Personal information

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Studio

Theme
Canal Saint Martin
Transformation of industrial heritage in the North Eastern of Paris

Teachers
W. Willers
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Argumentation of choice of the studio
The studio focuses on Paris, for me an unknown city except the tourist part. Former projects were mostly in Rotterdam/Amsterdam/Delft and I liked the fact that this is a totally new city to analyse and work in. I think RMIT is studio, which focuses on the current issues in architecture. On the one hand, I find support in the existing building when designing. On the other hand, the existing building makes problems for the new design. The problem-solving part and the use of existing building stock appeals to me.
La Chapelle International is an area in the north east of Paris and has always been used by the railway company. It is enclosed between the railways of Gare du Nord, the Boulevard Périphérique and the Rue de la Chapelle. Nowadays the area is in development, it is a sector of the great master plan for the north east of Paris. The area will become a living/working area. Halle 5 is situated at the south of La Chapelle International. It is built around 1900 as a customs building, the trains came inside the building at the south side and the freight was checked. At the north side of the building, the offices were situated. Nowadays the building is used as a print shop from the SNCF. At the south side, a big part of the building is demolished.

Urban problems
Paris North East is nowadays known as a an unsafe area, the area has a bad reputation. La Chapelle International will become a new living/working area in Paris North East, this area should become a part of Paris. The area has always been used by the railways company, separated from the city of Paris. The area will become a living/working area, which should have a connection with the city of Paris. It has to be clear for the inhabitants of Paris that the area is changed, that it is safe and the area should be promoted as a contiguous part of Paris.

Besides, La Chapelle International will become a new living/working area with a great mix of inhabitants. To create a safe neighbourhood, a good cohesion between those different inhabitants is required. That cohesion can be achieved by creating respect and understanding towards each other. For this purpose the different inhabitants should to get to know each other, interaction is necessary.

Building problems
Halle 5 is situated inside the new living/working area, but with the current function as a print shop of the SNCF, it is not integrated in the area in terms of function. Besides, Halle 5 is a refined building, the façade is very delicate and detailed and characterises the building. But the façade and construction are dated, they create thermal bridges and a bad climate inside the building. Therefore, the building is not sustainable enough to function in the future.

To fit in a new function in Halle 5, the building has to be transformed. As said earlier, the façade characterises the building. So it is important to maintain that specific character. But at the same time, it has to be clear that the building is a part of the new living/working area with its own/new character. Besides, the building has to expand to fit in the new function. This expansion must be clearly different than the old part, but at the same time the old and new part should be one, it should be a harmonious complex. In order to do so, the position as an architect should be stated.

Research questions - Urban
- How can the historical meaning of the site be translated into the new design?
- How can Halle 5 provide both the connection between the new area and Paris and the creation of a new dynamic and safe neighbourhood?

Research questions - Building
- How can the historical and current character of the building be interpreted for the new design? Including the creation of a sustainable building.
- What function is suitable for the building?
- Which scale of intervention suits the existing building?

Goal
The goal of the project is to make a new master plan for La Chapelle International and a design for the re-use
of Halle 5, including the direct surroundings. The new design should be a proper interpretation of the historical and existing values of the building and her surroundings. Halle 5 will become a cultural centre. The cultural centre has to function for the new neighbourhood, to prevent the creation of a problem area and to create a new dynamic and safe neighbourhood. Besides, it has to function for inhabitants of Paris/France or tourists, with a diverse program that has to deal with the actualities.

Process

Method description
To achieve the goal the research questions have to be answered. In order to do so, I started with an analysis of the urban context, the architecture and the structure.
With this analysis the problem statement and the research questions are made. Based on the problems and the research questions, a new master plan for La Chapelle International is made and the new program for Halle 5 is chosen. This choice is based on the master plan, the architectural and structural analysis and my personal interests.
The new program for Halle 5 is a community and cultural centre. To gain information about such a program in a building, I visited reference buildings like the Balie in Amsterdam and Het Klooster in Rotterdam.
The new program, the research questions and my position (from my position paper) are forming the starting points of the design.
To position the program in the building I made relation schemes of the program and conditions for the building, the direct surroundings and the atmosphere needed in/around the building. Precedents, sketches and 2d-drawings are used. For the architecture-part of the building, I have read literature, to position myself in the field of the RMIT-architecture. After that, I made a model of the urban scale and a sketch-up model of the building itself.
In future, to make the final design, I will also use precedents, literature, sketches, 2d-drawings and 3d-models. The precedents and the literature I will use to gain knowledge, to see possibilities and to see whether options are working. The 3d-models I will use to shape the mass and the 2d-drawings to sketch and to draw everything in detail. In the whole process I will reflect on my own work, to ensure that the research questions will be answered.

Literature and general practical preference

Context
Francois LeClerq architectes
Francois LeClerq architectes
Apur
Apur
Rapport Strategie Urbaine (2008)
Atlas 18 arrondissement (2010)
Paris et ses quartiers – 18e arrondissement (2011)

Building
Le mans, Centre des archives historiques SNCF (access date 17-04-2014)

Arends, G.
Constructies van ijzer en beton : gebouwen 1800-1940; overzicht en typologie (1998)

References program
Creatieve fabrieken
Ijzergieterij omgesmolten tot cultuurcluster
Cultuur onder de pannen
Cerutti, V. (2011)
Journal ‘Stedenbouw’ (2009)
Journal ‘PI Project en Interieur’ (2009)
Visits (including analysis)
De Brakke Grond - Amsterdam
De Balie – Amsterdam
Pakhuis de Zwijger – Amsterdam
Crea – Amsterdam
Het Klooster – Rotterdam

Visits
Westergasterrein - Amsterdam

Position as architect
Provoost, M. Re-Arch nieuwe ontwerpen voor oude gebouwen (1995)
Van den Dobbelsteen, A. REAP Rotterdam EnergieAanpak en Planning (2009)

Relevance
I think the studio RMIT is very relevant in current architecture. Not only the very unique buildings have to be preserved. More and more buildings are being preserved rather than demolished. Halle 5 is a great example of such a building. It is a very refined building, but things can be changed, because it is not a very unique building. The project of the redesign of the building can be compared to others.

In the greater scale, the project is relevant. The new cultural centre will prevent the new area to develop in a problem area and it will contribute to the creation of a dynamic and safe new neighbourhood. This is more often visible in other cities, for example the community centre Het Klooster in Rotterdam North. Besides, it is about living nearby the railways, which is a current topic in Paris. Transforming old railway area into a living/working area happens more often, which makes it possible to compare.

The project itself is relevant, because it is about a developing area. There will be a great mix of inhabitants in this new area, who need a place to meet each other. This is possible in the park (with a greenhouse for the inhabitants for example) and in the cultural centre (with meeting rooms). The cultural centre is there to protect the youth to become ‘jeune-de-banlieue’ (loitering) and to give space for the older inhabitants, to talk with each other. Besides, it is important not to forget the history of the area. It has always been used by the railways company and this will be visible in the park and in a part of the exposition part of the cultural centre.
Reflection
P4 – 01/12/2014

In my graduation plan I explained how I worked so far and what I was planning to work like in the future. The way I worked until the P2 was with obtaining a lot of information and looking at a lot of references. Obtaining the information led to useful analyses and looking at references led to a program of requirements. The design I made so far was a sketch design, which certainly had to be improved. I stated that I was able to do so with ‘design by research’. I would use precedents as an inspiration and to see whether options were working, I would use 3d-models to shape the mass and I would use 2d-drawings to sketch and work everything in detail. But is this how I worked in the period after the P2?

From P2 to P4

After the P2 there were three minor subjects for me: obtain more information about the (construction of the) building, sharpen the program of requirements and improve the design. For the first subject, obtain more information about the building, I went back to Paris, measured elements of the façade and made assumptions on the construction. For the second subject, sharpen the program of requirements, I compared several references and I did an analysis of the different functions in the neighbourhood. Just like I explained and expected in my graduation plan. But for the last subject, improving the design, it was different.

In my graduation plan, I forgot one very important part of the way I design: I like to make variations. Variations drawn in a floor plan, shaped in a model or detailed in a 3d-model on the computer; variants in every way. The subjects of the variations originated from minor research questions in the design, often raised while designing. To answer those minor research question, I first researched several references. To see how different approaches were in practice, whether they were noticed as positive or negative. From this research I chose a modus to make the variations (drawn in perspective, shaped in a model, etc) and I was able to see the consequences of the different variations. And in the end I was able to make an argued decision for a particular variation. This was not always a linear process. Sometimes I started with the image I wanted to have in the end, then I looked at references, made variations and came back to the image I drawn in the beginning. And sometimes I started with three very different variations, to see in which direction I wanted the solution, then I looked at references, made some minor variations and then came with the solution. And sometimes the references were not necessary, because it was so specific for my design.

While I used to work with models to shape the mass, 2d-drawings to make a floor plan and make the details (like I explained in my graduation plan), this project I worked a lot with the experience of the visitor. To be able to do so a lot of the variation-studies are made in perspective, on eye-level. I think that focus is very important, because architects make buildings for visitors.
Important decisions
In my whole process, from p1 to p4, I made a lot of decisions for my design. To make those decisions I worked the way I explained above. To illustrate this way of working, I will explain three examples, which were important for my design.

Volume of the ensemble
One of the research questions is ‘which scale of intervention suits the existing building?’ To answer this question I made a research beginning by my starting points. One of my starting points of my design is to make an interpretation of the historical volume of the building (in history, the building was bigger). This gave me the opportunity to make the building bigger again, by extending a part of the building. But in this expansion, there is a street, which goes from the apartment blocks in the master plan to the park at the end of the building. This means that the expansion is already split up in two parts. But only splitting it up, will give a monotone view for the visitor, while the visitor just has to be attracted to walk down the whole street. So the new volumes I design, has to be exciting and has to make the visitor curious for what is behind. For this I first made a model. I was able to see the development of the openness in the model. But with a model you have a sort of a bird’s-eye view, while it is very important to see it from the view of the visitor. That is why I started to make sketches in the perspective of the visitor, which are visible in the images below. From the inside of the building to the park, the ensemble has to develop from a dense area to an open area (the park). To achieve this goal, there are more volumes at the beginning of the street than at the end of the street. And to retain the curiosity of the visitor, some volumes are overlapping the street. It may look like the street ends, but it is a translucent greenhouse, so the visitors are able to see the new volume already through the greenhouse, so it is visible that it is possible to walk further. And to make the whole ensemble open at the end, the volumes at the end are smaller, so the street is opening up into the park. I drew several variants on specific positions in the volume, each variant was just slightly different from another variant, so I was able to see what the effect was of the specific variant. By laying all the variants next to each other I was able to form good arguments why I chose for one specific variant. And by laying all the different positions together, the volumes of the ensemble were formed. In this case I started to draw from scratch, references were not used, it was too specific for my design.

Placement of the volumes inside the building
The connection between the ensemble and the main building is visible inside the building; there are also
volumes, which has the same material as some of the volumes outside, those volumes are placed in the open space of the main building, which means that they can shape the building. In a reference I saw that by making slanted walls, the visitors can be sucked into the space. This is exactly what I want in the main building, because in the space around the volumes, there is the exposition area of the cultural centre. To see how that would work I made a model. And in the model it was visible that the space around the volumes was more attractive with reshaping the volumes. But by reshaping the volumes, the floorplan of the volumes became non-flexible and not perfectly suitable for the function. The floorplan had to remain orthogonal, while at the same time the visitors should be sucked into the exposition area. By rotating the volumes, I created the same effect as the slanted walls, but the floor plan was still orthogonal. To see how many degrees were necessary for the right effect, I made a lot of small variations. In the images below the process is visible.

**Entrance of the building**

As the street is such an important element in my design, it is also very important that the beginning of the street is well-designed; the entrance of the main building. To be able to do so, I first draw a sketch of the image I wanted to have in the end. And with that image in my mind I draw a lot of variations of the possibilities to create that image.
Answers on the research questions

In my P2 report I explained my research questions and by ‘research by design’ I was able to answer those research questions. On urban scale, the historical meaning of the site is translated into the new design. In history, the site is always been used by the railways. Those railways are still visible on the site and they give character to the park at the end of the ensemble, not only by their appearance but also by giving an interesting biodiversity in the park. Halle 5 is providing a connection between the new neighbourhood and Paris, by the new restaurant and the program in the cultural centre, which is in line with the agenda of Paris. And Halle 5 will be used as a platform for the residents of the new neighbourhood. A platform, where they can meet and be in contact with each other, so there will be appreciation towards each other.

On the scale of the building, the historical and the current character of the building is interpreted by the new ensemble which is added to the existing building. As regards the new materials, there is also made an interpretation of the existing materials. But the interpretation is also an interpretation of the expectations of the materials used in the future, to make the building sustainable and making it an example for Paris. The function for the building is a cultural centre, with lecture rooms and an exposition area. But only those functions are not profitable, so I looked in the neighbourhood: what is necessary and what suits the cultural centre? A restaurant, rooms for workshops and a library are added to the ensemble to make it profitable. And in the end a hotel, offices and the park are added, to make the whole ensemble lively the whole day. In the existing building I looked which functions are best to be able to show the nice interior of the existing building. So that the open space can be best used. And last, but not least, there is a sustainable climate system with a ground heat exchanger, for the whole ensemble. And the facades of the offices are isolated for a nice working climate.

End of the design?

A design is never finished, that is the same for this design. For me, it is a pity that I made the whole ensemble so big. Of course it suits the existing building, but I would really like it if I was able to design the whole ensemble, but that was too big. So in the end, the one thing I think needs some more designing is the wall inside the building, which separates the offices from the street. If I would have some more time, I would look at it more carefully.

But I am very happy with the end result, I really like the volume of the whole ensemble, the new materials I used and the redesign for the existing building.

RMIT versus my project and approach

The practice of RMIT focuses on transforming existing buildings. In order to do so I positioned myself in the debate of transforming existing buildings. I used several references of RMIT-projects to determine my own position. Once my position was taken, I was able to use references of RMIT-projects and of new built projects, which I both often did. And I was able to use my position to create arguments for debates (with myself or my teacher). Positioning myself as an architect was very useful in this design, but I think it will also be very useful in the future. Knowing where I stand for is useful to know by searching a job in the first place and then designing/working in that office at the second place.

RMIT deals with heritage. this can be ‘historical heritage’ like the Neues Museum or canal houses. Both heritage, with a high value in a social, historical, architectural and contextual way, such buildings simply can not be demolished. But on the other side there is ‘industrial heritage’, which has not such high values. Sometimes those buildings can be demolished, because they have expired. But when they are in good condition, they can remain, they can add charm to the neighborhood. A new function is necessary and to fit in that new function in the old building, an intervention is mostly necessary.
My project is one of ‘industrial heritage’, it is in good condition in the middle of a new neighborhood.

RMIT focusses on all levels: urban, architecture and construction. For all those levels, a value assessment has to be made. In the beginning I didn’t see the relevance of the value assessment, but while designing I noticed that I was actually using the value assessment. So actually, it is a very helpful element while designing, I will definitely use it in the future.

My design is twofold: on the one hand I made a new volume attached to the existing building, on the other hand I made some interventions in the existing building, to fit in the new function. Both were RMIT-issues in my opinion, the new volume has to be in character with the existing building and the transformations in the existing building has to be possible. But the ‘dealing with the existing building’ is much more complex in the part of the existing building itself, think of climate issues, changes in the façade, adding walls, etc. That is why I have chosen to only work out the existing building in detail.

Halle 5 in a wider context

The relevance of my project can be found in the redesign of industrial heritage in a new neighbourhood. In Paris, and a lot of other big cities in the world, there are arising more and more new neighbourhoods on the place of former industrial activities. It is a complete new neighbourhood, which asks for a connection with the rest of the city and for a connection between the new inhabitants. On those places, there is often industrial heritage, which can be transformed to serve that new neighbourhood. Industrial heritage is different from ‘commonly loved – heritage’, more types of interventions are possible and also necessary. In my design it is visible that it is possible to demolish a part of the façade, while the rhythm of the façade remains. Besides in my design is visible that to remain the building, and at the same time seek to the climate requirements anno 2014, a lot of insulation is necessary, which changes the inner look of the façade.

My design can be used as a reference for the redesign of industrial heritage in a new neighbourhood, but it is not proven that my design works the way I want it to work until it is realized.

In future?

That is a hard question to answer. I really do not know what I am going to do. But the methods I used in this design suited me very well. By creating (a lot of) variations, by making analysis, by searching for references, by positioning myself as an architect and by making value assessments, I made arguments for the decisions I made. And wherever I am going to work and whatever I am going to do, I think that it is always very important to have arguments for the decisions you make.

Paris, march 2014, I visited Rue de la Chapelle 61 for the first time and I felt in love with the building. At that time I did not know that it was going to be a long (and sometimes tuff) road to make a design. I made an analyses of the surroundings, of the building and of the construction. I recognized the problems and I made research questions to be able to solve the problems. With ‘research by design’ I gave answers to the research questions. This process, the recognition of a problem and the capability to solve it, is what I definitely will use in the future.