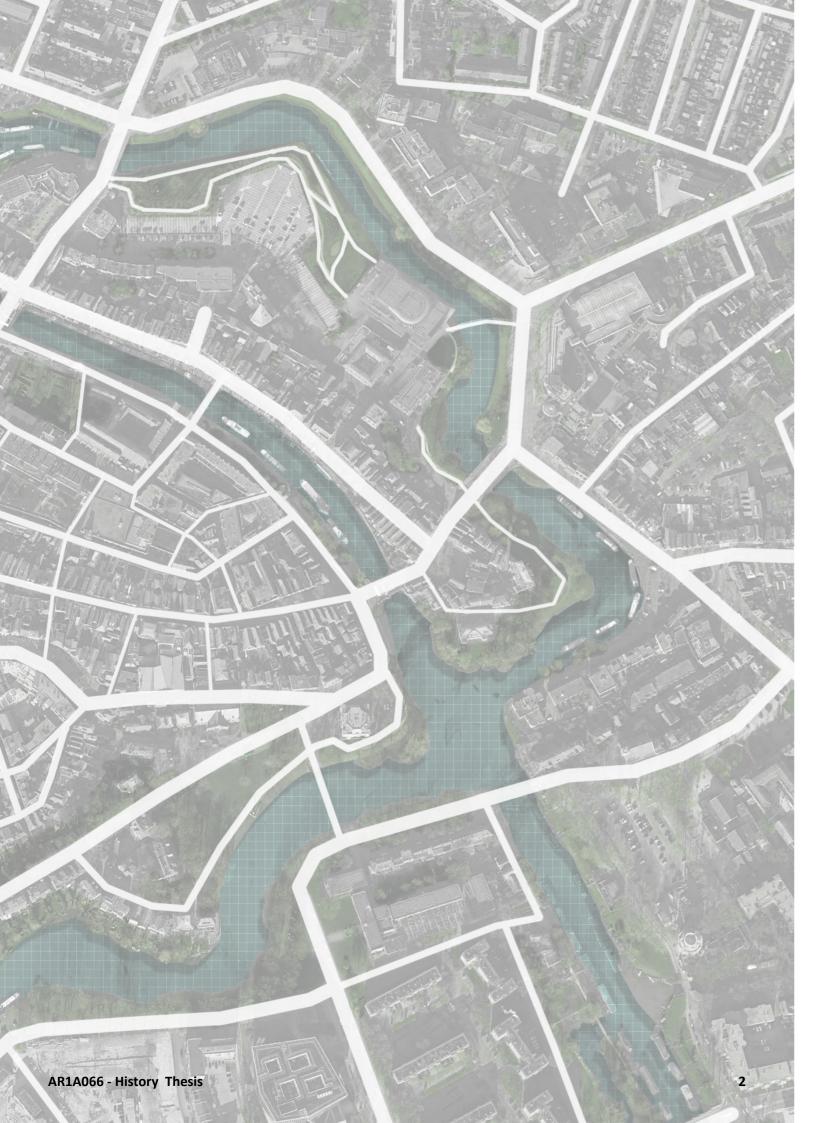
THE REDEVELOPMENT OF A FORTIFIED CITY

Delft University of Technology History Thesis, AR1A066 Tutor: Marcel Teunissen

april 2022 Jens Klappe - 4685946



"Society will be defined not only by what we create but by what we refuse to destroy" -John C. Sawhill -

So many cultural and historical buildings and structures have been lost in history under the pretext: We can better use this space for other purposes. This is a big loss while these buildings could have told us so much about society and the way of life at that time. This knowledge is crucial to put our own society in perspective, which in turn can stimulate discussion and ensure that we grow as a society.

Unfortunately for many of these historical and cultural structures it is too late, but it is not too late to bring aspects of them back into the street scene. There are different ways of doing this and it is this wide range of ways and solutions that I find so interesting about this issue.

The issue is there, but the topic comes from another finding that came to light during the Bachelor of Architecture at TU Delft. Because relatively much has been written about cities in the Randstad, one may get the idea that the historical and cultural value of the Netherlands stops at the borders of the Randstad. This is absolutely not the case while the Netherlands in all directions is rich in beautiful villages and cities that all have their own story, so this time the study is not about the reconstruction of Rotterdam or all hisorical buildings in The Hague or Amsterdam, it is about the historic and cultural city Zwolle, the capital of Overijssel.

AR1A066 - History Thesis

CONTENT

INTRODUCTION	6
1. ZWOLLE	8
City Walls & Moats	8
Defensive Walls & Bastions	8
Demolition & Urban Expansion	9
Modern student city	9
2. REDEVELOPMENT	10
'Het Maagjesbolwerk'	10
'Museum de Fundatie'	12
'Het Kraanbolwerk'	14
3. FUTURE PLANS	16
CONCLUSION	13

INTRODUCTION

The Netherlands, at that time the republic of the seven united netherlands, experienced turbulent times from the sixteenth century to the end of the nineteenth century. Due to various wars and the development of heavier artillery, cities were forced to construct fortifications. In order to make space, not only were the old city walls demolished, but in many cases the houses had to go as well, in order to be able to construct these fortifications. The previous walling of cities had to make way for a new defense system with specific characteristics, so that this uniform structure became very iconic for all fortified cities in the Netherlands.

In the course of the 19th century, peace returned to the western part of Europe. As a result, many of these fortifications became superfluous. Most fortifications were demolished to make space for the growing demand for housing in the inner cities of these Dutch cities.

Since the demolition of these fortifications, the traces of these image-defining structures have become less and less visible over the years. In some cases, the remains of the city gates, bastions and/or moats are still present, but this is the exception rather than the rule. In most cases, the fortifications had to make room for housing or industry.

Demolition or renovation has always been a matter of debate in the built environment, especially in densely populated cities with little room for new construction. In the past, people often opted for the former, demolition, but today people are increasingly realizing what has already been lost over the years. As a result, the option of cultural preservation or bringing back certain aspects, is being chosen more and more often.

Many old fortified towns have also been wrestling with this dilemma for years; to what extent and in what way can we translate our history as a fortified town into the new built environment? The starting point and inspiration of this thesis comes from the way the city of Zwolle has dealt with this issue.

Zwolle is one of the cities that in recent decades has very consciously dealt with its history as a fortified city; the city canal, part of the fortress and even the city gate have all been preserved and well maintained. Also, several aspects that have been lost over the years have been

brought back. The municipality of Zwolle has deliberately chosen this path and also has no intention of deviating from it in the coming years, as is evident from the new regional plan. In this plan, the municipality of Zwolle clearly states its position on the preservation and conservation of these iconic structures. (Gemeente Zwolle, 2021)

The inner city of Zwolle will also continue to redevelop in the coming years and the municipality will again run into dilemmas about how to deal with its culture and history. To solve this issue it is crucial to look back. How Zwolle has dealt with this issue in recent years is central to this thesis, with the following research question:

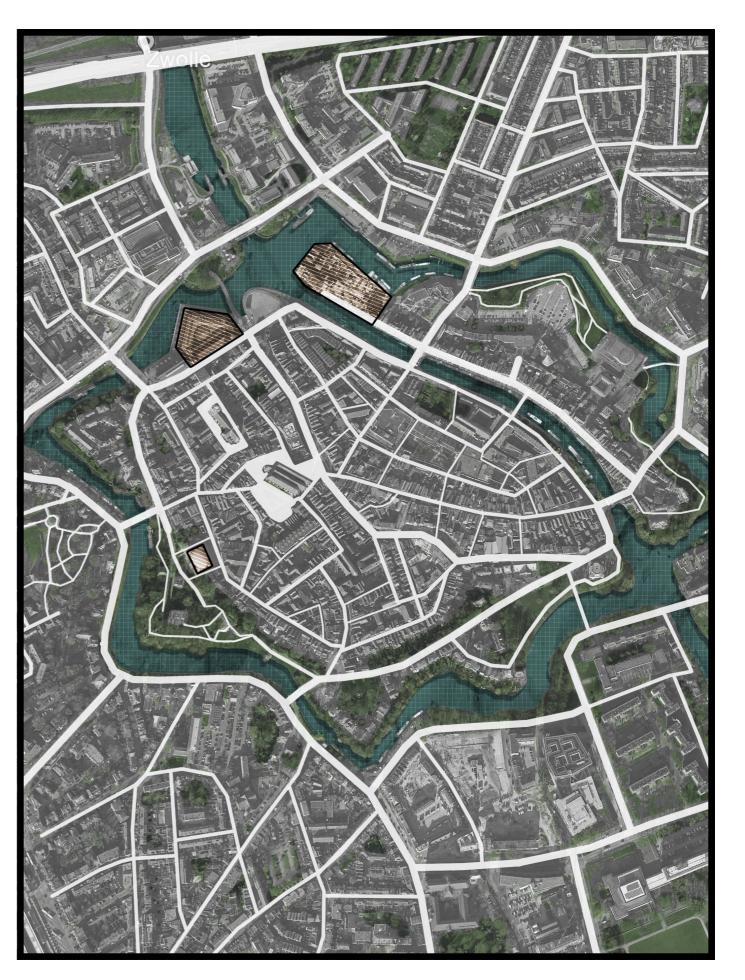
"How have the demolished fortifications been made more visible and functional in Zwolle on an urban, landscape and architectural level, in the last 30 years?"

This question is answered by analyzing and comparing different case studies that were realized in the last 30 years in and around the area where the fortifications of Zwolle used to be. These are case studies in the field of urban planning, landscape architecture and architecture. The projects and structures that will be covered are:

- 'Het Maagjesbolwerk' (2002)
- 'Museum de Fundatie' (2013)
- 'Het Kraanblowerk' (2021)

The analyses and comparisons are made using map material, photographs and various illustrations. The map on the right is used as a thread to answer the above question. From this map the context is given, allowing the reader to be taken through the city of Zwolle. This creates a consistent story, with illustrations and images that can be easily compared.

After the research question has been answered by means of the methods mentioned above, a conclusion is drawn. Based on this conclusion an advice will be , which can contribute to the further development of the inner city of Zwolle.



- Zwolle (Klappe, 2022)-

AR1A066 - History Thesis 6 AR1A066 - History Thesis

1. ZWOLLE

City Walls & Moats

Zwolle originated from a settlement that was established around the year 800 on a sandbank along a small river. The location of this settlement was the most decisive factor for the function it has developed over the centuries towards the outside world: A regional market center and trading hub. (Hove, 2005) Because of this important status Zwolle receives city rights in 1230, this gives the city the right to strengthen itself with moats and city walls, these walls give the city security but also prestige. (de Kam, 2020) The current Zwolle has its street structure still thanks to this period, there are also parts of the old city wall still intact and there is one of the city gates of the wall by all those years preserved. The size of this gate 'Sassenpoort (1409)' gave prestige to the city and reflected the wealth of the city in 'the Golden Age of Zwolle'. (Sassenpoort Zwolle, 2020) Over the years Zwolle grows because of its location on the IJssel also as an international trading hub, in 1448 the city of Zwolle joins the Hanseatic League. An alliance between cities, which at its peak ran from London to the Russian Novgorod, to facilitate trade between these cities and grow economically (Hove, 2005).

Defenisive Walls & Bastions

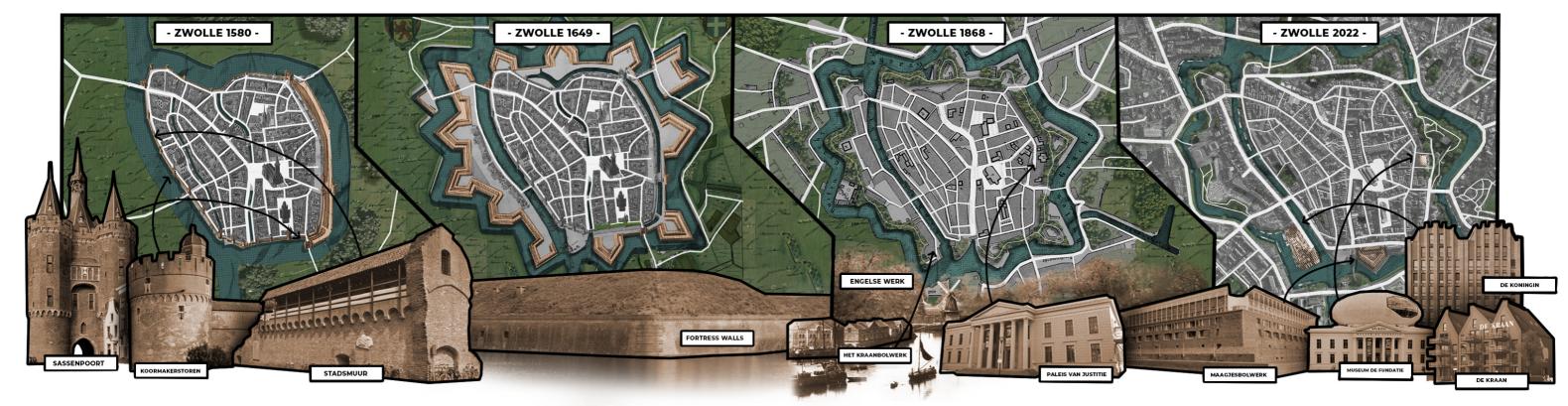
The citizens of Zwolle were not waiting for it, but the Eighty Years War in the Netherlands did not skip the city of Zwolle. The Eighty Years' War had major consequences for the defenses of Zwolle. The stadholder Prince Maurice wanted Zwolle to be part of a large defense line, which had to keep the north of our country free from the Spaniards. (Canon van Nederland, n.d.) A city wall was sufficient before, but with the rise of gunpowder from about 1410 the attack became more attractive, provided there was enough power to blow through the walls. (Corfis & Wolfe, 1999) So in addition to the city walls and moats already in place, bastions and defensive walls were needed to defend the city, so that the city would be adequately protected from the firepower of cannons. The walling of the city also created a modest city extension and brought part of the moat within this walling, creating a peninsula. Because of this unique position in the inner city, it is the ideal place to trade and establish industry. The fortifications of Zwolle were never used during the Eighty Years' War and the years that followed (Canon van Nederland, n.d.), but the inner city of Zwolle still owes its star-shaped structure to this period.

Demolition & Urban Expansion

In the course of the 19th century it became clear that the defenses had lost their function. Moreover, they stood in the way of the further expansion of the city. Therefore, the Fortress Act was passed in 1874. This established which lines of defense and fortifications would be part of the national defense and which would be abolished, thus eliminating the classic role of individually defensible cities. Within three years, the designated lands had to be transferred to the Diens der Domeinen. (Vestingwet, 1874) In Zwolle, the fortifications mainly came into the hands of private individuals, who partly demolished them and partly occupied them with houses and factories. (Elberts, 1974) There was also room for greenery, so an English landscape garden (Het Engelse Werk) and a city park (Potgietersingel) were realized on the site of the former fortifications. Parks that are still used for recreational purposes today. The demolition of the medieval gates often took place well before these fortification laws. Zwolle had already two city gates razed to the ground in 1772 and 1814. (Hoefer, 1911) The demolition of all these defense works put an end to "the closed inner city" and made the area much more accessible.

Modern student city

Since the demolition of the fortifications, the city of Zwolle has not stood still. The Hanseatic city Zwolle has grown into a modern student city with a population of 130 thousand (January 31, 2022), which makes it the nineteenth largest city in the Netherlands in terms of population. The green areas around the city have been swallowed up step by step over the years by new urban districts to keep up with the growing demand for housing. The historic center of Zwolle has also continued to develop, especially the area in and around the former fortifications: The greenery has been further suppressed and many initiatives have been carried out to give this space a new purpose. For example, in 2003 'Het Maagjesbolwerk', an apartment complex with a parking garage, was completed on a site where a bastion used to stand. Also the cultural center of Zwolle, 'Het Museum De Fundatie', was realized around this same area. A more recent example is 'Het Kraanbolwerk' completed in 2021 on 'Het Noordereiland', the peninsula created by the construction of the fortifications in the early seventeenth century. Zwolle has developed strongly in recent years and will continue to develop in the future.



2. REDEVELOPMENT

'Het Maagjesbolwerk'

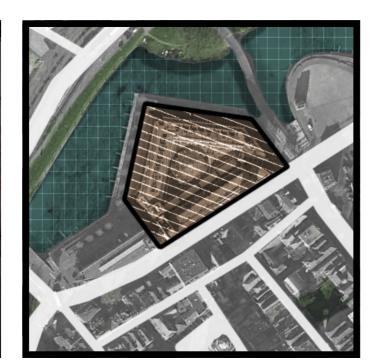
'Het Maagjesbolwerk', a multifunctional building with a gross area of 38,000 m2, was completed in 2003 on the western edge of Zwolle's Inner City. In 1994, a commission was issued by Amstelland Development Vastgoed (now AM Wonen) for this building, which includes apartments, stores and an underground parking garage. The final design came from architect H. Ruijssenaars of Ruijssenaars Damstra architects in Amsterdam. For this design assignment it was important that the core of the design effort on the Maagjesbolwerk is motivated by the desire to create a new balance between the east and west sides of the city center, because this side of Zwolle's center has been left behind. An attempt is made to give it a boost and a good connection to the center; a new meaning for the former trade entrance to the city. (Ruijssenaars, 2003)

Het Maagjesbolwerk' owes its name to the location where it has been realized; the site of a former stronghold of the old fortifications. The strongholds are losing their defensive value and are gradually being eroded. In the course of the 20th century, the sharp waterline was diluted and the adjacent Rodetorenplein was overrun by parked cars.

Because of this historical location, the issue of cultural preservation plays an important role; how to balance the latent appreciation for history with the need for renewal? (Ruijssenaars, 2003)

This location has a rich history and has fulfilled many different functions over the years. In this design, a clear link and reference to the past was chosen, to which the location owes its form. The reference to the stronghold that once stood here is not only reflected in the name of the complex, but the robust, sleek and pointed design of the building is reminiscent of the massive stronghold that once stood here. The reference is unmistakable; the entire design has been copied almost in extremes, with the height of the lower storey also corresponding to the former bulwarks. The references to the defense works are also abundantly clear in the use of materials; a 'chaotic' manner of using earth-colored bricks, which gives the complex something imposing and almost frightening, or in other words the appearance that a stronghold should have to deter the enemy.

Furthermore, where at the other 'star points' of the center of Zwolle the dilution of the sharp water line is still clearly visible, here the choice was made to stop the erosion of the water line and even



- 'Het Maagjesbolwerk' -

- Location 'Het Maagjesbolwerk-

restore it to the situation before the erosion hit. 'A new balance in the center', according to the architect an important aspect of the design of this complex. (Ruijssenaars, 2003) This can also be seen, as the building gives more "body" to the previously relatively empty and less vibrant part of the city center. The facade of the complex on the city center side is therefore very open and inviting to connect the stores located in the complex with the rest of the city center (Image: Closed vs Open). But if we talk about the balance between the downtown and the rest of the city, on the other hand, we see a very different picture. The facade towards the rest of the city is very closed and that is actually not surprising if the design and appearance of old bastions are used as a starting point; A

stronghold had the function of keeping people out of the city who you did not want in your city, so they were constructed very closed and almost daunting (Image: Closed vs Open). Something that was very useful for that period in history, but is no longer of this time. Because of the adopted design and appearance, 'Het Maagjesbolwerk' gives the same feeling, not inviting and it even looks like it wants to keep people out of the inner city, which is an unpleasant image as a major pedestrian entrance to the center Something the municipality of Zwolle should not aspire to and which also does not correspond to their own structural vision; a vibrant and inviting city center.



- Closed vs Open 'Het Maagjesbolwerk'-

AR1A066 - History Thesis 10 AR1A066 - History Thesis 11

'Museum De Fundatie'

'Museum de Fundatie', a 1000m2 visual arts museum in the center of Zwolle, can be roughly divided into two parts on the timeline. The neoclassical building was built between 1838 and 1841, to a design by the Hague architect Eduard Louis de Coninck. During this early period, the building was used as the Palace of Justice and then housed the National Planning Service, among other things. In 2004/2005, the building was assigned the function of art museum for the first time, the renovation to house a 'Museum de Fundatie' was carried out by architect Gunnar Daan, the starting point of the second part on the timeline. The literal high point of this new function takes place in 2013/2014 when the building is expanded following a design by Hubert-Jan Henket of Bierman Henket Architects. The great contrast between these parts is what makes this building so unique (Museum de Fundatie, n.d.)

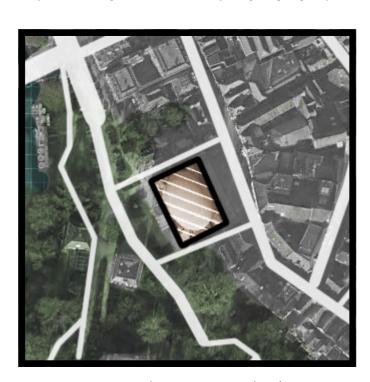
The location of 'Museum de Fundatie' is not, like the other two projects, exactly on the site of former strongholds, but rather stands on a space created by the demolition of the various defenses. The museum is adjacent to one of the city parks created in the same period, which is not surprising given the former function of the building. It was an important and prominent

MUSEUM DE FUNDATIE

- 'Museum De Fundatie' -

building, which is again emphasized in the publication 'Wandelingen in en om Zwolle'; W.A. Elberts describes the building in 1890 as 'one of the most beautiful buildings in the city'. Such an important and prominent building naturally deserves a prominent place in the city, which makes an undeveloped space in the middle of the inner city surrounded by greenery an excellent location.

The location of the building, as well as the building itself, have fulfilled various functions over the years. The architect of the neoclassical building opted for a design in keeping with the nostalgia for the classics that prevailed at the time. This led to a translation of the former function: The construction of a palace-like government building with large temple fronts. After the change of function to a museum, it soon became apparent that expansion of the building became necessary. The museum was able to resist the temptation to leave the historic city center, where it is difficult to expand, and opted for an expansion of the existing National Monument building. Due to lack of space and the desire to preserve the symmetry of the building, it was decided to expand the building in height. (Museum de Fundatie, n.d.) The austere design of the former courthouse from 1838 had to make way for an image that suited the young target group the



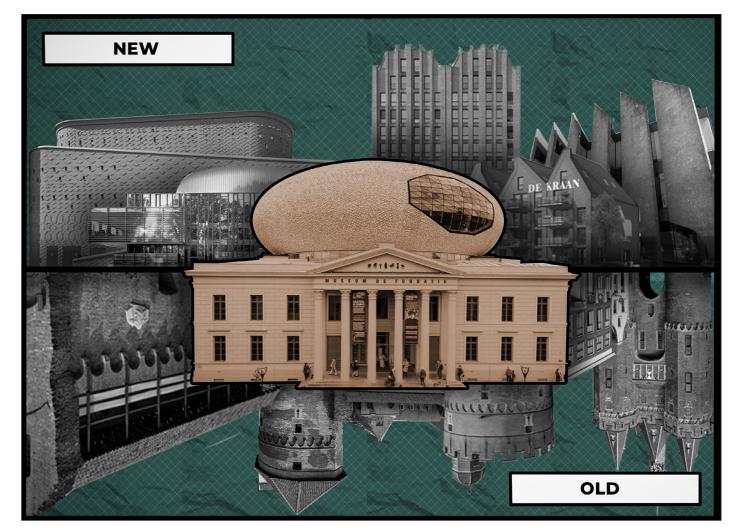
- Location 'Museum De Fundatie'-

museum had in mind. (Cheung San, 2013) This became an extension consisting of an almost futuristic 'cloud' on the roof of the historic building, covered with 55,000 white and blue tiles from Royal Tichelaar Makkum.

It is immediately clear what the architect wants to achieve with this: Bringing together the rich history of the building and its surroundings. Where history is not lost sight of but does not get in the way of the future. This is already evident in the choice not to leave the site and opt for this extension. Subsequently, the already existing neoclassical building is fully embraced in the subject of the expansion, by maintaining the balance between old and new. As a result, the futuristic extension does not demand all the attention, but rather enhances the image

and leaves the former building totally intact by making it stand out. This trend is also continued in the interior of the building, in the old building the stairs are stately and straight and in the new they are curved, where new and old meet runs a glass corridor. In this way the museum wants to present contemporary and ancient art in one building.

This is an example of a building where the history of the location has been embraced and even enhanced by a well thought-out extension. Combining old (neoclassical building) and new (futuristic cloud) creates a link between the medieval inner city and the new more modern buildings in zwolle on the other side of the city canal (image: Old vs New). It ultimately resulted in the museum becoming a characteristic part of the skyline of Zwolle.



- Old vs New 'Museum De Fundatie'-

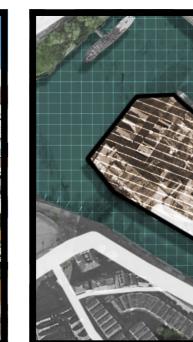
AR1A066 - History Thesis 12 AR1A066 - History Thesis 13

'Het Kraanbolwerk'

'Het Kraanbolwerk', unlike the other two projects, is an area development project of approximately one hectare in size which consists of several buildings located on the Noordereiland northwest of Zwolle's historic center. The area is being redeveloped by area and real estate developer AM from Utrecht and was completed 10 years after the initial plans in 2021. This developer then selected architectural firms for the various phases of the redevelopment for the Kraanbolwerk in Zwolle. They are KENK Architects from Amsterdam, BDG Architecten Ingenieurs from Zwolle and Zecc Architects from Utrecht, they designed most of the apartment buildings and houses on the former industrial site. (Architectenweb, 2012)

Before this area was important for the industry in Zwolle, it was part of the fortifications. 'Het Kraanbolwerk' owes its name to one of the twelve strongholds that Zwolle had in this period. It belonged to the so-called city crown, which gave it a unique position as a peninsula in the inner city. This made it in the seventeenth century the ideal place to trade and establish industry. When the defensive value of the bulwarks disappeared, industry remained, after which the area was transformed

into a trade quay for Zwolle. On this quay there were several merchant houses and luxury canal houses, on the north side adorned several warehouses. The different sides were connected by alleys and courtyards. When industry in the inner city became uninteresting, there was first talk of redeveloping the industrial area into a place to live. A "high-quality addition to the inner city" was the common goal of the various market parties and governments. (Hoekman & de Ruiter, 2020) The various market parties have ensured that in different aspects and in different ways this is reflected in the design language of the entire area development. BDG architects, who designed 'De Hanzehuizen' and 'De Kraan' in the area, had as one of their starting points to use the existing buildings of the Thorbeckegracht as a source of inspiration for their 'Hanzehuizen' (Image: 'Hanze' houses), but they wanted to translate this form language to the present. For example, the old buildings are slightly inclined forward, to prevent flooding and to facilitate the hoisting of goods. 'The Hanseatic Houses' adopt this in their own way, by playing with the depth of the window sections a similar effect is achieved. (bdgarchitecten, n.d.) 'De Kraan' Forms the transition between the buildings on the Thorbeckegracht and 'De Stelling', designed by KENK Architects. It is easy



- 'De Hanzehuizen' -

- Location 'Het Kraanbolwerk' -

to see that 'De Stelling', 'De Kraan' but also other buildings in the area were inspired by the factories that stood on this location (Image: Industry). This is not only reflected in the design and appearance of the buildings, but also in the almost austere use of materials. The tallest building on the Crane Bulwark, "The King", designed by Zecc Architects, refers in its name to the crown-shaped island created by the fortifications. On this island the development area is situated. This is the only reference to the present time, also here the design language is inspired by the industrial history. No reference is chosen, the design is a combination between the luxury canal houses

(palace) and industry (warehouse), buildings that both have always played an important role in this area.

The Kraanbolwerk shows that different choices can be made with regard to embracing the rich history of the city and the location. The issue never has a right answer because a location never has just one story. Alluding to a different time can create a chaotic picture. In 'Het Kraanbolwerk' the industrial period of the area was chosen and through good cooperation a certain atmosphere and industrial look was created with a varied yet uniform image. Also at street level the references to this time in history are clearly recognizable, the alleys and courtyards



- Industry vs Canalhouses 'Het Kraanbolwerk'-

AR1A066 - History Thesis 14 AR1A066 - History Thesis 15

3. FUTURE PLANS

Structural concept

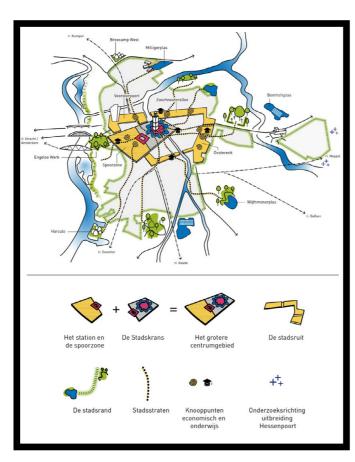
In the previous chapters we looked at what the municipality of Zwolle owes the still existing historic buildings and structures and how in various ways with reuse projects the lost history has been brought back to the present. In other words, we looked at the past and the present, in this chapter we will look at the future: What are the municipality's future plans regarding the continued reuse of this historic area?

These plans can be found in the environmental vision 2030: "a starting point, for a new balance between development and preservation of liveability and scenic, cultural-historical and ecological values." (environmental vision, 2020) It is strong that the first chapter of this immediately starts with a timeline about the development history of Zwolle, which is highlighted much further in the appendix 'The identity and development history of Zwolle', which is referred to more often in the environmental vision.

'We cherish our qualities: the basis for every development' a quote that sums up well the approach of the municipality of Zwolle in the area of area development. This makes the history of the area the basis for various aspects of the area development. In the coming years, difficult issues will have to be answered, such as the housing shortage and the question of greening and sustainability. However, this will not be at the expense of "the impressive history, such as the municipal and national monuments and other culturally valuable buildings, landscapes and places, which are definitely worth preserving." Thus, renewal is sought without loosing sight of the history of the area. When specifically looking at the development in the inner city, there is talk of old and new qualities coming together and the Kraanbolwerk is cited as an example of this. 'We want to preserve the special qualities of our beautiful but small historic core' is the starting point in many design issues. Thus, already in the design of various outdoor spaces the standard of the inner city will be cited. Also, the qualities of the historic areas will be reflected in the new areas and buildings that are realized, "In this way old and new qualities are forged together through the public space and through buildings. For example, the city canal as a public space is cited as the unifying element, the Velcro between the two sides of the water. The water will play an important role in the experience of the city. The areas around the city canal offer enough opportunities

to make the center area even more attractive and livable.

The history of the city is also referred to a number of times in the issue of the accessibility of the inner city. For example, the environmental vision talks about the new contemporary "City Gates" as traffic nodes that will make the historic city center more accessible, as an addition to the other historic city gates. Also, according to the municipality, the city streets is a historic quality to be cherished: "The downtown area is the beating heart of our city, They are the arteries by which old and young parts of the city are connected to the center and are an important setting for daily life." Work will be done in the coming years to preserve and develop these "city streets. This will be done with the surrounding area to optimally connect need and fulfillment, taking into account the central role that the core shopping area must maintain. A strong, lively city center must be supported by the city streets. In this way the municipality of Zwolle wants to embrace and strengthen the history of the lively inner city by stimulating the accessibility of this historical area.



- Structural Concept -

CONCLUSION

Research

In this thesis research has been done into an issue concerning cultural preservation in the built environment and how you can deal with this as a municipality or city. To make it even more specific, through personal observations we chose to highlight the approach of the municipality of Zwolle around this theme. A city with a rich history that has played a major regional, national and even international role as a trading hub. This important function made it necessary for the city to defend itself against possible attacks, this was first done by constructing a city wall and later by building fortifications. These fortifications have had a major impact on the structure and appearance of the city, not only then, but also today these structures are still clearly visible. How the municipality of Zwolle has partly preserved and restored these structures is further elucidated in this thesis by means of the following research question:

"How have the demolished fortifications been made more visible and functional in Zwolle on an urban, landscape and architectural level, in the last 30 years?"

To answer this question, three case studies were analyzed, all developed in the area of the former fortifications in the last 30 years.

Findings

The various projects studied in this thesis have in common that they were realized in a place with a shared history: the defense of the city by means of fortifications. What makes these case studies so interesting is that in the design of these projects this history has been dealt with in a very different way.

The architect of "Het Maagjesbolwerk" has chosen a very literal translation of the former bulwark that belonged to the former fortifications. This is reflected not only in the design but also in the use of materials. This makes the building very closed and has no inviting appearance. A choice that cannot be explained by the environmental vision of 2030, in which the municipality of Zwolle deliberately distances itself from the closed inner city, which was created by the construction of the fortifications. A good example of the desire for an open inner city can be seen in the design for the expansion of the 'Museum'

de Fundatie'. Here the architect chooses the connecting element between the old inner city and 'the new Zwolle', thus creating a clear contrast in the design of the building. The various architects of 'het Kraanbolwerk' have deliberately chosen a different piece of history: Zwolle as a trading hub. This is reflected in the industrial design of some buildings on one side and the canal houses (Hanseatic Houses) on the other side, or a combination of these.

The various projects reflect well the dilemma surrounding cultural preservation. This shows that there is not just one answer or outlined roadmap to develop a successful project in an area with such a rich history. It cannot be emphasized enough how important it is as an architect to be aware of the culture and history of the place and the environment where the design is realized. How an architect translates this knowledge into the design of a project, he or she is completely free. These different translations can also be seen in the case studies of this thesis and whether you personally find these projects 'beautiful' or not, they have all given a piece of lost history back to the city of Zwolle.

Recommendations

In the past, many ad hoc decisions have been made on many facets in various historic cities, including Zwolle, which have not benefited the history and culture of cities. Area development does not always have to involve the demolition of historic buildings and structures that no longer meet the demands of the present day. It is possible to balance the latent appreciation for history with the need for renewal. The municipality of Zwolle will have to continue to realize that they are responsible for this historic city with its rich layered history, but will also realize that the city will have to become more sustainable. In order to safeguard the history of the city, it will not be possible to place solar panels or wind turbines everywhere in the historical inner city, and renovations with modern materials are not always possible either. A new balance will have to be found with the current circumstances, so that the appreciation for the past does not stand in the way of the future, but rather creates a new alliance with it.

BIBLIOGRAPHY

- Architectenweb. (2012, March 12). Twee architecten voor Kraanbolwerk gekozen. Retrieved March 30, 2022, from https://architectenweb.nl/nieuws/artikel.aspx?ID=28510
- bdgarchitecten. (n.d.). projecten bdgarchitecten. Retrieved March 30, 2022, from https://www.bdgarchitecten.nl/
- -Blaue, J. (1663). Atlas van Loon (1 t/m 10 ed.). Albert Magnus.
- Braun, G., & Hogenberg, F. (1582). Civitates orbis Terrarum, Liber Tertius (4th ed.). unknown.
- Canon van Nederland. (n.d.). De Tachtigjarige Oorlog in Zwolle. Retrieved March 29, 2022, from https://www.canonvannederland.nl/nl/overijssel/salland/zwolle/tachtigjarige-oorlog
- Cheung San, N. (2013, May 13). Uitgebreid Museum De Fundatie opent deuren. Architectenweb. Retrieved March 30, 2022, from https://architectenweb.nl/nieuws/artikel.as-px?ID=31514
- Corfis, I. A., & Wolfe, M. (1999). The Medieval City Under Siege. Amsterdam University Press.
- de Kam, R. (2020). De ommuurde stad. Spectrum.
- Elberts, W. A. (1973). Historische wandelingen in en om Zwolle. Waanders.
- Gemeente Zwolle. (2021). Omgevingsvisie "Ons Zwolle van morgen" 2030.
- Hoefer, F. A. (1911). "Vestingstad Zwolle." VORG. https://www.vorg.nl/afzonderlijke-publicaties/werken/
- Hoekman, F., & de Ruiter, M. (2020, September 7). Kraanbolwerk Zwolle: industrieel geïnspireerd woongebied. Gebiedsontwikkeling.nu. Retrieved March 30, 2022, from https://www.gebiedsontwikkeling.nu/artikelen/kraanbolwerk-zwolle-industrieel-ge%C3%AFnspireerd-woongebied/

Article that well describes the organizational structure of 'Het Kraanbolwerk'

Description of the design principles of the architect of

'De Hanzehuizen'

Old city maps from the 17th century

Old city maps from the 16th century

Description about the history of zwolle with regard to the eighty years war

Description about the design principles of 'Museum de Fundatie' through the eyes of a journalist

Description on the history of the defense of medieval cities.

A book about the impact of a wall around the city, practically and symbolically.

A book about the entire history of Zwolle based on specific examples

Environmental vision of the municipality of zwolle for 2030

Documented consultation on privatization of fortifications

Description of the design principles of the architect of 'De Kraan'

- Hove, J. (2005). Geschiedenis van Zwolle. Historisch Centrum Overijssel.
- Kuyper, J. (1868). Gemeente-atlas van Nederland. Hugo Suringar.
- Museum de Fundatie. (n.d.). Museum de Fundatie Zwolle. museumdefundatie. Retrieved March 30, 2022, from https:// www.museumdefundatie.nl
- Ruijssenaars, H. (2003). Maagjesbolwerk Zwolle. Ruijssenaars Damstra Architecten. Retrieved March 30, 2022, from https://www.ruijssenaars.nl/portfolio-items/9417/
- Vestingwet. (1874, April 18). Forten. http://www.forten.info/index.htm?http://www.forten.info/wetten/vestingwet.htm
- -Zecc Architecten. (2020). Zecc Architecten: De Koningin Zwolle. Retrieved March 2022, from https://www.zecc.nl/nl/project/2022/De-Koningin-Zwolle
- Zwolle in Beeld. (n.d.). Zwolle in Beeld. Retrieved March 2022, from https://www.zwolleinbeeld.nl

Description about the history of Zwolle

Old city maps from the 19th century

General information about 'Museum de Fundatie'

Description of the principles of the architect of the project

The law establishing the dismantling of the fortifications

Description of the design principles of the architect of 'De Koningin'

An image bank with current and historical images of the city of Zwolle

USED IMAGES

MAPS

Zwolle (2022): - Google earth Zwolle (1868): (Kuyper, 1868) Swolla (1649): (Blaue, 1663)

Swol (1580): (Braun & Hogenberg, 1582) Structural concept: (Gemeente Zwolle, 2021)

BUILDINGS

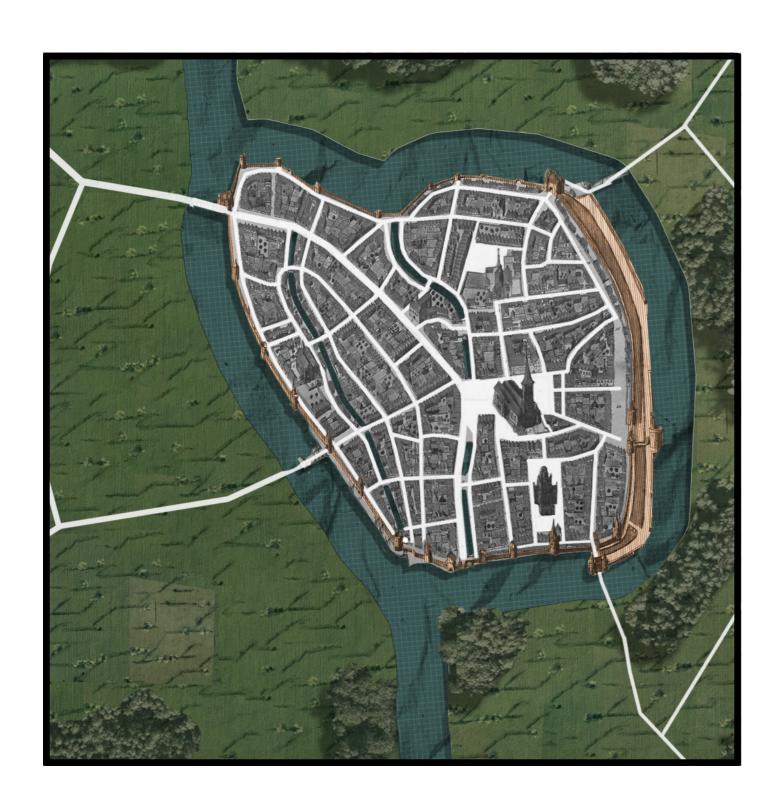
'Het Maagjesbolwerk': (Ruijssenaars, 2003)
'Museum de Fundatie': (Museum de Fundate, n.d.)

'De Kraan': (bdgarchitecten, n.d.)
'De Koningin': (Zecc Architecten, 2020)
'De Sassenpoort': (Zwolle in Beeld, n.d.)
'Koormakerstoren': (Zwolle in Beeld, n.d.)
'De Stadsmuur': (Zwolle in Beeld, n.d.)

AR1A066 - History Thesis 18 AR1A066 - History Thesis 19

APPENDIX

A. SWOL 1580 B. SWOLLA 1686





C. ZWOLLE 1868 D. ZWOLLE 2022

