



# Katoenveem

*Reflection*

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## Introduction

*An important part of the work of a heritage architect is the valuing of historical objects or parts thereof, on their cultural importance. It is important to understand a building and its history when designing a new life for an existing structure. Not only determining what the relevant features are but also how to incorporate or reuse those elements within the new design can make a heritage design successful. This reflection paper will reflect on my personal design process, with a special focus on the importance of cultural values on the design.*

First a character description will be given as an introduction to the building and the site. Followed by an overview of the important characteristic, which have formed the starting point of my design. The opportunities that follow from the analysis and valuing are listed next after which the alteration of the value assessment will be discussed. A reflection on the design process as a whole will be given at the final chapter.

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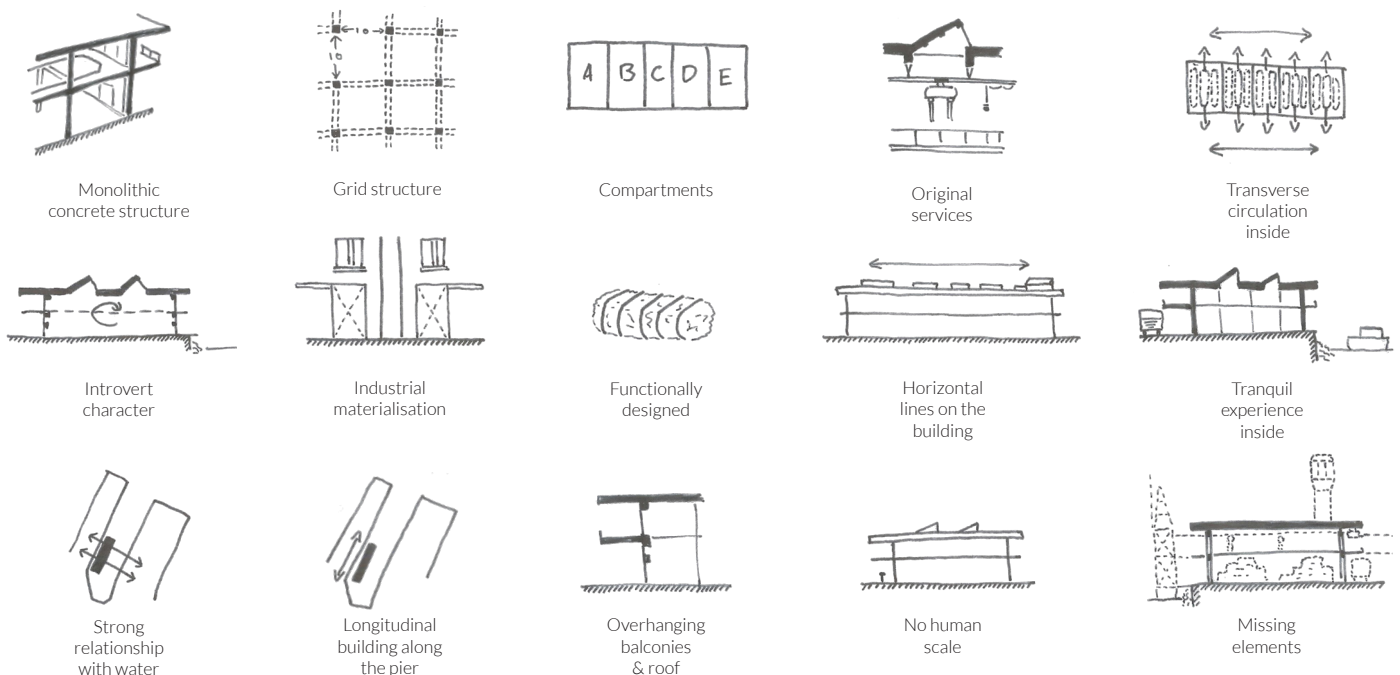
## Character of the building

The existing building in question is a storage and transshipment facility designed specifically for cotton. The name 'Katoenveem' refers to this, for it is the Dutch name for cotton storage and transshipment. It is a longitudinal building which stretches along the end of a Rotterdam pier. With a need for fireproofing the building was constructed in concrete, with fireproof walls separating the 140 meters long building in five compartments. Within these compartments on a grid of ten by ten meters, a concrete structure of columns and beams hold up the walls and roof.

There are walkways running along these beams at a height of seven and a half meters, which allowed the workers to use the electrical traveller system to transport the heavy bails of cotton. This traveller system, along with a few other original elements, are currently present in the building. Other elements, such as the original water tower for the (still partially present) sprinkler system, have been lost over the years. Traces of such elements can still be found on the building and at the site. All these services allowed for the transport and safe storage of the heavy cotton bails between transatlantic ships, trains, inland ships and the different storage areas.

The rough industrial building fits perfectly within its industrial surrounding of the harbour area, however the usage it once saw is no longer present. The derelict state the Katoenveem and its surrounding are currently in, reflects on the shifting of Rotterdam's industrial heart near the city centre towards the east; heavy industry is moving away and new functions return in its place. The Katoenveem will border on the area between housing and light industry, allowing for many different functions to settle in its concrete structure.

This introduction describes the different important elements found at the site, which I have found to be relevant to the cultural value of the building. These elements have formed the first guidelines for the design and originate from the cultural value analysis I've made along with my group on the Katoenveem. A visual representation of the character of the Katoenveem is given with the sketches below.



## Opportunities

The character sketches on the left page have been the starting point of my design. First, they formed a list of the elements that make the Katoenveem what it is; removing too many of these elements will make the building itself lose its character and with that its cultural value, so they form the obligations I should strive to maintain or improve.

Secondly, in separating the character in more 'tactile' elements, it becomes easier to see what chances the site holds. For instance, currently the relationship with the waterside is rather poorly whereas it used to be very important; a good alteration with cultural basis could be to improve or reintroduce this relationship between building and water.

The most important chances I have determined after the analysis are:

- **Restoring complex value;** The building used to be part of a whole complex of buildings and elements that formed the cotton transshipment and storage system, reintroducing elements that refer to this history can be a valuable addition.
- **Open space plan;** the large grid allows for great freedom in placing new functions in the building
- **Become part of society again;** the building is currently empty, but it used to be a place of activity. A new function can reintroduce such life again to the site. Along with the future plans of the municipality to revitalise the surrounding area with new housing and activity, there is a great opportunity to make the Katoenveem an active part of society.
- **Reshaping the relationship between water and quay;** the Katoenveem used to depend greatly on the water; without a good connection between building and the waterway, there could be no transshipment of cotton. New projects along the waterfront of Rotterdam have begun to revitalize the relationship between quay and water, it is a great opportunity for the new design to do this as well.
- **The compartmentalisation of the floor plan can be a great divider of functions;** the building is already separated into five compartments due to the fireproof walls. This makes the building very suitable for a combination of different functions within the same structure.
- **Reusing the present services and building elements;** there still remain original elements on the site. These elements can be reused to great effect, showing the original use and reminding people of a time long passed.

These chances have shaped the focus of the design, firstly in the selection of new functions. The site allows for some functions while also denying others. Functions that require silence or strongly regulated environments such as healthcare, schools or even housing, are not suitable whereas others that actually produce a lot of sound are suited to be placed here. The site informed me that it would be greatly suitable to house a number of functions such as a festival site, theatre and workspaces specifically for the creative industry.

## *Personal value assessment*

However, after the actual designing started, the importance of the different elements changed. Now that the influence of the new design becomes more and more apparent, a number of conflicts have arisen. Elements which I've previously thought to be important to the design became difficult to incorporate.



*Interior shot of the original services*

*This picture shows the original services that are still present in the building. The steel beams, with the black box attached to it, are part of the original traveller system. This system was used to transport the bails of cotton throughout the building. As it is part of the original design it can be considered historically valuable.*

*source: personal photograph*

A good example of this are the original services; I thought that the existing traveller system could be used by the new theatre function. Only after designing the new structure that would be required to allow for the free space in the middle of the compartment, I realised that the traveller system could not be maintained in its original composition.

As of now, I have yet been able to find a way to reuse the system in this place, except for the trace value they hold. I have set out with the aim to reuse such original elements but this has proven to be rather difficult. Perhaps in the future, after further solidifying the design, opportunities for such reuse may present themselves. I hope that this is just an in between state, in which the restrictions formed by the new design which now cause the original services to be obsolete, can later be adjusted to incorporate or reference to them.

I feel that it is important to analyse an existing building in order to understand and value the different aspects that make determine its character. These aspects should form the base of the design, informing on what can and cannot be touched. However, these elements or aspects of a building should not be sacred, in order for new life to take place within the existing, alterations are necessary and sometimes this means that certain qualities of a building are lost. This should not be considered a bad thing; I think it is better to create something new in order to allow for reuse than to maintain what is present indefinitely, forcing it to be either unusable or to become a museum piece.

I've found that the information gathered and valued in the cultural value assessment can be very informative as a starting point for the design. However, I've also found that it can be limiting.

Consider for example the fact that we as a group found every original element that still remained at the Katoenveem to be of value. This does not leave a lot of room for alterations since almost everything is still original. It was my original plan to maintain the Katoenveem in the same shape as it is now, only interfering if absolutely necessary. This restricted my design so thoroughly that hardly anything could take shape.

After visiting the building and looking at all the pictures I've taken there I later began to realise that this building is designed as a purely functional building. It was designed for storing cotton and when that function ceased to be, alterations were (crudely) made so that new functions could thrive. Doors were added there where it was necessary, windows were boarded up instead of repaired and so on.

I've come to realise that an industrial building such as the Katoenveem, which isn't very striking to begin with, has no need for a delicate touch as one might give a building like the Paleis op de Dam. It was designed for optimal functionality and adapted over its lifespan if that functionality required it. And the building allowed for it, it's a very stable structure with repetitive elements; so why not alter it? The building is long, and has no clear entrance, no distinction between the compartments and no clear routing, all things that one might expect for a public building. With that in mind, the functions I've chosen do not seem very fitting indeed, however, the next chapter will answer the dilemma of finding a new function for a building that is only suited for storage.

## Finding a new life for the Katoenveem

As stated before, the Katoenveem is a peculiar building. Its closed off character, harsh environment and bad shape do not necessarily invite a lot of people to go in. However, the industry is slowly leaving the area of the Merwe- Vierhavens, where Katoenveem is situated. This will further render Katoenveem useless, as the municipality no longer wishes for heavy industry and storage to be part of this neighbourhood. So, a new function is required for the building else only demolition remains.

In order to determine what functions could be suitable for the site, the building analysis was, once again, a very good starting point. Taking almost every function imaginable and checking how well they suit with the characteristics of the building proved to be a good start. Of all the possible functions that remained, the cultural sector and offices proved to be the most suitable. This follows mainly from the location: access to public transport, safety issues and local climate make it unsuitable for housing, schools or healthcare.

Function	Character															
	Grid	Longitudinal building	Compartments	Low rise	Original transverse reading	Original services	Missing elements	Introvert character	Relationship with water	Industrial materialisation	Functional design	Tranquil experience	Load & dangerous site	Changing environment	Necessity at location	Suitable at location
Festival site	+		++		+	++	+	..		+	+		+	+	++	+
Art cluster	++		++		+	++	+		+	+	++	+	+	+	++	++
Theatre	++		++		+	++	+	..	+	+	+	+	+	+	+	+
Music venue	++		++		+	++	+	..		+	++	+	+	+	..	..
Museum	++		++		+	++	+	..		+	++	+	+	+	..	..
Housing	+	+	..	..	..	..	+	+	++	+	..	+	..	+	+	..
Industrial	+	+	+	..	..	+	+	..	..	..	..	..	..	+	+	..
Healthcare	+	+	+	..	..	+	+	..	..	..	+	+	..	..	..	..
Warehouse	+		+		+	..	+	++	+	..	..	+	..	..	..	..
Industrial	++	+	+		+	..	+	++	++	+	..	+	..	..	..	+
Office	+		++		+	++	+	..	+	+	+	+	+	+	+	+
Restaurant			+		+	+	+	..	+	+	+	+	+	+	+	+
Marketplace			+		..	..	+	..	..	..	..	..	..	..	..	..
Mix																

Function matrix

Following the usage of the cultural values matrix, I used a similar setup to determine the suitability of the different possible functions at Katoenveem.

source: personal scheme

My personal fascinations lie with festivals and theatre, which further bolstered my ambition to make a public place out of the Katoenveem. Reading various texts from the municipality and influential locals showed the need for a festival location in Rotterdam, similar to the NSDM wharf found in Amsterdam. Never having designed a festival I found that it could prove to be a interesting challenge in my final project.

Regrettably, after analysing different festivals and talking to my tutors, it became clear that just a festival function is not enough. Considering that a festival site is only used a couple of times a year, even if it is nearly every weekend, no activity takes place there during the “off-days”. Further, what type of festival would be the main focus of the project? After long consideration I’ve chosen the theatre festival ‘De Parade’ to be the goal, in which theatre is combined with the festival experience.

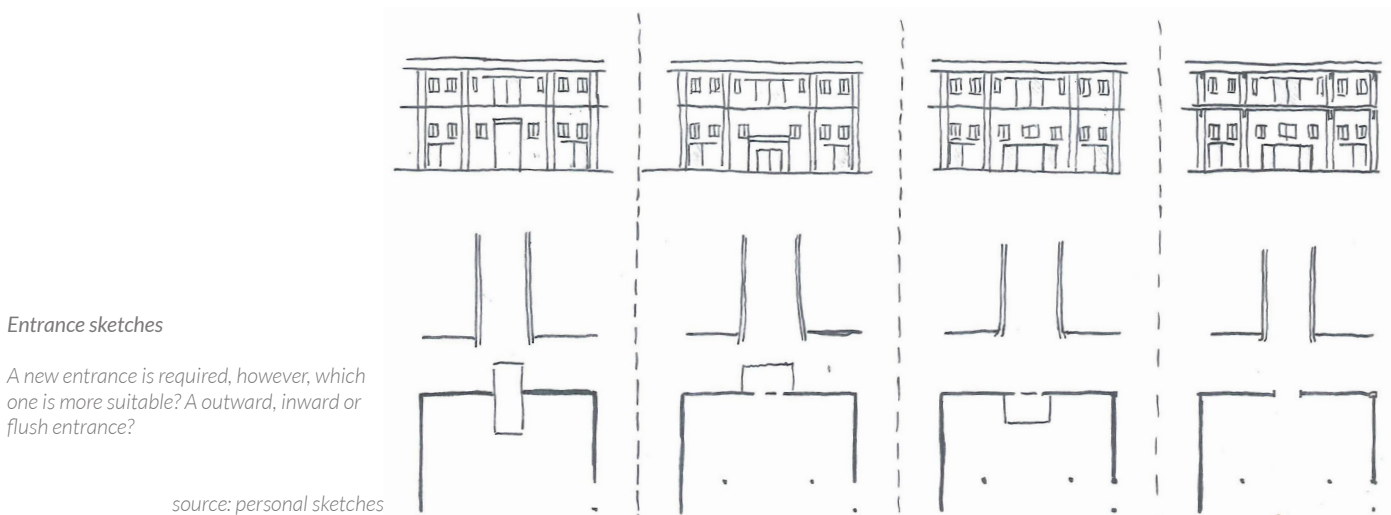
That’s when the plan emerged for a creative space in which all aspects of making theatre could take place; from the first creative meetings to building the decor and rehearsals. Katoenveem should become the space where plays can be made, on site, and performed in its very own theatre space. The surround site should be usable a couple of times each year for a grand festival, during which the building functions as an entrance point and a stage for activity.



## Relationship between research and design

It is safe to say that my research influenced my design. Preliminary ideas are shaped and further developed alongside the research that was done in order to understand the subject and the new functions. Deeper understanding of the building led to better grip on the design task at hand and the possibilities that the building held. The specifics of each function gave insight in to what would be required, which then determined the shape, size and number of my alterations. Research into different reference projects gave certain strategies one could use to place a new function within an existing structure. This design by research approach is a great way to design a heritage building.

A side note has to be made at this point however, one needs to keep referring and checking back to design criteria stated in the beginning of the design process. In researching every aspect of a building, you might fully understand all the possibilities but that doesn't mean that you can make a choice just yet. I've found that at multiple times I got stuck, not knowing how to make a final decision for a design problem.



Only after my P2 it became clear to me that I could endlessly keep sketching different entrances etc. in order to find the perfect one, see the image above. However, no clear reason could be found in order to make that choice. I didn't have a clear list of requirements and ambitions set with which I could weigh the different options. After the P2, I focussed more on the story and the required design strategy. I feel that I should have done this earlier in the process but it is an important lesson to learn regardless. In developing a overall strategy I finally got the tools to make the important decisions that the design called for.

## Connecting to the social context

*This final chapter has two goals, first to discuss how my design fits within the social context of the site and secondly, how I as a designer position myself within the social context of my craft.*

*The project is trapped between a shift in functionality. In the future the whole area will become a urban landscape in which new families will find their housing. Currently there is still some industrial activity mixed with cultural entrepreneurship, slowly changing the way the area is used. My design fits well within this transition, it will firstly be a festival site at which a building with a theatre and creative workspaces will ensure continuous activity throughout the year (fig. 1). After a while, the festival function will perhaps be less desirable as more and more houses are build next to the site, the park function will then be of greater import (fig. 2). And even further on, buildings might be build within the park, to allow for the right density of citizens (fig. 3). Furthermore, the frame that is used for the new functions on the inside is built up of segments that can be altered if necessary, allowing for future adaptations. With these ideas I think that my design fits quite well at the site.*



fig 1. Festival setup of the site



fig 2. Park setup of the site



fig 3. Urban setup of the site

Figuring out what to do with an existing building is one of the most important tasks of a heritage architect. I think that this project allows me to demonstrate an ability to deal with the history of a building, with the demands of new functions and the will to combine those aspects.

The freedom that is given in the graduation studio is liberating and sometimes frustrating as well; if everything is allowed, then everything is possible. It is very interesting to be able to design without too many restrictions but I think it is good to keep the realism of your design in mind. For instance my desire to create a separate festival island works well conceptually but in the real world it would perhaps not be realistic to be doing.

I think my design is a good study of how an industrial historic object can be adapted to suit a completely new function.