Heritage & Architecture
Binnengasthuis, Amsterdam

The search for conjoining campus and city
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Introduction

This booklet is made for the studio Heritage & Amsterdam by Heritage & Architecte, TU Delft. The reason for this booklet is to present the research, the urban, the architectural and technical analyses that has been conducted during this gradutaion studio.

This booklet starts with the introduction of the case; the Binnengasthuis in Amsterdam. The case, and the current situation around the case, results in the base of the research, the problem statement. With the problem statement set, the Binnengasthuis has been analysed; the history and the current situation. The analysis has been translated into a conclusion which can be used for the urban masterplan. But for a masterplan the research is conducted first. Only after this the masterplan is developed. The masterplan will show a critical design area, a place where multiple design decision come together. The building(s) within the design area will then be analysed, not only architectural but also technical. This will also be translated into a conclusion. With the conclusion and a new function prescribed by the masterplan, the design of a building can start.
Amsterdam & Binnengasthuis

The start of Amsterdam
In the 11th Century the extraction of peat in the moor landscape of Holland resulted in ditches being dug towards the Amstel. To prevent the inland from flooding, dykes were needed around the Amstel and a dam was created to close the Amstel from the sea. This dam in the Amstel was the beginning of the fishing village Amsterdam at the end of the 12th Century (IJsselstein, 2011).

Amsterdam became a city in the 14th Century, with the first dwellings no longer situated on the dykes. The city of Amsterdam is shaped by the Amstel and the cultivated man-made landscape of the ditches running towards the Amstel. All new extensions were preceded by digging new canals parallel to the Amstel, the peat extraction pattern was leading for the new street pattern (IJsselstein, 2011; van der Hoeven & Louwe, 1985).

The era of the nunneries (until 1578)
The city wall was created between 1482 and 1490 to defend the city from outside treats. Within the city wall not only dwellings but also nunneries were located. Before the 15th Century the nunneries were not considered part of the city but by the building of the wall, it is now part of the city. The nunneries can mostly be found at the border of the city, next to the city wall (IJsselstein, 2011; van der Hoeven & Louwe, 1985).

The era of the Binnengasthuis Hospital (1820 - 1982)
Around 1820 the hospital becomes an academic hospital. This sparks the renewal of the Binnengasthuis, many new building are being build and buildings were joined with new ones. In 1869 the Dutch Bank realised a new design at the Binnengasthuis, which is the first up scaled building on the Binnengasthuis, the first designed big volume building.

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The era of the Binnengasthuis (1578 - 1820)
The nunneries of the old and the new nuns were located at the southern part of Amsterdam, now known as the Binnengasthuis. The conversion from nunneries into hospital kept the different plots intact, in the beginning there were two hospitals: one for women (Onze Lieve Vrouwengasthuis) and one for men (Sint Pietersgasthuis). In 1582 the two hospitals were combined to one, called the Sint Pietersgasthuis (de Moulin et al., 1981). In 1635 the complex was named by its current name, the Binnengasthuis.

The plot owned by the nunneries housed a few homes, built by the nunneries to lease them to those who need them. With the Binnengasthuis new estate was build for rent as well, to increase the income that was needed to keep the hospital running.

It took almost a century before the city of Amsterdam started a new extension in 1578, the first part of Canal District was being build, with a new city wall around it. The Golden Age was the initiator for this growth, Amsterdam had become the capital of the world and was the trade centre of the world. Soon after the first extension a second followed, finishing the now famous Canal District (IJsselstein, 2011).

In the 18th Century the city of Amsterdam did not expand, it was a period of decline and stagnation. The current expansion was on hold and resumed when times were better.

In 1808 however, many plots had to be sold during the reign of Napoleon. This meant that other plot owners now entered the Binnengasthuis, previous owned by one owner. The new dwellings at the Binnengasthuis built in these times can be called stately homes and no longer houses for the poor. The Dutch Bank was founded around the same time, and was located at the Binnengasthuis as well (de Moulin et al., 1981).

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In 1870 the academic hospital starts planning new buildings, larger in scale than the original buildings and inspired on the pavilion typology used in hospital buildings at that time (de Moulin et al., 1981). These pavilions are being built until 1900, when building space was limited, the other well used hospital system is applied, the corridor system. The old tower Swych Utrecht was being demolished in 1882 to be replaced with the Doelen Hotel, the last remembrance of the old city wall was now no longer visible (Gemeente Amsterdam, 2014). Buildings from the period of the nunneries are no longer present on the Binnengasthuis, most have been destroyed, some have been rebuild.

The era of the University of Amsterdam (1982 - 2015)

In 1983 the academic hospital leaves the Binnengasthuis and moves to the Bullewijk, for better accessibility and newer and bigger buildings (Maas, 1981). Due to the move of the AMC, the municipality takes a large role in the discussion about the new functions and the potential changes in the area. Prof. A. van Eyck and his taskforce design a new master plan, with the agreed distribution of 60% academic vs. 40% non-academic functions on the Binnengasthuis. The biggest change that the taskforce introduced is the new passage at the Nieuwe Doelenstraat and the new connection of bike lanes from East to West (Maas, 1981). The new social housing will guide this new passage into the plot and create with the existing buildings a new square in the centre (Koster, 1988).
Research focus

Problem statement
Since 1983 the UvA (University of Amsterdam) has its Alpha studies in the centre of Amsterdam clustered around and on the Binnengasthuis. Since 1999 the UvA strives towards the clustering and combining of facilities and faculties. They started with the Science Park campus and the Roeterseiland campus and in Amsterdam ZuidOost they have the academic hospital. These campuses are used by respectively Bêta-studies, Gamma-studies and medical studies. The Alpha studies are now in need for a true campus instead of a clustering of buildings in the centre of Amsterdam (UvA Huisvestingsontwikkeling, 2011).

The UvA prides itself with having the largest alpha studies, but sees the need for a campus for these studies. It will enhance its position in the market and serves as a stimulating factor for new students (UvA Huisvestingsontwikkeling, 2011).

The plans however stop with the clustering and combining of faculties on the Binnengasthuis. Where the Science Park and Roeterseiland have additional functions for the students, the Binnengasthuis campus will not have additional functions for all other students besides the alpha students.

All UvA campuses have their own facilities like library, study rooms and lecture halls. But no comprehensive study facilities on one location, while all sport facilities are on one location and so are the creative facilities. The student now has to go from one place to another for all its needs, this should and could be combined on one campus.

And what is the relationship between the campus and the city of Amsterdam? This is the aspect which is not being accounted for in the planning of the UvA fot its inner city campus.

Fig. 6 | The future Binnengasthuis campus and the connection with Amsterdam (own ill.)
Research focus:
Creating an integrated university campus in the city Amsterdam, for student and urban dweller to use the same space and functions.

Research question:
Which function(s) can contribute to the integration of the campus Binnengasthuis and the city of Amsterdam?
- What is the possible relationship between the Binnengasthuis and an university campus?
- What can serve as meeting point for students and urban dwellers at the university campus Binnengasthuis?
- How can a meeting point be implemented in the Binnengasthuis?

Relevance:
The use of university campuses is changing, with the new technological developments and the situation in the urban fabric. By wanting a inner city campus by the University of Amsterdam this connection with the city is important, together with the challenges of creating a new age campus, fit for the new age students.

Approach
For this studio there are three paths, the location specific research, the general theoretical framework and the design.

Before I start, I will analyse the location. In order to do this I start with the urban scale and analyse this to find the qualities and the less desirables. Not only the current situation is to be analysed, the history of the area is also very important. The history shows why some decisions that have been made in that time and what their effect is on the existing. This will be done by using historical maps and by using literature about Amsterdam and the Binnengasthuis.

This urban analysis leads to the theoretical framework, because I believe that without knowledge of the site I cannot research anything future function related subject. The theoretical framework consists of case studies of University campuses and literature study about the designing of campuses. The question: ‘How does a campus function and how to integrate this with the city?’ has to be answered by the case studies and the literature. In combination with the analysis of the Binnengasthuis a way of implementing can be found for the location specific.

The outcome of the location specific research and the general framework leads to a master plan for the Binnengasthuis. By making this master plan, single or multiple buildings will be of influence of the transformation of this site. This leads to the specific research of the building(s) and to the research of the function that this building in the master plan gets.

Again the analysis, case studies and the literature study will be combined into a design for the building(s).

This design will lead to another analysis, the technological analysis of the building and how to use this for the new function(s) the building will get.

Fig. 7 | Approach of design (own ill.)
Influences of the past Binnengasthuis

The history of the Binnengasthuis has a big influence on the current situation. The current situation of the Binnengasthuis has been formed by the decisions and ideas of their respected era's. As the research focusses on the future use of the area, the analysis has been focussed on the aspects that can be used for the future design of the Binnengasthuis campus.

The functions on the Binnengasthuis
In figure 8.1 we can see the different functions and the changes of function through the four era's of the Binnengasthuis. Until 1578 the nunnery were the main functions on the Binnengasthuis together with dwelling and the defence wall of Amsterdam. This changed into a hospital after the Alteration in 1578, the hospital expanded and remained the main function until 1820. Dwellings can still be found at the border of the Binnengasthuis, it divides the city and the hospital from each other. In 1820 the hospital became an academic hospital and the Dutch bank occupied a large plot at the border of the Binnengasthuis. As can be seen, the smaller buildings of the hospital have been replaced by large scale buildings, because of the new needs in healthcare and the growth of Amsterdam. In 1982 the academic hospital moved to the outskirts of Amsterdam, this meant that the Binnengasthuis would yet again have a new main user: the University of Amsterdam. The Dutch bank has also left and is now a museum (owned by the university). The biggest change is that now dwelling cannot only be found at the border anymore, but also in the heart of the Binnengasthuis.

The public character
In figure 8.2 the public character of the Binnengasthuis through the ages can be seen. As can be expected the nunneries and their orchards and courtyard were semi-public, only for the visitors and users of the nunneries. The gardens of the dwellings were private and only for its owners. With more dwellings and other privately owned companies, a large area of the Binnengasthuis became private and inaccessible for the public. The Gasthuis hospital was semi-public, only for the visitors and users. In the era of the academic hospital the main area was semi-public accessible, for patients, visitors and users only. In 1982 the Binnengasthuis became public and open for all to enter, with the exception of a few courtyards.

Fig. 8.1 | The functions on the Binnengasthuis in the four era's (own ill.)

Fig. 8.2 | The public character of the Binnengasthuis in the four era's (own ill.)

- Nunnery: Public
- Dwelling: Semi-public
- Defence wall: Private functions
- Private functions: Private
- Hospital / Health care function: University
- University: University
- University, student function: University, special function
- University, special function: Student dwelling
- Theater:
The accessibility of the Binnengasthuis

As can be seen in figure 9.1 and 8.2, the Binnengasthuis was accessible by the main infrastructure of the city and was publicly accessible for all. This infrastructure remained throughout the era’s of change, with small adaptations when necessary. Aside from the main infrastructure, a corridor was present during the Binnengasthuis hospital. Here only pedestrians could walk and get to the ‘university’ building of that era. This corridor is still there today, only accessible by pedestrians. The biggest changes on the Binnengasthuis can be seen around 1578 and 1982. In 1578 the Binnengasthuis went from multiple entrances to the nunnery to only one entrance to the hospital. Upon using this main entrance, the visitor could enter the individual buildings of the hospital. This principle remained until 1982, the Binnengasthuis was opened to the city of Amsterdam by Prof. A. van Eyck and his team. A bikelane was introduced and now everyone could enter the Binnengasthuis. The buildings each had their own entrances and do not longer share a main entrance anymore.

The ensemble

As figure 9.2 illustrates, the Binnengasthuis consisted out of multiple ensembles in the era of the nunnery. Both the nunnery’s had their own area, there ensemble, which they did not share and was not working as one. The other area’s were the dwellings and the wall. When the nunnery’s were combined in 1578, a big ensemble emerged from this. It worked and was used as one area, with dwellings as border. The start of the university was an ensemble on its own, divided from the hospital by the corridor, and the hotels and housing in the south were separated by the road from the main ensemble and therefore can be seen as an independent area. This continued to stay the same until 1982, with the mindset of the 1980’s and the Masterplan by Van Eyck, the main ensemble has been divided into several pieces. No longer working as one space and visually it does not work together anymore either, with the division made by the social housing and the bikelanes running through the Binnengasthuis.
The current Binnengasthuis

The current situation of the Binnengasthuis is the most important situation, when designing a new future for this area. The current situation is the situation from which the new development starts, therefore an extensive analysis has been made of the current situation.

Academic buildings
The major part of the buildings are academic buildings, the entrance of these buildings however are not all focussed on the same public space.

Big scale buildings
A large part of the buildings are large scaled buildings, many of them built in the era of the academic hospital. The social housing building is the only building dat has been built later on. These kind of big scaled buildings cannot be found in the centre of Amsterdam, with the exception of the buildings around the Dam.

Public transport
The Binnengasthuis is in walking distance of the Metro and Tram stop at the Rokin. And even from the central station the distance is 20min walking or 5 by bike.

Routing on the Binnengasthuis
The Binnengasthuis cannot be entered by car, only the border of the area can be reached by car. Either pedestrians or cyclists can enter the inner world of the Binnengasthuis. The cyclist have limited option for getting through the area, while pedestrians can get everywhere. Many of the pedestrian entrance to the Binnenagsthuis are highlighted with gates, a few of them have been closed. The same good for the gates to the courtyard of the social dwellings, these have been closed to prevent drunks and addicts to enter the courtyard at night.
Areas of the Binnengasthuis
The public areas of the Binnengasthuis are paved. The courtyards are green spaces, but they are semi-publicly accessible. All the courtyards close at the end of the day, to prevent drunks and addicts to enter these spaces. But also for the inhabitants of the buildings to use the courtyards as gardens.

Building forms and open spaces
The buildings by Dirks and .... are the only building with oval, rounded shapes. The buildings are not reacting with the surrounding buildings, they are not only different in form but also in materialization. The opening in the south is not only an opening, but there is a hole visible. A building, when walking there, seems missing. The walls of the other buildings are covered with graffiti and are completely closed, no window openings.

Parking
With the university on the Binnengasthuis the amount of bikes has increased. And on top of that, the car cannot be used efficiently in the centre of Amsterdam, so many more use the bike as their form of transportation. This results into many parked bikes on the Binnengasthuis, a place that never had been designed to be able to park as much bikes. The bikes are now parked at any spot that has space to fit a bike. Next to the parked bikes, the empty spot at the south is being used as parking space for cars by Hotel de l’Europe.

Vividness
There are three different levels of vividness on the Binnengasthuis. There are the quiet courtyards, courtyards with no academic buildings around them. The courtyard and spaces which are only loud and vivid when the students go to and from their faculty. And the vivid, loud spaces where all cyclists go through and all types of traffic and users meet each other.
Conclusion Binnengasthuis

The conclusion is done by dividing the analysed elements into strengths, weaknesses, opportunities and threats. This does not mean that other elements from the analysis do not matter, but they do not fall under a specific category.

Strengths
The main infrastructure around the Binnengasthuis is a strength, it can be used to get to and from the area without needing new infrastructure. Just as the public transport stop at Rokin is a strength for the Binnengasthuis, for the new function as campus it is welcome for students to be able to take the tram or metro instead of using the bike. The big scale building from the academic hospital era are the characteristic that makes the Binnengasthuis the Binnengasthuis.

Weaknesses
The Binnengasthuis is less understandable by the round, oval building volumes and with the open hole at the south the street facade seems broken. With the new openings and buildings, the once closed ensemble is now broken in several pieces. This results in the Binnengasthuis being an ordinary piece om Amsterdam, while it always was an extraordinary area within the centre of Amsterdam. This does not contribute to the character of the Binnengasthuis.

Opportunities
The gates that lead to the inner world can be used to help the Binnengasthuis be exceptional in relation to the rest of the city. Just as the green courtyards can be a welcome change in the paved and built environment of the inner city of Amsterdam. And the new publicly accessible area could be used to combine Amsterdam and its users with the Campus and its users.

Threats
If not carefull the bike lanes and (bike) parkingspaces can be elements that hurt the image of the Binnengasthuis campus. With bike lanes that cut through the area it limits the potential accommodation space and the possibilities to meet others that use the campus. The parking spaces can make the space look cluttered and unfriendly. The closed gates to the biggest courtyard can be user unfriendly.
Research

The campus and its connection with the community

The students are the main users of a campus, but teachers and researchers use the campus on a daily basis as well. These users are not the only users of a campus when it is situated in the city. The local residents use the campus too, whether it is just to cross the campus to get somewhere faster or because there are functions that they want to use.

The connection between the different users is minimal and scarce. As seen on the Binnengasthuis campus of the University of Amsterdam, the public space is not designed for all these different groups nor for the interaction between them. Also the connection between the students and the city is not optimal. As Van den Berg & Russo say in their study, the students are the high-skilled working class of tomorrow, but the conditions for a full integration of students in local communities are not always met. “Students are still an ‘invisible population’, with little space in local policy, no decision power, and an ambiguous role in social development” (Van den Berg & Russo, 2003, p. 2).

There is a more intimate contact between the university and the city when meets the eye. Universities, other higher education institutions and research laboratories have direct and indirect impact on its region. They create jobs, revenue and services (direct impact), and knowledge (indirect). But at the same time they use the city for its resources and come in contact with other city users, mainly the residents (Van den Berg & Russo, 2003). Students have a crucial impact on the housing market; as tenants, they enjoy lower protections and have a faster life-cycle than other locals. This can lead to the increase of housing prices and help reinforce the market.

But it also works the other way around, students can live in buildings that are too expensive for the other urban residents (Van den Berg & Russo, 2003, p. 5). According to Van den Berg & Russo the ideal solution is to favour mixed functions and multiple uses. This helps the student and the other residents to live with each other instead of living separate.

Not only the students and other residents should live mixed, but the campus should also be a place for residents instead for only students and teachers. The campus should be publicly accessible and open to the other urban dwellers. If the campus is too much separated from the city, there is a risk of conflict with the rest of the local population, because it is too isolated and unattractive for those ‘users’. The student facilities and meeting-places should be in balance with its location. The community and campus should not be separated from the rest of the city.

A campus is not a closed entity, as the name might suggest, but a collection of buildings which are needed to fulfil the primary tasks of the university. But nowadays not only these primary tasks should be ‘designed’ but the housing of students and the relation with the city as well. The buildings should house multiple functions, as where in the former days every faculty had its own facilities, creating even more separation between the students mutually (A.C. Den Heijer, 2011). Aside from the buildings, the public space on the campus (and in the buildings) is of great value.

The campus and the modern use

The university of today is connected with the university of the past. There are three types of universities: the Medieval university, the Humboldt university and the Third Generation university (A. C. Den Heijer, 2011). The universities that started in Medieval times were generally located in the city. The Humboldt universities are more located to the edge of the cities and the Third Generation university is still at the border of the centre, but engulfed by the city. The three types are the following sequence in the development of universities. The universities that do not have a medieval origin therefore do not all have buildings in the city centre. And the same is the other way around, universities with a medieval origin do not always have buildings left in the centre of a city. Not only the location changes per type, also the focus and language changes: from religion and Latin, to research and local language, to valorisation and English (A. C. Den Heijer, 2011).

Den Heijer uses three strategies for the future use of the campus: the traditional campus, network campus and the virtual campus. The traditional campus is the closed university model, the campus is exclusive for the university in this model. The network campus is an integral component of the city, the campus is shared with other users, mainly the partners of the university. The campus is an open market place for the creation and exchange of knowledge. The virtual campus can be much smaller with the focus on social and intellectual encounters in an inspiring space. The student and staff spend most of their time off-campus, the campus does not supply fulltime workspaces for the users (Chapman, 2006; A. C. Den Heijer, 2011; A. C. Den Heijer & Teeuw, 2011).

The students and staff cannot be expected to deal with only one strategy. Not everybody likes a virtual campus, as they want and need a fulltime workspace. Others might not work well in a traditional campus, they want to be able to work more flexible. The student might even want to be able to relax on a campus instead of the constant studying that is mainly focussed on a campus.
Aside from complaints from the users, the university has been able to sustain a certain strategy and it should fit with the programme. The traditional campus has too much surface area and is expensive to sustain. The network campus is not really connected to the city, only with the partners of the university, but neither are the traditional and virtual campuses. The virtual campus has the main disadvantage that the carbon footprint rises (which is an ethical problem), while the square meter of the campus decreases. This because lectures will be followed from individual computers on individual locations instead from a central lecture hall (A. C. Den Heijer & Teeuw, 2011).

The three universities of technology in the Netherlands (TU Delft, TU Eindhoven, TU Enschede) are moving towards a network campus, they want more shared use of facilities. This also because of their relatively large footprint and expensive laboratory facilities. While the oldest and broad universities are choosing the traditional campus, they want to go back to a ‘closed and exclusive campus’ (A. C. Den Heijer, 2011).

Den Heijer states that multiple functions are required to be mixed on the campus of the future (A.C. Den Heijer, 2012). But these functions depend on the strategy the university chooses. For the amount of square meters surface area and the distribution of the function over this area depends on the strategy. But if the individual need of every user should be accounted for, a combination of function and strategy is desired to make every user feel at home.

**CREM variables**

<table>
<thead>
<tr>
<th>CREM variables</th>
<th>A – Back to the Future</th>
<th>B - Intellectual Agora</th>
<th>C – Clicks &amp; Mortar</th>
</tr>
</thead>
<tbody>
<tr>
<td>goals</td>
<td>the campus is almost exclusively university property, faculties have their own buildings and facilities the physical campus is private territory</td>
<td>the campus operates as an open market place for the creation and exchange of knowledge the physical campus increasingly becomes part of the urban fabric, other users are welcome</td>
<td>much smaller campus due to more working/learning from home: ‘clicks’ replace some of the square meters (bricks) the physical campus is above all a meeting place: ‘creative, stimulating and with a focus on intellectual and social exchange</td>
</tr>
<tr>
<td>users</td>
<td>largely exclusive use of buildings by their own users (students and staff members), also at faculty level</td>
<td>knowledge institutions make use of each other’s facilities and are no longer the exclusive users of their buildings</td>
<td>students and lecturers spend less time at the campus, come to the campus to meet others</td>
</tr>
<tr>
<td>euros</td>
<td>same amount of resources available</td>
<td>more resources due to shared usage – external users pay</td>
<td>same amount of resources available</td>
</tr>
<tr>
<td>m²</td>
<td>same number of m²</td>
<td>same number of m² higher occupancy &amp; usage</td>
<td>far fewer m² campus is partly virtual</td>
</tr>
<tr>
<td>combining the CREM variables</td>
<td>same money available for the same m² → no resources available to increase quality level</td>
<td>more money available for the same m² → higher quality per m² possible</td>
<td>more money available for fewer m² → higher quality per m² possible</td>
</tr>
</tbody>
</table>

Table 1 | Chapman’s three campus model (2006), illustrated by Den Heijer (2011, p. 177)
The campus and its layout

The campus is the grounds and buildings of a university or college (Oxford Dictionaries, 2014). But is this still what we need from a campus or should it be more? I already mentioned the possibility of shared buildings on a campus, but Den Heijer was talking about the university with its partners on a building level. The campus itself could be seen different, there are two models for the future campus: A model for the univer-city from university perspective, and a model for the univer-city from city perspective (A.C. Den Heijer, 2011, pp. 181-193). Universities are increasingly dependent on non-academic spaces in their vicinity. From infrastructure to retail&leisure to residential and business related. The mix of function is not necessarily on campus, the urban function could complement the needs of the campus.

The universities have their own focus on the possible mix of functions on the campus, not all function have to be mixed to create a functional campus. It also depends on the location of the campus within the urban fabric and the type of university. Aside from the wants of the university, the non-academic functions are owned by different parties, if they do not want to mix functions the story ends for the university. Table 3 shows the different functions that can be mixed on campus with the different owners and users. And if the space is scarce on campus, the available alternative locations in the city.

Table 2 | Opportunities and threats of mixed functions for three university campus-city models (A.C. Den Heijer, 2011, p. 182).

Table 3 | Function mix and its owner (A.C. Den Heijer, 2011, p. 184).
The campus and its efficient use

The UvA wants to reduce the amount of surface area of buildings, because the current buildings are expensive to maintain (Demmers, 2014). By mixing student facilities and mixing faculties, the surface area of buildings can be reduced. Faculties used to have separated buildings, but some spaces like lecture halls can be used by multiple studies instead by just one.

So for the Binnengasthuis the focus lies on efficient use of its available space, by combining all the student functions the total surface area needed can be reduced. The study rooms and lecture halls are better and more intensely used, so there is no empty space anymore that costs a lot of money to maintain. These are all university owned functions specified on students. If different staff facilities are being mixed, the amount of staff can be reduced, less guards, less cleaning staff, less IT staff (A. C. Den Heijer, 2011).

The non-university functions are the infrastructure and the retail functions (although the buildings for retail are mostly still owned by the university, a 3rd party provides the function). By creating mixed retail function, like restaurants, (coffee) bars and museums the city and campus use the same functions (A. C. Den Heijer, 2011).

The campus and its green needs

Many students are fully occupied with their study, whether this is at home, at the faculty or in some other study space. While they are busy they desire some form of social activity, even if this is only for a brief moment during lunch (Hanan, 2013). The campus should provide in this need. The outdoor environment that maximizes collegial encounters and exchange of ideas will also maximize formal indoor learning process according to Hanan. Aside from being outside, the visual connection to the outside and a wide overview to greenery seems to be attractive for students, staring out to the open space in between the studying with short rests (Hanan, 2013). The green outdoor space contributes to the human health according to Petros, it has been linked to help to get over stress, help to concentrate and boost the immune system (Petros & Costa, 2011).

A successful public space for a campus can be described as follows (Hanan, 2013):
- Located where it is easily accessible to and be seen by potential users.
- Clearly convey the message that the place is available for use and is meant to be used.
- Be beautiful and engaging on both the outside and the inside.
- Be furnished to support the most likely and desirable activities.
- Provide a feeling of security and safety.
- Encourage use by different subgroups of the likely user population.
- Offer an environment that is psychologically comfortable at peak use times.
- Allow users the option to use it for special events.

Fig. 17.1 | Green for relaxing, meeting and watching (own ill.)

Fig. 17.2 | Active and Passive relaxation on different locations and without nuisance from each other (own ill.)
Case study: Inner city campus vs outer city campus

The inner city campus is generally a cluster of building within the urban fabric of the city. Many other functions and buildings can be found in between these academic buildings. Between the academic buildings the connection and interaction is often less than one would think when speaking of an inner city campus. On the other hand, the campus can benefit from the city and vice versa. The city and its inhabitants can use the campus and the students bring liveliness into the city.

In outer city campusses, the so called greenfield campus, the connection with the city is only minimum. The campus can be seen as a closed entity, the city dwellers often do not use the campus, as these are located outside of the cities. The campus can be seen as small city on each own, everything the student needs can be found here. Only studenthousing is located for the major part in the city, causing nuisance for the other dwellers. The outer city campuses have a central heart, where function for all students can be found and because of the available space also green public space. Furthermore, the campus can be reached without needing the infrastructure of the city.

Fig. 18.1 | The university building are cluster in their campus, within the urban fabric

Fig. 18.2 | Other buildings and functions are to be found amid the academic buildings, urban routing crosses the campus

Fig. 18.3 | Connection between city and campus is minimum, the campus is a closed entity

Fig. 18.4 | Campus is very accessable due to its location outside the centre of the city
One out of four

The Binnengasthuis campus, is not the only campus owned by the University of Amsterdam. As said earlier, the Binnengasthuis campus will become the Alpha campus. The other campuses are the AMC (the academic hospital), the Beta campus (Science park) and the Gamma campus (Roeterseiland).

The AMC is located at the border of the city, as it is a hospital it needed to be accessible without getting stuck in the traffic of the city. Here the students can find everything they need, the campus is a true outer city campus, being a small city on its own.

The Beta campus is the second largest campus of the UvA, right behind the AMC. The Science park needs this amount of space for the laboratories and other test facilities. Aside from faculties it has studenthousing and sport facilities. This ensure that the campus is also used when the faculties are closed.

The Gamma campus is comparable with the Binnengasthuis campus, but it is bigger and located on the border of the inner city. Not only faculties have been built there, also creative function spaces and spaces for start-ups. This connects the campus with the companies that can benefit from the university and vise-versa.

The Binnengasthuis campus is planned by the UvA as being the Alpha campus without any extra specific functions (Demmers, 2014). This has been done because it is situated in the city centre and therefore would not need any extra functions. This will result in a campus that will not be used by any other than the students and staffmembers, something that is not wanted as the literature prescribes. Therefore I propose to make the Alpha campus on the Binnengasthuis into the study campus, where all students can study and go to lectures. And for the city dwellers all other who want to, to use its study functions. This integrates the campus with the city.
Conclusion

For the Binnengasthuis the theory and casestudies illustrates the added value of intergration of the users of the campus and the city dwellers. The Binnengasthuis campus is not only just a place for students and staff, but it becomes a place for all users of Amsterdam (see figure 20.1). With adding functions on the campus, the campus can become a new public area within the city of Amsterdam.

The users of campus however will also use the city of Amsterdam, to live in, to shop and for transportation. The campus should not house all functions needed for its users. For better function mix and user mix the campus needs the city and the needs the campus (see figure 20.2). One of the functions the inner city of Amsterdam is lacking, is green public spaces. This green public space can be offered by the campus Binnengasthuis and will often be used for those who want to escape the busy city life.

To create a efficient Binnengasthuis campus, the students and academical staff will be separated and housed in different buildings as can be seen in figure 20.3). The students will have multiple buildings with different main functions, the study centre, the library and the student facilities.

Fig. 20.1 | Combining campus users with city users (own ill.)

Fig. 20.2 | Functions on the future Binnengasthuis campus (own ill.)

Fig. 20.3 | Binnengasthuis campus efficiency (own ill.)
The Binnengasthuis campus will be situated within a reestablished ensemble. The ensemble will ensure that the campus can be identified as such, and it shows the former inaccessible nature the Binnengasthuis always had for the citizens of Amsterdam.

But this campus will not be closed for public use, it favours it. The new heart of the campus will be a green park, open to all dwellers of Amsterdam. Green public space can not often be found within the centre of Amsterdam, this campus park will be a welcome addition to the city fabric. The entrance of the campus will lead to this park, from here the buildings can be reached. The inner courtyards can also be reached from the campus park. All buildings will have vision on these green areas on the campus.

The area will only be accessible for pedestrians, the former bikelanes will be removed. The students and staff members that travel by bike can park their bikes in the underground bikestorage underneath the central campus park.
With the new masterplan, a new era arrives for the Binnengasthuis. The main user has not changed but entered a new fase in its use of the Binnengasthuis. The new design has created a inner city campus, which can still be used and visited by the other users of Amsterdam.

The new function
As can be seen in figure 23.1 the function are more clearly divided over the Binnengasthuis. When you find yourself in the inner world of the campus, all buildings are owned and used by the University of Amsterdam. Other users and the dwellers are situated at the border again.

The new public character
In first glance of figure 23.2 the illustration suggest a closed, semi-public area in the heart of the campus. In fact it is accessible for all during the day (from 07.00 till 23.00), everything is public with the exception of the gardens. When the campus is closed, the campus park will be closed too, to prevent unwanted users such as addicts and drunks to get into the park. In Amsterdam most of the courtyards and parks close at night, this will be no exception on the Binnengasthuis.

The new park will attract many new users to the Binnengasthuis, not only student and staff members, but also families and children. In the centre of Amsterdam, no other green public spaces can be found for the dwellers to use. The Bagijnhof is the exception, but it is not allowed to be used as recreational public space, this campus park will be recreational. There is even a square for summer lectures or street performers for the neighbourhood.
**New layer in time**

**The new accessibility**
The campus will have one main entrance and several secondary entrances. The main entrance is designed for cyclists and pedestrians to enter the campus, from here a underground parking space for the bikes can be found. The secondary entrances are for pedestrians only and will use the former gates that gave entrance to the Binnengasthuis. The gates will stay in service as entrance gates.

The main infrastructure will remain located at the border of the Binnengasthuis, just as the metro en tram stop at the Rokin. With the main infrastructure and public transport near the campus, it can be reached with ease.

On the campus itself it is pedestrians only, no other forms of transport are allowed. This makes sure that the users of the park, the students and staff members are not interfering with each other neither being interfered by passing traffic. The recreational spaces and the routing will be separated from each other to avoid possible nuisance from one another.

**The new ensemble**
With the new inner city campus, the area will become one large ensemble with a small ensemble in the south, separated by the Nieuwe Doelenstraat from each other. This is a new unseen situation of the ensemble on the Binnengasthuis. But by having a clear campus, with a clear main use and inner world (the campus park) the Binnengasthuis will be a true ensemble and will be visible as such. It will be reinstated, and stronger than ever, as a part within the inner city of Amsterdam with its own character and history.
The new Binnengasthuis design has not only a public park in the heart of the campus, but also a public university library. The library will be one of the more public academic functions on the campus to connect the campus with the city.

The library will, aside from the public aspect, also close the hole in the Nieuwe Doelenstraat, reestablishing the border of the Binnengasthuis. This new building will therefore have a big impact on the design of the campus and the way it will work in relation to the city of Amsterdam.

This means that the current buildings that will be a part of the library have to be analysed, to find the history, the characteristics, the weakpoints and to find out if the buildings can be transformed into a library.

The analysis has been done for two buildings, the 2e Chirurgische Kliniek and the Social Dwellings.
Analysis: Buildings

2e Chirurgische Kliniek

The 2e Chirurgische Kliniek was build in 1897, designed by F.W.M. Poggenbeek, and was a corridor hospital style inspired building. While other buildings were pavilion hospital buildings, due to lack of space the corridor hospital type was chosen (de Moulin et al., 1981).

The style of the 2e Chirurgische Kliniek can be described as 'style de transition' and is the style that has influences of neo classical style and of more modern styles. The building has been build in red-brown bricks, with different colours as ornamentation of the building. These ‘ornaments’ can be found above the windows and below the gutters.
Social Dwellings

In 1987 a new building, the social dwellings by Paul de Ley, was introduced to the Binnengasthuis.

It was the first new building on the Binnengasthuis since the change of ownership of the Binnengasthuis. With the move of the Academic Hospital the city demanded 40% of the functions to be different from the University. With the Masterplan by Van Eyck, the citizens of Amsterdam now could live on the Binnengasthuis. And now the users of Amsterdam could freely roam the inner area of the Binnengasthuis, formerly not publicly accessible.
Analysis: History

2e Chirurgische Kliniek

The building has been built in three partitions in 1897: The middle section, the right wing and the left wing. In 1922 the first changes have been made to the left wing by the Dienst der Publieke Werken. A second surgery room and two laboratory spaces have been added. The facade has also been altered to fit the new needs, with a bay window and large windows.

In 1950 the bay window has been altered by, yet again, the Dienst der Publieke Werken.

In 1959 a third alteration has been made to the left wing by the Dienst der Publieke Werken. A third surgery room has been added to the 2e Chirurgische Kliniek.
Social Dwellings

The design started in 1982 and lasted till 1985, the building was only completed in 1987. A small adaption had to be made in 1988, to prevent drunks and drug users to enter the courtyard. Two gates have been added to the complex. These gates can only be opened by the residents of the social dwellings.

In 2000 the building was in such a deteriorated state that INTRON did an investigation to the state and the potential need for repairs. This resulted in several repairs of the building, ranging from staircases, facade and construction (INTRON 2000).
**Analysis: Composition**

2e Chirurgische Kliniek

The building has its entrance directed towards the central entrance of the hospital terrain, so visitors immediately know where its entrance is. It also creates a courtyard, accessible by a gateway next to the tower; this was mainly used by ambulances to transport the sick to the building. The building reacts on the 1e Chirurgische Kliniek in the north, the dissection room (Snijzaal) protrudes from the building, forcing passers to go around the building and forcing them to see the courtyard of the 1e Kliniek.

The composition of the building is a L-shaped base form, with protruding elements. The main shape houses the generic functions, the infirmaries. The protrusions house the more specialised functions, such as the dissection room (Snijzaal), the doctor dwellings and the entrance of the building. Each protrusion is shaped differently as can be seen at figure 30.3.

Fig. 30.1 | Shape of building derives from the existing building alignment in its surrounding and has aligned its entrance to the main entrance of the Binnengasthuis (own ill.)

Fig. 30.2 | Shape of building creates a inner courtyard and shapes the entrance square, the special Snijzaal is clearly visible at the street (own ill.)

Fig. 30.3 | Composition of the building, consisting out of several protrusions (own ill.)
Social Dwellings

The main form of this building has been designed in the Masterplan by Van Eyck, but small alterations have been made by Paul de Ley. The surrounding buildings all contribute to the form of the social dwellings, the endings are aligned with the buildings next to it, a square has been formed together with the facade of the 2e Chirurgische Kliniek and the buildings in the inner courtyard also contribute to the shape at that side. This results in a building with several angular rotations.

As said, the building creates a square at the front and at the back it creates a inner courtyard. The building provides also guidance to the street it creates.

Not only the shape has been derived, but also the height of the several elements of the building. The heighest section reacts on the height of the 2e Chirurgische Kliniek, the other heights are also derived from the buildings next to it.
Analysis: Facade

2e Chirurgische Kliniek

The facade of the 2e Chirurgische Kliniek consists of multiple sections, due to the angles of the facades and the protrusions. The entire building is made out of bricks and some natural stone elements around the entrances and above the windows. The entrance is highlighted by protruding facade in the upper part, topped with a sloped roof and a clock. The entrance itself however is not situated below the clock, but off centre and a-symmetrical.

The tower is also a-symmetrical, but a clear visual marker for the building. Just as the protruding dissection room, it is clearly visible and has slightly different windows in comparison to the rest of the building.

Most of the windows are vertical oriented, the other windows do not have a defined direction. The vertical windows highlight the height of the building, the exceptions show the different building volumes and functions.

The plinth of the building is a slightly protruding brick plinth, this refers to the dwellings of Amsterdam with natural stone plinths. The protruding building volumes are topped off by a ripped roof, while the main building volume has an almost flat roof.

Fig. 32.1 | Elements of the main facade (own ill.)
Fig. 32.2 | Verticality of the windows on the main facade (own ill.)
Fig. 32.3 | Elements of the main facade (own ill.)
Social Dwellings

The social dwellings by Paul de Ley consist out of several building volumes as well, but the scale is different. The building sections are larger in comparison to the Kliniek. This is done due to the connection and relation to the surrounding buildings, each height matches a neighbouring building. The building volumes change at each corner of the building. The smaller protruding building volumes are the balconies of the dwellings.

The building as a horizontal articulation, this can be seen in the building volumes, but also in the articulation of the windows. Most windows are horizontal, while the vertical windows highlight the staircases. The windows differ in height and width due to the function behind them. The windows of the kitchens and living room have taller windows, while the windows of bedrooms are less in height.

The social dwellings also have a plinth, made from concrete. This again refers to the plinth of dwellings in Amsterdam and this is strengthened by the use of small stairs in front of the entrances. The rest of the building is plastered and painted and has no pitched roof in contrast to many buildings of the Binnengasthuis.
Analysis: Routing

2e Chirurgische Kliniek

The Kliniek has one central entrance on the ground floor, this leads to the centre of the building. Here a central staircase is situated with a void, now this void has been filled with an elevator. There are two more staircases, each at the end of the building, mainly for emergencies. The routing in the building is by corridor, a typical hospital style of routing. While other buildings on the Binnengasthuis are pavilion buildings, the 2e Chirurgische Kliniek has been designed as a corridor building, as there was not enough space left on the Binnenagsthus to create a pavilion building.

On the groundfloor an extra passage was created for ambulances to enter the inner courtyard. This passage crossed the corridor at this point.

The corridor has some spots where natural light enters and a view is offered to the Binnengasthuis area. The routing is mainly focussed on the inside of the building, rooms are situated on both sides of the corridor.

The routing in the building has remained the same for over hundred years, only a small addition have been made, the elevator in the former void of the main staircase.
Social Dwellings

The social dwellings on the other hand, do not have a horizontal routing system. All dwellings are accessed by stairwells, the ‘portiek’. The dwellings have minimum circulation space, as is common in social dwellings, unnecessary space is limited as much as possible, for it is expensive. The routing inside the dwellings is concentrated in a small hallway in the middle of the dwelling.

As reference to the Amsterdam dwelling typology and because of the routing systems interferring with each other, the entrances to the stairwells all have a few steps on the outside, before entering the building. By doing so, the dwellings on the groundfloor can still be reached without needing more space for the hall and preventing collisions with the stairs.

The dwellings have not been altered in the past 30 years, the staircases have not been altered and no elevators have been added. The routing is still the same as designed.
The Kliniek was used, as the name reveals, as a hospital building. The rooms for patients (infirmaries) are situated with a view to the courtyard. These patients have to stay here for a while, so they have a nice calm view to the courtyard. The staff rooms, storage, emergency rooms, surgery rooms and the dissection room are located to the busier side of the building, with less view of green, calm spaces. The routing has some areas with views to the Binnengasthuis, the central staircase has a view to the courtyard.
Social Dwellings

The social dwelling by Paul de Ley has its living rooms directed towards the courtyard. Here the dwellers will be most of the time, the other rooms are mostly situated to the other side of the building. There are a few exceptions, as the building has a few angles, not all living rooms can be directed to the courtyard. The dwellings without vision on the courtyard often have no other rooms with vision on the courtyard, due to the design of the building.
Analysis: Construction

The walls and floors of the social dwellings are made of reinforced concrete, cast on site which results in moment-resisting connections. The entire building consists out of three sections, divided by dilatations between two concrete wall slabs, filled with insulation. At the corners of the building the grid rhythm changes and continuous in another direction with a new rhythm. The corners do not have columns or load bearing walls, this results in an open corner with windows. The floors are load bearing in four directions, hereby the open corners could be realised.

The in situ cast concrete is cast in a framework of wood with a supporting scaffolding and struts. When the concrete dries, the framework is removed and re-used on another section of the build, or the next level. The few columns used in the design are prefab concrete columns.
Fig. 39.1 | Groundfloor, grid used for the position of concrete slabs and columns

Fig. 39.2 | First floor, same grid used
Analysis: Details

The details are the most common details present at the building by Paul de Ley. The details of the hardwood windows are used for all hardwood windows for the dwellings, same for the roof, upper balconies and for the prefab balconies.

With the floors and load bearing walls cast, the facade could be constructed. The window frames are ‘inmetselkozijnen’, this means that the window frames were supported in their place and the limestone blocks are glued underneath and around the frames. The next step is adding the insulation and finishing with plaster and paint. The ground floor has a different finish, instead of plaster it has a prefab concrete plinth. This prevents damage and refers to the dwellings of Amsterdam. The amount of insulation however is less than the rest of the building, otherwise the plinth would protrude too much.

There are two types of window frames, hardwood frames for the dwellings and coated steel frames for the offices. The coated steel is also used for the balcony railings and the frames for the glass block staircases.

The balconies are made of prefab concrete elements, connected to the cast concrete floors of the dwellings with steel profiles. The cast floors are constructed with voids for the prefab concrete balconies to be hung in.

Fig. 40.1 | Common vertical hardwood window detail 1:10
Fig. 40.2 | Common vertical roof detail 1:10
Fig. 41.1 | Common vertical balcony detail 1:10

Fig. 41.2 | Common vertical prefab balcony detail 1:10
Analysis: Conclusion

2e Chirurgische Kliniek

The building layout
The characteristic shape of the building, with its corridor structure and protruding building volumes, show the history of the academic hospital and the needs of that time. Also the patient healthcare went beyond only curing illness, also the well-being was important, for which the view on the courtyard was created.

The special features
This dissection room is one of the special features in this building, it shows that it was not only a hospital building, but also an academic hospital building. This room was used to show students the human body and how everything worked in humans. The facade shows the importance of this room and it is protruding from the main volume of the building. The staircase in the centre of the building is the other feature, with its former void (now closed with an elevator) it brought in light and an open atmosphere in the centre of the building.

The changes of 1922
The changes have diminished the idea of the original design, but the spaces created and the routing of the building are a positive change.

The change of 1950
The change made to the original design are big, extra protruding elements have been made, but in other materials and style. The change does not complement the building.

The protruding element at the west side
This protruding element was originally designed by Van Poggenbeek while being not visible from the main entrance of the Binnengasthuis. Other buildings stood in front of it, therefore this protruding element did not house special functions or ornamented differently. The volume was created for toilets and storage.

Fig. 42.1 | Values of the 2e Chirurgische Kliniek (own ill.)

Fig. 42.2 | Values of the facade of the 2e Chirurgische Kliniek (own ill.)
Social Dwellings

The building layout
The shape of the building has been designed, as said earlier, to fit within the urban structure. It uses the form and height of the surrounding buildings and adapts to those. And it creates a courtyard, on which many livingrooms have been positioned, this has resulted in a view for the dwellers of these apartments.

The stairwells
The three stairwells, positioned in the angular rotating points of the building are of high value. Due to the use of rotation of the building and the creation of space and light.

The staircases
The staircases are part of the way of creating social housing in the centre of a city. By using stairs, the routing is vertical instead of horizontal, needing less space for people to get to their apartment. The impact of the stairs on the architectural design and on the experience of the building is indifferent.

The facade
The facade does not match the surrounding buildings in the same way as the form of the building does. It has different materialization, plastered facade and concrete elements, in comparison to the other buildings, red/brown brickwork. Also the windows are horizontal orientated instead of vertical, as can be seen on the surrounding buildings. The balconies are round in shape, a shape that cannot be found on the Binnengasthuis.
New library on the Binnengasthuis campus

As the urban masterplan for the Binnengasthuis campus shows the new location of the library and the analysis of the buildings has been done, the design can start. The design of the UvA library on the Binnengasthuis. This starts with the question: What does the UvA expects from an university library and what does it need?

The UvA library

The UvA currently has 20 libraries, spread over the city of Amsterdam (uba.uva.nl/en/locations). The campus of the AMC will keep its own library and the depot for the storage of the older pieces. The Beta campus will also keep its library, as this one is brand new and the way of studying and use of library for beta and alpha campuses is different. The other libraries will be combined in the new University Library on the Binnengasthuis; the BG UB.

This means that 25,000 students (from the BG and Roeters campuses) will need to be able to use the library. The UvA applies the norm of 1 study place for each 10 students, resulting in the need of 2,500 study places. For each study place the UvA reserves 2.5m², resulting in 6,250 m² for study spaces. 750 of these study places (1875 m²) will be in de Oudemanhuispoort as computer, media and group rooms. A portion of the study rooms will be combined with the library, here it will be possible to study between the books, ensuring a practical way of researching in between the books of your field. A total of 4375 m² will be needed in the library.

The collection has 12,000 m of books and magazines, resulting in 1,920 m². A part of these books, the books written before 1900, will be stored in the archive of the UvA. Many books nowadays are also available in digital form, this means that less space is needed for new books in the future.

The book depot for the books that need to be stored or need a climate regulated room, has to be around 1000 m² for current books and future books as well. The depot needs to be able to fit the future needs of storing books.

<table>
<thead>
<tr>
<th>Function</th>
<th>m² needed floor space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public space</td>
<td>1325</td>
</tr>
<tr>
<td>Entrance</td>
<td>660</td>
</tr>
<tr>
<td>Café</td>
<td>310</td>
</tr>
<tr>
<td>Sanitary</td>
<td>46</td>
</tr>
<tr>
<td>Exposition</td>
<td>310</td>
</tr>
<tr>
<td>Study rooms</td>
<td>4627</td>
</tr>
<tr>
<td>Between collection</td>
<td>1250</td>
</tr>
<tr>
<td>Without collection</td>
<td>3125</td>
</tr>
<tr>
<td>Sanitary</td>
<td>252</td>
</tr>
<tr>
<td>Collection</td>
<td>2534</td>
</tr>
<tr>
<td>Extra needs</td>
<td>614</td>
</tr>
<tr>
<td>Staff facilities</td>
<td>1823</td>
</tr>
<tr>
<td>Offices</td>
<td>1409</td>
</tr>
<tr>
<td>Extra facilities</td>
<td>387</td>
</tr>
<tr>
<td>Sanitary</td>
<td>36</td>
</tr>
<tr>
<td>Installations</td>
<td>1000</td>
</tr>
<tr>
<td>Bike parking</td>
<td>2800</td>
</tr>
<tr>
<td>Routing</td>
<td>20% of total</td>
</tr>
<tr>
<td>Total</td>
<td>16936</td>
</tr>
</tbody>
</table>

Fig. 44.1 | Program of Possibilities with relationship between the function (own ill.)

Fig. 44.2 | Program of Possibilities with needed floor space per function
Use of current buildings

With the new function of library, the question is whether the existing building will be able to be transformed into a library. Whether or not they can handle the new loads of the library can be supported by the construction and the higher demands of today's buildings can be met within the existing.

With books weighing 60kg/m shelf (Edwards, 2009) and the average of having 8 shelves per bookcase. The extra load on the construction will be 480kg/m bookcase.

This extra load and the regulations for study spaces do not allow the social dwellings to be transformed into a library without strengthening the construction and foundation. The limited floor height however does not allow reinforcements to the construction, because that would mean that there is not enough space for the user to walk in these spaces.

The 2e Chirurgische Kliniek will also need reinforcing the construction and foundation, but it has enough space and opportunities within its own design to be able to handle the new loads and changes.

Together with the inability to adapt to the new function and the historic need for demolition of the social dwellings (Van der Zanden, 2012). The decision has been made to replace the social dwellings by a new structure that fits better in its context and is able to be a university library for the next generations.
Building Concept

The library building will consist out of four buildings; the new addition, the 2e Chirurgische Kliniek, the Zusterhuis and the small connecting building of the Bijzondere Collecties.

The approach for this design to create a building that compliments the surrounding it sits in, that it has a dialogue with the past while being a visible new layer in time. The existing should be transformed by intervening as minimum as possible while being fitted to become part of the future with the new function.

The new addition will merge within the existing building structure; the scale, form, materials and openings will be related to the surrounding buildings, while the building will still be visible as a new layer in time. The addition will connect all the buildings and form one building.

Fig. 46.1 | Concept principle: transform the existing to fit the future (own ill.)

Fig. 46.2 | Concept principle: add a layer of time (own ill.)

Fig. 46.3 | Concept principle: to connect buildings and public spaces (own ill.)
The new addition will be molded to fit the existing structures around it, it will connect existing buildings and enlarge the small courtyard. It will also connect the 2e Chirurgische Kliniek with the outside border of the Binnengasthuis, to make it visually part of the border for the campus park.

The new addition will be the entrance building for the library, the main entrance will be from the campus park. Two small entrances have been created at the Nieuwe Doelenstraat, this to allow extra functions within the library building to be exceeded individually.

The existing views to the green courtyards will be used for study spaces, new study spaces will also be designed with a view on green public spaces. The original routing systems will be used and connected with each other within the new addition. Here a new stairwell will be designed that is inspired on the surrounding stairwells of the other buildings: will ascending, a view on the outside is possible, a place of light and in the heart of the building.


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