A new Houthaven

Defining the principles for the transformation of the Houthaven

P1 report RMIT graduation studio: mixed projects
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Introduction
The graduation studio Mixed Projects of the department RMIT deals with ten different projects located in the West of Amsterdam. The only aspect given is that these locations are in need for redevelopment and that after the first quarter one location must be chosen for your redesign.

This P1 report provides an overview of the analysis's which are conducted. The first analysis is the urban analysis on the scale of Amsterdam West. This research can be seen as a collection of data of the whole site and as a instrument for making my choice of the redesign area. As the whole area is to comprehensive to understand, the public space and morphology of the area will be analysed over here. This research topic derived from my personal fascination, as will be explained in the last chapter.

Then the architectural analysis resulted in a design assignment and the first starting points for the redesign of the Houthaven. This research also led to a problem statement for further research in the second quarter of the graduation year. This subject however, is briefly discussed in this report and more elaborate in the thesis plan.

Each analysis will start with an introduction describing the topic of research, the research question and the goal of the analysis. The first analysis will be the urban analysis on the scale of Amsterdam West, then the analysis of the Houthaven. Finally the choice of the redesign location, the personal value assessment and the starting points for redesign are described.
Urban analysis of Amsterdam West

The RMIT graduation studio of 2012-2013 is called the Mixed projects studio. These “mixed projects” are located in a part of Amsterdam West, the Westerpark and the former Houthaven and consists out of following projects:

1. The Westergasfabriek.
2. Pink office building.
3. Scholar triangle.
5. Houthaven.
6. Haarlemmerpoort.
7. Markthal in the Foodcenter area.

Our location is a mix of industry, residential area and the Brettenzone. In the north the Westharbour is located. This harbour slowly transforms from harbour industry at the water to offices in the south. A part of these offices also lie already in the Brettenzone. The Brettenzone is a small and straight area which starts at the Haarlemmerpoort and continues all the way to Haarlem. Main element in this zone is the Haarlemmerdijkvaart, a canal which is the origin of this zone. The last part is the residential area in the south. A very dense part of the city, which is a collection of different housing types. More information about the site is given in chapter 1.2.

Fascinating about this area is that the public space mainly consists out of streets or other linear spaces like the Brettenzone or the water structure. Next to the public parks and the Foodcenter area, which isn’t public at all, there are almost no squares. Only linear elements and streets which differ in importance and seize. The public space in the area became the main topic off this urban analysis. To start the research the following research question is applied:

What is the character of the streets in Amsterdam West and the Brettenzone?

The answer of this question is given in the last chapter, the conclusions.
Summary of the area

The area can be divided in two main parts:
- the harbour area in the north;
- the bretzenzone and the residential area in the south.

The railway is the border between the two area’s. It cuts the Spaardammerbuurt from the residential area in the south. It’s a visual barrier and limits the access to this neighbourhood. It also separates the Westerpark from the harbour area. In the west the A10 forms the border off the area. But it doesn’t form a barrier like the railway track does.

The west off the area is adjacent to the the old centre off the city, the former city wall area forms the border area over here. Although the urban fabric changes over here, there aren’t real borders over here. It’s just the border which marks our place of graduation. The same can be said in the south off the area.

In the residential area there are some main roads and waterways or canals. Roads are the main element in the public space, next to the parks there aren’t any squares to be found in this part off the city.

In the next chapters the different subjects in the area are more closely analysed. Starting with the functions and the urban fabric they form in the next chapter and there after the analysis off the public space. Lastly a conclusion will be formed.
Urban fabric and functions

There are two different areas in the location which form the urban fabric: harbour and offices in the north and a residential area in the south. Even though there are also two sites which contradict this statement: the Spaardammerbuurt and the Foodcenter area. With the railway cutting of the Spaardammerbuurt it has more a connection with the harbour area and the Zeeheldenbuurt. The Foodcenter area is a closed of industrial/food area in the middle of the residential area. How this situation occurred can be explained by the spatial development off the area over time.

The expansion plan of Kalff of 1877 created the 19th century belt. Part of this belt was the Spaardammerbuurt, but already back then it was cut off by the rail road from 1938 (Heleenders, P). The fabric off the new urban plan consisted out of buildings blocks, built up with different houses standing next to each other (fig. 4). According to the water structure map this belt was based on the underlying water structure (Maat, B).

The next area of dwellings is part off the 20 - 40 belt. Over here buildings blocks were still used, but with one architectonic style: the Amsterdamse school. The blocks were built as one and had less differentiation, than the 19th century blocks (fig. 5). In the same period the Food centre area was created between the two expansion area’s in 1934. It was built to replace the uncontrolled kind off market in the basements off the dwellings at the Marnixkade (Nissen, A). Why it was created over here and not above the rail road isn’t clear. Assumed is that the former market was a public market and therefore needed to be near the inhabitants. Also over here the underlying water structure was the basis for the street pattern (Maat, B).

The last part in the west off the location is the pre-AUP part and the AUP part west off the A10. The pre-AUP part consists out off the neighbourhoods Landlust and Bos en Lommer. Here they broke for the first time with the traditional building block and introduced “het nieuwe bouwen” (fig. 6). In this part the old water structure isn’t the base any more for the street patterns.
Public space and functions
Between the urban fabric lies the public space. This chapter focuses on the public space in the residential area and the Brettenzone. This is done because the harbour area hasn’t got any inhabitants using the public space.

The street is an important element in the public space of our site. Next to the public parks and the Foodcenter area, which isn’t public at all, there are only streets. Streets which differ in measurements and importance and in functions located at these streets. But no squares or other elements which are connected to each other with streets. At this point the research question was formed:

What is the character of the streets in Amsterdam West and the Brettenzone?

As said before the streets show some differences. In the east, next to the city centre the streets or public space between the blue blocks are quite equal. The streets have a lot of different functions located on them.

In the grey area this changes. Here, there are streets with dwellings and some streets which have been pointed out as shopping streets (red lines in fig. 7). In general the space between the blocks is wider compared to the blue blocks.

The AUP blocks break completely with what was shown before. The streets are much wider and the separation between living- and shopping streets become bigger.

This divides the streets in three main categories, each of them with their own set of characteristics.

However, a fourth type occurred during research. The next chapter will address this type of street.
This type of street is different in the reach they have. They have, over a longer distance, the possibility to connect important places or have different functions located on them. In this case they are called public spaces, because not all these spaces are streets but also canals.

The first example of such a space is the Haarlemmertrekvaart. It flows from Haarlem to the Haarlemmerpoort in Amsterdam and has many different functions located on it. But also in the north-south direction it dictates the connections. On the places where there is a bridge people can cross. Some of these places are empowered by the function or building at that crossing. Like the Westergasfabriek next to a bridge. The opposite is also found, as in a long strip of office buildings blocking the way further to Haarlem (fig. 12, 13).

The same can be said for the Singelgracht, the former city wall area. Along the water you can reach important places like the Rijksmuseum or Leidseplein or in direction to the north the Haarlemmerpoort and the Spaardammerbuurt (fig. 12, 14).

An important point in both linear spaces is the Haarlemmerpoort and its surroundings. It’s an important junction, connecting different neighbourhoods together. Though the gate itself has completely lost the connection with its surroundings (fig. 12, 14).

On a smaller scale the Tweede Keucheniusstraat, through the Foodcenter area towards the Karel Doornmanstraat form an interesting connection between the two neighbourhoods. Unfortunately the area of the Foodcenter isn’t public at the moment (fig. 12, 15).

The last one are the former dikes, de Spaardammerdijk and de Tasmanstraat, which are located between the harbour area and the Spaardammerbuurt (fig. 12 en 16).

The four public spaces have in common that they are or were a border area between two or more different area’s.
Conclusion

In summary, it can be said that the location is divided in two by the railway track in the north off the residential area. In this residential part the urban fabric has three different characteristics:

- in the east building blocks;
- in the middle the Amsterdam school blocks;
- and in the west the AUP blocks.

Furthermore the most important element in the public space is the street. This element became the main topic for research, with the following research question:

*What is the character of the streets in Amsterdam West and the Bretten-zone?*

The answer is that the streets change in characteristics from east to west:

- in the east there are small streets between the building blocks with mixed functions located on the street;
- in the grey part the blocks have a wider set up then the blue blocks and there is a separation between living and shopping streets;
- in the black part the space between the AUP blocks become even wider than the grey blocks and also over here, there is an separation between living- and shopping streets.

In this general pattern a few exceptions are recognized. These are streets or canals which are different in the reach they have. They have, over a longer distance, the possibility to connect important places or have different functions located on them. The four spaces have in common that they are or were a border area between two or more different locations.

1. The Haarlemmertrekvaart;
2. the singelgracht;
3. the Tweede Keucheniusstraat, through the Foodcenter area towards the Karel Doornmanstraat;
4. the Spaardammerdijk and Tasmaanstraat.
Introduction architectonic analysis

The former Houthaven is an area which is in need of development. Currently, plans are made to create a new neighbourhood in this area, or an extension off the Spaardammerbuurt as the municipality calls it. At the present situation the area contains mostly temporary buildings like the student housing, a school, “strand west” and one old permanent shack which has a sign which says Ambagstheer & van der Meulen on its roof. At first sight the new plan looks like a big interference in the existing area. If this is the case, will be main topic in this analysis. To research this topic the following question is formulated:

Does the new plan for the Houthaven take the cultural heritage, buildings and spatial development of the Houthaven in account?

To get an answer for this question the future developments will be tested with criteria. These criteria derive from the urban, architectonic and building technology analysis, as a value assessment.

Architectonic analysis
History of the area and buildings in the Houthaven

Before circa 1860, the fortifications of Amsterdam formed a clear border between the city and the surrounding landscape. The harbour was situated on the east and west side of the city. The harbour was confined by long rows of poles in the water. These poles made sure that the harbour was protected from waves. The Western Islands were mainly built with shipyards and storage buildings, with in between some residential buildings. The people living there all worked in the harbour.

After the development of the Noordzee-Kanaal the harbour needed to grow because the ocean ships needed docking spots. With this development the timber market also grew and Amsterdam became one of the largest places for timber trade in the world. The Houthaven was full of big floating rafts from Scandinavia that had come all the way down the rivers until they arrived in Amsterdam. On the straight docks with its huge warehouses, the wood was sawn and prepared for transport. In the old harbour more and more residential buildings were built, because the city needed more dwellings, these dwellings were mainly intended for the working class. The industrial area moved more west and the scale of both the harbour and the industrialisation grew considerably. At that time the Houthaven was customs territory, you had to pass customs every time you wanted to go in.

In the last half of the 20th century the prosperity of the timber market ended and a lot of companies in the Houthaven went broke. A lot of the storage buildings were closed and demolished. There are only three of them left. The docks were filled up and the harbour activity moved even more towards the west, where the scale of it grew even bigger. The dwellings also expanded towards the west, but the Houthaven area was abandoned. Now there are new plans to develop the old harbour in a new residential area.
Present state of the area
At this moment the Houthaven is an area which is waiting, its period of being a harbour has passed. The student housing and school are temporary buildings. They started demolishing the houses and the school will be replaced when the time is there. The only permanent building on the site which has a longer history is the building of Ambagstheer & van der Meulen, a company which doesn’t exist any more.

The plot has a triangular shape and in its point in the east, where the shack is located, it connects to the former area of the houthaven. Which has been completely transformed by now. At the south side of the plot the Spaardammerbuurt is located, at the north it is adjacent to the water and in the west the harbour is found. The dwellings off the Spaardammerbuurt form a front along the south side and define the border between the former harbour and the residential area. This is emphasized by the hight difference of the former dikes. The waterfront, unlike the area to the right off the plot, has no former industrial buildings. But is an open surface towards the water.

Old guidelines of the area still can be found in the way the old sheds are located on the site. These were the direction of the former insertions of the harbour which are filled up now. The big overhang on one side reveals the former usage off the sheds, reachable by boats in the past. Under the overhang the boat could unload the wood it was transporting. In the next chapter all these warehouses will be analysed.
Buildings

The building structures of the Houthaven consisted out of several warehouses and sheds built right next to each other. The straight land strips were completely filled with buildings, right up till the docks, so the timber could be unloaded straight from the boats into the warehouses. There aren't that many of these buildings left, so we focussed on the building shown in the pictures. Because these still show the structures, shapes and usability of the past. The open construction still has the former owners name standing on the rooftop. The essence of the building is basically a roof structure on steel columns. It's 51.5m long and 28.5m wide, and has only ten thin columns to support the roof structure. On either side it has an overhang, one of 4.5m and one of 9m. Under the 9m side the boats would dock and unload, on the 4.5m side there were smaller storage sheds, which are all demolished now. The building has always been open so the wind would blow through to dry the wood that was stored there. Looking at the construction and research off pictures of the beeldenbank of Amsterdam shows us that this building was probably built between 1950 and 1965.

The materials of these buildings are mainly wood and steel. Both buildings also have glass openings in the roof to bring more light into them.
Construction
The base of this construction is a truss or lattice girder. The truss has been pitched in the middle. First figure of the sequence on the left. In order to get the construction stable, bracing is applied at the column in langsrichting. In the dwarsrichting trusses are added between the main trusses. These are the dotted lines in the second picture. The last additions are the cantilevers on both sides. To make the 9 meter cantilever the height of the truss is increased.

We assume that the foundation of the shed are poured blocks of concrete, with no poles underneath them.

The trusses and columns consist out of L-shaped profiles, bolted together on steel plates. Using the bolt connections was considered as a clue for dating the shed. As these connections were only used after the second world war.
Value assessment

Direct context:

Negative: the existing industry, west of the location. Although a lot of offices are built over there now, it still is a factor which will be in sight from the site.

Indifferent: the Oude Houthaven and the Westelijk Eilanden are predecessors of transformation of old harbour areas in Amsterdam. The Houthaven is next area in this line of transformation. Physically they don’t have a connection.

Indifferent: physically seen the Spaardammerbuurt has a big relation with the Houthaven. It marks the boundary between the old harbour area and the city. It isn’t a hard border though.

Positive: the accessibility of the area towards the direct context is poor. And this has always been this way, it was customs territory. And with the harbour function it had, it was focused on the connection over water and later on the fastest connection towards the highway. And not on the connection with the neighbourhoods around it. So seeing the connection with the direct context from a harbour point of view it is positive.

Positive: connection with water, deriving from being a harbour area. The connection with the water is an extra element which distinguishes this area from other areas. Not every location is located at the water front.

Within area:

Positive: only a few old buildings and some traces of the old insertions are left. More about these in the value assessment of the architectonic analysis.

Architectonic analysis

Positive: the shape of the buildings telling the story how the harbour used to work and defining the mass of the old sheds. The Houthaven is an important aspect in the harbour industry of Amsterdam. In this story the former insertions of the harbour also play a big role. They show what the connection with the water was in the area.

Building technology analysis

Indifferent: construction of building. The construction was built when the wood industry was diminishing, after the second world war. This makes the story important but the physical shell, less important. But then the construction itself is in good condition.
Future development

What is the Houthaven going to be? It still is an area which can be transformed, from harbour to residential area or from harbour to something else. The municipality has made plans for this location and will transform it into a residential area with new office space. The new program of the site is focused on the more expensive part of the housing market. A big part of the location will be excavated. The new islands are based on the insertions of water of the former harbours. These insertions are exploded in longitudinal way to create more space for the residential area. The architectonic system of the new neighbourhood is based on the old city centre of Amsterdam, the spijkerwoning to be more exactly. This type can still be found at the Warmoesstraat in the city centre. With the base of the spijkerwoning each island has another identity. Each identity representing a stylistic part or urban plan of Amsterdam, like the Amsterdamse school style for island two for example.
Has the site lost its own identity?
Do all these new concepts form a unique new identity for the location, which take in account the former functions the location had, as being a harbour? In the previous chapters aspects were described which are typical for this location. When looking at the new Houthaven the only thing that slightly remain is the direction of the former insertions. The insertions itself are altered so much that they are barely recognizable. The complete urban context is changed to fit in these new plans. Now it happens to be over here, but where could this urban plan not be applied?

Why did they completely change the existing setting? One reason could be that the lack of former industrial buildings on the site automatically gave a free pas for changing the area. Unlike the former harbour area on the other side off the location, which is richly filled with former industrial buildings like het Veem and the former Graansilo, the buildings in our location are all demolished or of another quality. More like a shed. This research shows that this assumption would be wrong.

2006 - crisis - now...
Another questionable aspect of these new plans is related to the fact that they were created before the economical crisis. Resulting in a program which provides over 50000 m² of office space. Even though there is a “small” over plus of 1.3 million m² office space only in Amsterdam. The presentation of Remco Daalder learned us that the current times do not ask for large scaled interventions, but ask for small scaled densification projects inside Amsterdam. In our opinion creating a whole new neighbourhoud on artificial islands isn’t a small densification project.

Conclusion
Does the new plan for the Houthaven take the cultural heritage, buildings and spatial development of the Houthaven in account?

Compared to the values found in the architectonic analysis, the new plan doesn’t take in account the cultural heritage of the Houthaven. Instead it introduces a new concept which could fit in anywhere as long water is involved. For a new development in this area, it is suggested to take a new look at the program. Together with a better understanding and application of the former harbour area a new plan can be made which is more appropriate for the area and for current times.
Choice of redesign location
This choice derived mainly from three factors:
- my personal position;
- the urban analysis on the scale of Amsterdam West;
- my thoughts of the area after the first site visit and basic literature review.

Personal position
One of my biggest interests in architecture is the interaction of architecture and public space. These two must interact with each other to make appropriate architecture in a place. Public space isn’t just the space between the buildings, but is something which need to be designed. And a building on the other hand can affect the way public space works. This makes me also interested in the public space on the bigger scale. How it works and what kind of spaces form a public space.

My position in RMIT can perhaps be best explained by the analysis of other former harbour area’s. The KNSM island of Jo Coenen is an example of the direction I would like to go in this graduation studio. It is not copying some structure, but it is creating something new with old characteristics incorporated in the design. In this case keeping the central road on the island and using the scale of the former buildings for the new ones.

Urban analysis and site visit
The urban analysis assessment is divided in two scales. The large scale of Amsterdam west and the smaller, direct scale of the Houthaven. On the large scale I looked for a project which has influence on a bigger scale then the building and its surroundings. In the Houthaven two potential axis end in the area, the Spaardamnenstraat and the Tasmanstraat, and therefore can be part of a bigger scale.

The current state of the area, abandoned, also plays a role. It is a part off the city which need to be fixed on urban and architectonic scale.
Design assignment
As has been demonstrated in the architectonic analysis, the new plans for the Houthaven aren’t rooted any more to the identity of the site. At this moment, the area is almost a tabula rasa. The challenge to revive this area lies for a big part in the urban design, as is the chance to keep the spirit of the former harbour area alive. In this urban design new buildings can be added.

Research question for further research
The analysis of the Houthaven also provided input for further research. The design assessment is to create a new urban design for the Houthaven. But the architectonic analysis showed that there are values in the site which are considered important. How to incorporate these values in the new design?

A start is made by making a personal value assessment of these values. This personal assessment is based on the assumption that the area will transform from being an abandoned harbour area tot a integral part of the city. But as the program for the design will develop in the second quarter, the way these will be incorporated also can change.

The direct context of the Houthaven:
Negative: the relation with the Oude Houthaven and the Westelijke eilanden.
These two area’s have a connection as being predecessors for the the transformation of this harbour area. The Houthaven is in this case the next transformation in line and the precedents can function as an example. But in this case the comparison goes blank because of the lack of former industrial buildings in the Houthaven. These buildings are very dominant aspects in the transformation of these area’s.

Positive: the relation with the Spaardammerbuurt.
There is already a strong connection with the Spaardammerbuurt, encircling the area on the south side. When transforming to a part of the city it needs to be more connected on the level of public space. In this perspective it is important to enhance the connection with the streets of the Spaardammerbuurt.

Positive: the connection with the water.
This was and still can be an important aspect in the redevelopment of the area. It is what separates this area fro other areas. How can the relation with water be of value when the area will be transformed?

Architectonical
Positive: the story of the buildings are important and can be incorporated in the urban or architectonical design. The current shed and old pictures of the area show the scale of the buildings which stood over there. The question is, if this story and scale must be represented in keeping the old shed and it’s construction or restoring the old harbour. Maybe this story can be used in other way. My preference would be to do more with these stories and masses than just restore them.

Building technology
If possible the shed should be incorporated this way in the urban planning and then be restored.

Another question is related to the fact the economical crisis makes it hard to develop big urban designs, which have to be executed as a whole. This was emphasized in the presentation of Remco Daalder of the physical planning department of Amsterdam. What other options are there available for developing an area in general or specific related to Amsterdam?

Starting point new design
The starting point for the new design might be called a hypothesis. As the program for the new development is not known yet and research of other urban design methods still have to be conducted.

Deriving from the urban analysis on the larger scale, different axis in Amsterdam were found which can be continued into the area. For the Houthaven this is the Singelgracht – Spaardammerbuurt axis. How can this axis play a role in the urban development of the new Houthaven?