The Maassilo

This reflection is part of my graduation project “The Maassilo” at the studio “harbor Rotterdam” at the Faculty of Architecture with specialization Heritage and architecture at the TU Delft. During this graduation project students could choose one of the industrial buildings that were part of the harbor in former days. My choice was the Maassilo building, which is located on the south part of the Maashaven. The Maassilo complex was a former silo building that lost in 2003 its function. Now it is transformed into a nightclub with several big stages and in front (Maashaven-east) creative offices. My personal choice of this building was the massiveness that was strengthened by the concrete material. These two examples create a contrast in the environment in scale and materialization, it’s like an industrial concrete cathedral. Also the function as a big storage machine with all the characteristic elements like the introvert character, the shafts and the machines on the water-side and on top of the building like an industrial landscape grabbed me.

This landscape grows over time like an organism. In general you could say that the Maassilo transformed in three main stages: Stok (1910), Brinkman en van der Vlught (1930) and Postma (1950).

These transformation were in order to adjust to the new requirements and the technological innovations in that time. From 1910 to 1950 this machine changed from partly storage to sacks to transport bulk right away to bulk on a train.

The most characteristic feature about the Maassilo is for me the machine. The machine has played the determining role in the area, shape, dimensions, openings in the facade, construction and materials of the Maassilo. I was asking myself: what is exactly this machine about? in a large

Maassilo on world scale, from grain to grain products. In the red circle the Maassilo in this process. (Leunissen, G.)

When you strip off the Maassilo you will see this transportation belts and a collection of silos that evolved over time. (Leunissen, G.)
context and in the Maassilo complex itself.
I came to the conclusion that this grain silo Machine mainly consist out of four different spaces. These spaces are the workfloor at the ground floor, the distribution floor at the attic, the shaft that distributes the grain from the ground floor to the attic and the silo bins itself the “in between” space. These spaces can also be divided into two different worlds. On the one hand there is the active part with: a lot of Light, Noise and movement. So the spaces people can enter (work floor, distribution floor and the shaft). On the other hand there is the inactive part that is dark, silent and motionless so the silo bins the space that is not accessible to people. The Maassilo complex consist out of 75% (in volume) out of silo bins, so almost the main character of the building you can’t use and experience. For me this was the biggest issue in the design: to use the silo bins again!

My research question was: How can the Maassilo complex be reused to accommodate new functions and at the same time keep its character? and design question: How can the remaining 75% of empty space (silos) in the building be redeveloped?

After the first visit I had several ideas to transform this grain silo machine into a living environment and make the silo bins accessible for the public that they can experience the inside of this machine. This idea growth over time when I was analyzing and value the building. This valuation is one of the main focus of this studio. For me these values were the outside characteristics of the Maassilo as a storage machine. These characteristics were the organization as a former introvert silo building like the machine landscape on top of the building, the blank facades, ground floor with the funnels and steel structure attached to the water. The Analysis and evaluation is the base of the framework of intervention. This framework consist out of several conflicts between change in appearance of the facade and the new function. Daylight is one of the biggest issues with this closed off building as a living space. I solved this problem by searching and testing several building products to maintain this enclosed character at the facades at the city side.

This analysis is a combination of research in literature, archives, on site observations and a strong personal fascination. This fascination clears out your manifest and position yourself as a young “transformation” architect and make it a joy working on your own project. My position changed often during my studies which was mainly due to the debates in the beginning and also by reading architecture literature of several architects who I find interesting. But this position will changed also in the future. However for this project it was clear that this Maassilo machine was my biggest interest for the inspiration for the new design.

Analysis (research) vs Design: The starting points of my design were based on several problems that encountered in the analysis. The analysis I divided into three parts: Maassilo as a machine (personal fascination), Typology (technical) and Different Approaches on Heritage Buildings and sites (Theoretical). The hardest part was to come up with the best solution on that specific spot with that specific building. My starting points were the answers on the problems I faced. These several problems vary in different ways from world scale (sustainability) to right on the spot of the building (social problems cq. desolated building complexes due to leaving of harbor activities).

A program of a building is always connected with a broader social context, so I find out that the
project was situated on the border of a more or less socially different worlds. On the one hand, a relatively highly educated neighborhood and, on the other hand, a low-educated neighborhood. My next idea was to meet this two groups together and find a way that they can live and work together in the Maassilo complex.

These starting points demanded spatial spaces to facilitate both groups the program of the building. To connect this program at the Maassilo with the urban area around the project I had to made decisions of entrance, functions, routing and daylight. The intervention I came up to is quiet radical but is needed for the program and is also permitted by the value assessment.

In the design the building will be part of the city and the community so a working, leisure and living area. All the spaces that therefore were accessible by people are now public areas (work floor) a market and workspaces, (distribution floor) a restaurant and the Shaft the SiloEXPO. The shaft will be used again as a important node to transport the public and goods through the Maassilo complex. The new main space in the building is the Silopark that is directly connected with pedestrian bridges to the urban tissue. The steel structure in front of the water will be function again as a connection at street level and water to the silopark. From this main park you can enter all facilities of the building.
Conclusion

The research question: How can the Maassilo complex be reused to accommodate new functions and at the same time keep its character? This design changed the character of the building from a storage machine into a living environment, so the building changed radical. But the elements of the machine like the distribution floor, shaft and work floor will be kept. Some elements will be bring back like the big doors at the quay to strengthen the original design of the machine.

A transformation project always start with analysis and concludes with a value assessment. The needs of a new program and valuation are the base of a transformation framework. In this case the transformation is quite radical to demolish almost 50% of the silo bins to create this Silopark. But this transformation has lead to a living environment that is very unique quality to experience this silo system. This system is also sensible at the inside of the building and gives therefore a strong identity to the building. The story of the history is still visible but enters a new chapter with a new function. This new chapter, where the people that live in the direct context can facilitate their dreams in the new Maassilo!