

Reflection

In this reflection paper I will reflect upon my graduation project. Reflecting upon the process and the products to learn and understand what did and did not work in the used approach. The aim is to gain insights that are useful in the future and to help me defining my position as an architect more clearly.

Studio and subject

The first part of this reflection concerns the relation ship between the theme of the graduation studio and the subject of choice. The studio *Heritage & Architecture* is concerned with the reuse and transformation of existing buildings and structures in order to fit the requirements of today's society. The approach used for both research and design is based on the levels of *cultural history*, *urban context*, *architectural expression* and *building technology*.

The graduation studio *Rotterdam Harbour Heritage* focuses upon finding an approach for the adaptive re-use of existing buildings in the old harbour area of Rotterdam. Due to the movement of harbour activities towards the Maasvlakte, the city harbour areas and its buildings have lost their original function. The question is how these (vacant) areas and buildings can be developed through transformation and intervention. The essence of this question lies within the significant relation between buildings and the water and the tolerance for change.

The subject of choice is the *Quarantine area* near the garden village Heijplaat. A former quarantine facility built to protect the city and country from exotic infectious diseases. The area has an unexpected and different character in the middle of the harbour of Rotterdam.

Located at the end of the Waal- and Eemhavens, it takes some effort to get there. In an environment of stacked containers, large steel warehouses, cranes, ships and lots of harbour industry, the Quarantine Area creates a silent spot in the middle of all this busyness and noise. A green, calming, village like world. Completely contradicting its harbour surroundings. The former facility differs from other monumental buildings in the harbour area. It is an ensemble of buildings and outdoor spaces, barely changed. So the transformation approach cannot only focus on the buildings, thus therefore focuses upon the whole area. Due to the continuity and unity between the separate buildings in the area the tolerance for change of the facades is small. The approach regarding the existing structures is therefore based on preservation, and finding a balance between the necessary building technical changes and existing architectural qualities in the interior.

Methodology

The method used in this graduation project is based upon the method used at the faculty of Architecture, thus by the studio of *Heritage & Architecture*: design by research and research by design.

The graduation starts with thorough analysis on the past, present and future of the subject on the four levels of *cultural history*, *urban context*, *architectural expression* and *building technology*. Based upon the conclusions drawn from the analyses a value assessment is developed. Both factual, the historical value of the parts of the subject, and architectural, important qualities the subject embodies. Both conclusions and value assessment then lead to several starting points, to be used for the design.

A main conclusion drawn from the conducted research is that in order to preserve the continuity of the area, the exterior of the existing structures should be preserved. Although there is continuity between the separate buildings in the area, coherency lacks due to the overgrowth of vegetation. In order to create coherency and to meet the needs of society the focus for transformation lies in the area, thus a new building, reacting and interacting with existing buildings and outdoor spaces.

Research & Design

Research

The research and analysis conducted was focused upon the character and identity of the area, as it is so completely different from its surroundings. What characteristics are important contributions to the autonomous yet continuous atmosphere of the terrain? The main research question for design then, focuses upon maintaining, preserving and possibly strengthening this character.

The research question was:

- *How to transform the existing ensemble of the quarantine area, while maintaining its coherent and autonomous character?*

Sub questions asked:

- *What does autonomy mean?*
- *What characteristics make the quarantine area autonomous?*
- *What does continuity mean?*
- *What characteristics make the quarantine area continuous?*

Especially the question regarding autonomy and architecture has proven to be difficult, as autonomy is more often used for the architect than for the object or building. In hindsight the research could have been more in depth, focusing upon the changes in experiencing the area over time. What were the autonomous characteristics when it was built? And also the question regarding the relation between inside and outside spaces has now proven to be very important for the design.

From research to design

This step has proven to be very difficult during this project. Making decisions determining what is important or not, is hard. Though, concluding from the research the continuity of the area exists due to the similarities between the buildings. This similarity is mainly expressed in the facades. The interiors have been changed by its current users (artists). To the relationship between the interior spaces and outdoors is essential in the area. Regarding the buildings therefore a position of preservation is taken.

Design

In the design phase, a focus upon this relationship between inside and outside, but also between new building and old building is constantly to be taken into account, in order to find a balance between the existing and the new that will be added.

The chosen programme for the area is an art cluster, combining the current function with a broader scope of the theme 'art', a museum and depot facility. The focus of this graduation project within this programme are the museum en depot building.

Relative questions for the design are what these functions mean for the site, buildings and new buildings. What requirements does this programme bring? Art not only requires a regulated climate but also brings issues of light, safety and exhibiting options. A balance between the requirements of the programme and the requirements of the existing building had to be found, because not all spaces in the area are suitable to transform into an exhibition space. Where does art decide what happens, and where does the building?

A concept derived from the existing building typology has led to a design for the former main building of the area, the disinfection building, and the new building. The quarantine area can be described as a sequence of experiences. You walk around and every space brings a different experience. A route, with spaces of experience. Zooming into the building scale, most buildings were designed to have a long hallway to which all functions are situated.

This concept of sequence, experience and routing was translated to a design for the disinfection building, museum, and a design for a new depot & exhibition building. The design phase brings loads of questions. How do you define space, and what experience should different spaces bring to the users of the building.

Social context

Transformation of heritage

Re-use and the transformation of existing buildings, have become an important task within the profession of architecture. New technologies, globalisation and ever-changing norms and values of people and society, have left us with a large amount of vacant buildings (Gelinck & Strolenberg, 2013). These 'old' buildings no longer suit the original function they were built to facilitate, but remain part of our built environment. Even though they are no longer in use, they remain valuable as embodiment of our history and our collective memory. They are reminders of times prosperity and innovation, but also reminders of development, as they are no longer used for their original purposes, because technology and society evolved (Smith, n.d.). The government values these buildings as monuments, to keep them safe from demolition and protect these values they embody. It is our job as architects to deal with these protected structures, to re-use and transform them, so they will once again be assets to society. As these buildings have either been used or vacant for a while, abandoned and empty, the task is not easy. A future has to be visualized beyond the damages and dust (Haan & Hannema, 2011).

In case of the quarantine area the preservation assignment does not only apply to the buildings of the former facility but to what is left of the entire ensemble, including outdoor spaces and organisation. The focus lies on preserving the character and identity of this ensemble, which has become almost like an enclave in its harbour surroundings

Programme

The appointed function of the project is an art cluster within the city harbours. A mixture of living, making (working), exhibiting and preserving, continues the storyline of art, which the quarantine facility has taken part in since artists squatted the area in 1979. Residences and studio spaces for artists and art related companies like In4Art, CoCA and SdvB will embody the 'living and working with art', while a small museum and depot building represent showing and preserving art.

This programme focuses specifically on the city of Rotterdam, to house a renowned Rotterdam art collection, which now is only kept in storage; to give artists a pleasant and green space to live and work within the city and to give local art collectors an exclusive space to store their art. Most pieces of art are hidden in storage. Less than 40% is actually exhibited in museums. Lots of art are also in private ownership. In the last few years there has been an uprising of private museums. In the Netherlands examples are: museum Voorlinden in Wassenaar and museum MORE in Gorssel.

Denmark concept

Art brings a lot of requirements to the building it is stored in. Currently this means a strictly regulated climate system, which costs both loads of energy and money. Research at the TU Eindhoven (i.e. Bart Ankersmit) pointed out that the museum climate does not actually need to be regulated as strictly as we are currently doing. Art can handle a certain amount of fluctuation in its climate without damaging. Though still, the environment needs to be controlled. The same goes for storing facilities for art.

Depot spaces are designed to preserve and keep safe (private) art collections. Though it is not necessary to dress up these spaces with lots of installations. In Denmark a passive concept was developed, based on thermal accumulation from the earth. An airtight façade with a high R_c value (10+) combined with an un-insulated floor create a perfect climate for storing art. The passive system saves both money and energy.