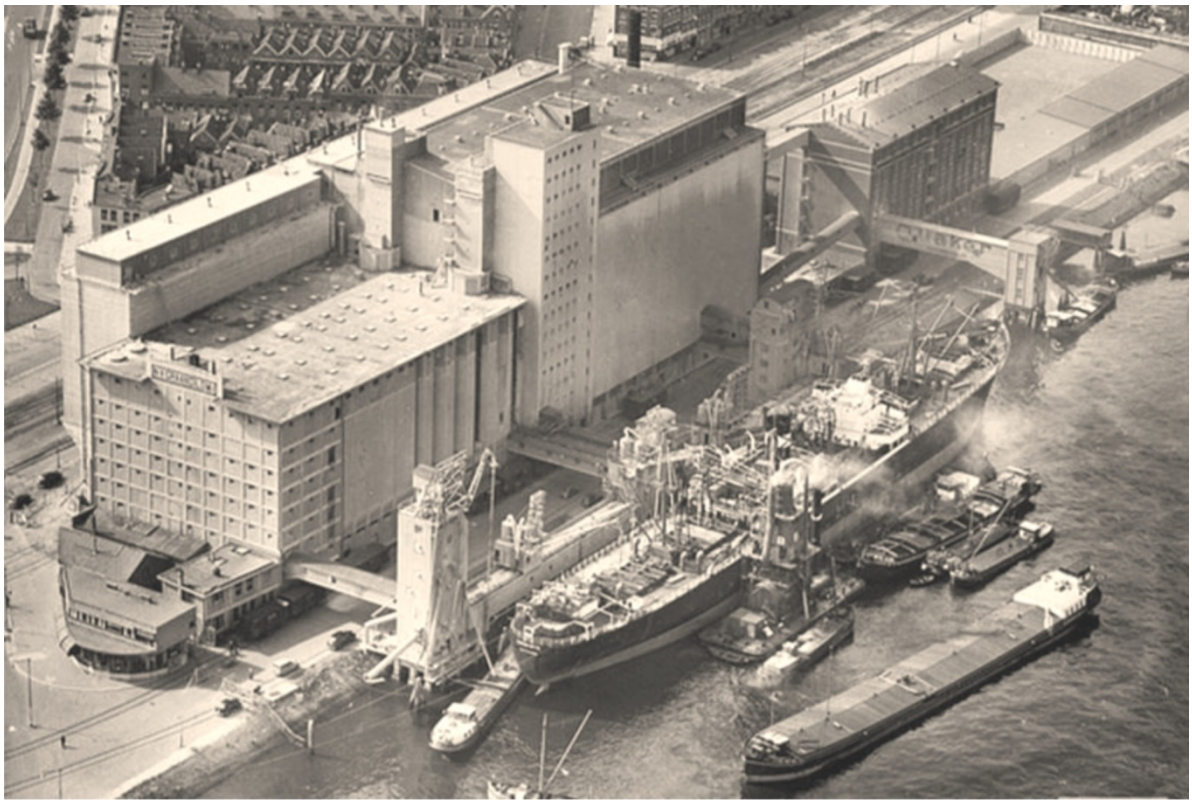
REFLECTION PAPER P5

This paper reflects on the research and design process I made during this graduation studio. I will talk about why I chose my case study and how I approached the redesign of the building.

The relationship between the theme of the graduation lab and the chosen case study

The Heritage & Architecture section focuses on the architectural and technical aspects involved in the conservation and transformation of buildings, including those of cultural significance. Finding challenges where the past explicitly determines the possible future. The approach of the Heritage & Architecture section is preservation through development. Especially in the Rotterdam Harbor design studio, this holds very true that preservation through development is necessary because these harbor buildings made Rotterdam the city it is today and would be a shame if lost.



Luchtfoto maassilo, sepia

The Maassilo located in the south of Rotterdam at the Maas Harbor was at one point in time the largest grain storage facility in Europe, but this happened gradually in 3 massive phases which are still visible in today's ensemble of the building. The moment I first saw this ensemble all other case studies became boring in my eyes, the sheer volume of this monolith excites me to see what is possible with it.

In 1910 the first part was build, designed by J.P. Stok. This was the first large building/storage facility that was built at the Maas Harbor, and at the time it stood above all other buildings in its vicinity. Then in 1930 the second part was built on to the west façade of the first part as an extension for the increasing demand of storage volume. Designed by Brinkman & v.d. Vlugt it was the first building outside of America to implement the McDonald method. And in 1951 the last major extension was added to the south of the complex designed by J.P. Postma making it the largest storage facility of Europe.

After the Company moved to the Botlek area in 2003 the building stopped working as a storage facility and the building was left behind with all its empty silo's. since then there has been a nightclub in some parts of the Maassilo as well as flex office spaces and some other activity spaces. Currently 70% the buildings volume is still left empty due to the silo's, and the interventions that have been made since 2003 are only temporary interventions so some parts could be used. But the building is still deteriorating now because there have not been any real interventions to increase the life span of the building or try to use the huge amount of volume that is available in the building.

So in order to preserve the Maassilo we have to develop it. Not only by preserving its original state but finding a new function so that the building can start a new long life.

The relationship between research and design

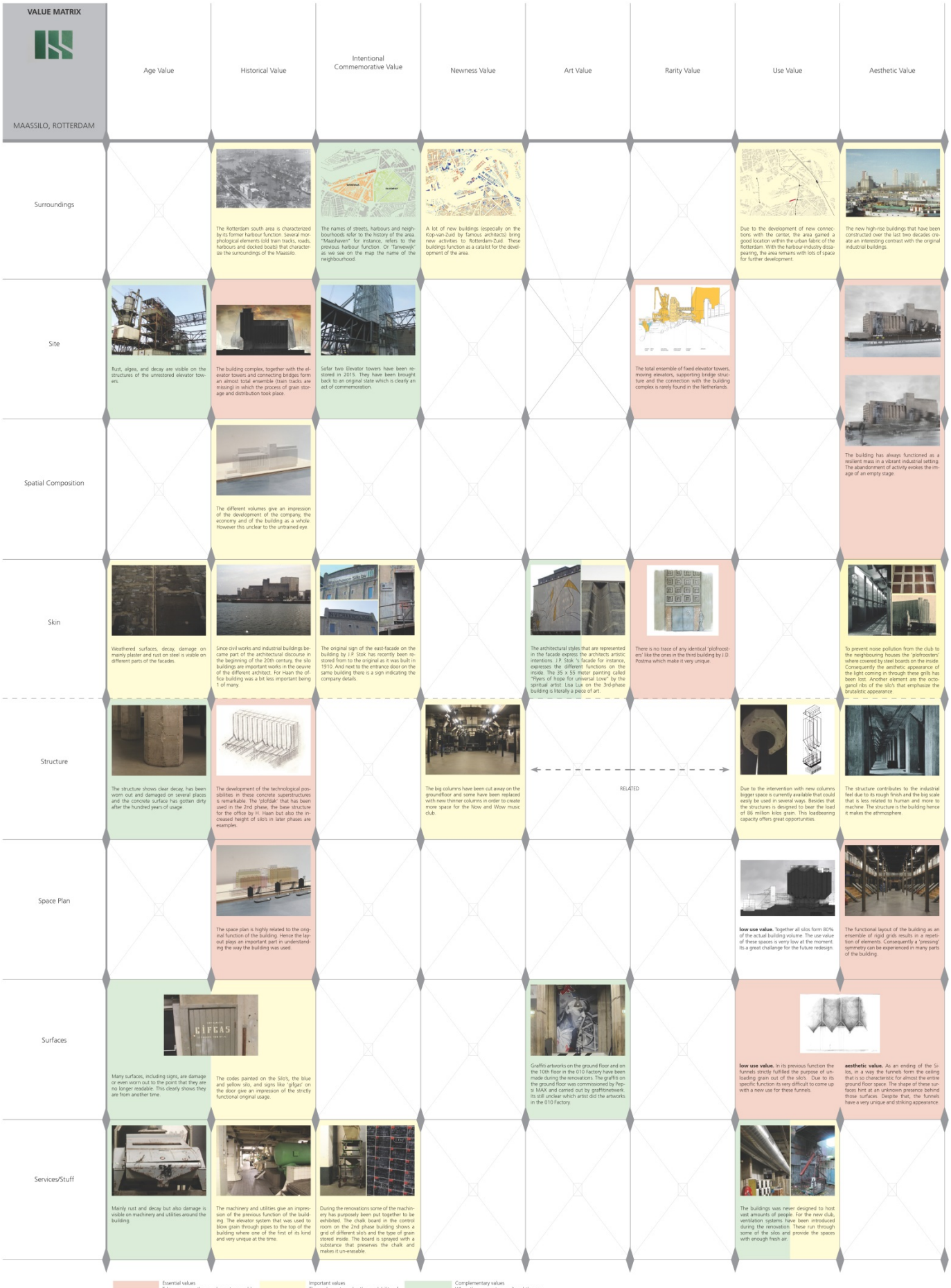
When designing in relation to an existing/historic building you have a starting point for your design, and a compass that can guide you in the way the building should be orientated. The relationship between research and design within heritage is something of key importance, because one cannot exist without the other. When designing interventions it is of a fundamental interest to find an appropriate balance between the old and the new. Research is a substantial part of the design process and is reflected in the statement Design by Research and Research by Design.

Research is the father of design, without researching and analyzing an object/subject/desire there can be no fruitful result in the design. Because of given existing information we can evaluate the good qualities and bad qualities of a design and also see limiting factors or rather creating limiting factors. By which I mean creating guidelines so that one's design doesn't start on a tabula rasa but on a palimpsest, enriched by the underlying value of what once was. Or the exact opposite can happen in which you discover that most of what you have been analyzing isn't worth anything or is more expansive than building something completely new.

In case of existing buildings one must first look at the history of the building, researching the influences that created the final design, and valuing them as to how much they contribute to the current state/image of the building. Which in heritage is done by assessing the cultural values of the building. During the first two phases of the project Rotterdam Harbor Studio I researched different aspects of the Maassilo, like the urban context, technical details such as structure as well as previous activities and the architects of the buildings. Alongside this research the Maassilo-group used the information that was gathered to compile a report about the cultural values of the building which can be divided into physical and non-physical values. To get a better understanding how these values correspond with each other or oppose each other we composed a value matrix that measures the values according to level of scale.

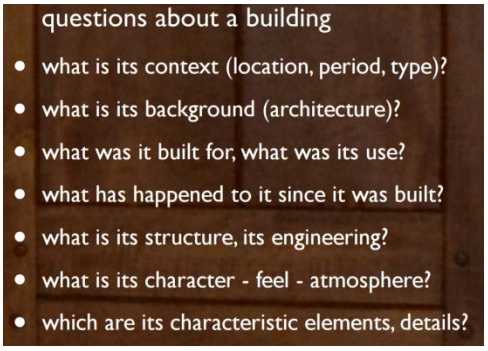
From this matrix one can compile the most important values and decide from there what to use in the design and what has to be kept in the design to preserve the heritage.

CULTURAL VALUE MATRIX Made by the Maassilo research group



The relationship between the methodical line of approach of the graduation lab and the chosen method

There are a lot of different ways to select data and to assess the value of that data. Some methods that are already in use nowadays to assess the values are for example the method of Suzanne Fischer which has an approach which works based on scale. She starts from the biggest scale which in the case of buildings/architecture is context and works her way down to small details of the building and ornaments that have meaning.



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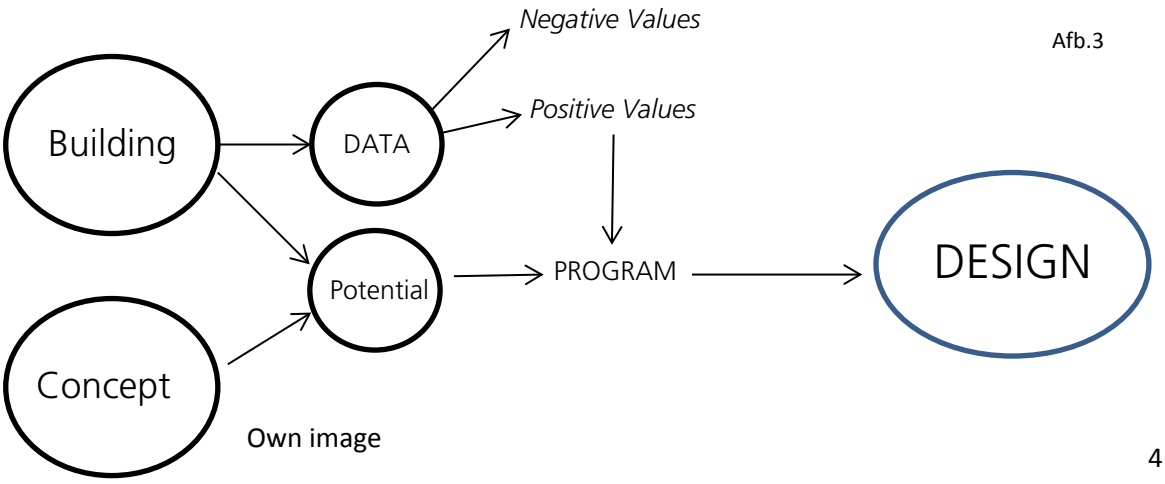
Another way of analyzing the data is dividing the data into different kind of values. Such as the NARA Document does, it makes a separation in four different aspects.

DIMENSIONS / ASPECTS	Artistic	Historic	Social	Scientific
Form and design				
Materials and substance				
Use and function				
Tradition, techniques and workmanship				
Location and setting				
Spirit and feeling				

Fig. 2 Scheme based upon the Nara Document (ICOMOS 1994)

I think that collecting the data is the easiest task, it may take up a lot of time but it is most of the time available in digital, paper or physical form. The hardest task in my opinion is to find the data within all the data collected which is useable or even better *reusable*. Trying to formulate the worth of that data by creating a new plan which utilizes those existing elements is what makes a design special if you're building in relationship with an historical or existing context.

Here is my method, how to change the data into value for your design while working with historical buildings or existing structures.



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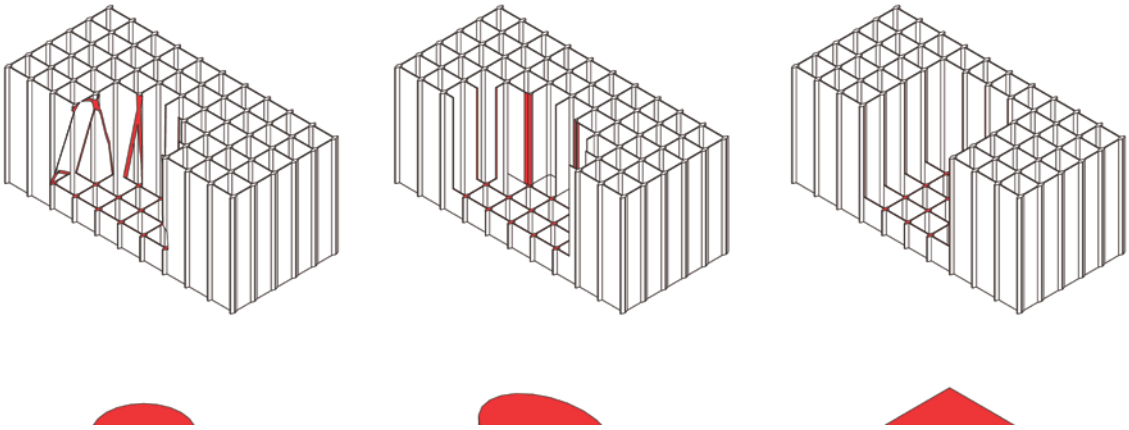
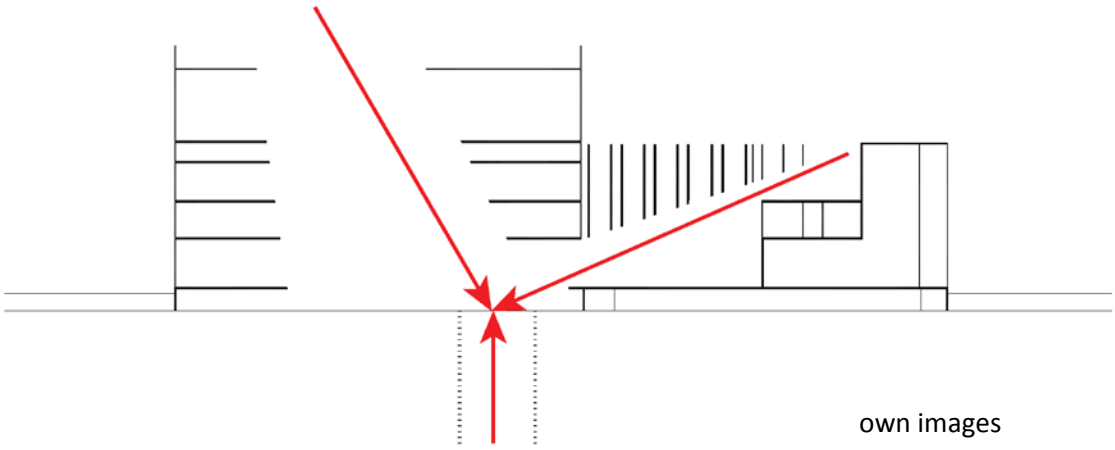
Own image

So this brings me to my approach towards designing a museum in the Maassilo. How do you make the Maassilo suitable for a museum, a giant concrete monolithic block with zero to no daylight and a 70% volume that is unusable for anything other than its previous function, storing grain. So the main challenge is how to deal with the inaccessible silo's that take up a lot of space. So how do you create an intervention in the silo's that increases the value of the silo structure and bring in daylight as well. Maintaining the image of a closed off, alienating concrete monolith, but opening up the inside to light, revealing the hidden parts of the building and experiencing the hidden nature of the silo's by partly exposing them.

Using the cut out to increase the value of the silo structure . own image



Using these openings/voids as guide posts for the routing of the museum so that users can orientate themselves at ease while observing the art.



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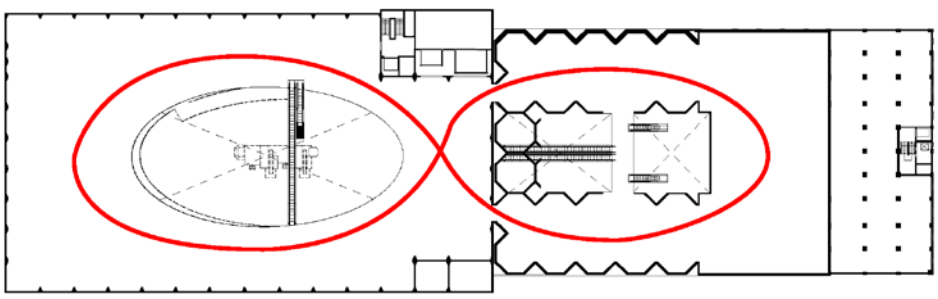
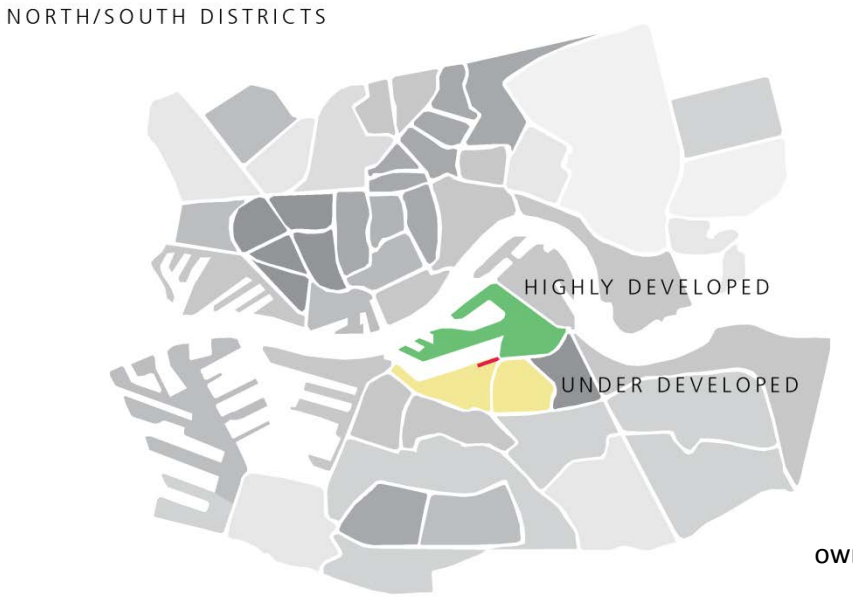


The relationship between the project and the wider social context

The Maassilo is located on the edge of the southern district Tarwewijk and Bloemhof which currently are one of the worst neighborhood districts in the whole of The Netherlands in terms of safety, financial situation and crime. On the north side of the Maassilo are the districts Katendrecht and Kop van Zuid which have been undergoing rigorous real-estate development and the public space has been improved a lot which increased the value of the properties and also increased its good social standing as a district.



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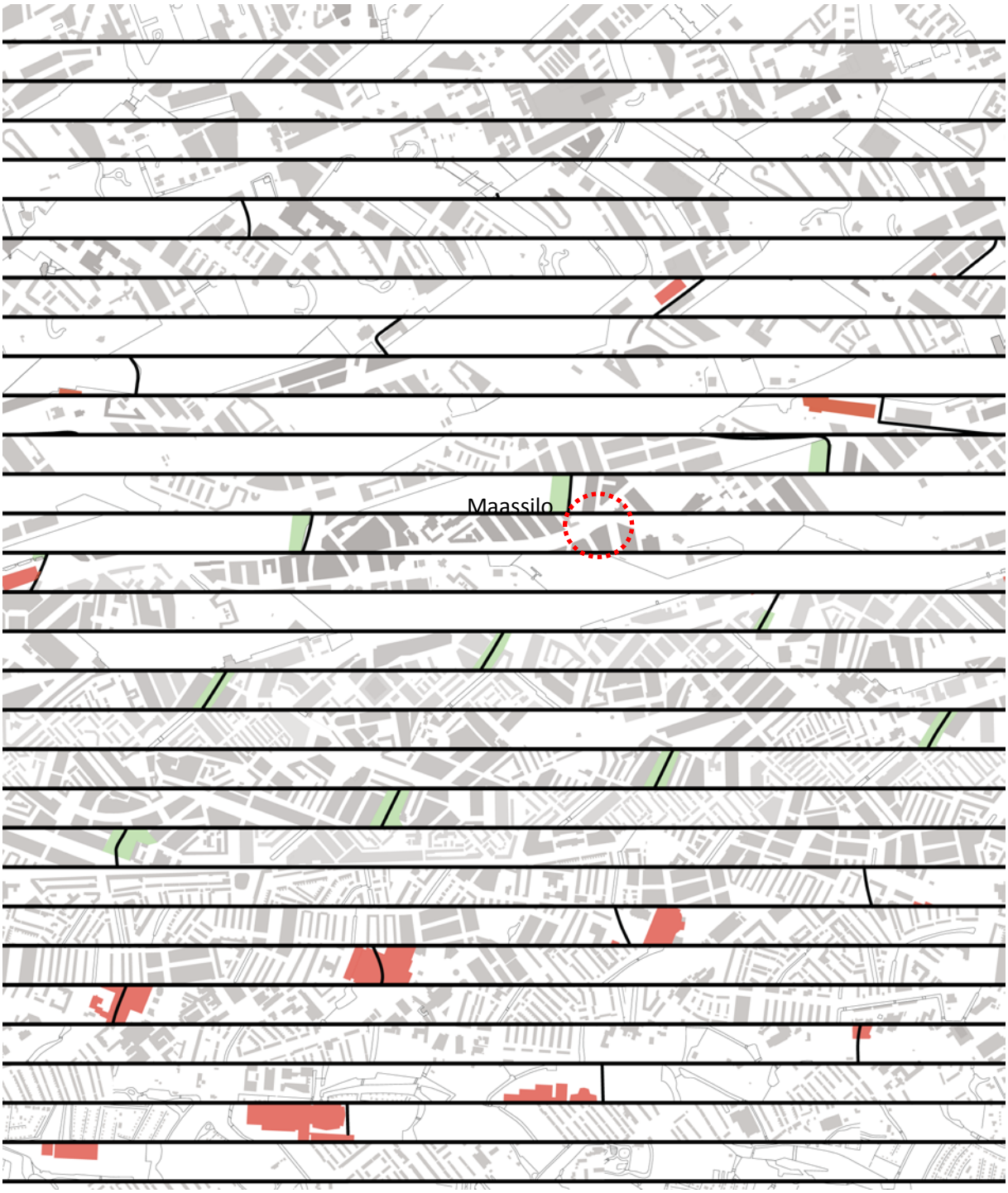
Creating a cultural art hub/museum in a neighborhood to help with the social development of the surrounding areas as well as connection the district to the more prosperous Kop van Zuid and creating an connection to Zuidplein. This can generate enough traffic and interest in the

area to help the social development of the struggling districts. Multiple researches done by the municipality have pointed out that art/culture are in fact an effective measure to help improve those areas. I want to create a cultural route through

the south of Rotterdam that once again connects these districts and increases its standing within Rotterdam and make it increasingly more popular with not only the inhabitants of

Rotterdam but also make the district internationally known to the whole world because of the Maassilo museum.



Cultural routing connection the Maassilo. own image

Conclusion

With this paper I tried to define my how and why, which is a combination of cultural value appreciation but also looking at the context of the building and trying to create interventions which increase the quality of the redesign. The most important aspects were how to deal with the huge unused volume but also using the characteristics of the silo's as a design quality rather than removing them or leaving no real trace of them behind. Changing the function of the building became necessary in order to keep this building alive and to preserve the heritage that once ruled the Maas harbor in terms of usage and activity so that it not decays any further but rather shines again.