Transforming a closed off barrack into an open public building respecting and preserving its original characteristics - reflection

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The journey of my graduation process has not been easy. There have been some bumps on the road, which have delayed my graduation, but overall I see it as a good learning experience.

I have to say that doing the P4 for the first time in September, and not succeeding, was a revelation to me. It was not that my design was poor per definition. It was just not complete. The main criticism was that there was no overview of my project, which I could absolutely relate to.

My project is about the transformation of a former barrack into an open public building. The former barrack exists of two building volumes, to which a new volume is added. However, this was barely visible in my P4, because the focus lied too much on the new building volume, when it should be regarded to as a part of the bigger picture.

The decisions I made regarding to the design of this new building relate to the existing buildings. However, this was not clear in my presentation. Also I had thought about how to deal with the existing, but this simply was not showing. So, the assignment for the upcoming P4 was clear, I needed to take a step back and get back the overview of my project with the support of the preconditions and my value assessment.

Over the past six weeks, a lot of things have become clear to me. Not only concerning my design but also concerning my planning and process. During the period previous to my P4 in September, the overview and the overall goal of my project were long missing. I came to the conclusion that my main goal had not been my project anymore, but the goal was graduating before 2015. After realising this, the focus on the main goal was back, which was how to answer my research question; "What are the different ways of transforming the Prinses Julianakazerne from an introvert to an open public building without discounting its original characteristics and style as a barrack?"

To be able the answer on this question, I came up with the following sub goals:

- create accessibility (physical and visual)
- create relationships (physical and visual, horizontal and vertical)
- bring more daylight in to the building
- clear orientation (route)
- preservation of the existing

Now, with the right focus, planning on how to proceed for the upcoming P4 became much easier.
Research and design

In the studio of RMIT the existing building forms the guideline for a new intervention. By researching the history and analysing the building thoroughly, helps understanding it. With this background and knowledge you can make a value assessment and form a position about the existing and the possible intervention.

On reflection, for me the value assessment and the analysis have been a good foundation on how to approach the transformation of the building. From the analysis I concluded that the Prinses Julianakazerne is an exceptional building that offers a lot of qualities.

In the value assessment high valued elements are elements that I want to preserve and/or emphasise. Negative valued elements are tackled.

Positive valued are for example the good structural condition, characteristic towers, beautiful interior spaces, an attractive garden and all this on a site that is surrounded by a lot of greenery. This is remarkable since the site is located near roads that lead in the direction to Amsterdam/Leiden and Utrecht. It is also located near the city centre of The Hague, The Hague Central Station and the International Zone. This is a great advantage and makes the site easy accessible.

An extraordinary space within the building is the former theatre; an impressive, beautiful space with double height ceiling that has been elaborated in detail. This space has been renovated and adjusted to the new function and requirements as a restaurant. Besides its qualities, the barrack also holds some negative values. One of which are the centric corridors. Due to the traditional way of building with brick load barring walls that enclose the corridors, creates dark corridors with lack of orientation.

Another negative value is the poor visibility and accessibility of the beautiful barrack, though it hides behind fences and high bushes. This is logical with the former function of a barrack in mind.

The visibility of the barrack was poor, which is consistent with the closed off character. High fences around the site and the high bushes dominated the view. For me this was the reason to value these elements negatively. Therefore in the new design of a public building these have been removed.

In 1986 a building volume was added on the site. This building formed the physical connection between the main building and the annex. It physically and visually also closes off the courtyard completely from the greenery on the north side. Since I highly value the enclosed courtyard by the form and placement of the original building volumes with accessibility from two sides, the building from 1986 for me is a negative value.

Concept design

During my design process in the conceptual phase I had three different designs and finally ended up with my first concept design.

It started with an added freestanding volume that supported the existing volumes and proportions. Back then I could not argue exactly why I added this freestanding volume, but it was more a gut feeling.

I was told not to be afraid to “touch” the building and try different ways of adding volumes to the existing. On reflection, in this way my mentors probably tried to force me to understand and argue why I was making my design decisions. Through different volume studies I got to the second concept design, which was a very radical intervention. A big L shaped volume that pierced through the existing two volumes. Soon I came to the conclusion that this intervention was too harsh and eliminated the high valued courtyard and typology of the barrack.

The third concept design was based on the first design of the freestanding volume. However, in this concept an extra volume was added in the "armpit" of the
existing main building. This was the result of a new volume study in the search for the best way to add a new volume on to the existing building. This resulted in less daylight inside the existing building. Whereas it developed into a cog volume, letting in some daylight. Still, this concept is not valid, since the initial volume that is added contradicts to one of the essential sub goals to bring more daylight into the existing building volumes.

Reflecting on this process I realise I assumed that an add-on was necessary in transformation projects. In the back of my mind I thought a new freestanding volume was the easy solution, because then I thought that the difficulty lied in the direct physical connection between old and new. Now, I realise that this is completely false and that it is equally hard to make the connection between two freestanding buildings. However, they are just different approaches. The most important realisation on this process is that there is not one solely way to approach transformation projects. It all depends on the specific project, the value of the existing and the way you as a designer want to approach this. Where as for me and for this project the building ensemble as a whole and the carré typology has played an important role of coming to the conclusion that adding a freestanding building was the best concept design.

For this specific project I found that the challenging factor lies in the elaboration of the new freestanding volume; adding a new volume to an existing ensemble, in a way that both compliments and relates to the existing volume, while forming a coherent whole with the existing buildings. In addition the new volume must also be a building of its own, yet respect the identity of the existing building.

**Design**

During the elaboration of my concept design, the process has been the search of my approach of the existing and the new building. The appearance of existing buildings is very massive and heavy. The main goal of this transformation is to open up the building for the public. Leaving the existing in its value, closed and massive, requires a very open, transparent and inviting new building volume, in order to create an open public building.

In contrast to my last P4, I now can say that I have answered my research question on different scales. Programmatically there is chosen for a mixed function programme, making the plot more public and lively.

On the urban scale, first the site has become more visible and accessible for the public by removing the bushes and the fences blocking the view of the Prinses Julianakazerne from the street. However, preserving the characteristic barrack walls. A new entry to the site is added by new bridge. On the east side of the site runs no canal, which immediately makes the site accessible by removing the fence. A new building
The existing

One of the high values was the building ensemble as a whole with its rhythm and proportions. Hindsight, I would say that this from the start was the reason that I did not want to “touch” the facades of the existing building, preserving the explicit rhythm. This is also the reason for preserving the facades and the garden. The highly valued interior spaces are preserved, renovated and adapted to the present requirements.

The former dormers are valued indifferent, which makes it easier to make interventions internally. Since the construction is in good quality, the intervention should take place within the existing structure. The building is opened up and given orientation by moving the routing on the ground floor to the façade along the public garden. On the first floor the central routing is preserved although some parts in the load barring walls have been opened up, letting in the daylight into the dark corridor. Additionally some floors have been removed, creating a relation with the public route on the ground floor.

While detailing this part, I realised that the decision making in on this level also has to do with the larger goal. Zooming in and out and in again.

The topic was the materialisation of the balustrade. It started with a glass balustrade that let through lots of light. The feeling and expression of glass is rather cold, which lead to a wooden lamella balustrade, still letting through the light, but with a warm expression. However, the goal is letting in as much light as possible, which lead to a glass balustrade with a wooden finish.

The new building

In the design of the new volume I have had great advantage of the analysis of the existing, which has been the main part of my research. Finding the rhythm and consistency of the existing design that has been applied all throughout the ensemble, has been very helpful for the elaboration of this design. The systematics and thought process have been implemented in the new volume.

The existing buildings are built in a traditional way with brick construction and brick cladding. A starting point for the materialisation of the new volume was to find a material that also could be used for construction as well as for cladding. I aspired the new building to be in contrast to the original. Since, the Prinses Julianakazerne appears closed and has a lot of mass. The new building therefore should be open and light. However, the material should to be in contrast with the existing, still mostly traditional materials should be used (one of the positions of the Stuttgarter Schule).

Wood is light, sustainable and is a traditional and natural material referring its surroundings, making it fit in its natural habitat.

The openness also supports the new public function. However in health care some privacy is also needed. This is why is chosen for a double façade with a glass inner
façade and a wooden slat outer façade, letting in daylight, but still creating some form of privacy within the openness.

Since the big difference in materialisation of the new and the existing, the rhythm and consistency of the openings in the façade is an important reference that the buildings are related. The swimming pool, which is an exceptional space with a double height ceiling, similar to the former theatre, should also be visible in the façade. The preconditions to this façade: let in sunlight, offer privacy for the swimmers and still have a relation to the greenery outside. However, still it should relate to the adjacent façade of the existing.

Previous to the first P4, I wrote that the strict rules and systematics resulting from the existing obstructed me in my creative thoughts. Reflecting back on this, I understand that one rule does not exclude another; it is just the puzzle to find the solution that fits within both rules. Also, beforehand I held on to the literal translation of the openings in the existing façade. Now, I have come to the conclusion that these openings did not necessarily have to be exactly the same, just as long as something different happens in the new façade referring to the openings in the existing façade.

**Relationship between studio and framework**

The RMIT Graduation Studio: Mixed Projects The Hague focuses on the redevelopment of vacant governmental buildings. Within this field I choose a former barrack of the Ministry of Defense; the Prinses Julianakazerne. Due to its former function as a barrack the building has always been closed off and not accessible for the public, which for me was the trigger to do something with this building.

In my opinion reuse of vacant buildings gives a chance to blow new life into a building. Especially for a building as beautiful as the Prinses Julianakazerne, with its representative spaces and its great location near the woods, the city and main roads at the same time, I think it is an opportunity to make this building public.

The Prinses Julianakazerne has a dominant off character, yet I found the existing composition, with its rhythm and majestic representative spaces, very beautiful and therefore hard to “touch” it. To be able to understand how I should tackle this problem I searched for reference buildings that had a closed off character that were transformed to public buildings. The most interesting project I found was the transformation of a prison into the Faculty of Rights and Rectory at the University of Hasselt, Belgium.

In this project Noa Architecten wanted to keep the character of the original building. One of the strongly existing elements of the prison was the prison wall. Other architects wanted to demolish the prison wall, which would be the easy first step to make the prison more public. However, Noa Architecten kept the prison wall, because of its strong character of the original function, but opened up the prison gates instead. The hallways were widened and opened up towards the garden. The open spaces have been the foundation for the integration of the new functions.
In my design I have opened up the plot by taking away the gates, but still remaining the strongly characteristic wall and the canal surrounding the plot. Also the high fences were demolished and by cutting some bushes and trees makes the Prinses Julianakazerne more visible for the public.

Similar to the reference project the open space has been the foundation for new functions in my design, which did not fit in the existing building. On the southeast side of the main building a new volume was added which also emphasised the carré typology, in which the building was originally built.

**Relationship between project and wider social context**

The government has indicated to cut back on health care, with the result that many nursery homes will have to close their doors. This means that the elderly will have to continue to live at home as long as possible. Their care then needs to be organised in their own environment, relying mostly on the help of family and friends. This will increase the number of informal caregivers in the coming years. Most informal caregivers (80%) are younger than 65 years old and have a job and/or a family to take care of. Informal care can be very stressful, especially if this applies for a longer period of time. To be able to maintain the care for their frail relative or friend as long as possible, it is important that this care can be transferred to a professional every once in a while.

Therefore, primarily we need to prevent elderly to get ill and help them to stay fit and independent for as long as possible. Secondly, we need to help the caregivers with the professional help they need in a way that they are able to maintain the care for their caretakers in the best way.

Also, around the area of the Prinses Julianakazerne there are a lot of elderly people. In the direct environment there is no place for these elderly to gather and meet. In my opinion elderly should be stimulated to be around people and stay active and engage in society.

Responding to the current situation in the field of health care and after an interview with a professional within the field of healthcare, I suggest transforming the Prinses Julianakazerne into a Vitality Centre with among others a respite hotel.
In the Vitality Centre there are different professions within health care that work together such as doctors, physiotherapists and massage therapists. But there are also sport facilities as a fitness centre and a swimming pool. Professionals will together help people to become or stay active and focus on their health. There are also some supportive functions as a restaurant and shops such as a home care centre to help them with smaller struggles in every day life.

Besides, a proper respite hotel does not yet exist in the Netherlands. It could be seen as a temporary nursery home with the service of a hotel, where the person in need of care can stay whilst the caregiver is away. It is also possible to stay in this hotel together with the caregiver. Given the change in the health care system of the elderly, there will most likely be high demand for this.

At this perfect location with a lot of greenery, good accessibility and the many elderly in the quarter, the Vitality Centre is meant for people who want to age in a vital way and meant as a new meeting point of the quarter.

Decisions in design process that were crucial

A crucial element in the design has been the façade of the new building volume. This is the visual connection between the old and the new. In one glance it should be clear that the new building volume is new although it has a strong relation with the old.

The new volume should be open, light and inviting in contrast to the closed barrack, as well as provide privacy for the health care facilities. It should be contrasting to the existing, in order to see what is old and what is new. However, it should also blend in with the green surroundings, leaving the barrack in its value.

Characteristic and strongly visual is the rhythmic of open en closeness in the existing façades. When this would be directly translated to the new building, this new façade would be equally “closed” as the existing.

A horizontal lamella that is placed 600mm in front of a curtain wall is chosen, to provide privacy as let in as much light as possible. It is materialized in wood, giving the building a warm, inviting character that fits in its surroundings.

The open and closed surfaces of the main building of the Prinses Julianaakazerne are translated into more open and more closed lamella in the façade.

Although some spaces behind the façade ask for more privacy than the lamella façade can provide I have done some research on how to translate this into the façade of the building. An example was to experiment with different lamella panels that where more open or closed, instead of just the open and the closed one (responding to the open and closed surfaces of the main building). Another example was that the lamella would be movable. Soon I came to the conclusion that this was not the right solution, because in both cases the façade would have random open and closed surfaces, when this is the most expressive element to relate the new façade to the old. A negative value to the first option was the lack in flexibility. If the building in a couple of years would change function, the different lamella panels may not fit the function behind the façade anymore.

Therefore I chose to stay with the principle of the horizontal lamella, with open and closed parts corresponding to the adjacent main building. The privacy issue is solved not in the outer façade, but in the inner façade. In the curtain wall is chosen for there are two panels with either clear or frosted glazing. In this way there is still a lot of light
coming into the building and the openness and closeness of the wooden façade is also experienced from the interior. Even if the building will change function, the wooden façade will still keep the relation with the old façade and the panels in the curtain wall can be changed after function.

**Approach leading for elements in the design**

Analogy has been leading for the elements in my design. As well as the reference project of Noa Architecten I referred to earlier, which has been the guideline for my approach on how to keep the existing character.

The new building should be in contrast with the existing. It should be clear what is old and what is new. At the same time the new should clearly be in dialogue with the existing. The question is how to combine dialogue and contrast.

My approach for contrast was using different materials for the new opposed to the existing. The dialogue is found in the way the building is organised and systematised; the rhythm and consistency. Using the routing, construction, rhythm, materialisation of the existing and trying to apply this thought process in my own design has been crucial for my decision.

*Contrast*

As the existing building volumes are materialised in brick, which has a massive heavy expression, to compensate the new building volume should be light and open/transparent to meet the requirements of an open expression of a public building.

*Dialogue*

The internal routing of the existing building on the ground floor was replaced from the middle with on both sides, counterpart spaces. With the new public garden that was created by the new volume southeast of the main building, a public routing along this garden was a logical choice; opening up the interior of the existing, letting in more light as well. Now, the routing passes the entrance hall, through the hallway that is always in direct relation to the public garden, to the second hall/staircase and on to the double height beautiful theatre.

This same thought process for the routing was also applied into the new building. Whereas you enter the entrance hall, follow the way along the façade into the sports area, which leads to the second staircase. Here you have a visual relationship with the double height swimming area. The only difference is that there is no direct/physical relationship from the corridor to the swimming area, because this is undesired. The changing rooms are the direct connection between the two.

Besides routing, the relation between the existing and the new is emphasised by the building structure. To design the new building, I used a derivative of the existing building structure as a blue print. The structure in a transparent building is directly articulated in the façade. Since the façade is the clearest element for the public to see the relation between old and new, choosing a derivative of the existing structure, has given me a good handhold in designing the façade.
Conclusion

"What are the different ways of transforming the Prinses Julianakazerne from an introvert to an open public building without discounting its original characteristics and style as a barrack?"

The different ways of transforming the Prinses Julianakazerne are expressed in the ways different parts within the barrack are approached.

These different approaches are correlated to the value that is given to the elements in the value assessment. Since this is an old building that is transformed, some adjustments should be made in order to meet the requirements of today. Indifferent valued elements such as the common spaces are easily adjusted and opened up bringing more daylight and visual relations into the building. In these spaces it is easy to insulate on the inside of the construction without any inconvenience.

In high valued elements on the other hand, these adjustments have high impact on the existing expression, which is adverse and should for that reason be approached in a different way. Here the adjustments are overruled by the preservation of the original expression. An example of this is the theatre, which is very high detailed. Oak wooden parquet flooring, panelling and elements give the theatre a finish with a representative extraordinary expression. In this case, insulation on the inside of the construction is only applied, if the existing expression stays the same. In practice this is only applied under the windows behind the wooden benches.

Whereas the expression of the existing buildings is preserved, to compensate the massive closed building the new building should have an open, transparent and inviting presence.