

# cultural value report

case study: Santos, Rotterdam



**H&A Graduation Studio, 2016/2017**

student: Hester Slager, 4161831

date: 03/12/2017

tutors: A. de Ridder, F. Koopmans, S. Stroux

board of examiners delegate: J. J. Trip

# introduction

The main issue concerning cultural value is that Santos used to be a warehouse; a building specifically meant for storing goods. Yet in my proposal it becomes a cultural office, a building that revolves entirely around people, and it must be adapted to fit the needs of these people.

This report will work with the terminology of the matrix, which is based upon the ideas of Riegl's 'the modern cult of monuments' (1903) and Brand's 'How Buildings Learn' (1994), see the next page. By using the matrix, this reflection will look at the dilemma's that arise in the design challenge of Santos, but also at the possibilities. The reflection is partly structured to reflect upon the previous reflection paper, but it will look at the design process that followed this first paper as well.

To provide us with a semi-objective value assessment, we will start with the group matrix and the statement of significance that our group decided upon, combined with the value assessment that the Rijksdienst Cultureel Erfgoed gave to Santos.



## #1 Statement of significance

Our general conclusion of Santos was that its facade is its most important asset, value-wise. They are very ornamental, with a strict symmetry yet functional. Their ornament was not that common for a warehouse of that time, which were often more sober (but not entirely without ornament). Therefore, Santos is quite valuable in the warehouse typology. Even more so if we remember that at the time, Santos was the highest warehouse of Rotterdam. Yet Santos is not entirely as it was when it was built anymore. It once had winch-houses that strengthened its composition, and a metal advertisement that crowned the building.

The inner construction uses the American Phoenix System. Originally, we valued this very high, as our sources told us that it was a very rare construction. However, during this studio, we have found more and more examples of similar systems being used, so we concluded it is not necessarily rare, just a very undocumented system. Nonetheless, it still has a high value for the building, just not as high as we first assumed.

Santos is one of the remains that tells the story of Katendrecht as a harbor area. Not much of the original harbor buildings are left, and with the large scale new proposals for the area, the harbor character is under a serious threat.

**In conclusion, Santos is valuable within the warehouse typology, mainly through its expressive North and South facades and the Phoenix construction system, and it is valuable for the whole of Katendrecht as it is one of the last remains from the (harbor) past.**

## #2 Statement Rijksdienst

Waardering: Vroeg twintigste eeuwse koffiepakhuis van algemeen belang vanwege de cultuurhistorische en architectuurhistorische en typologische waarde.

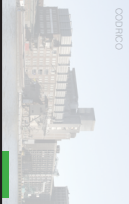
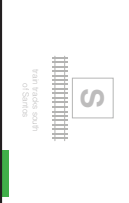

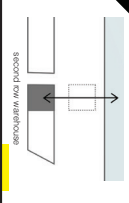

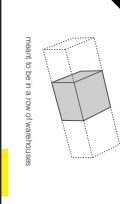
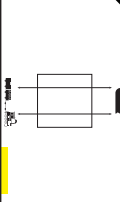
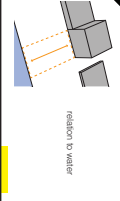
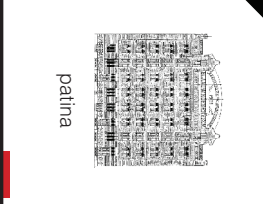
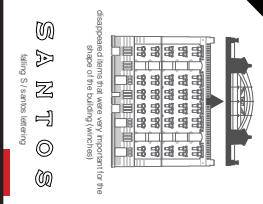
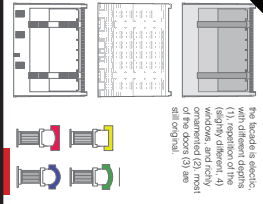


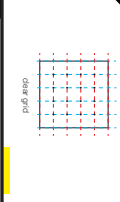

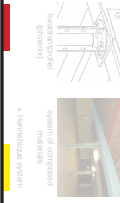



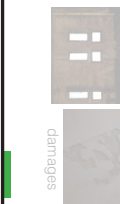



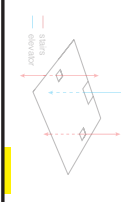



	AGE VALUE	HISTORICAL VALUE	INTENTIONAL COMMEMORATIVE VALUE	NON-INTENTIONAL COMMEMORATIVE VALUE	USE VALUE	ART VALUE	RARITY VALUE	SPIRIT OF PLACE
<b>SURROUNDINGS SETTING</b>		jazz club & culture chinese neighbourhood						
<b>SITE</b>		 meant to be in a row of warehouses						
<b>SKIN</b>	 patina	 <b>SANTOS</b> disappeared during the war very important for the archive of the building (architect) Sifeng Si (archive building)				 The facade is electric. We have a list of the (1) repetition of the (light) adjacent (4) ornamented (2) most of the doors (3) are all original.		
<b>STRUCTURE</b>	 WOODEN CONSTRUCTION THE WAREHOUSES	 architectural drawing of the facade by architect		 date grid		 reproduction system + reproduction system	 there are only a couple of warehouses with these dimensions left from the 19th century.	 small windows - interior of chimney
<b>SPACEPLAN</b>		 supervisor house		 leisure korpsan				
<b>SURFACES (INTERIOR)</b>	 damages							
<b>SERVICES</b>		 elevator interior walls & other elements urnials (0-4)	 interior			 cutting away		
<b>SPIRIT OF PLACE (STORY)</b>						 highest building at the time (now tall)		

figure 1 / cultural value matrix

# location, Katendrecht

As was stated in the previous report, Santos is one of the few historic industrial buildings left in Katendrecht (see also figure 2). The significance of this also shows in the statement of significance; with the new proposals for Katendrecht not much of the old harbor character/spirit is left, and therefore Santos should be treated with respect to retain the (valuable) link with the past, while at the same time revitalizing the area around it. By designing a masterplan that really incorporates Santos in the new urban tissue, I hope to achieve this.

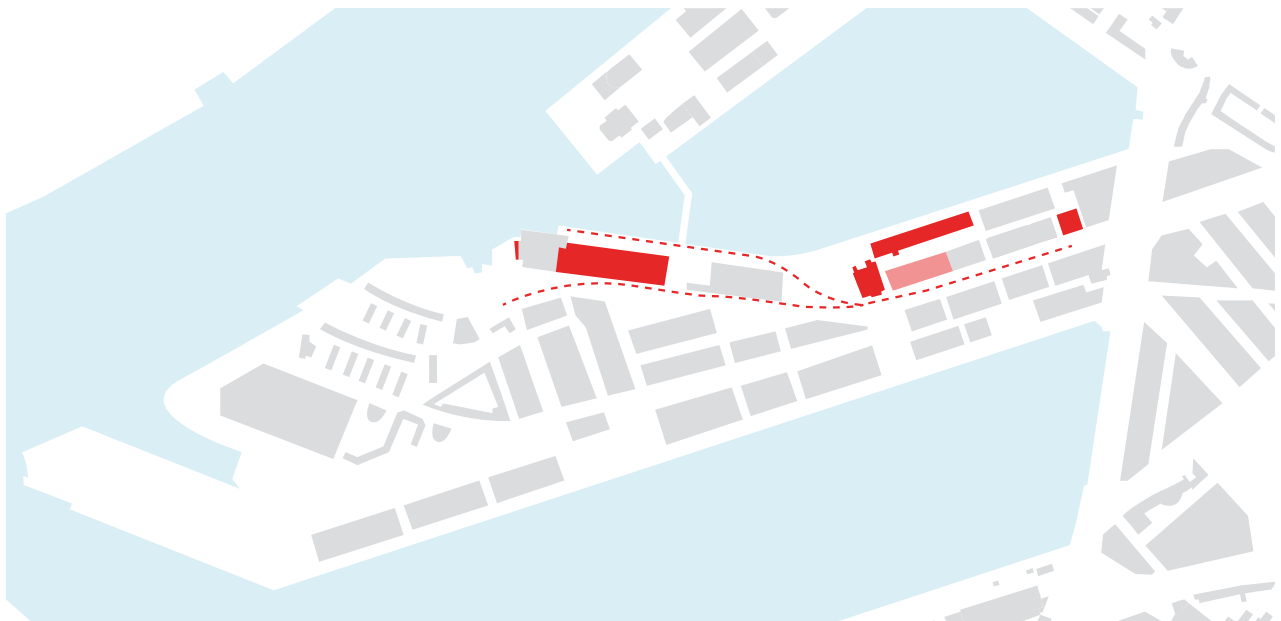


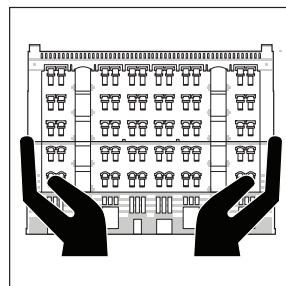
figure 2 / older industrial buildings Katendrecht  
drawing by H. Slager

# exterior, the facade

The main point about Santos are the facades, this is quite clear from almost every report or value assessment on Santos. The facades are not only significant in terms of the warehouse typology, but in terms of architectural value as well.

Their architectural value comes from their excessive ornament (figure 3): J.P. Stok carefully designed with early American modernist school in mind, combined with his own background in Art Nouveau. They follow a rather strict symmetrical rhythm, where every floor is slightly different from the other. There's a clear division between plinth, midsection and crown, which was typical for the American School.

Due to their monumentality, the facades prove a continuous problem throughout the design process. Because of their ornament and rhythm, it is hard to design an addition or transformation that really compliments and improves the current situation.



## #1 the options

One could say that there are four possibilities: 1, do nothing; 2, a subtle addition; 3, a not-so subtle addition; 4, a completely new facade.

Option 1 would make sure that none of the monumentality of the current façade is devalued. It will need the re-glazing of the windows, in order to gain daylight. But even with re-glazing the introvert character of the inside would remain. An issue with this approach, aside from the fact that it might not provide enough daylight for an office-function, is that it could be quite difficult to recognize that the building has been transformed, which might refrain people from going inside and explore what has happened.

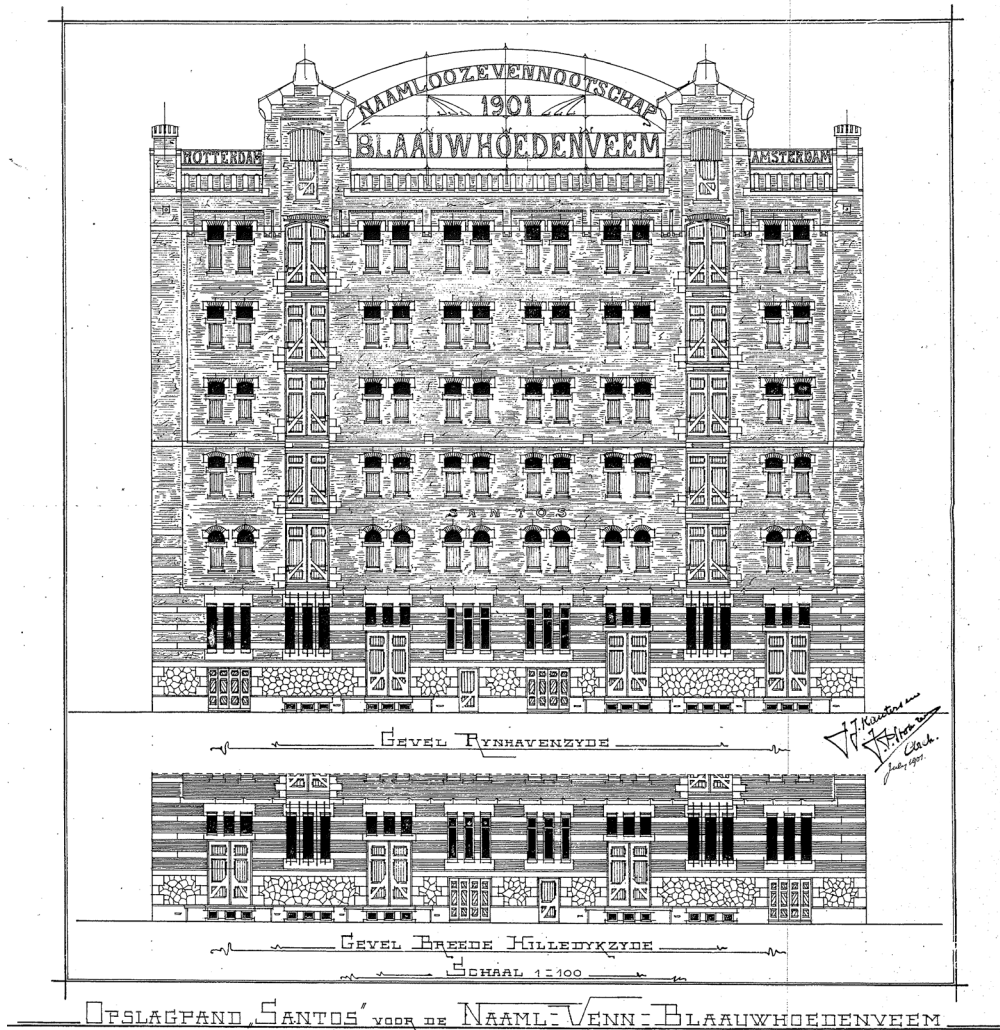


figure 3 / original drawing of the facade  
source: Rapport Santos

Option 2, the subtle addition, would be changing some elements of the façade while following the existing rhythm. This way, the monumentality and overall view of the facades stay relatively the same, while it does provide a passerby with clues of a transformation. This method could also be used to make a building that's more inviting.

Option 3, a not-so subtle addition, which would be an addition that does not respect the existing rhythm. Such an addition, when done well, can provide a pleasant contrast between old and new, and would make the building recognizable as a revitalized building.

Option 4 is the most drastic of the three, and would be to replace the whole façade. For Santos, this could be the choice to insulate on the outside. But since the facades are so telling for Santos' history, and its typology as a warehouse, replacing them as a whole could possibly lead to the building becoming unrecognizable to the passerby, especially to someone who has never been to the area before. It would also not help Katendrecht, since it is one more connection lost to its industrial past. A similar approach can be found in the Fenixloods II, next to Fenix Food Factory, where only the construction is retained, but the overall view is a new building.

## #2 the changing face of the facade

During my design process, especially during the writing of the previous reflection paper, I was steering towards option 3 by adding a completely new plinth. The idea behind this was that the existing plinth was so complex, that any smaller, subtle addition would devalue and disrupt it. Therefore, changing the whole plinth seemed like a good idea. It would also provide the (semi-public) ground floor with more light and an inviting character. However, in the period after the first reflection paper, I started to change my mind on this topic. I was worried that such a drastic change might devalue the façade, especially since the architect had designed it with such care. It would be a shame to hide this behind a new façade. My change of mind could also be tied back to the previous paragraph on location: since Santos is one of the few buildings that ties back to Katendrecht's historic harbor, and its exterior is what most visitors will see, the function of the facades becomes to tell the story of Katendrecht. By completely changing the plinth however, one could walk past without even recognizing that there's such an important piece of history right beside them.

Therefore, I've become more in favor of option 2, a subtle addition that respects and follows the existing façade, with the more drastic changes happening in the interior of the building.



Yet, changing the shutters and loading doors into glazed openings is nonetheless a large intervention. First of all, it changes the introvert spirit of the space, which I will expand on in the following chapter, but it also means getting rid of the characteristic green shutters and doors. I have thought about showing the shutters on either the inside or the outside of the building, but looking at some references (see figure 5) I decided against it. When it comes to the exterior, such a placement of shutters creates a completely different image, with a new type of rhythm. I do not think this will benefit the current proportions of Santos, and therefore I decided against it. Showing them on the interior walls might work better, but it creates a very distracting image, whereas I want a calmer image for the office floors.



figure 4 / facade throughout the design process  
drawings by H. Slager

Wagenborg  
Groningen



Het Pakhuis  
Deventer



St. Jobsveem  
Rotterdam



figure 5 / examples of adapted warehouses  
that have incorporated shutters & loading doors

# interior, spirit of place

Although the design of the facades played a prominent role within my design process, it might not be the largest dilemma in the transformation/adaption of Santos into a (creative) office; this lies more in the concessions that must be made in terms of spirit of place, especially that of the interior.

In the group matrix, we can find three elements within spirit of place: relation to water (site), introvert character (spaceplan, etc), rough industrial working conditions (history). They were all given a medium value, as all these aspects show what kind of building Santos once was: a storage facility located in an industrial harbor, where hard-working men loaded and unloaded the coffee from and to ships & trains.

The rough industrial working conditions were actually one of the reasons why a creative office seemed so suitable to me (the building remains a workplace, although the work has changed), but the other two are a little more problematic than that.



figure 6 / Santos & location in the active days  
source: ??

## #1 relation to the water

The “problem” with the relation between Santos and the water is that this is very much an invisible value. Because Santos was designed as a second-row warehouse, the distance between Santos and the water is quite large. Back when Santos was still functional, this did not matter as the relation was visible through the harbor activity (see figure 6). Yet in the current situation, the area between Santos and the water is completely empty, and in the new masterplan it is designed as a public square.

Even though Santos will be at the center of the square, there is nothing that really attaches Santos to the water. Of course, there will be the view, and people can walk over the square towards the water, but there is no real, tangible connection as there was back when Santos was still functional.

Now, I could have chosen to add something to the square that would connect the two. But the most that could be is a reconstruction of something, and not the true connection. Perhaps a statue might commemorate the harbor-connection, but for my design I decided to leave the tangible connection alone for now, although we valued it quite high.

## #2 introvert character

The introvert character of Santos is created through a couple of aspects: there is no vertical connection between the floors, the dimensions of the floors make the ceiling feel quite low), the two blind facades and two facades with small, closed off windows. These are combined with dark materializations (brick, wood), which absorb the small amounts of light that happen to reach the interior.

Santos being introvert is characteristic for the warehouse typology, as Santos’ architecture is great for storing goods, but not so much for storing people. It is therefore clear that things need to change in order to create a productive and healthy office.

In the previous reflection paper, I was trying to marry both the introvert character and the open character of an office by locating a wide on one side of the building, so the space would gradually go from light/open to dark/ introvert. However, as became clear after the P2 and my research for the retake, this was quite a bad idea in terms of daylight (figure 7). It created very dark areas that were unsuitable for working conditions. I had to come to terms with the fact that to have a well-functioning office, the introvert character had to go. Although it is an inherent quality of Santos, that we as a group valued relatively high, it very much hinders its adaptability into an office.



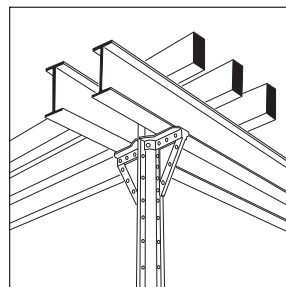
figure 7 / the introvert character of Santos  
photo by L. Jespers

# interior, retaining the spirit of place

Because the introvert character really defined the spirit and history of Santos on the inside; now that I concluded that it must change, it is important to look for other values/aspects that define Santos as an industrial building interior-wise.

## #1 construction

An obvious one is **the construction**: the phoenix column system. In the group matrix, we valued these highly at first (rarity value), but it turned out that the system was not quite as rare as we first thought. Yet the way in which I came to value the construction is not necessary in terms of rarity, but also in the part that they play for the aforementioned spirit and history of Santos. With the introvert character gone, the construction starts to play a larger role in giving a visitor clues towards the industrial history of the building. I would suggest not only valuing construction in terms of rarity, but also in spirit of place.



The Phoenix system is not the only aspect of the construction that I want to show in the interior: there are also the wooden floor beams. For these, the problem lies in the office function and its need for acceptable acoustics. In order to maintain acceptable acoustics, sound insulation and absorption has to be placed on the ceiling, and will temper with the image of the beams. Therefore, I decided to create different areas within the office that have different solutions, which can be found in image 8.

For the construction, this means that it will be in view. On the ground floor, there's currently fire-resistant concrete to protect the construction, but since this was added later we did not value it very

A  
no acoustic insulation  
proportions stay the same

B  
insulation between beams  
proportions beams change

C  
lowered ceiling  
no visible beams

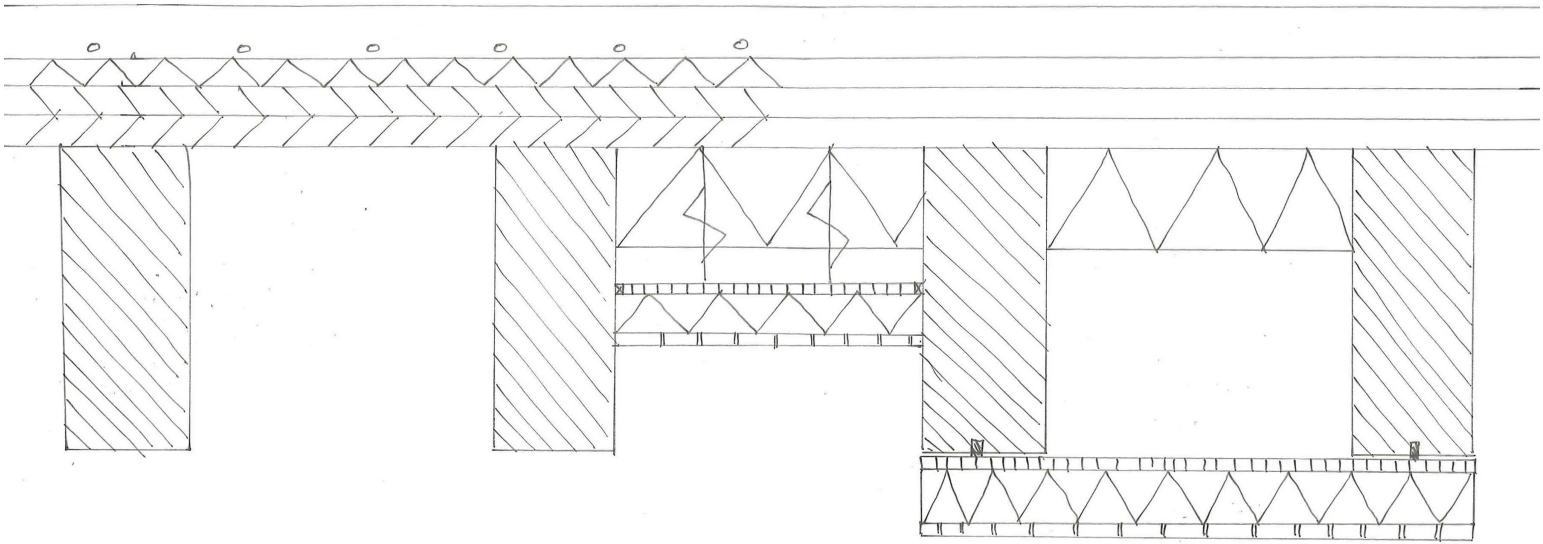
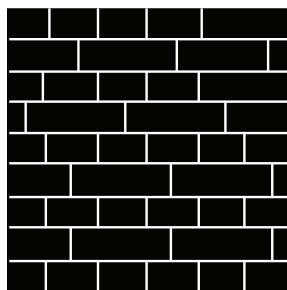


figure 8 / 3 systems of acoustic insulation  
drawings by H. Slager

highly, and therefore it can be removed without issues. By losing the fire resistance, other actions have to be taken in order to guarantee the buildings fireproof-ness. This can be done with resistant paint or a sprinkler installation. Both are a lot less obtrusive then completely hiding the construction. Using fire-resistance paint adds a couple of mm's to the construction, but nothing obtrusive. Since the construction could do with a new layer of paint, this seems like suitable option. However, a fire-resistant layer is easily tempered with, and to ensure the fire safety of the building, it is probably necessary to add a sprinkler system as well. Since I keep the construction visible, this means that the sprinkler system will be visible as well. It also means that the climate system will be visible, and in my opinion having the installations visible only adds to the industrial feel, and it is therefore a deliberate choice.

## #2 interior walls

Another element than can play a role in the spirit of the building are **the interior walls**. This is an interesting case value-wise, as we valued them very low in the matrix (surface – art), yet the role that they play in my design is an important one in terms of surface – spirit of place.



Consider the two monumental facades untouchable, and it will be almost impossible to show all the interior walls and still insulate the building. Their value lies much higher than that of the interior walls, therefore the north & south façade will have to be insulated from the inside. Luckily, there are two blind facades that we valued very low. By insulating these on the outside, it is possible to retain the interior brick on the inside. Given the fact that I will be giving Santos two direct neighbors, there is no trouble with an outer layer either.

What this approach does require is an inspection of the brickwork on the interior, to see whether its state is acceptable (not too damaged).



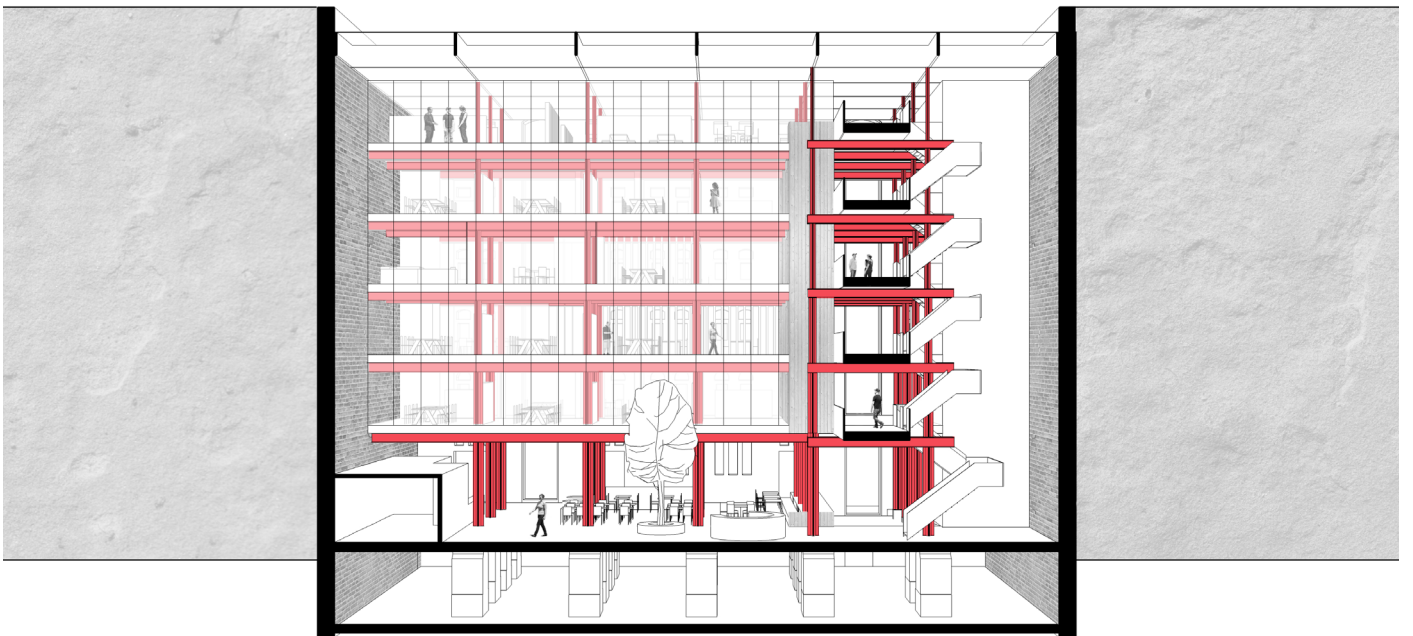


figure 9 / section with emphasis industrial elements  
drawing by H. Slager

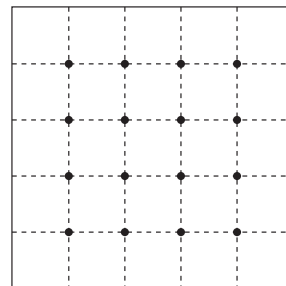
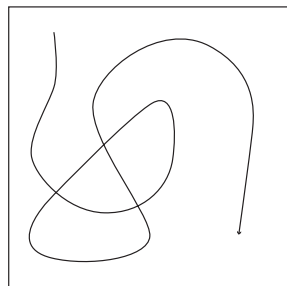
# interior, use value

Coincidentally (or not), all the values that provide clear possibilities for an office function are located under use value:

The free, flexible floor plan; the clear grid; the north-south connection between the loading doors.

For Santos to store goods as efficient as possible, the floor plan needed to be clear from any obstacles other than the necessary construction. The goods needed to be efficiently loaded and unloaded as well, which creates the N/S connection in between the storage space.

For the new function, this means effectively a clean slate, an open floor plan that can be divided in almost any possibility. This fits the office function well, as offices nowadays tend to have more open and/or flexible floors. Especially creative offices, where often a whole range of sizes is offered. The construction and its grid can then serve as the guidelines for the new divisions of space.



# exterior, the roof

In our group matrix, the roof was not assigned any value. Yet it's removed elements, the wench houses and the advertisement banner, were both valued highly, since they played an important role in the visibility of Santos back in the day. In old photographs, it is the compact shape with these two castle-like wench houses that easily identifies Santos.

Therefore, when looking at an intervention for the roof, there are a couple of options:

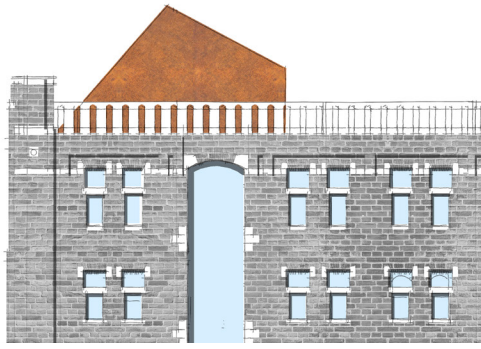
Keep the roof as it is; change the roof, retrieving/mimic one or more of the removed elements; change the roof, do not retrieve/mimic the removed elements.

In earlier designs, I wanted to create a visible new roof element, that directed people to the entrance. Its shape was perhaps vaguely inspired by the removed wench houses (see figure 10), but I deliberately chose to not make it symmetrical, and therefore creating a contrast. This can be seen in the earlier image of the facades, see figure x. However, this design did not work out, and I did not feel like using the removed elements as inspiration was something I would do. It felt a little too much like a "gimmick" that does not add to the architectural quality of the intervention.

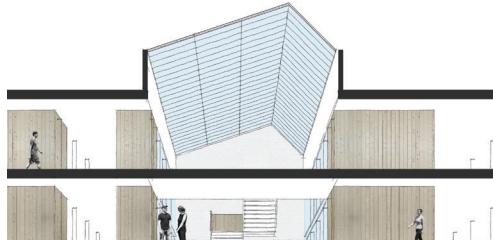
Then, I moved away from the roof for a while. Its current shape was 90 degrees rotated from the earlier design, and reminiscent of the existing roof light (see figure 10). It was not visible from the street, which was something I intended to do, as I wanted to keep the proportions of the existing as they were. Yet the shape of this second roof light was not that suitable for Santos, and I tried to challenge myself to really do something different for the roof.

My main idea for Santos was to maintain from the outside, and change on the inside (figure 11). A contrasting roof, that can be experienced mostly from the inside fits that idea. In my search for the design, I started off with the existing grid, but then decided I only wanted to use the square-shape of Santos, and design a sculptural roof that spans the whole building (figure 10). The columns and visible main constructive beams are a continuation of the building system, but the folded roof that tops this is clearly a new element. By containing it between the walls, it is not visible from the street/surroundings.

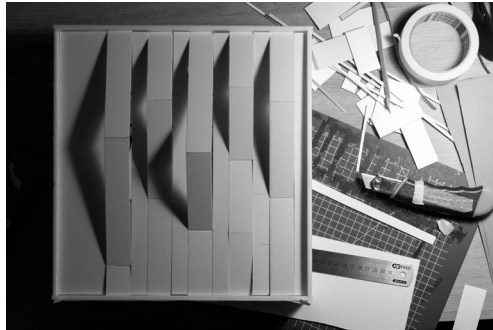
P2



P2 retake



P3-P4



P4

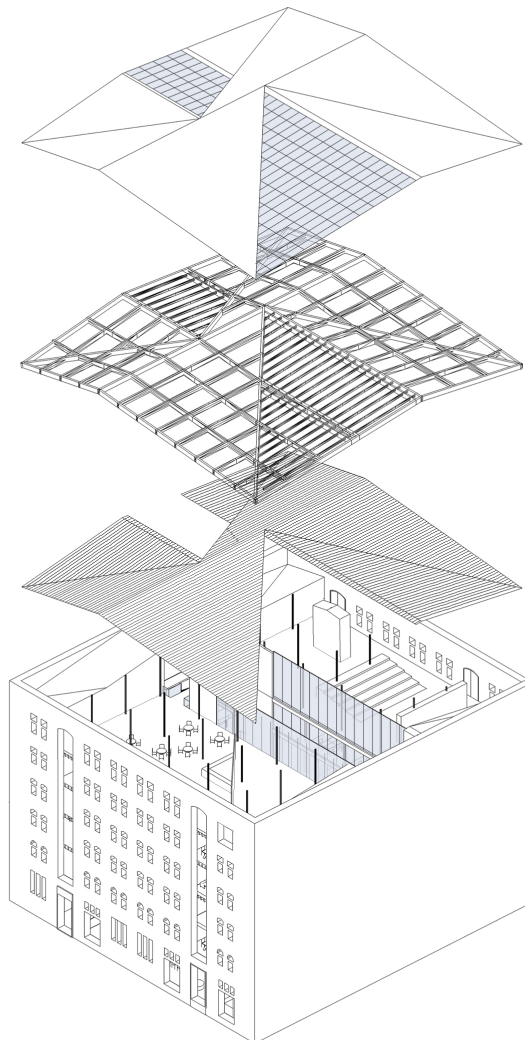


figure 10 / options for the roof drawings & model by H. Slager

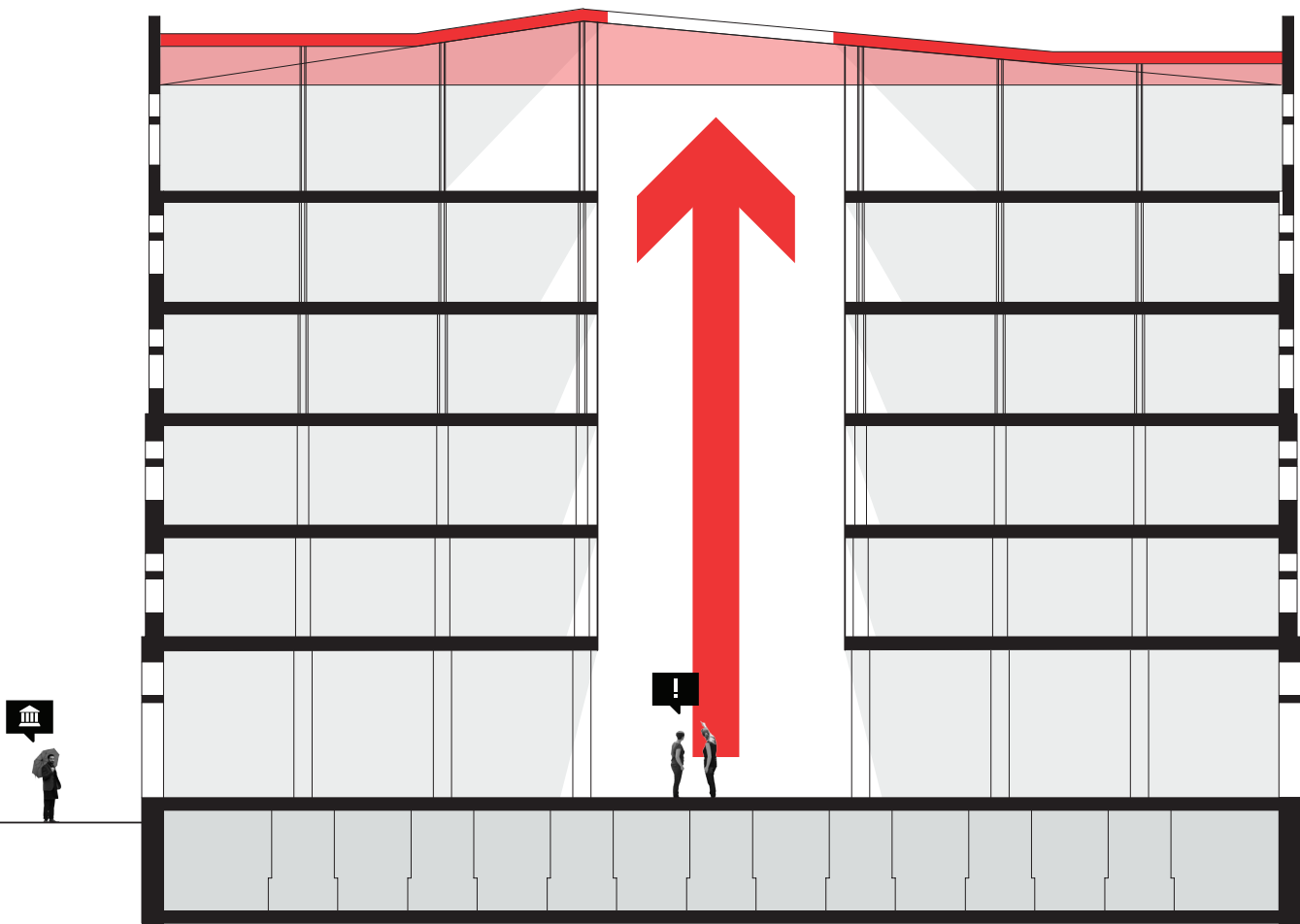


figure 11 / concept drawing, retain from outside, change from inside  
drawing by H. Slager

# conclusion

Throughout my design process, I feel that Cultural Value played a pretty consistent role. We started with a logical process of analyzing, that lead to the group matrix, which then became a handy tool to reflect upon design decisions. It forced me to think why I was doing something, and what the influence of it was for the building and its context.

By using the matrix as a sort-of reflection, it provided me with a more objective point of view, which

The role that the matrix played on my design process seems pretty logical. From the get-go, we decided that the facades were very important for Santos. Although I took a bit of a detour when it came to the facades, in the end my design proposal does not change all that much about the facades. I believe that cultural value played an important role about this, because it forced me to dig a little deeper into the façade, and look into why it is so valuable. By doing this, my appreciation of the façade grew, and influenced my design.

An interesting cultural value aspect is that of the “introvert character”, which was something I really liked for myself, but I had to come to terms with the fact that it did not suit my function. Here, cultural value might have hindered this process a little, because I was very reluctant to accept that the introvert character had to go.

Overall, cultural value provided a different point of view, that seems very logic for existing buildings. It is not just about creating a fancy intervention, but also about looking at the qualities that are already there. Throughout the design process, I kept going back to existing elements, and how to appreciate them in the design.

When it comes to the group matrix, looking back, I feel it might have been interesting to discuss the matrix once more, perhaps halfway the design process. I know that my opinion on some values changed, and that there were some elements (for example the shutters) which could have been added to the matrix as well. Sharing these thoughts a more explicitly with the group members might have lead to some new, interesting insights.