THE PARKSTAD (CARE) HOTEL
THE HEALING POWER OF INVISIBLE CARE, THE PARK AND THE CITY

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INTRODUCTION

This paper contains the reflection on the proceeding of my graduation project which I am working on in the graduation track Architectural Engineering. The process that has taken place and product that is produced up until the P4 presentation will be reflected and discussed. Focus hereby is also on the approach towards the assignment. It discusses the method that is used and how and why the approach did or did not work. And especially what it taught me.

But before I start reflecting I will give a short overview of what my project is about. It is located in the Netherlands in Heerlen; a city in the Southern part of the Province Limburg. The area is a former mining area and characterized by a lot of unemployment and the aging of society. Nevertheless, the landscape of the area is almost unlikely to be Dutch. Its hills covered with sunflowers, vineyards and the picturesque towns give the impression of being in Tuscany, especially on a sunny day.

My project hooks on to the contemporary changes and need in the care sector in the form of a care hotel. To be more specifically; it provides a solution for the gap between hospitals, residential care housing and a patient ability to go home. Invisible care, the Park, the City and the patients control over their own environment are the main concepts of the project. The building of the former Clara College will be transformed into this care hotel, where three different atria and a kinetic facade will help realising this experience.
THE RESEARCH

- The relationship between research and design -

My research paper is about Kinetic Facades and how they can be of interest when applied to a building with a care function. In the research paper I examined 32 architectural projects containing kinetic facades with a broad variety of moving types, scales and purposes. The purpose of this research was to generate a broad overview of realised projects concerning kinetic facades in order to learn how these can be beneficial for the user.

Besides moving types, scale and purposes, I also looked into the climate type of the projects' context and the mechanism that makes movement of the facade possible (actively or passively). Even so is the motive of letting a facade move and adapt. In the a building would continuously adapt to its surroundings in order to find the most sustainable composition. Before starting my research I assumed the ground of using kinetic facades is always found in the performance of the building physics. But as turned out, a lot of facades that move are more about communicating the image of a company f.e. creating an icon or landmark - than about awareness of a buildings inner climate or being sustainable.

I was looking for the optimum type of movement and effect on the regulation of the internal climate in relation to the materialisation and costs. The conclusion to this research is used in the design for a care hotel. It doesn't n concept of the design anymore (as it did when I started designing) but is an extra tool to improve the design both climatically and aesthetically. Since the available sum is relatively low for care functions, a kinetic facade cannot be too expensive. To reduce the costs for the facade, the design should not be too complicated. The movement of the parts should be designed as simple and effective as possible. I consider the facade effective when it at least works the way it is designed, when it has a positive effect on both the internal climate (f.e. reduction of energy need) and the user of the building. Furthermore, it is also durability and easy maintenance that make the facade more effective. An effective kinetic facade is most likely to respond to the sun, because it is, compared to wind or humidity, the most rewarding element to respond to. Both light intensity and heat load can be controlled this way.

In my design two types of kinetic elements in the facade can be distinguished. The normal moving parts like a door and windows that can be opened (as in any other building) and the additional kinetic facade that is placed in front of the existing windows. It is the additional kinetic facade that adds an explicit esthetical layer to the building. These facade parts are activated by an overall programme in such a way that the moving panels are optimally positioned at all times. However, when a client is in the room behind a compartment of the moving facade, he or she has the possibility to take over the system and position of that compartment of the facade to his/her own preferences by means of a Home Automation device.
THE IBA PARKSTAD INITIATIVE

- The relationship between the theme of the graduation lab and the subject/case study chosen by the student within this framework (location/object) -

The way of working, or the theme of Architectural Engineering that characterises the graduation studio is the formulation by each individual student of a technical fascination that will respond to contemporary or possible futuristic demands from society. At the start of the semester a few contexts are highlighted, each context having their own characteristics. When focusing on the IBA Parkstad context it becomes clear to me that this is a region with a range of societal needs. The aging of society, changes in the care system, the search for a new identity, the large amount of vacant buildings, the need for more sustainability; it are a few themes that need a solution. I thought it might be a possibility to design something in this region focusing on finding a possible solution to some of these needs combined.

Especially the new regulations concerning care and the residential care-housing have a big gap between care and a patient home situation as a consequence. In the scope of the Netherlands hundreds of residential care housing facilities have to close their doors, and care is supposed to be given by home care instances. Anonymity, solitude, and a big responsibility for informal carers are the consequence. Furthermore, it is hard to find informal carers both in the big city, where business has the main focus and in smaller towns where all young people seem to leave.

I decided that I wanted to design something that could be a temporary solution for people who are normally able to be independent at home, but need help for a short period of time because of medical reasons. The upcoming concept of a care hotel is a good solution. The patient is a client here, and it is all about luxury, wellness and not having the feeling of being in a hospital. I wanted to bring this concept to a next level where the client gains more control over their own environment, and has the possibility to stay in touch with society and being able to go outside as much as possible.

I started looking for a building that would be suitable for the program of a care hotel. The context had to be fitting for the concept as well. Finally, I found a building in Heerlen, at the centre of the city centre and close to a park. Heerlen, being the central part of Parkstad would also be fitting, since I wanted the care hotel to become a model or
The shape of the building makes it possible to introduce different atria.

Fig. 1 Zones of additional atria and kinetic facade
The kinetic facade is applied into the deep windows, conserving the characteristic grid, of the concrete building. As the total building consists of two types of buildings already, different relationships are forming between the existing materials and the additional atria. To show these differences in relations between the materials I made a section through the whole building that communicates these differences.

Because there weren or in any magazine or book, I had to interpret what the facade was build up like myself. I found this rather difficult since detailing is not my speciality and I prefer a lot of confirmation instead of guessing what it could be.

THE APPROACH
- the relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework -

What I found difficult is the order in which the track Architectural Engineering starts. It comes down to a reversed order of a normal assignment. The project starts with a technical fascination which will become base for a resolution of the graduation project. Once that fascination is determined a search for a possible problem that the fascination answers to has to be found. I figured that this is best found in a social/societal need or problem, in order to let the fascination land. But it took me quite a while to come up with a rooted story.

The method used in studio is that you start researching and designing similarly. The time spend on research in the beginning of the graduation period should be around 80 per cent, versus 20 per cent on designing. Apart from the few assignments like the pavilion we had to design, I didn right away, because I felt the need to gather more information first, both about the contexts and the kinetic facades. Once I had a better knowledge about kinetic facades and knew what context and building to work I wanted to work on, it felt easier to start developing ideas. This difference in method is shown in a diagram in Fig.2.

Although I might have experienced the set up as a difficult order of working on a project, I do think it is a good way of approaching a design project. The role of the architect is changing. And we have to more often look for the assignment/job instead of wait for a client to come to us as designers. Research in the needs of society and developing new concepts or technical ideas and combining the two can be of great use.

Despite the fact that I was really triggered by my technical fascination, I did find myself presenting a design that I did not really connect with at the P3 in October. I figured that I was too focussed on designing a facade product that could almost be something that can be applied on many buildings. What I was working on suggested that the next step would be totally constructing and designing every little detail of the facade, while I felt much more for designing something more building specific, the relation between the use of the specific spaces of the building and the technique added to these.
existing walls. I decided to approach the facade in a less technical way and focus more on the design of the whole building. This way I could do much more with the function on the building, the experience of the invisible care, and the themes of the park and the city.

![Fig. 2 Difference in time spend on research vs. design](image)

It did result in a bit of a delay towards my P4 in December, and I knew that it wasn’t enough to be a proper P4. But I decided to present then anyway, and consider it as a second P3 presentation from another illumination angle. The technical fascination I examined in my Research paper isn’t anymore, but is turned into one of the tools to design the total experience of the care hotel.

IN A BROADER SCOPE
- *the relationship between the project and the wider social context*

As mentioned earlier I wanted to address a few needs of society in this graduation project. It especially addresses the changes in the care system in the Netherlands, and the gap that has formed between the residential care housing, the hospital and peoples home situation. Furthermore, we also need to find a way how to deal with an aging society that will need a rising amount of care.

A care hotel is a temporary solution for everyone who needs aftercare, or needs to be taken care of when an informal carer is not available for a short period of time. Also people who are in the need of care throughout the whole year because they have a chronic ailment can go to a care hotel as means of a holiday accommodation.

The most important characteristics of the care hotel is that the patient does not feel like a patient but as a client. Since people have to pay more for their care, they would also like to receive more luxury. A hotel can give them this experience. It means pleasant ambiances, having control over your own environment, privacy, good and healthy food, staying in contact with society, etc.

A care hotel is therefore not only something that should be introduced in IBA Parkstad or areas that are dealing with a shrink of the society. Also in the bigger cities this are wishful initiatives.