Accommodating change

Historic Solids
The case of Klinisch Ziekenhuis in Amsterdam

REFLECTION PAPER

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At this final point of my graduation project in Heritage and Architecture, the following document presents a reflection on the out comings of the project in both research and design approach.

The relation between research and design

Starting my project in Housing and Heritage and as explained in my graduation plan, the research was concentrated on adaptable housing strategies. The changes that today societies are facing lead to a more customer oriented architecture and the need for more flexible solutions in order to attract different groups, became more imminent. As a result, today housing needs to become more dynamic in relation with the contemporary lifestyle. Designing for flexibility means intentionally providing as many future decision opportunities as possible.
To gain the knowledge and awareness of these approaches and also to be able to answer my research question, my research was concentrated on several experimental flexible designs solutions of the past and today, mainly introduced in the Netherlands. The primary intention of the graduation project was to integrate those flexible housing design solutions which are appropriate in historic monuments, in order to fulfill the demands for urban housing and the customer orientated architecture that nowadays societies are leading to. After analyzing the flexibilities found in the canal houses of Amsterdam, the modern Movement's architecture, the Open Building principles and the Solids in Amsterdam, one of the most general results was that buildings that were originally not conceived as flexible where at the end the most adaptable buildings.

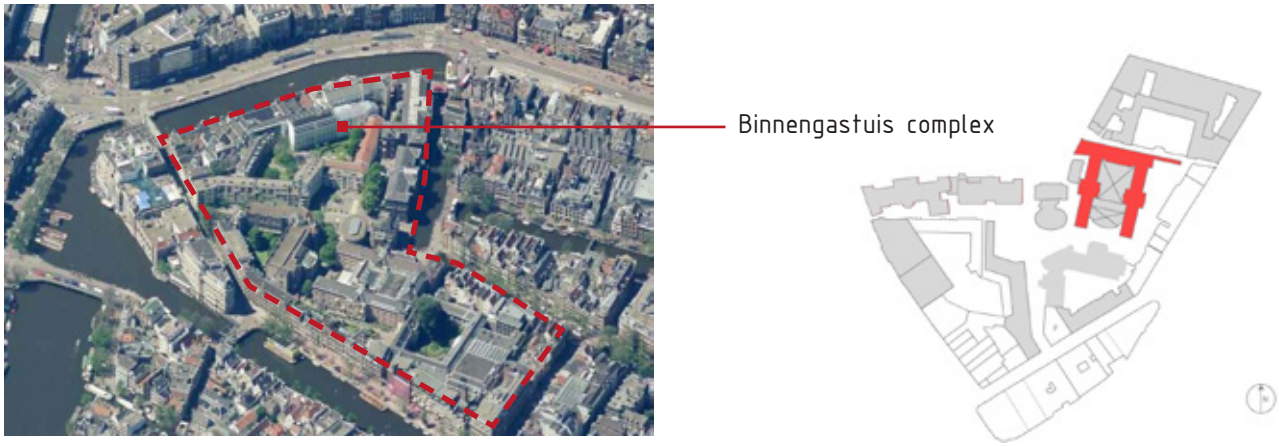


fig 4. Aerial photo showing the Binnengasthuis complex in Amsterdam.source: Introductory presentation of Heritage and Architecture studio in Semptember 2014

The fact that the Solids concept is still experimental itself and the fact that we are dealing with existing buildings and specifically with monuments placed in the historical inner city of Amsterdam, made the realization of the 'Historic Solid' more challenging. The desirable solution was found only when the design was linked, to the maximum extent, with the theory. That was accomplished not by copying the same design solution of the Solids into the historic case study, but by relating the new interventions with the notions behind this specific concept intertwined with the values of the building. Some crucial design strategies that were adapted where; the unfinished spaces for the tenants to full fill and cover all their spatial wishes, looseness of fit, providing redundancy and over design capacity in the case of the service cores and all the technical aspects that influence and at the same time ensure the functional interchangeability and diversity.

The relationship between the theme of the studio and the case study chosen by the student within this framework

Introducing housing units within the medieval part of the city center of Amsterdam is a smart solution to the increasing demands for urban housing. On the other hand introducing housing units within the borders of the Binnenhasthuis hospital and formal campus of the University of Amsterdam is a challenge, but it represents at the same time the main objectives that the studio of Housing and Heritage tries to accomplish. The chosen case study of the Klinisch Ziekenhuis is a representative example of the Binnehasthuis complex, to show how the Solids principle can be integrated in historic monuments. The design project is practically an experiment testing the possibility for implementation of this concept in a monumental building. The selection of one specific case was not random but came up after analyzing most of the site's buildings in terms of architectural analysis upon adaptable perspectives and the value assessment. The Klinisch Ziekenhuis had most potential and ability to accommodate flexible housing units but also exhibited several limitations. From the beginning it was seen as a constructed shell which with several alterations could offer flexibility to the tenant, who decides on the size, configuration and use of the space.

As mentioned above the design solution was made after taking into consideration not only of the research findings upon adaptability but also the site analysis and the value assessment of the complex. The Klinisch Ziekenhuis building despite of the historical and social significance, as one of the first modernized pavilion hospitals of Amsterdam and the Netherlands of the 19th century, also concentrates qualities that enhance the monumental value of the complex, such as aesthetic and architectural qualities. The most valuable elements are found in the materialization and ornamentation of the facades and reveal the aesthetic significance of the building with impacts on the appearance of the entire framework. The articulation of the Rotunda placed in the center courtyard gathers architectural and monumental values that enhance the significance of the buildingas regarding its unique and authentic values. Taking into consideration of these qualities my responsibility was to preserve and enhance the historical appearance of the building. This was translated into minimum design interventions on the outside showing aesthetic appreciation to several facades and restoring them to a pristine condition to preserve the overall character of the conservation area. Especially the west façade, facing the Oudezijds Achterburgwal, which together with the surrounding buildings constitutes an integral whole and until today it transmits the original image of the site from the city center.

The new intervention are unfolding from the inside to the outside with less intervention on the outside enhancing special characteristics of the building's DNA such as the vaulted flooring construction and the logic of the pavilion typology. The only new volume that was added on the North side of the building tries to achieve high level of compatibility in the streetscape but in a more contemporary way and it is related to the scale of the adjoining heritage buildings. The additions that took place in the 80's distort the appearance of the site and did not ensure their relation

with the adjoining heritage buildings. The intervention occupies one of the open green spaces of the complex and furthermore has detrimental impact on the articulation of the most prominent facades and the Rotunda.
The open public spaces of the Binnehasthuis site are sufficient in quantity but are lugging in quality. Today the Klinisch Ziekenhuis courtyard, as mentioned before, performs as a closed atrium. The social dynamics of the existing open public spaces disappeared and became of secondary importance. They remain as ambiguous spaces that reveal either a public character during day or private character during night. These spaces enclose the collective values of the site and should reflect the social life of local community. This was one of the main intention of the design approach for the surrounding area.
At this point I consider the new design and overall approach for this specific case study as a successful response to the addressed values and qualities.

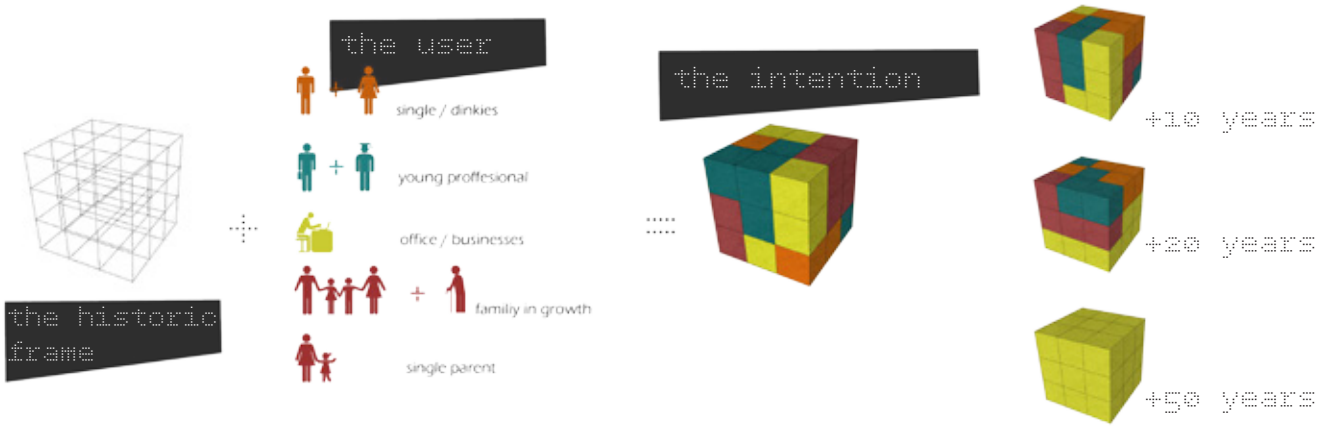
The relationship between the methodical line of approach of the studio and the method chosen by the student in this framework

The methodological line that was followed during the graduation process did not correspond from the beginning with the traditional genuine approach of the Heritage and Architecture studio. Having in mind a specific programme like housing, led to a different methodology path, that did not start with the analysis of the site and the value assessment as usual.
When my research started it was focused on adaptable housing strategies and the analysis of the idea of flexibility through historic recursion. This helped me formulate a clear research question and the overall design question but also to structure the site analysis that followed. Specifically for the site analysis retrieving the knowledge acquired in the primary research became essential and resulted to a more concrete and comprehensive first analysis of the site. The historic research and the analysis of the qualities found on site, helped to identify all those authentic elements tangible and intangible that could be considered as valuable. Up to P2 this two fold analysis helped me establish my starting points in correspondence with the building scale and the city scale.
During the design process after taking some important design decisions that mainly concerned the optimal separation and accessibility of the building several problems arose and I found more relevant to focus my design to the more technical aspects mainly in scales from 1:20 until1:5, due to the purpose of my project to obtain flexibility and have diversity in several levels. Since this was achieved I went back to the scales of 1:200 and 1:50 to elaborate a complete design result.
Even though in the design procedure I did not follow o linear transition from the larger scale to the smaller scale this operated in benefit of the design. Besides that, the analysis and all the significant qualities of the building influenced all the design decisions, in correspondence with the requirements determined by the studio of Heritage and Architecture.

The relationship between the project and the wider social context

One of the project's goal, as formulated in the graduation plan, was to give the opportunity for extended lifetime of the historic buildings as part of a broader strategy for urban regeneration and sustainability.
''Historic Solids'' aim to be a realistic project that can serve as a new design field for further investigation and experimentation. The social, economic and cultural benefits of it are various. As John Habraken said, the introduction of the users into the design process, is important for the people, the architecture but also the built environment. It achieves to satisfy any user seeking for an urban life and allows economic flexibility. From the cultural perspective point of view, giving the opportunity for extended lifetime of historic buildings brings relevance and meaning to the city.
The Solid's ''openness'' and incompleteness allows the tenant to choose how they want to complete it in order to fit their needs. It is a work

in progress. The Solids idea is for the tenants to rent and finance the design of the interior according to their needs and the owners to take care of the structure and façade. That was actually what led Bijdendijk to formulate the Solids concept: *"A Solid is a sustainable building. In my opinion this is achieved through two qualities: accommodation capacity and preciousness".* Preciousness that will make people want to preserve it, as Bijdendijk states, cannot easily be defined and achieved in architecture. It is not a coincidence that the owner deliberately tries to deliver preciousness through an ambiguous and indeterminate façade, as part of the ''openness'' and allowance for future change, but also in order to fit quietly into its surroundings. However there is a big risk ending up with indeterminate, repetitive Solid developments within cities. One should rethink whether new Solids are the answer to the question of how to deal with the time factor in buildings, or if the answer is the transformation of the build heritage into Solids. As Graham Kelly said, "A sustainable building is not one that must last forever, but one that can easily adapt to change".
Concluding the achievement is the creation of flexible housing solutions in combination with multiple functions, following a strategy that understands the dynamics of historic inner cities that fits today's life.



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