Reflection

THE URBAN SCULPTURE
Graduation project the urban sculpture is a proposal to densify the urban emptiness within the Sint-Jacobsplaats while dealing with the fragmented patchwork of buildings and integrating a hybrid flexible program within a unifying building skin.

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Research methods

The graduation project for the studio Public Realm Rotterdam consist of a redevelopment in the area of Pompenburg and Sint-Jacobsplaats in Rotterdam. The urban fabric of our site is highly complex. Railroad infrastructure that crosses the location partly above- and under ground and surrounding urban enclaves realized in the late 70’s make this location difficult to grasp. The design assignment is to design a public building that will react to the complexities of the location, also to provide the functions and facilities that will enhance the quality of this area.

The first intention for the graduation assignment is to research a subject that will form a base for the forthcoming design. This research is closely related to specific characteristics of Rotterdam. Especially Rotterdam has an extended history in urban development. The bombing, during the Second World War, created a large void in the heart of Rotterdam where many historical references vanished. The design location is situated within this area. The 50 years of reconstruction had great influence on the composition of the urban fabric. This can be seen at the design area that can be characterized by a fragmentation of building projects. As such we can understand Rotterdam via the notion of the archipelago city. These fragments share the same typological design characteristics.
An important aspect related to these fragments is density. During the 50 years of reconstruction economical and political aspects formed a dominant framework for the densification projects, Hereby the architectural style strongly relate to each specific time period within the reconstruction period. Density is an important aspect that can be related to a wide spectrum of subjects. Densities do have influence on the quality of the public space, the formation of the building volumes, architecture style and political and economical aspects. The density form and function of different projects can be generated and compared within a scientific method. That is why the preliminary research will consider the density of the in the individual fragments in the research area the named the Rotte area.

The results of the research will guide the process of the forming of the design. Not only is density related to historical facts however also with the future requirements of the Rotterdam municipality. They state that the current inhabitants of the city center should be doubled in coming twenty years, approximately 30,000 inhabitants. This given will have influence on a final design and is also strongly related to densification.
Translation of research results

The ultimate goal of the final masterplan design is to anticipate to the demand of densification of the Rotterdam municipality. To integrate this given into the a small scale site of the Sint-Jacobsplaats is proven to be a real struggle, nevertheless a serious challenge. To answer the question of the how to create a dense intervention while remaining the quality of the public space can be visualised in the masterplan figure 1. The strong wall of buildings (delfse vaart) will be closed with the head of the design, forming a closing piece of the existing ring. The strong direction of the infrastructure and the casbah will be amplified with by the tale of the design. At the head of the design the stacking of floors will be in the form of a highrise tower that will be approximately 70 meter in height.

The design

Regarding to a larger scale as visualised in figure 2 the relation between the city and the urban composition becomes more clarified. The strong direction of the Binnerotte, starting at the Sint-Jacobsplaats and ending at the blaak train station, are derived from a historic intervention namely the lifted railway. During the late 80’s the railway is reconstructed under ground what resulted in a large public space with little meaning. In the contemporary days this area is transforming two days in a week into a market plaza. The area of the Binnerotte is transforming into a transition space near the Meent area. Continuing into Sint-Jacobsplaats where the space is meaningless and undefined and cut with railway infrastructure. The urban intervention on the Sint-Jacobsplaats will function as a public incubator for the Binne Rotte area, as well as a entrance gesture for the city movement North to South.

The urban composition can be structured into three separated positions. These positions are related to the building context of the Sint-Jacobsplaats and so influencing the formal composition of the building. There will be a dialectic relation between the historic layers and the intervention. The three differentiated elements of the building are physically connected by form. The distinction of the elements are ingrained into the accentuated direction and height differences of the elements. The gesture that will form the public
Figure 2 | Urban settlement

Figure 3 | Routing
incubator is composed into a lifted part of the building seen in figure 2. This lifted volume will function as a framework to mark the beginning of the Binne Rotte. The area underneath the lifted volume will function as a public gathering point and distinction of the public entrance of the building. This area will be extend into an descending stairs that also will function as a public attractor.

**Relation between the wider social context**

The relation between the final design and the social context are interrelated. The creation of a increasing density will allow a hybrid program of the building. Where the focus of the municipality is set on the density of housing, the design will cope with a variety of functions. Not only to support the housing demand but also to cope with the demand of the context and the contemporary economical situation. The public program will contain a focus on the demand of flexible separate spaces that can be rented for example by small scale companies. The public program can also be seen as a convention center. Although not a immense out of scale center but moderate spaces where also art and cultural conventions are possible. These convention spaces are part of a wider context in the building configuration. The convention center is supported and connected with a hotel for convention guests but also tourist and visitors with remaining purposes can make use of the hotel plus facilities. The program of the building will not only focus on visitors but also on local inhabitants. Facilities as a Health club and a spa will facilitate all visitors including regular citizens.

The routing through the public and convention program will unify the varies flows of people running through the building program. The direct public route from the public lobby to the roof stage will go through a extern void and react of the formal space adjacent to a glass facade. The formal public will follow a ramp routing adjacent to formal spaces.
Critical reflection

The idea of creating a unifying skin wrapping a volume will give you as a designer a certain freedom in form. The form can be adjusted to the urban context and react while the skin should be reparative, flexible in open-close and shouldn't imply a specific direction. The sculpture will be enhanced by a type of skin that will not imply direction. A grid of equalized triangles will form a net without direction (figure 5). With the combination the triangulated skin and the sculptural result in a specific urban settlement. In other words this building is designed specifically for this location and will not fit into a changing context. In a worst case scenario the surrounding building will be demolished. Than the building will lose its connection with the urban fabric. Although the most important direction will remain, the railway infrastructure will not likely be demolished. This could form a additional framework for future architects to consider while designing new building adjacent to this design proposal.
As I designed and formed the unifying facade I recognized a contradiction between enhancing sculptural form and creating a public accessible building. In my opinion people should be invited with clear gestures into a building. A building should not create a stronger distance between spectator and building than the facade. The urban voids caused by the extrusion of volume could ease this problem. The spaces that resulted from the extraction are encapsuled with volume. This will mean shelter for instance rain and wind and will invite people to enter the building. The experience of being in a enclosed space should motivate the attention towards the building. The facade will also react to this thought by being as transparent as possible. Hereby enhancing the interaction between pedestrian and building user. Still it is hard to make the public space surrounding the building attractive. It is a continuing space without any discontinuity, the abundance of physical barriers and fragmented volume make it hard to combine a dynamic environment for pedestrian, nature and activity.

figure 5 | A unifying facade