Document: Reflection, The Counter Fortress, reflecting on a 70’s philosophy
Course Coordinators: S. Komossa, N. Marzot, J. Fokkinga, R. Have
Student: Robin Beusink | 4094239 | Youngho Oh | 4183231
MSC3/4 - Public Building - Public Realm Rotterdam 2012/2013
Project location: St. Jacobsplaats, Stadsdriehoek, Rotterdam, Netherlands.
Project keywords: Hybrid cultural passage, structuralism reloaded, public building, continuity, Re-use existing.
The heritage of infrastructural degradation, The St. Jacobsplaats, Rotterdam

The designated area of our project is located at the tail-end of the Binnenrotte, Rotterdam. An enclave isolated from city activity one could say. Its historical significance is remarkable since this is the location, the city came to being. In the second half of the 19th century the site was characterized by the presence of the suspended rail tracks. After decades of transformation and degradation due to infrastructural invasion the site was split up. Leaving the St. Jacobsplaats with unattractive areas dominated by cars, ambiguous green and a built environment which has little relation with its neighboring public space.1

The Binnenrotte square came from being covered with water, subsequent a viaduct for train traffic disturbed its cityscape. The viaduct, in fact, divided the zone and lowered spatial quality. The railway in Binnenrotte was transferred into the underground. This transfer created a permanent urban void, and it remarkably regenerated the spatial quality of the Laurens Quarter. The Binnenrotte square emerged as a permanent urban void. But, its potential is overlooked and yet unveiled. All public buildings, main traffic access, and new development are concentrated near Blaak station. Recent transformation around the square were done in a naïve way. Much of the building use is residence, and access by the public transport is limited. Although an open air market occupies only 30% of a week, there is no sufficient floating population willing to use the square on remaining 70% of time. Fluctuation of people, inconstant use, and low efficiency are problematic in this area. What will be the catalyst to attract the public?

The project site locates on the other side of the square blocked by the freeway. The inlet of the underground railway formed a weak green space that separates apartment and parking-level house with dominant housing block. It is located on the edge of 3 VIP areas where the municipality has a plan to develop in area development concept. It could be a nodal point in phenomenological view by Kevin Lynch. However, it is merely disconnected corner of the city. We would like achieve continuity by under-passing the freeway. This turns the boundary into border. Two linear buildings are placed alongside of the railway. This forms a pedestrian street on outside and a passage between them. This connection strengthens effect. The intervention will form an anchor to bring spatial balance to the site.

Finding answers, Research level

The Center and also the Laurens-quarter of Rotterdam consists of urban blocks defining a clear border. These urban blocks are developed after the bombing of the WOII. The urban tissue of the center is clearly different than the urban tissue of the neighborhoods that were not bombed during the war. To grasp Rotterdam we decided to research the different blocks. Our point of departure was the research of Robert Venturi and Denise Scott Brown. Learning from Levittown1 and Learning from Las Vegas2. They chose a certain research area and determined the parameters they wanted to investigate. Subsequently they compared them. The focus point of that research of the episteme of semiology Instead of semiology we chose to concentrate on typology/morphology. This because the city inhabits a great deal on diverse buildings and therefore typologies. The understanding of these buildings in relation to the public sphere will allow us to understand an important part of the urban tissue concerning Rotterdam. Parameters of this research will be function, organization, private/public, and morphology. Which will be compared with the other blocks. Hereby we can derive statements on the relation of these blocks to their surroundings. Plans, sections, 3d models, pictures, text, will be the tools to touch upon these different aspects of the blocks. The main issue in our research is to find answers on how our design interventions should work. This on larger but also on small scale. To understand the urban fabric we cannot only discuss the morphology of the city. Another important aspect is also the perception of the blocks. Perception is an important aspect about how an block or space is perceived. In order to create quality-full diverse space it is fundamental to look at this episteme phenomenology. By trying to capture these experiences we make pictures sections, 3d models, and drawings according to our parameters. By combining a subjective and objective approach we are able to create a framework for a future design.

We made a research which deals with both a more intuitive and personal approach together with a factual, unbiased analysis this by going trough scale and time, looking at the static and the dynamic. The profit it gave is that we know have great insight in how the location has been inhabited, what transformations it underwent and what positive and negative aspects we should keep in mind, from these we can derive our design parameters. The research gave us positive outcome on our thesis statement and therefore we will adapt the following strategies.
"From green limit, to limitless green (The plan, urban level)"

One of the initial ideas was to transform the impractical infrastructural element that covers the train tunnel1 to a high quality boulevard which could inhabit public manifestations. Together we immediately felt that we could break boundaries and frame connections with the Binnenrotte and the Pompenburg areas which could be open for development as well. Transforming the green ends of Rotterdam to eachother. By doing this we make the Jacobsplaats an important public mediator which could feed the Binnenrotte with activity. Since this famous area is only supplied with city dwellers throughout the Blaak station and the Hoogstraat we could make an intervention which transforms the location to a public magnet so to improve the vibrancy of the area2. In order to densify the St. Jacobsplaats we let the infrastructural elements be the amphiolas of our new urban block. A generic building which inhabits private, collective and public functions. Connecting to new green spaces using the Binnenrotte as its red carpet. The location will be transformed from a dead end to an important mediator that brings people together.

Land use
Underground parking (bring back ground to the pedestrian)
Continuation by slope (green network, pedestrian/bike)
Mediator (pavilion with Sint Jacobsplaats, bridge with the Fortress)

Specific place
Stimulation of creating own story by having specific place as a sunken, water features, resting area, pocket square, routing which facing outside

International hub
Design a ground scraper to allow close relation of the building with the street

"Revision of a 70’s philosophy (The plan, architectural level)"

We both had the intention to design a context conscious project. Since we felt the area was lacking this symbiosis of the void and the solid we line on a project that integrates and strengthens its location. The Jacobsplaats as it is now was part of a project in the 70’s which main target was to densify the city center. The architect Hoogstad made a plan to create a walking route alongside the Rotte, This led to the implementation of the dwelling complexes on the St. Jacobsplaats3. Following the style and rules of that time, according to a structuralistic approach.

As it turned out the structuralism ideology was doubtful. Shortly but to the point, buildings where introvert and the whole idea of individuality was lost in the endless repetition of units. In a way complexity and liveliness was missing. We took the chance to make a counter-reaction in retro-perspective on this body of thought called structuralism. We like the idea of rule-based design and therefore took the rhythms and flows of the site which were already implemented. Trying to indulge the shortcomings of the structuralists in our own design3.

The design implies rule based design. With rules for rhythm, hierarchy, materialization. We bring in complexity through basic mathematical elements embodying a street, square, house and public function that together create the informed simplicity and complex relation between public and private functions within the project. We also allow poison within the rules in order to create variations on critical points in the design so to respect the context.

The design reflects on the Kasbah3, a fortress, a solitary building and on the formerly connected tower which could be assigned the same critics. Our intervention consists of two elements, being our own courtyard tower and two adjacent and similar wings. The two elements together form one urban block. with a central courtyard/boulevard that could stage several activities. The design distinguishes itself from the former stated buildings by having a transparent public plinth, and a individualization of the units that form the dwellings. In short we get the fortress out of its solitary momentum and show it to the world. We tactically organize the different functions in order to get the best relations possible, intern and extern. We also connect to the existing fortress to create street life on a suspended ground floor. Besides this we carefully materialize entrances in order to attract people to visit and participate.

The design forms 3 new types of public space on the former split up ambiguous space of the St.Jacobsplaats.

- A green space for recreation and sports
- A courtyard for public activities and contemplation
- A busy commercial street for shopping and passing by.
**A framework for change (The plan, engineering level)**

The concept on engineering level was to make a flexible framework which could adapt to future needs. We insisted on a prefabricated structure and chose to work with a combination of prefabricated concrete and steel trusses. Smart floors (slim-line floors) which could integrate the necessary climatically needs. The floors and facade are designed in a clever way so that they can aim for a climate facade. Theoretically, the project could be torn down and build up elsewhere without doing much damage to the overall building.

Elaborating on the climate issue within the design we integrated aspects which would lead to a lower energy demand and elements that could win energy itself. Like protruding canopies, climate facades, green facades and roofs, water storage and so on.

The tower touches the ground floor only via two strong Colum-beam walls. The main reason we do this because the sunken train tracks give trouble to build else way. We give this space back to the inhabitants of the St. Jacobsplaats. The two big walls are connected via mega structure which is placed in-between. The mega structure carries the floors and transfers the forces to the big walls on to the foundation.

We have provided basic rules and several prototypes for the dwelling as a guideline. Residents can choose one out of this wide range of choice, namely catalog condition. Also we opened up the possibility for creative modification by applying prefab system for the facades.

**Exposure or Disclosure (The plan, detail level)**

Seen and being seen, or disclosed contemplation. Facade detailing that allows for both antonyms. By tactically allowing openings in the facade to show or to hide people.

- Load bearing walls carry the floors and facade.
- Hollow floors integrated climate piping.
- Flexible double facade with screen. Brass cladding strips that are slightly separated from each other with structural glazing, in the line of the facade or back.
- Green roof

**Looking back.**

The research of combining the static and the dynamic allowed us to form a decent urban plan. The characteristics of the site gave us chance to reflect on the context and implement our own architecture. We think we have come from far and have stressed a proper proposal. Our collaboration turned out to be a fertile one. And we have strengthened each other.