

Reflection paper - General information

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Studio

Urban Architecture MSc3 spring ° Craft in the city

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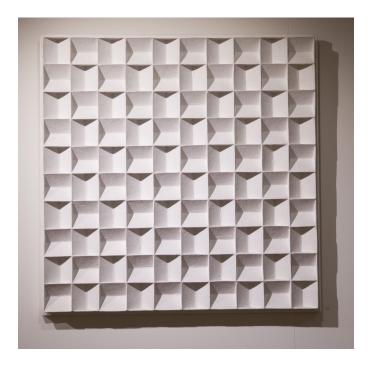
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The relationship between research and design.

Architectural research is twofold, on the one hand there is a more theoretical approach in contrast to sketching and designing a building using specific criteria and hypothesis. The architectural project 'Urban architecture, crafts in the city' is a perfect example of these two worlds combined.

In the preliminary architectural research I used different façade elements obtained via photography of ancient, existing buildings Delfshaven, Rotterdam. From this research I made the connection with the art work of Jan Schoonhoven. An artist that lived in Delft and had a very interesting idea of repetition in structures made of cardboard. He belongs to the "nul-groep" artist group and I was inspired to use his ideas in the design of the Gold and Silversmithing school. By conducting research into the work of artist Jan Schoonhoven (1914-1994) and comparing his work and my design of the school I came to three essential pillars to use throughout the school building: (1) time (e.g. sunlight, shadow, pollution), (2) proportions (fine art) and (3) specific materials.



Work of artist Jan Schoonhoven

To make a school building for students of a gold and silversmith training, research was also done into the existing schools. In the Netherlands there is one training institute in Schoonhoven that trains students to become jewelers and goldsmiths. By researching the current way of working in this training, it is

possible to further develop my design. During this investigation, the building was examined, but also the tools that are used and the safety standards with which to work.

The end result is based upon the preliminary research examples made in digital and physical models. You could say that the architectural research is therefore a construction or pillar to make a foundation and further processing of the design for the gold- and silversmithing school.

The relationship between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master program (MSc AUBS).

In the master program 'Architecture, Urbanism and Building Sciences' different subjects in the area of the building environment are touched upon (e.g. experience in architecture, spatial planning, built environment professions, multidisciplinary working processes). From this broad spectrum of activities focus was brought onto a specific subject – the studio topic 'Urban architecture, crafts in the city'. The part of the original architecture track gave directions which field of research I should explore to research the design of the gold- and silversmithing school. As the name of the studio topic suggests research was based on crafts, literally and figuratively. Preliminary architectural research and art (sketching and design) determined the exact topic of this graduation project. The relationship between my graduation topic, the studio topic and my master track is therefore an in depth research and art analysis of an architectural building for the gold- and silversmithing in Delfshaven.

Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work.

To create the final building, various types of architectural research were used, which together led in combination with art to a building design. In general, qualitative studies have been conducted. At the beginning of the architectural research process, a field research was conducted, by taking a large series of photos from the surroundings of the chosen plot. This resulted in an organized view of the different types of materials in the environment. Desk research dived deeper into the similarities

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Field research

and differences between the photos and history, demography, monumental buildings, arterial roads, public transport, orientation of the plot and other data required for the design including links to art and crafts.

The final design of the building contains three pillars (1) time (e.g. sunlight, shadow, pollution (2) proportions (fine art) and (3) specific materials (usability and construction). (ad 1) The positioning of the building is orientated that a maximum of sunlight can enter the building. The building was integrated with the monumental building of Firma Diepenveen designed by architect Willem Kromhout (1929). This brickwork building was an essential part to come to a harmonious design. (ad 2) I used inspiration of the art work of Ian Schoonhoven throughout whole exterior of the campus and parts of the interior. In addition, inspiration for the interior was obtained from the craftsman school in Schoonhoven, The Netherlands and (ad 3) specific materials such as brickwork were designed via brick factory Vogelensangh, Deest (vogelensangh. nl). These bricks were designed in a way how Jan Schoonhoven prepared his cardboard art. The construction and the interior is decorated with wooden elements. This is an style adhering to a jewelry box.

It is relevant to conduct such an investigation in several different areas. Firstly, the plot was explored and research has been performed in order to be inspired to build a building on this location that fit in the environment via a specific reasoning. Second, art, sketching and design can be used into the gold and silversmiths' craft school to finalize the drawing

and physical models of this school. The research into Jan Schoonhoven and the making of a facade based on his art with proportions and light was helping and fits very well in the local surrounding of the plot. The integration of a monumental building and the new design of the school was a specific point of concern. The study of the integration of old and new had specific attention.

Conclusions

The architectural task was freely given by the TU Delft and no specific conditions were given. Trough research and development of hypothesis we developed a task during the stage of P1 and P2. In P3 and P4 we defined the criteria for this building. With specific attention to the surrounding. The building adheres to these conditions in full and it is adequate for outreach for the local inhabitants and organizations.

Elaboration on the relationship between the graduation project and the wider social, professional and scientific framework, touching upon the transferability of the project results.

The design of the gold- and silversmithing school is a realistic design and could be used by the municipal government of Rotterdam to integrate a craftsman school in an area that has specific problems i.e. poorness, criminality, deferred maintenance. Building a school could have wider impact for the whole area because an influx of new students, entrepreneurs, new activities and new housing. The



Graduation project

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design of the school is built in a realistic way that contain solutions such as a school, shops, activity centers and new houses. If the approach works in strong collaboration with the various stakeholders (local government, habitants, public organizations) it could be used in a much more general way in terms of social interest.



Graduation project

Discuss the ethical issues and dilemmas you may have encountered in (i) doing the research, (ii, if applicable) elaborating the design and (iii) potential applications of the results in practice.

When designing a craft school for gold and silversmiths and the jewelry industry, it must be considered whether the use of these precious materials has the right future perspective. Mining such materials can cause a lot of damage to the environment. In the past, natural areas were destroyed to obtain these noble materials. Despite this, wearing jewelry (in all kinds of materials and people in different areas in the world) is an activity that has been discovered in ancient times. This makes it seem as if the wearing of decoration is the primary need. In order to satisfy the needs of people, but also to keep the environment intact, it is important that users and makers are aware of this. Nowadays you already see several designers who only use recycled precious materials. Such initiatives must be promoted and implemented to ensure the future.

Another ethical issues in building is that a building is safe for who enters this building independent on his or her physical condition. To reach an ethical design I adhered to the general conditions as described in the fairly briefly described "bouwbesluitonline.nl". Ethical reasoning is needed if the "bouwbesluit" is not adequate. The design of the building takes into account the accessibility of handicapped persons and wheel bound people. They can reach this building everywhere, and they can participate in activities with all other people in the building.

The fire protection has a maximum level and all precautions to reduce fire risks. For chemical processes as used in gold- and silversmithing I have used high ceilings and installations to remove toxic vapors. Using the processes of gold- and silversmithing open fire is needed. I made a surrounding that prevents risks for the people who are using techniques with open fire and for the bystanders. I feel this is an ethical responsibility of an architect, that these kind of installations have to be kept as designed and if changed that this is in good agreement with the architects.

In the corona period the condition to have a larger spatial separation between persons in a building for full use became more important. At this timepoint we have no idea if this is a structural condition or a much more temporal condition. This school has a spatial orientation which makes it possible to have a distance of 1,5 meters in the school. I have the feeling that more viruses can be foreseen in the future. This dilemma has been taken into account to a certain level.

The integration of the gold- and silversmithing school in the suburb of Delfshaven is an experiment in itself and it is unclear if this works thoroughly. Essential topics to reach success is communication with the local government, inhabitants of the suburb itself and outreach to the City of Rotterdam. The willingness of all stakeholders to make a success is needed at least to reach success. This needs specific attention of all involved and to show the results in a larger scope (interviews, promotion, media attention).