

Renovation of former industrial buildings in Anderlecht

A community center including a daycare, a market, and a courtyard

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Urban Architecture “Spolia”

The graduation studio of the chair of Urban Architecture encourages us to fully explore the urban context of Brussels city, as shown in the name, aims at critically assessing a given urban context, in order to either complete or re-direct it.

The keyword for the studio is “Spolia”, a term from archeology, which is the carrier of the past. Tangibly it could be the leftovers or ‘spoils’ of a building, intangibly could also be social networks, practices of inhabitants, or cultural expressions.

The item of “urban context” and “spolia” went through the whole project including both the research and design process.

Research and methods

In the urban architecture studio, architecture is by no means a plastic art created out of thin air. In the first half-year, research and design are interwoven together. Research gradually evolving into the actual design acts, coming up with the design proposal is like bricolage with the materials we salvaged in the research.

The research consists of group work and individual parts. The group work before P1 was a kind of objective observation of the site. We studied the site thoroughly from the start point of the relationship between the living and working. The basic information, such as programs, location, and historical evolution of each block, helps us to get the first impression.

Through the qualitative description of the building facades by a series of image collages, we explored how the facade reflects the atmosphere of the hidden space. The facades present their programs behind, by different compositions, different materials, and the signs on the facade.

Later the subjective observations were distilled in narratives, drawings, models, and even comics to reinterpret the atmosphere. By combining traditional section drawing with a physical model, together with notes and illustrations, we succeeded to juxtapose a large number of descriptions from the interviewee in many different perspectives, to be able to represent their different activities in daily work and life routine. In this act, we managed to describe the experience of the residents in Anderlecht and then discussing those parts that can be validated by our feelings.

For my individual research, I continued this kind of subjective observation. I treated the urban environment as a stage. The built environment gains meaning through fixed-feature, semi-fixed-feature, and non-fixed feature elements as tools of non-verbal communication. I treated the city as a fixed feature and highlighted people's activities with a bubble diagram. Then I picked 8 paradoxical places that tell different space stories as the semi-fixed feature. Utilizing 5-min soundscape maps combined with a series of elements I extract from the daily scene, I tried to answer: How this specific urban context which accommodates spatial contradictions manifests itself through a perceivable manner?

The research craved to answer the question of “what to keep”. After the research period, an awareness of its material presence, layering, and specific character in the site came out clearly in my mind. I realized the amazing relationship can just be produced through the most ordinary daily communication so long as there has a possible place for events to happen. Finally, I could conclude: what I want to keep is the most ordinary building element on the site. It could be those who may not have splendid structures or history, but people can feel in

their every-day life. And the criterion for whether demolished or not more come out of a rationalistic reason considering the existing situation of the element, the economic/ecological potential of the reuse.

Rearrange the site – interlocked courtyard

The block in Anderlecht is opened without closed borders and there are different types of volumes in it. In the past, a long and continued wall crossing the middle of the site divided the two sides too distinctly, the wall is not only a physical boundary but more like a mental barrier to isolated two sides. So, for the urban renewal, I re-allocated the arrangement considering the programs, the new buildings groups follow their counterpart one by one, several inner courtyards acting as the spine of the site, connecting those groups.

The whole site could be approximated as a right triangle. Unfortunately, the three corners were not been treated properly, which result in a regrettable situation: the two legs of it both become a negative logistic side for the city in the end. The huge volume of Rotor building caught my eye first. The isolated building stayed at the west corner, kept distant with the terraced houses, and in close proximity followed by a jumble of sheds from the east corner, serving as its depots. These industry relics were just a few meters from Les Goujons-the densest dwelling tower in the block, but emotionally have no connection with the local. As for the north end, another housing project stood there. It could have surrounded by a positive living environment, however, some industrial buildings hid in the backyard of terraced houses, unavoidable causing some noise to the backside of the housing project, where should have been quiet and peaceful greenery.

To react to this fact, the most significant measure I intervened is to reshape the Rotor building to a diagonal volume, the re-orientation is respected to the original industrial building pattern. By doing so, a front square was formed which could signify the industry characteristic of Rotor to the city. Furthermore, the industrial square could attract visitors from the other side of the railway and go through the passage to the park at the community side as the destination. As for the east, I reorganized the fragment depots, which now become a series of buildings interlocked with courtyards on a different scale.

The urban strategy for the hybrid buildings group sits back behind the terraced house is to follow the principle as the other side, using an enclosed courtyard connecting the different programs. But in contrast to the significant makeover in the industrial side, for those pitched-roof buildings, I took a low-profile intervene, concerned more with how to coexist harmoniously with the existing.

Architectural proposal

In the end, the three adjacent industrial buildings become my design target. They used to be the only three depots in nearby dwellings, connected to the street by a narrow passage. Based on my urban proposal, the programs have transformed from industrial space to a community center including a local food market and a daycare center, in between would also be an inner courtyard enclosed by two small pavilions.

I keep most of the ordinary architecture elements we could found in this task as the spolia. They could be the mottled brick walls; basic structural parts like columns, beams, and the trusses; and even the picturesque view brought by the park next to them considered to be

my spolia. Those architectural and environmental elements from different ages are precious traces of time, which have witnessed and shaped the functional evolution and life scenarios of the neighborhood.

Although all of them were industrial buildings, however, they have quite different space quality. One of them stands opposed to the collective housing used to be the clothing outlet, characteristic itself with the steel trusses standing on top of concrete columns, make a long-span space possible under the pitched roof. On the other side, the one now becomes the daycare for the children, together with the building next to it were the depot of Belgium sanitary company, which has a smaller space inside, using steel columns to support the wooden truss on top. The rest one in between was a simple building taking steel frame structure and supporting a flat roof with skylight.

For the daycare, the four façades still stay in place. I proposed to tear down the inner parts of the building and return its original layout with two floors instead of four, as well as the original scale. Related to this is a return to the original division of the facade. Without sentiment and depending on the needs of the layout, we opened other large openings where needed.

Since this is a building for the young generation, the thermal performance is relatively important in this renovation. I put a new, insulated CLT “box” into the existing staged ruin, acting as the new loadbearing system, but also could become a building that can meet all current energy standards. A ventilated gap is maintained between the new and the original structure, and the structures do not touch. The new structure is sometimes slightly shifted from the old one. The windows do not fit precisely the openings in the old wall, and in some places, the old wall is also present in the interior. There is a visual intertwining of the two worlds. The new building penetrates through openings in the old wall, and on the contrary, the old wall enters through new windows.

Then comes to the market building, the renovation is also gentle. I stripped the space from excess material and exposing the beautiful steel structure that was hiding underneath the clutter. The character of the long-span structure defines the expression of the market. The open area consists of tables placed in a transversal position, where the different small-scale local market activities are integrated.

The renovation for the market aims to improve the ventilation quality. I add some openings between the concrete columns to highlight the structure and let in the fresh air also natural light. The existing tile roof was replaced by a new metal sandwich board, and skylights were added to bring in the fresh air. For the wall facing the park, a new glass wall behind the opening complements and preserves the ‘newly’ opened structure. The honest industrial aesthetic proved to be ideal for a lively market atmosphere.

Last, for the in-between building, I decided to demolish the roof and most of the façade. By doing so I hope to bring the project a breathable inner courtyard. I restored one former brick wall facing the park as the main entrance. People will first step into a transitional lobby space with a lowered eave, and then gradually walk into the heart of the courtyard, then spread to a different destination. The inner courtyards could bring light and airflow, and at the same time, like hinges, they anchor the space.

Social relevance and challenges

The project is my manifesto of how it is possible to treat old houses. It is not necessary to lose

the authenticity of old age. It is not necessary to demolish, neither to reconstruct dogmatically. Most of the material remained in place, just rearranged.

With the historical evolution over the past century, the industrial area developed during the industry boost time and has been losing their positions for a long time in Brussels. In the face of the deep-rooted local culture, the inertial strategy of "demolishing it and starting all over again" dominated by design technology seems out of place. To this end, I tried to create a contemporary design expression, which is, giving design interventions after the restoration of the site, following the residents' pure culture and life needs, integrating into the natural evolution of the neighborhood, while restoring the emotional connection between the residents and their community.

At the same time, even in such a case, it is possible to build economically using modern materials and achieve the required parameters. It carefully evaluates conditions as well as accommodability of the existing buildings, and protects them correspondingly with hierarchical strategies, so that the remains of different time and space and the memory of the site can blend and coexist.

Conclusion

I admit that it is not an easy journey to set down this final architectural proposal. So far, I have overturned twice the former scheme and started all over again. Having seriously reflected on this, I have to say the most valuable lesson I learned is: Architects cannot define any specific traits of the site when we about to design. A questionable attitude of detecting the elements that whether can become design tools is crucial. This predisposition lets you go through the whole process without any absolutes- occasional infatuation at the most, but we always must be able to turn back. What you try to do is extract objective conditions from the ones that the people who are going to experience those spaces will use.

In the coming final phase, I would continue refining the materials, the atmosphere of the space, and the visual presentation; at the same time, it is not difficult to the greenery on the east side of the community. I would like to dive deeply into the given natural resources, try to design a small but elegant pavilion in the park to complete the whole project and as a buoy navigate people from the outside to the inner part of the new community complex.