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"The noblest architecture can sometimes do less for us than a siesta or an aspirin...

Even if we could spend the rest of our lives in the Villa Rotunda or the Glass House,

We would still often be in a bad mood."

ALAIN DE BOTTON, THE ARCHITECTURE OF HAPPINESS

## **De Gracht** | Reflection *On quality and value of healthcare in the historic inner city of Amsterdam*

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## 1 Introduction

In this paper, I describe my research and design process from a personal point of view. This does not only include a factual description of the products that I made, but also a reflection on the graduation process itself. The relation between my individual process and the approach and structure offered by the design studio is put forward as well.

The paper starts with a concise summary of my research and design. The research and design process are described and reflected on in more detail in chapter 3. In the last chapter, the relevance of the project in the field of architecture and in a wider social context is reflected on. Several themes are highlighted that are not only part of my project, but that are also subject of societal discussion at this moment.

# 2 Project Summary

My graduation project, 'De Gracht', has the Prinsengracht Hospital in Amsterdam as its main subject. It is one of the cases provided for the Heritage & Design studio, which is part of the Heritage & Architecture department of the faculty. The project consists of two main parts: a research and a design. In this chapter, I will provide a short summary of these two parts.

As soon as I set foot in the building, I was fascinated by it. The complex was rather cluttered, the corridors narrow and dark, the buildings in a state of severe disrepair. Yet, I felt at ease. The complex radiates a certain peace, a certain tranquillity. I was eager to find out what it was that created this calm atmosphere. Therefore, the main question dealt with in my research report (Bolhuis, 2015) is the following:

### To which extent did architectural aspects contribute to the positive experiences and user-friendly atmosphere of the Prinsengracht Hospital, and how can they be of use in the redevelopment of the complex?

The result is a report about intangible, hard-to-grasp aspects of (hospital) architecture in general and of the Prinsengracht Hospital in particular. The report contains several conclusions about the way that architecture influences the sense of well-being of its users, as well as a number of recommendations on how to maintain these qualities in the case of the Prinsengracht Hospital.



FIGURE 2.1 - VIEW OF THE PRINSENGRACHT. PICTURE BY AUTHOR, 13-2-2015.

For my redesign, I chose to continue the story of care. It was not feasible to maintain 'De Gracht' as a cure-providing institute, but it is still very suitable for its initial purpose: to provide a peaceful, bright and quiet environment for care. In my case, this will be psychiatric healthcare.

The complex features a number of spacious, green courtyards. In my proposal, these will become even more important and will serve as the main circulation area of the complex, thus preventing the need to use the long, narrow corridors. Around it, several shared spaces are organised that provide a variety of therapy types, including art therapy, music therapy and drama therapy.

The current policlinic will remain in function, albeit with psychiatric patients rather than somatic ones. The former nurses' housing will be modified to provide temporary housing for patients that cannot (yet) make it on their own, so that they can slowly reintegrate into society without having to go to a closed clinic.

## 3 Research and Design Process

In this chapter, the methodical line of approach of heritage & Architecture is explained. Over several paragraphs, my research and design processes and my final products are subsequently elaborated and reflected on.

### 3.1 Heritage & Architecture

The department of Heritage & Architecture (formerly ®MIT) focuses on the adaptation and transformation of the built environment in order to meet the needs of a modern society. In this process, a clear understanding of all aspects and characteristics of the existing situation, is key. These aspects do not only include visible, tangible ones – in many cases, part of the value of a building or site cannot be seen or touched (Orbaşlı, 2007). These intangible, often historical aspects are no less important than any fixed element.

I have followed many courses from this department – my minor programme, BSc thesis and my entire MSc education have been with Heritage & Architecture. For my graduation, it was logical to do the same. Moreover, I was used to the general line of approach of their design studios.

In the course of the projects that I did with Heritage & Architecture, a sound analysis and understanding of the site, its values and its qualities proved to be very important, as they would form the basis on which a design would be developed. By analysing all available information, it should be possible to formulate your own assignment (Roos, 2007). Of course, the process isn't as straightforward as described here. Nonetheless, the structure is very useful as a guide to shape your own research and design process. In other words: the design relies strongly on the research, and the research is shaped and elaborated through the design.

This year, H&A offered three graduation studios, all of them with project locations in the inner city of Amsterdam. I chose the Heritage & Design studio, because of the interesting sites and the structure of the project, which offers a lot of freedom to investigate the subjects that I am interested in.

### 3.2 Researching 'De Gracht'

The research focuses on the Prinsengracht Hospital, built in the 19<sup>th</sup> century and situated in the middle of the Canal Belt of Amsterdam. The Prinsengracht Hospital is a typical H&A project: it is a complex with a long, rich history, and a large part of the complex has a monument status. Moreover, it is situated in the Canal Ring of Amsterdam, which has been listed as a UNESCO World Heritage Site since 2010. The question what consequences these statuses will have on any building activity in the area, is essential in this studio.

As mentioned before, the main question dealt with in the research report (Bolhuis, 2015) is the following:

#### To which extent did architectural aspects contribute to the positive experiences and user-friendly atmosphere of the Prinsengracht Hospital, and how can they be of use in the redevelopment of the complex?

The question is relatively straightforward, but answering it is – as I found out – rather tricky. It requires a very clear understanding of the buildings and the changes that have been made to it over time. Also, it is very important to relate these developments to a broader historical context.

Therefore, I decided to dedicate an entire chapter of the research report to the history of hospital design worldwide, and in the Netherlands in particular. The Prinsengracht Hospital itself is only mentioned later on. The final chapters combine information about user experience in general with case-specific information about the Prinsengracht.<sup>1</sup>

Part of the research is dedicated to forensic healthcare, as a proposed new function for the building. For this chapter, I consulted an architect specialised in the subject – Jeroen Veth, from the office dJGA in Rotterdam (Veth, 2015) – and visited several clinics and guided living complexes in Amsterdam and Utrecht.



FIGURE 3.1 - TWO OF THE LOCATIONS I'VE VISITED: THE MENTRUM CLINIC VLAARDINGENLAAN IN AMSTERDAM (LEFT) AND THE GARDEN OF THE NEW WILLEM ARNTSZ HUIS IN UTRECHT (RIGHT). PICTURES BY AUTHOR.

The research was probably the most elaborate research that I did for my studies, and I'm quite happy with the final result. In the report, information from many different sources is combined: literature and radio shows, archives and interviews, discussions with staff from both the psychiatric facilities and the architecture office responsible for their designs, and my own research and measurements at the project site.

Because of the well-defined – and not too broad – topic of the research, I managed to keep the research and report well-structured. Moreover, I was able to find a rather satisfying answer to the research question.

A large section of the research report focuses solely on the case of the Prinsengracht Hospital. I got to know the building very well, especially by combining elements from the group analysis with my own findings about the history of the hospital. As a result, I came to a much better understanding of the interventions that have been done over time.

During the research phase, I handed in several drafts of the research report. In the beginning, we received replies on the material by e-mail, but later on, there was no feedback anymore. This was a serious flaw – more feedback and guidance during the research phase would have been beneficial for the final result. Nonetheless, I was able to deliver a sufficient report.

Overall, I am quite content with the research phase of my project – it has proven to be a sufficient base for a preliminary design. Of course, the research was not finished when I handed in the report – it still isn't – but that's all part of the design process.

<sup>&</sup>lt;sup>1</sup> For more information, please refer to the research report (Bolhuis, 2015).

## 3.3 Designing 'De Gracht'

The design process started as soon as I first set a foot in the hospital. In the narrow corridors and empty rooms, it is not difficult to see the grandeur of the initial design, or the effect of any spatial intervention.

In my current design, I'm looking for the subtle interplay of existing and new building parts. I'm trying to create an environment that feels 'logical', as if it has always been like this. I'm also trying to achieve a warm, friendly environment, that's not just aesthetically pleasing but also attractive in terms of smell, touch and sound.<sup>2</sup>

Because the buildings already possess many of these qualities, I defined my task as an architect to be as humble as possible. I tried to make the existing buildings stand out as much as possible, and make my own interventions as subtle and non-existent as possible.



FIGURE 3.2 - DETAIL PICTURES OF THE HOSPITAL AND GARDENS. PICTURES BY AUTHOR.

Even though I like this approach very much, it makes the design process very difficult. On one hand, it means that each part of the hospital complex asks for its own, very specific, intervention. The workload increases as a result. On the other hand, the resulting design lacks a focal point. There's no major intervention that draws any attention to it, or any underlying grid that brings structure. In that sense, the design is not that different from the designs that Aldo van Eyck made for the municipality of Amsterdam: the lack of a system makes every element equally important, regardless of its size and materialisation (Bergen, 2002). Combined with the complexity of the Prinsengracht Hospital, this makes for the trickiest design challenge I did at this faculty.

As a result, it was very difficult for me to make decisions during the design process. I was always working on several scale levels and thinking in terms of atmospheres, sequences, transitions, borders, autonomy, control, and other intangible elements of the design. Consequently, the research report is very much reflected in the design process. Nonetheless, even at this point there is still much unclear about the design: I know the atmospheres that I'm trying to create, the feelings that I'm trying to evoke, but the physical elements that I'm using to create these places are still being developed.

Luckily, during the process, I invested relatively much time in a decent structure and clear presentations. So far, I have been able to communicate my design in such a way, that my intentions were always clear. The presentations provide a lot of insight in how the design should work, despite the enormous complexity of the building and programme.

<sup>&</sup>lt;sup>2</sup> Midas Dekkers wrote an interesting plea for a change of mentality in the world of architecture in 'De Thigmofiel' (Dekkers, 2015).

## 4 Reflection

In an earlier version of this report, just before my P4 presentation, I wrote a small story of the project as an adolescent:

*I like to think of a project as if it were a child, slowly growing up.* 

By P5, I want to present a mature plan. One that shows responsibility, and respect towards its surroundings. However, no design is born as an adult. It starts as a whining little child, demanding attention but not knowing what it wants, what it needs. You take care of it, you feed it. And it keeps whining, day after day.

As I'm writing this, one week before P4, the project has hit puberty. I can see the traits of its character, slowly taking their final form. I can almost recognise the adult I'm looking for.

The project however, is an adolescent, and it is occupied with other business. It's being cross, it doesn't cooperate. It gets home late at night, when I'm trying to sleep. Sometimes, I'd like to be able to force it into a sensible role, but I know it's of no use. It's of no use because the project does not yet know what it is or what it would like to be. It's still busy determining its nature, its preferences and its role in society. It is recalcitrant, it's unsecure about its looks, and it changes its convictions every week.

Puberty is a temporary phenomenon, and it will pass. If I keep feeding the project, if I keep giving it all the attention it wants, I know everything will eventually fall into the right place – even if I can't indicate that place just yet.

Puberty is also a phenomenon that can't be rushed through. An adolescent will be an adolescent, and growing up takes time.

In the few weeks between writing this story for the first time, and finishing the final reflection, the project has taken a more fixed form. There have not been any shocking changes, but on the level of the detail and the ornament, the design is maturing quickly. Most importantly, I believe that the starting points that led to the original idea, remain valid on every scale level of the design.

In the following paragraphs, I will use several themes, related to the assignment, to explain the project as part of this graduation studio, as well as in a wider social context.

### 4.1 Heritage

Dealing with protected, valuable heritage and adapting it to maintain a role in modern society, is the main subject of the Heritage & Architecture studios. The Prinsengracht Hospital makes for an excellent case study, because the challenge of building in a protected site like the city centre of Amsterdam is a real and difficult one. Especially since its inscription as a UNESCO World Heritage Site, the Canal Ring needs to be treated carefully. The municipality of Amsterdam has published an elaborate Management Plan for the area, containing background information and proposed legislation for building activities that affect the area – even if the actual construction site is located outside of the heritage site (Gemeente Amsterdam, 2009).

The hospital itself, with all the changes that have been made to it in its lifetime, consists of a range of different building parts. This diversity and complexity is very interesting for the graduation project,

and I have made it one of the main themes for my design. There's a delicate interplay between new and existing building parts, and they connect and react to one another very subtly.

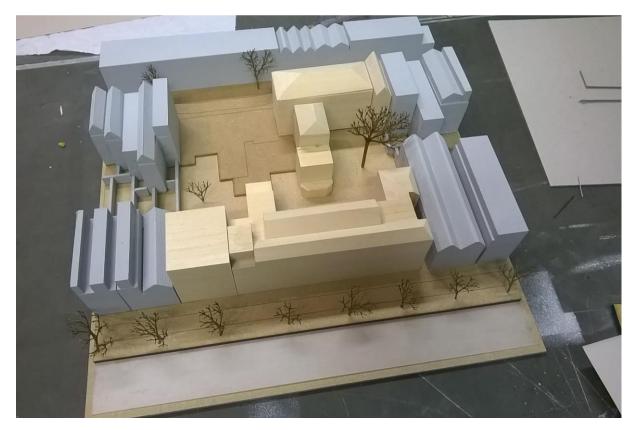


FIGURE 4.1 - SCALE MODEL OF THE COMPLEX AND DIRECT SURROUNDINGS. MODEL AND PICTURE BY AUTHOR.

### 4.2 Enclosed gardens

The relationship between the street and the interior of the hospital buildings, is not very direct. The thick, heavy facades act as a strong barrier with a relatively quiet, protected area behind it. However, enclosed by the hospital complex, there is a large garden with a lot of living green. The relationship between the hospital buildings and this garden is much more direct. In my design, the gardens play an even more vital role in the complex, as they are all connected to each other and act as the complex's main circulation area.

Both closing the gap on the Kerkstraat and creating space in the enclosed gardens, match with the ambition of the municipality of Amsterdam to maintain and even restore the urban fabric of the Canal Belt. In other words, the design refers back to the original ideas behind both the 17<sup>th</sup>-century city planning but also makes sense in relation to contemporary legislation.

Looking at the hospital itself, the similarities between my design proposal and the ideas of 19<sup>th</sup>century healthcare architecture are obvious. The important role for the garden as a quiet, safe place for patients is just as valid now as it was in Leliman's original building in 1857. It should be noted of course, that I'm aiming for different beneficial aspects of the outside space than Leliman was.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> For more information on the benefits of the enclosed gardens and on how medical theories have developed, please refer to the research report (Bolhuis, 2015).



FIGURE 4.2 - THE GARDEN OF THE PRINSENGRACHT HOSPITAL IN 1960. IMAGE FROM 'GRACHTENZUSTERS' (DE BOER & PLEY, 1993).

### 4.3 Continuation of care

The project also reflects another actual discussion – that of 'healthcare architecture'. Not just because of the existing hospital buildings, but also because of their new function as a safe place and guided living complex within the inner city fabric. In the psychiatric field, a current trend is for clinics and policlinics to become smaller and more integrated in the urban environment, as to decrease the disruption from society that their patients experienced (Mens & Wagenaar, 2010).

Simultaneously, there is a political trend to decrease the amount of beds in psychiatric departments. In many regions, including the municipality of Amsterdam, this will require patients to live at home, and arrange any necessary help themselves in an ambulatory construction. It is expected that some patients will get in and out of clinics every few months or years (Vervoort, 2015). Sufficient and adequately equipped complexes for guided living, and monitoring in the city districts themselves (so-called 'wijkteams'), will become more important to prevent recidivism for former patients or former detainees (Abraham & Nauta, 2014). In that sense, my project might fit in the gap between the patients that require constant guidance, and those that can live completely independently.

My project is, obviously, not very realistic. It uses some of the most expensive square meters of the Netherlands for a function that is economically not feasible at all. However, it might provoke some thoughts about the role of psychiatry in our hectic society, and it corresponds with a number of themes that are currently apparent in the debate about use of space.

#### 4.4 Healing process

Situating a psychiatric facility in the city centre of Amsterdam can be considered beneficial for both the patients and the municipality. For the municipality, because the function fits in the mixed use policy for the inner city, and because the complex addresses several societal issues that would

otherwise have to be solved elsewhere. For the patients, because they are not removed from society as was the case with large mental hospitals in the twentieth century.

Through literature and interviews with a healthcare architect and building- and healthcare managers at psychiatric facilities, I got to understand the healing process of psychiatric patients a lot better. Of course, the process is different for every individual, and exactly that has become one of the leading themes in my redesign.

Because the building consists of so many different parts and features several types of residences, gardens and therapy rooms, it is able to reflect the healing processes that take place inside it. For example, a patient might start in a very much protected living group, hidden away in the quietest part of the gardens. He can get close to society when he needs to, but can also choose to be alone or with a small group of staff and fellow residents. As he improves and starts to take part in society, he might move to an apartment of his own, still located inside the complex but with his front door on the public street rather than in a garden. He might attend other types of therapy, located around the more crowded square in the middle of the complex. There, he can meet other people, who live alone but use the same therapy facilities. It allows him to engage in social interactions in an environment that provides a feeling of safety. Eventually, the goal is for the patients to live independently outside of the complex, but the policlinic, gardens and shared facility will remain open and accessible for them, as they can play a vital role in guiding and monitoring a patient.

## 4.5 Detail and ornament

The building parts of the hospital all reflect the time in which they were built, and are all different. Still, there are many similarities – one of which is the great attention that has been paid to detailing and ornament throughout the complex. For me, this was a very interesting subject to continue on.

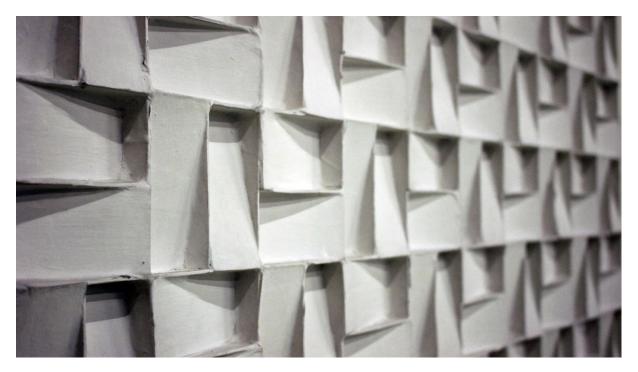


FIGURE 4.3 - FRAGMENT OF R71-20, A RELIEF BY JAN SCHOONHOVEN. COLLECTION STEDELIJK MUSEUM, SCHIEDAM. PICTURE AND EDITING BY AUTHOR.

It took a while to find an architectural language that expresses ornament in a contemporary way, without conflicting with the existing hospital complex and its tangible and intangible properties.

Eventually, I came up with simple but elegant masonry variations in white brick, which make for a connecting element throughout the garden area but are flexible enough to change in appearance according to their exact location in the complex.

## 4.6 Conclusion: My position

I believe that the design approach I chose for this project, suits the hospital buildings very well. I think it demonstrates my understanding of the aim of the Heritage & Architecture studio and connects with a number of contemporary societal issues.

Of course, the next assignment will require a new approach – there's no such thing as an architectural solution that can be copied and pasted anywhere. Even the Prinsengracht assignment could have been done in many different ways.

So overall, I'm quite content with my graduation project. The research and design complement each other very well, and form a coherent story that I believe in. I have been (and am still) working on the project with conviction and energy, and I am positive that it will make a nice project in the end.

There are still many (smaller and larger) flaws, which will take time to resolve. I will continue working on them, although I understand that it is not possible to address every single issue. This is, after all, a student project. Nonetheless, my products should be sufficient to deliver a satisfying P5 presentation, and, more importantly, a project that I can be proud of.

## 5 Literature and references

Abraham, M., & Nauta, O. (2014). Politie en 'verwarde personen'. Amsterdam: DSP-groep. Bergen, M. v. d. (2002). De speelplaatsen van Aldo van Eyck. Retrieved 17-11-2015, from https://www.archined.nl/2002/06/de-speelplaatsen-van-aldo-van-eyck/

- Bolhuis, J. (2015). *De Gracht. On quality and value of healthcare in the historic inner city of Amsterdam.* Delft University of Technology, Delft.
- De Boer, H. W. J., & Pley, G. (1993). Grachtenzusters. Episoden uit honderdvijftig jaren Vereeniging voor de Ziekenverpleging. Amsterdam: S.N.
- Dekkers, M. (2015). De Thigmofiel. Amsterdam: Atlas Contact.
- Gemeente Amsterdam. (2009). *World Heritage Nomination Amsterdam*. Amsterdam: Gemeente Amsterdam.
- Mens, N., & Wagenaar, C. (2010). *Architectuur voor de gezondheidszorg in Nederland*. Rotterdam: NAi Uitgevers.
- Orbaşlı, A. (2007). Architectural Conservation: Principles and Practice: Wiley.
- Roos, J. (2007). *De ontdekking van de opgave*. Delft: Delft Academic Press.
- Vervoort, J. (2015, 21-7-2015). [Interview with Jeroen Vervoort].

Veth, J. (2015, 29-5-2015). [Interview Jeroen Veth (de Jong Gortemaker Algra)].