MASTER

A flirt with a church
a building design in the urban tissue of St. Andreas in Cologne

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‘A FLIRT WITH A CHURCH’
A BUILDING DESIGN IN THE URBAN TISSUE OF ST. ANDREAS IN COLOGNE

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The graduation studio ‘Inner city highway Cologne’ started in October 2012 with fifteen ambitious students who all wanted to make the very best out of this year. The program and topic got carefully provided by dr. ir. Jos Bosman, who owns a wide knowledge and experience about and with Colognes urban setting and development. His fascination for this city made me look at Cologne in a way in which it became an interesting learning topic for architecture students. Cologne is at first sight a postwar reconstructed collection of urban elements. By studying it carefully, more and more layers of history got discovered, which made it an interesting multidimensional whole to me. This resulted in a wide range of fascinations for Cologne, in which everyone in the studio was given the freedom to head in a direction of own interest. For that, I am very thankful.

My fascination about Cologne derives from the multiple churches it has. These are pawns which exist in the city for often over a thousand years. When the urban tissue around them changed over time, they still managed to survive. Sometimes it results in a situation in which you feel the friction between church and surrounding urban tissue. This report describes a process and search from this study topic to a building design in the urban context of a chosen church.

In this search I was assisted by my graduation committee, who always attentively stood by my side by giving advice, suggestions and who listened to me with a critical attitude. For this reason I like to thank the chairman of my graduation committee, dr. ir. Jos Bosman, who was very involved in my learning process and always willing to spend his time in teaching me a Cologne-sense of designing and also for accepting me to have my own vision and thoughts about this. The idea for the research to Colognes churches in their urban tissue, is originated by reading one of Jos Bosmans papers, in which he brings up Camillo Sitte, who criticizes the modern idea of the freestanding church with Colognes Dom cathedral as example.

Also I would like to thank ir. Daan Lammers, for his honest opinion and creative suggestions for theoretical works I should read to get a steadier argued base for my design. He is a good listener and gives well formulated comments to my words.

Special thanks also goes to my third tutor, ir. Sjef van Hoof, who always got me back on my feet when I just didn’t see the red line in my process anymore. His way of giving critique made me look in a different way at the work I had done, to make my arguments stronger. Even in the summer holidays he was there for me for mental support and to help me refine my design even more.

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RESUME

In first attempt, St. Andreas seems to be standing strangely in its urban tissue. It doesn’t seem to have space to breath, densely built in among buildings of a similar scale and situated next to a main traffic axis. When looking at the development in history of this urban tissue in morphological aspects, only little has changed. Still repeatedly transformations in the built environment have occurred; in volume and scale a big change can be ascertained. Postwar development under Rudolf Schwarz’ supervision is a maximum height concept for the built environment around churches and making churches more freestanding. This resulted in flat roofscapes and churches which could be seen from a large distance. A good example is the development around Colognes Dom cathedral, which was made freestanding on a big uplifted square. For Camillo Sitte, an Austrian urban planner who wrote the book ‘der Stadtbau’ in 1889, the idea of the church in the middle of a big square was too modern. It took away all the artistic effects a church can give in urbanism. According to Sitte, a church should be approached in two ways: once greatly in a big space and once in a way that a piece of its back-side appears from a narrow street. The church will be conceived twice in a different way.

The research question to this topic is: How should the urban tissue around St. Andreas in Cologne respond to its environment and how can a building be a part of that?

Important is to know how the city of Cologne thinks of the urban setting of a church. Günther Sellen of Colognes heritage protection mentioned: “All churches in Cologne have a ‘Schauseite‘, which is not the front portal, but the choir. To Catholic ideas the choir is the centre of the church, which therefore always should be uncovered.”

The artistic effect of how a church suddenly appears in between the built environment (Sitte), is completely perpendicular to the open built up postwar structure of Cologne (Schwarz), which is again somewhat different to the aim of Colognes heritage protection of a freestanding choir (Sellen). Between them is mediated with a photograph from 1970 of the famous photographer Chargesheimer as an argument and plot for a design. This picture perfectly fits to all three above mentioned points of view, resulting in a masterplan which accepts Schwarz’ modern structure and gives a sublime, artistic view to St. Andreas’ choir. The masterplan is the answer to the first part of the research question.

The second part of the research question, how a building can be part of that masterplan, got answered with the comparison between two terms for the English word ‘experience’, Erlebnis and Erfahrung (Walter Benjamin). Erfahrung is an experience which asks for a tradition or routine to be able to notice things you didn’t see at first sight. Erlebnis is a sensational experience, which will be achieved powerful in a first time, but that power will decline by repetition.

The design for a building with live-work apartments and a public grand café, situated in between St. Andreas’ choir and the Dom, consists of three stretched volumes, with narrow alleys among them; a dense urban setting within a plot. By looking through all three apartment volumes, it might be possible that
in your daily routine, you suddenly get exposed to a part of the richly textured façade of the church. The triviality of your daily routine is in a big contrast to a volatile appearance of the church; Chargesheimers picture now exists in a much more sublime way of an Erfahrung.

This will be a very different experience to the monumental, wide views you achieve by the Erlebnis of the static activity of dining in the grand café, which volume punctures through all three apartment volumes perpendicularly; a view from church to Dom is created.

The way this building makes the churches flirt with it, is the same kind of flirt Camillo Sitte admires in churches within a dense urban tissue. This makes the design a good example of the merger of urbanism and architecture.
INTRODUCTION

The present state of Cologne is like a collage of innovations and compromises. There is at least one recognizable element that has a high stability over the centuries, which is the network of streets. Today, most of the medieval road pattern still exists. This design studio started with a research to the ‘inner city highway’, the Nord-Süd-Fahrt, which was already conceived by the urban planner Joseph Stübben in 1888, but built in 1970 under supervision of urban planner Rudolf Schwarz. Researched is how such a large scale element can cross the inner city of Cologne and how the urban development of buildings in a large grain in the city is related to that. Specific examples of such buildings, like the Dom-Hotel, the Opera and the WDR got investigated and have been brought in relationship to the development of the Nord-Süd-Fahrt and to the ideas of urban planners who worked on Cologne over time.

Like the title of this report, ‘a flirt with a church’, already mentions is that a church is involved in the design. All studio members found their own fascinations with Cologne, deriving from the research to the Nord-Süd-Fahrt. In this report a new topic got investigated, which is the church in the urban tissue, specifically the context of the Romanesque church St. Andreas. This church is remarkably situated against a main traffic axis, a ‘branch’ of the Nord-Süd-Fahrt. This part of Cologne’s city tissue has a big potential for redevelopment. In 2007, Albert Speer and Partner got assigned to make a masterplan for Cologne, which is a combination of opportunities and possibilities for future projects and developments. Remarkable is that the tissue around St. Andreas is not marked as an area of modification, while right here diverse opportunities and possibilities occur. This is the area in which Cologne can enlarge its carrying capacity of the center. While Speer didn’t act in this location 2007, the famous photographer Chargheimer did notice this spot in 1970, which will be an important guideline for the design. The hereby formulated research question is:

How should the urban tissue around St. Andreas in Cologne respond to its environment and how can a building be a part of that?

Approach

This report is build up in a chronological way of doing research. It starts with a research to the church in the urban tissue. Some theories of urban planners to this theme will be explored and compared. With this base of knowledge, it can be investigated how a Cologne church stands within its urban tissue. The context with the biggest potential, that of St. Andreas, will be the topic of further investigation and will be the context for a new building design. Research to history and development, plus interviews with stakeholders and analysis to historical views will give a complete image of the church and its context. With this information, a masterplan for this context can be drawn. The next step is starting to find principles and inspiration for a building design, subsequent to the masterplan and urban theories in literature. The designing process of a building will happen parallel to finding principles in more theories. This process of design and research next to each other will lead to a final design which is in all aspects embedded in the context of the church.
1. THE CHURCH IN THE URBAN TISSUE
All churches in Cologne
INTRODUCTION AND MOTIVATION

By doing research to the Dom-Hotel, an interesting transformation can be noticed. In its first appearance in 1857, the hotel was inserted in a row consisting of small scale buildings. This row ended very closely to the Dom cathedral. After the many times the Dom-Hotel got restructured and rebuilt, the hotel became more and more removed from the cathedral and got bigger. In its present appearance it is an almost freestanding object in itself. The Dom cathedral also transformed from being a church with large elements built onto it, into an almost freestanding object on a big uplifted square. Nowadays, if we see a cathedral like that, we don’t even think about the fact that it might have ever began with a church that was attached to the surrounding buildings, as a bigger object built within a block. The cathedral still has a big influence on the built environment, only the way we deal with it has changed. In the images can be seen how much of the urban tissue has an influence on the public space around Colognes churches and which part of the tissue is visually attached to a church in the present time.

The book ‘Der Stadtebau’ (1889) from the Austrian urban planner Camillo Sitte is making people aware of the difference between the old artistic approach of the church, which should be a part of the urban tissue, and the modern thought that the church...
should be placed in the middle of a square. This book has been the motivation for further research to the transformation of Colognes churches. It is also worth it to mirror Sittes way of thinking to his English colleague during that time, Raymond Unwin, who wrote the book ‘Town planning in practice’ (1909). Since the 18th century Germany and England were both pushing in an urban way of thinking, also often they mirrored their practices by each other. The Urban Collage theory of Colin Rowe and Fred Koetter can also have a valuable contribution to this research, because in the way Cologne has been built up, there can be spoken of a collage. Fragments of the past, present and future are trying to work as one city tissue.

Important is now how to use this to be able to say something about the influence of Colognes churches in the urban tissue. The main question which will be discussed in this chapter is: How is a Cologne church part of a city block? Therefore eight churches within the defined research area will be analyzed. The transformation of the tissue around the church will be mapped in plans of various time eras, but also in typology major changes will be made visual. To see if the whole area behaves as one city block, it also important to know what kind of activities took place in the buildings surrounding the church and the type of clustering. In Cologne a lot of churches were even given a different function nowadays. Does Cologne only value the skin of a church – and in what way the surrounding urban tissue reflects to that – is what will be discussed in this chapter.
THEORETICAL BACKGROUND TO THE RESEARCH

Camillo Sitte and his approach of dealing with churches in the urban tissue

Camillo Sitte is impressed by the picturesque and beautiful results which derived from devious lines and varying widths of streets, from irregular squares planned with roads entering them at specific angles. He appreciates the urbanism of the Middle Ages and the Renaissance, which contain these kinds of features in their public spaces. According to Sitte, there should be an interaction between the public space and the surrounding public buildings, which should be achieved in an artistic way. Sitte is not a fan of a modern way of thinking, of which he says that all the artistic features of how a public space used to be like, are being erased. Building a city should be approached as making a piece of art, which nowadays turned into an approach which solves it as only a technical problem.

In the Middle Ages and the Renaissance there could be found abundant life on the city squares. In coherence to that, there was conformity between these squares and the adjacent public buildings. Sitte doesn’t see this artistic link between square and building anymore in his time. Squares are often used for parking; every element which previously formed the beauty of a square got lost. One of the elements of squares are the monuments. These shouldn’t be placed in main traffic axes, in sight lines nor in the middle of a square. Sitte names two reasons for that; the traffic flow shouldn’t be hindered and a monument doesn’t need an impressive building in its background. The classic rule is to leave the middle of a square open and to place the monument at the side of a square, preferably in the dead corners or areas of the squares traffic.

The rule to leave the middle of a square open should also be applied on placing a church on a square. A church will be experienced much more impressive if it would be built into the urban tissue, close to other buildings. When then suddenly a church façade appears, it will give a much more powerful image than a church which is placed freestanding in the middle of a square. For Sitte, Italy is a model in the way the church is adapted into the built tissue. Churches are seldom placed freestanding. From all 255 churches in Rome, only six are freestanding. The front portal of a church is mostly positioned at a square, which gives the façade an effect of rest and prestige. In antiquity the church was also sometimes positioned freestanding, but at the side of a square. In these situations, from the smaller surrounding squares, you also suddenly become exposed to an impressive church. In modern times it has become normal to place the church in the middle of their building lot. This gives a lot of disadvantages. The effect won’t be concentrated at one spot, but it will be equally fragmented on each side. Sitte compares this situation with a cake on a platter. A vital and organic grow into the urban tissue is from the outset excluded. The perspectival effect will never be exploited, because it is necessary to be able to take some distance. It can be compared to a stage in a theater, the façade which you should look at has to be standing in the background. The costs of construction and maintenance of a freestanding church are higher. It won’t be necessary to walk around the church, since all sides are designed in the same way. A connection from church to monastery
and school is often desired, but can’t be present. The urban tissue around the church changes during time, often buildings will be placed on the square, which transforms the square around the church into nothing more than a wide street. Despite of all these disadvantages is this the way it is done; we live in a delusion that everything must be seen. A building in an empty space is unpleasant; the diversity in effects will be destroyed. A palace or church should be approached in two ways: once greatly in a big space and once in a way that you can see the back of it from a narrow street. The building will be conceived twice in a different way. In the north of Europe a lot of freestanding churches can be found recently. The cause of this is that there used to be cemeteries attached to these churches. Nowadays cemeteries aren’t placed in the middle of the city anymore. A normal positioning of a Gothic church has houses closely built up to it at its back, the side of the altar. Against the front portal, which is the most impressive side with its towers, used to be placed a bigger square. A wide street with buildings on both sides will lead you to this. If the whole church will be placed in the middle of a big square, all sides will be seen, which would be negative for the image of the church, because the front façade is the one people should remember. This also happened to Colognes Dom; it has been uncovered from its surrounding buildings.

Old squares are often closed; the façade of a square is almost one continuous wall, with a church inserted in the built tissue. Roads that enter a square should not interfere with the squares’ façade. They should all enter in a different direction. In this way, different views will be given onto the squares’ public building and the squares frame won’t be visually interrupted. It is a modern idea to make squares wider, to give a bigger and complete sight on a building. Squares used to be small and intimate, which visually seem to be bigger by the artistic effect. Churches were often given a longitudinal square, which refers to the height of the church’ façade; designed in a way that a good vision on the vertical church can be achieved. Town halls were given a wide square, reflecting to the wideness of its façade. It is also favorable to surround an important building with a group of squares. Multiple sides, with different artistic aspects, will be shown often in wide and longitudinal squares. The modern composite squares don’t have such an artistic content; they are often designed too large.

Sitte shows more of his criticism at the more modern approach to urbanism. Long streets give you a sight on what is coming, but also short streets have their problems, like the openess of street façades. Wide transverse streets make incisions in the streets façade, which results in only an isolated row of city blocks at the left and the right. In modern urbanism, the ratio between built and empty surfaces has turned. The empty space of squares and streets used to be a closed unity. Nowadays the area is split up in various building lots and the remaining spaces just happen to be left over and shape the square or street. In old times, the public space will be designed with the buildings, which now is just an irregular remnant. The modern system for urbanism can be summarized in three main systems: the rectangular, radial and triangular system. The network of streets only serves for communication. Artistic motives are
Raymond Unwin; English town planning around 1909

Raymond Unwin wrote his book ‘Town Planning in Practice’, which is followed on from the work of Camillo Sitte in Germany and is influenced by theories of the garden city design and by socialist ideas. Unwin starts his book by mentioning that by England’s fast growth, there was not much time spent on town planning. Like Sitte also mentions, recent town planning was lacking in thinking of art and beauty. It is important to attach those factors in city planning, because they are expressions of community needs, life and aspiration. Unwin uses studies of old towns to show their individualities in town planning. The town planner needs to understand the beauty of these old cities, but also needs to ensure to make a new design realistic by looking at the changing conditions of today. Scale and proportion should be in relation to existing parts. Elements that shape the framework of a city include the boundaries and approaches, the centers and the main roads. In order to study each element, Unwin refers to the old towns as good examples that lead us to think of the importance and beauty of such elements, not by copying them but by using their ideas in modern shapes and requirements. The difference between Unwin and Sitte here, is that Sitte wants to exactly bring back all of the elements of the old times. Unwin said about Sitte: ‘Camillo Sitte, by a careful study of plans of medieval towns, came to the conclusion that these were designed on lines which not only provided completely for the convenience of traffic, but were in accordance with the artistic principles upon which the beauty of towns must

Jos Bosman – Urban Collage and Visual Planning: mirroring English and German practice

Jos Bosman wrote a paper for a Newcastle congress and is implementing a dialogue between various urban planners and their theories, that many urban planners have mirrored their practice with another. Bosman mentions Camillo Sitte as an important example of a practice that got mirrored very often by English urban planners.

Quite known is the mirror effect at the turn of the 19th and 20th century, when the theoretical base of a visual approach for town planning was provided first in Sitte’s book and twenty years later in Raymond Unwin’s Town planning in Practice (1909) that already a year later appeared in a German translation by L. Mac Lean, who in his foreword pointed at Sitte’s role of having been the first one that defined town planning as the art of creating spaces. […] The visual play of planning in Cologne, where a horizontal railway bridge was literally placed in relation to the vertical dome, was too modern for Sitte. […] For him it was an example in which every “artistic feeling” was evaporated; it was a sin of composition in his point of view that one could look out from.
depend. The Germans are now seeking to reproduce the ways these elements can be found in old towns, and to consciously design along the same irregular lines.\textsuperscript{4} The only criticism that Unwin has about Sittes approach is that he is going to consciously create a structure which should seem to be grown naturally and unconsidered. In the Middle Ages these kind of structures were almost grown like an instinct of people, taking natural features into account.

Unwin is both fascinated about the geometrical town planning and Sittes way of town planning. The most extreme ways of geometrical town planning we can find in American cities. He likes the way that even in this rectangular system, you can draw the attention on something by making an exception in something that is always continuous. For the rest, he is only skeptic about this extreme way of geometrical planning. He said: “Too often a regular system of streets, once started, is continued quite regardless of the contours of the ground, and not only entails vast expense in leveling, but destroys any interesting character that may spring from a more perfect adaption of the town plan to the conditions of the site.”\textsuperscript{4}

Unwin makes a difference between the main roads and highways, for traffic and for building sites and considers them in relation to both these functions and in order of their relative importance. In his point of view, while the curved road is less monotone and provides changes in direction and views, the straight road can still be made beautiful by giving it a view on an important element, or by beautifying its sides by trees or by breaking the lines.\textsuperscript{3} Sitte would disagree with this approach, breaking a streets façade will break with the artistic rule of old cities, plus the fact that each moment where the street line will be broken, there will be a transverse street crossing, which isn’t good for the traffic flow of the street. Sitte is also realistic about the use of tree-rows in roads, because only the ones which catch some sun will realize the wanted effect.

Some examples of town planning as practiced
in Germany are discussed by Unwin, particularly examples of how the earlier geometrical and more regular planning has given place to much more carefully considered, but altogether irregular systems. He even made some illustrations of Cologne, which plans are worked out with increasing detail, and in very large scale drawings of the streets and junctions are prepared before the work is executed. Some plans are specially prepared to show the division of the areas into plots, others to indicate the intended arrangement of planting, the treatment of open spaces, or the distribution of different classes of buildings. The Cologne examples may perhaps be classed as representing the period of transition from the geometrical to the modern systems. We can say that Unwin admires Sittes way of thinking and observing, but this admiration wasn't without comments. Sittes approach on urban planning can't just be applied to contemporary issues. Unwin desires to a way in which the artistic effects can be applied in the more modern systems, without prejudice to it. He doesn't ignore that we have to adapt ourselves to these new systems.

Colin Rowe and Fred Koetter; the term ‘bricolage’

When looking at Cologne, there can be seen all kinds of layers of different times which together form the city in a pattern that has stayed nearly the same over the years. The book ‘Collage City’ (1978), written by Colin Rowe and Fred Koetter, is in this sense applicable to Cologne. Collage City can be described as: ‘a city of fragments from the past, present and future, taking inspiration from working examples in existing cities; some scientific, others picturesque; some antique, others contemporary; some may be rational, whilst others disordered.’ Especially the term ‘bricolage’, which is mentioned detailed in the book, fits to the way there has been dealt with churches in Colognes urban tissue.

In some way Rowe and Koetter agree with Sitte, by saying that the modern architecture had, despite her idealistic pretentions, shown an unacceptable and sterile scientific rigidity. That’s the reason why Rowe wants to say goodbye to our intellectual vanity and just be content about copying the way the things are, with observing a world which doesn’t have to be redesigned. To accept the world as the way it always has been, at a way which was good and at a way how people always liked to see this world: efficient, real and reliable. Sitte also wanted to rely on the old way of dealing with the urban fabric. He questioned the modern approaches and wanted to hold on to something that has always been good, efficient and artistic in the past. In Rowe and Koetter’s explanation of a ‘bricolage’, they shall resign themselves that there has to be accepted that there are two worlds, who must be respected. ‘Bricolage’ is a proposition to constructive disillusion, a plea for order and disorder at the same time, for simple and complex, the combination of permanence and arbitrariness, of private and public, of innovation and tradition, of a retrospective and a prophetic gesture. The ‘bricoleur’ practices a disordered collection of rests of human efforts. The only difference with a scientist, is that they grant opposite functions to happening and structure as mean or purpose. The scientist creates happenings by structuring; the ‘bricoleur’ creates structures by means of happenings. If we are able to
recognize an accompany of both methods, and if we recognize that they both are ways to deal with issues, and if we are willing to recognize the logic arguing and the wild way of thinking, then it might even be possible to say that, by giving ‘bricolage’ a place next to science, we can manage to find an effective dialogue about our future. 

As well as Sitte, Rowe and Koetter see Rome as his model city. He names the 17th century, imperial Rome a collision of buildings in a disentangled fusion of what is ordinary and included. These make a dialectic of ideal types and at the same time one with an empirical context. Before that period, Rome could be interpreted as equivalent. Pieces of the city were interdependent, independent and ambiguous. The imperial Rome illustrates the ‘bricolage’-mentality on her best with abrupt conflicts, sharp disruption, large elaborate compositions, a dramatically distinct grid and a lack of sensitive inhibition. So weather Rome is Caesarian or papal, hard or soft; it is directed as a kind of model which could be an alternative for the urbanism and the society in which we live in the present.

Colin Rowe and Fred Koetter suggest that architects and urban designers should aim for something in between those worlds, an approach which lies somewhere in between the scientific engineering and the ad-hoc ‘bricolage’, to produce solutions which can be both contemporary, efficient and reliable, but also flexible enough to move with the times and adapt to future situations. The criticism of Rowe and Koetter on contemporary architects and urban designers is the same as the remarks which Unwin has about Sitte. Examples of the past can definitely be used as models of well-organized combinations of elements, but should then be applied in a different way, which suits contemporary issues.
Sketching, research to Colognes churches in the urban tissue
Defined research area
Within the defined research area eight churches are located, which will be eight case studies to find out how the Cologne church is being part of the urban tissue. The transformation during time, from the years 1180*, 1571, 1633, 1808, 1836-1850, 1912* and 2012 will be mapped. The development of the tissue is relevant to see how the city of Cologne might have changed the way there has been dealt with the church. This research is done to see how contemporary changes have an influence on the experience of the church.

*For the years 1180 and 1912, only the contours of city blocks are visible in the images.
Dom

The place in which the cathedral, St. Petrus, stands nowadays, has been the place in which the Christians assembled in Cologne since late Roman times. Several churches have been built in this place close to the city wall; each church bigger than its previous one. In its first appearance it was a Carolingian church, finished in the year 870. This cathedral stood until the 13th century. The cathedral in 1180 was freestanding in its tissue, but built onto walls, which almost completely surrounded it. Within these walls, at the East side of the cathedral, the St. Maria ad Gradus church is located. The cathedral grew out to be the official church of Colognes archbishop, but also one of the most important pilgrimage churches throughout Europe. Therefore it needed another architectonic form. The construction of the Gothic cathedral could begin in 1248. When it was finished, the whole cathedral burnt down by accident, when constructors wanted to work on the Eastern part. This part has been closed off by a wall, so only the other side of the church could be used to hold services, which stayed like that for many years. For years the remaining parts of the Gothic church got built up. In 1530 the construction of the church stopped. The urban tissue around this time had a same kind of appearance of how Camillo Sitte describes the original embedding of a Gothic church in an urban tissue. Later this changed; squares got narrower and the church got more tightly built in. In 1842, the Dom was taken into further construction again, until it was finished in 1880. In these times the cathedral already became more freestanding in its previous, densely built environment, but it still had the intimacy of the various smaller squares around it, which give several different faces to the cathedral. After the cathedral was finished, the closely surrounded buildings had to be removed in order to give a wider view on this prestigious Gothic cathedral. During the Second World War the cathedral did not get as much bombed as its environment, because the Nazis wanted to preserve it for orientation reasons. In present times the Dom is even more separated from its urban tissue, also because of the Dom Platte, an uplifted square around the Dom, which was constructed in 1970. When looking at the differences between the late Middle Ages and the present time in axonometric views, there can be seen more structure and logic in 1571.
In 974, Archbishop Bruno founded the early Romanesque church of St. Matthäus, the precursor of the in 1220 constructed St. Andreas church as we know it in its present, late Romanesque style. The church is situated just outside of the old Roman wall. Just like at the Dom cathedral, there was an accompanying chapel, St. Paul, at the East side of St. Andreas. The St. Andreas church has always been standing in a narrow space inside a building block, which shape stayed nearly the same over the years. The water which surrounded the Roman wall got replaced by a row of buildings and the place that came open by removing the wall, became the border between a new row of buildings and a street, which is still there in present times as the Komödienstraße. In the 14th and 15th century, some Romanesque parts of the church got replaced by Gothic ones, but the shape stayed the same. The space in the North of the church has always been a small square, only the experience of it has changed. The scale and the shape of the surrounding buildings are some aspects that made changes to this experience. Nowadays, the church has almost got the same scale as its surrounding buildings, while earlier the church was the largest factor in the tissue. There always has been a row of buildings between St. Andreas and the Komödienstraße. During war, this relatively high row of buildings got bombed and got replaced by two small building volumes. The building row at the other side of the street got built up again, but only further away from the street (now known as Burgmauer), so the street could become wider. At the side of the church, there was made a parking strip. One of the two new, smaller, unit-like buildings that got built next to the church was Komödienstraße 2, designed in 1956 by Theodor Kelter und Joachim Schürmann as a bank building. In present time, the neighborhood around the church is full of bank buildings, only Komödienstraße 2 is now serving as a travel organization (which explains all busses in the street) and the office of Pfeffer Architekten. The other newer building next to the church is Komödienstraße 4-8, designed by Karl Band in 1957. Karl Band was a member of the Kölner Schule, which was a circle of architects and artist who were active in the period after the Second World War. Some members were: Rudolf Schwarz, Dominikus and Gottfried Böhm, Josef Bernard and Hans Schilling. Being part of this circle gave Band a lot of opportunities to design for Cologne after the war. A lot of his designs were concerning a church. Looking at an overview of the present situation surrounding the St. Andreas church, there can be spoken of a ‘bricolage’ of elements from different times, trying to adapt to a contemporary urban ensemble.
2013; St. Andreas at the Komödienstrasse with its modern monuments
The Minoritenkirche is one that has always been located at the same site and with a similar kind of annex at its North side. The early Gothic choir from its present appearance dates out of the mid-13th Century and the three-aisled nave was finished in the 14th Century. In 1794, during the French Revolution, the church served as a store and fell into disrepair. In 1929 the church got restored.\textsuperscript{10} After the Second World War, Rudolf Schwarz designed the Museum der Angewandte Kunst at the same place as most of the previous buildings against the church were situated, but then in a more modern appearance. The design has a same kind of shape with a patio as the previous buildings. The Minoritenkirche still functions as a church.
St. Kolumba

St Kolumba was first mentioned in the year 980, when this church was belonging to the Dom cathedral. It was a small church with only a nave. Later it became independent and in the 12th Century, the small church got two side aisles. In the 15th century, it even got two more side aisles in a late Gothic style.\(^{11}\)

The church has always been situated in a crossing between the now called Brückenstraße and the Kolumbastraße. The shape of the block which is attached to the church on the other two sides has stayed quite similar in shape. So the South and the West façade have always been visible, and the North and East have almost always been built in. Already before the destructions of the Second World War, St. Kolumba hasn’t got a lot of pieces of the Roman time left. Only in the nave and the tower were some rests of its Romanesque character. In 1943, the church got almost completely bombed. Many people of Cologne wanted to preserve the ruins of St. Kolumba as a war memorial. These stayed preserved until in 2003 the construction of Peter Zumthor’s design for a museum began and got built over the ruins.\(^{11}\)

This was done with a lot of respect to St. Kolumba’s rests, and to integrate it into the urban tissue again. From the outside, only some walls are still visible, but from the inside, on the ground floor, the chapel and all what is left of St. Kolumba, is visible in an impressive setting.
The Antoniterkirche nowadays is the second most visited church of Cologne. Its situation in the Schildergasse, one of Cologne’s largest shopping streets, is responsible for twenty thousand people per hour to pass this church. The church is located on the basis of the former mendicant order of the Sackbrüder. In 1298, this land became property of the yet to build Antoniterkirche. In 1350 the construction began and got completed in 1378 in a Gothic style.\textsuperscript{12} Since then, its context had undergone many changes. In some way the church has always been a semi-freestanding object in a city block. The shape of this block stayed similar, only the infill changed a lot. The biggest intervention to this area has actually been the construction of the Nord-Süd-Fahrt, shown in the picture of 1960. On May 31th, 1942, the Antoniterkirche got severely damaged by bombs of the Second World War. Reconstruction began quite shortly after war, so in 1952, the church could be used again.\textsuperscript{12} A few years later, the Nord-Süd-Fahrt made its big distortion; it cut the city block, in which the church is situated, in two pieces. This new big traffic axis runs underneath the Schildergasse, which made the Antoniterkirche an important icon, which you could see by entering Cologne’s inner city by car. This situation stayed until in 2000 a new building by Renzo Piano’s design got built next to the Antoniterkirche. When looking at the changes over time in axonometric view, there is a big transformation in scale noticeable. The church itself got a bit smaller; the front façade got moved a bit inwards.
The parish church St. Peter, together with its collegiate church (Stiftskirche) St. Cäcilien is the last of such a combination of adjacent churches in Cologne. These Christian churches existed since early Carolingian times. Both of the churches have Romanesque parts in their present appearance, which are dated around the mid-12th century. Even in their present appearance, they are still connected with each other by a wall, which has always been like that. This wall used to cover the whole block, in which the churches are present. This block changed immensely over time, but the churches always have stayed, weather they were made freestanding or got buildings attached to them again. There were some exterior and interior changes over time, but the main shapes of the churches stayed the same. One example is the function change of St. Cäcilien in 1475, when it changed into a convent of Augustinian nuns. The flat Romanesque ceiling in the main nave got replaced by a Gothic cross-ribbed vault. After the Second World War, when a big part of Cologne got bombed, Karl Band restored this church and gave it back a flat ceiling. This convent grew bigger in the West of the churches, and got later reused as a hospital. In 1803 these buildings in the West got demolished and made place for new hospital buildings from 1848, with St. Cäcilien as a hospital chapel. St. Peter was included in the hospital complex with its West façade. In present time, both of the churches have new functions. St. Cäcilien now serves as museum Schnütgen, where its medieval art is shown. Onto this church is built the other part of the museum, where more modern pieces of art are displayed. St. Peter is now part of a Kunst-Station, which creates a dialogue between art and religion.
St. Maria in der Kupfergasse

St. Maria in der Kupfergasse is a Baroque church in Cologne, which dates of the year 1715. It is situated in the corner of a city block, which still has got the same shape in present time. During the Second World War, the church got completely burnt to the ground by the bombardments. It got reconstructed again between 1962 and 1964. One of the post war interventions in the area is the Vierscheibenhaus from the WDR, which is built next to the eastern façade of the church. This was an uncontemplated development in the urban plan of Rudolf Schwarz. The reason why the WDR has such a prominent place in the inner city and could have been built in this very large grain, is because in the time of reconstruction after the Second World War the city found it more important to build up again than to be critical of what got actually built.
Within the area of research, this is the only church which is situated in the Via Sacra, of which can be read more below. St. Aposteln is prominently placed on the Neumarkt square. In the year 1021, at the edge of the Roman city wall was built a basilica with an adjacent monastery. After a fire in 1198, the church received its present shape, which only slightly changed over the years. After the Roman wall and the surrounding water got removed, St. Aposteln got surrounded by buildings which kept some distance from the church, to make place for a big square. It was an introverted place, which over the years, got more built in, and transformed into a more extraverted space. The church now is one of the items of the city tissue, while it used to be enclosed by the surrounding tissue. Nowadays the space around the church can be entered from almost all sides, while in the Middle Ages, there was only one entrance to the church’s square.

Rudolf Schwarz’ concept of a Via Sacra

After the Second World War the question about Colognes identity arose. Rudolf Schwarz was Colognes city planner during post war reconstructions and he was also dealing with these identity questions. Which outlines are defining the look of the city? And, do the coordinates on which the great historical monuments are placed help to the dynamism of the urban landscape?

Some years ago, the architecture historicist Wolfgang Pehnt brought up Schwarz’ idea for a Via Sacra again. Schwarz wanted to conceptually connect the seven Roman churches: St. Kunibert, St. Ursula, St. Gereon, St. Aposteln, St. Mauritius, St. Pantaleon and St. Severin. Schwarz wanted to achieve this ‘Via Sacra’ within a wide green belt of wine and vegetable yards, at the inside of the Middle Age wall. Cologne should be seen as a holy city, but also as a city of trade and proud gender. The Via Sacra has never been part of the city plan nor drawn in topographic maps. The large Romanesque pins and churches are placed on the arterial roads and their accompanying cemeteries of Roman Cologne. By connecting them, a circle around Colognes inner city would be formed and it will draw attention to the urban environment of the great religious buildings. Currently, this connection is not really visible. There are some religious elements present in this road, like old monastery walls, some relicts and other religious buildings, but we can’t speak of an actual connection. The Bund Deutscher Architekten, Bezirksgruppe Köln (BDA) and the Architektur Forum Rheinland (AFR), together with the Forum aktueller Architektur in Cologne are working on the Via Sacra project, to make this connection noticeable. The project includes the possibility of having events, guided tours, exhibitions, lighting, image and object installations along the Via Sacra. The goal is to bring awareness the citizens, as a way to mark culture elements on their diverse potentials. It will be a long-term urban development and urban planning concept.

Any criticism on this project is the question why we now should now remember a Via Sacra. In historical reality, this has never been a connected route, but it was occasionally a used route in the Middle Ages, when there had to be walked a ceremony or any other procession. So half it was used in historical reality and half it was the idea of an imaginative city
planner. The great religious buildings which would be implemented in the Via Sacra, are restructured after their war damages and gathered a lot of affection from Colognes citizens. But no visitors and hardly any Cologne citizen sees the connection between them in the spatial context.
CONCLUSION

Cologne is used to preserve all heritage it has. After the bombardments of the Second World War, almost every piece of heritage that was still there, even if it was totally demolished, got preserved and built up again. This approach is also visible in the way Cologne has dealt with its churches. Religious views have changed, but Cologne wants its churches to stay, so they opened themselves up for function changes. So as long as the church can stay, even if it is only the shell, it can be possible to transform its function. A lot has been practiced about function change of churches already, but in an urbanism sense, the shell of the church (mostly) stays the same. The exterior of the church still has to deal with its contemporary environment. In all of Cologne examples, there can be seen that the scale of the church’ environment has changed. In some examples the scale of the surrounding buildings got similar to the scale of the church itself. Because of Cologne’s open minded vision about churches and heritage, a lot of transformations in these areas, which might look strange, could have been happened. But for this same reason, a lot of things are possible to happen in the future.

A recommendation for further research could be to look at how the church can survive in a context which transforms according to contemporary desires. How can a church survive next to a highway? Or what is the effect on a church when all surrounding buildings are built in the same big scale as the church itself? How can the artistic effect of the Middle Age church, on the way Camillo Sitte described it, still be applied in a contemporary city? This last question was actually already proposed by Raymond Unwin in 1909, and indirectly discussed by Colin Rowe and Fred Koetter in 1978.

In this research, one church, St. Andreas, will be chosen as topic for further investigation. It will be explained more into depth how the church and its surrounding buildings are developed to the present state in which they are functioning now. Interviews with important stakeholders and more theoretical works will be used to form a more steady opinion about the area. Finally, a masterplan for the area based on the urban context can be made and a building in the church’ context can be designed. This will give the answer to the following research question: How should the urban tissue around St. Andreas in Cologne respond to its environment and how can a building be a part of that?
2. SANKT ANDREAS

URBAN CONTEXT
INTRODUCTION

As mentioned in the conclusion of the previous chapter, St. Andreas' urban context will be the topic for further investigation and will be the location for a building design. This church is chosen because of the remarkable features of its setting. Nowadays, the church situated next to a main road, the Komödienstraβe, which is a branch of the ‘inner city highway’, the Nord-Süd-Fahrt. For Cologne, a big traffic axis goes often together with a larger grain of buildings at the sides of it. Remarkable is that the Komödienstraβe is accompanied by 5-storey high volumes, but only exactly where St. Andreas is touching this road, 2-storey high volumes are built. These are modern, postwar interventions, which later even became monuments. In this chapter, all of this will be explained and analyzed by giving an insight by discussing history, monument protection and by interviews with stakeholders for the area and with members of Colognes heritage protection. A new theme can be introduced in this area, the epistemic trauma, which is a reason for giving back the erased memories of the past. Finally, a masterplan for the site will be drawn and a plot will be chosen for the design of a new building.
In chapter one, the historical development of St. Andreas’ urban tissue in morphology was discussed briefly. Mentioned was how the scale of the surrounding tissue transformed into a scale which equals the church’ scale. Interesting is to look at the transformation from just before the Second World War until present. In the images of the previous pages, all taken from the top of the Dom cathedral, it is clearly visible that this large scale already existed before war. St. Andreas had a higher pitched roof, which makes it reach a little over the rest of the built environment. From eye level, the church was experienced in a way Camillo Sitte describes the artistic effect. An image of 1944 shows the damage which the bombardments have caused. The contrast with the image of 1960 is fairly big; within a short period Cologne has built itself up again, under supervision of Rudolf Schwarz’, who got assigned as Colognes urban planner in 1946. Corner towers, decorative elements, pitched roofs and bay windows made place for a more modern look. The typology of Cologne changed in a bricolage of styles of different time era. Because of the fact that Cologne had to be build up all over again, there was an opportunity to apply contemporary thoughts and needs. The modern thought that churches should be freestanding and visible from a long distance has been applied to Churches. A rule for a maximum height of 21 meter (and certainly not higher than the church’ choir) got carried out. For this reason the high row of buildings got replaced by two lower, modern buildings at the Komödienstraße, which later became monuments. These got built more closely to the church, which created a wider street. The reason for this is the explosive grow of the car; one of Rudolf Schwarz’ concepts for Cologne was the ‘autogerechte Stadt’. In the first two pictures, against the choir of St. Andreas, a building with a pitched roof is located, Marzellenstraße 1. After war, this building got restructured, only with a modern annex with a flat roof. In present time, the pitched roof has been built back onto that building again. A memory of the past seemed decisive for this, which can be called an epistemic trauma. More about modern monuments and the epistemic trauma can be read in the next paragraphs.

1180 1571 1633 1752 1808 1815 1836-1850 1912 2012
In 1980 the monument protection of Cologne (Denkmalschutz Köln) got founded. Before that time there were no monuments in Cologne. In the present time, in the area of St. Andreas, a lot of buildings got protected as monuments. Among them are the buildings on Komödienstraße 2 as a design for a bank building by Theodor Kelter and Joachim Schürmann in 1956, Komödienstraße 4-8 as a Dominican monastery by a design of Karl Band in 1957 and Marzellenstraße 1 which got a pitched roof in 1978 by Hiltrud Kier. The first two mentioned are characterized by a modern appearance. The question is how such new and modern buildings can be registered as monuments. This has historic and aesthetic reasons. In the mid-19th century, an English bank building and a rectory got built at the Komödienstrasse on the parcel of St. Andreas. Shortly after it, in the time of the rebuilding of the central train station and the connecting Bahnhofstraße, at that place were built lots of banks, hotels and administrative buildings. The preferred small scale parcel structure got abolished; largely dimensioned and richly decorated buildings with Neoclassicist facades got constructed. This also happened in the north- and eastside of St. Andreas in the late 19th century. After the destruction of the war, in the area of St. Andreas, the Komödienstraße and Burgmauer, new buildings in contemporary shapes got built in the kept structure of parcels. These were consciously designed with a modern and contemporary architectural appearance, in a way that the church is clearly contrasting and separating itself from the new buildings. Materials were chosen to create a contrast. The horizontal shapes of the two modern monuments adapt to the direction of the wide traffic axis of the Komödienstraße and their low height is adapting to St. Andreas. In an aesthetic way, both of the modern monuments have an individual character with an extraordinary urban and architectural quality.

The façade of the Dominican monastery of Karl Band shows a diversity of materials; brick used in various ways and concrete cells with a geometrical infill. Each ‘concrete cell’ is an apartment for one Dominican. In the present only three Dominicans still live here; the rest of the space is in use by the municipality of Cologne. Its characteristic architectural language, which still is in a perfect and original appearance, makes it a unique example of the postwar reconstruction of Cologne. For this reason it became protected as a monument on June 12th, 1997.
Transformation: ensemble before 1945; modern monuments in their original appearance in 1957; present appearance
The Sparkasse der Stadt Köln at Komödienstraße 2, which became protected as a monument since February 22nd, 2000, has the appearance of a pavilion with large glass facades. The use of concrete, brick and glass in a clearly designed rhythm of axes make it a distinguished building. Colognes monument protection compares this building with its style of the international Modernism with the villas of Le Corbusier. In the present this building lost its refined and romantic aspects of its original appearance. It got heavily restructured; the whole glass façade at the front side got replaced by standardized window frames. It is not in use by a bank anymore, but by travel organizations and an architectural office. The main tourist bus stop is placed right in front of the building, which causes a large amount of busses parked in front of the monument. In the future this bus stop will be replaced close to the Rhine, which will create a better atmosphere for the monuments.
Komödienstrasse 2 in its original appearance, Sparkasse der Stadt Köln. Design by Joachim Schürmann and Theodor Kelter in 1956.
Komödienstrasse 2 in its present appearance, travel organisation and architect office.
The building at Marzellenstraße 1 got added to the monument list on March 3rd, 1985. As mentioned before, the building had a pitched roof in its original appearance. After war, this pitched roof got replaced by an annex of glass with a flat roof. It fitted perfectly in the way Rudolf Schwarz planned Cologne; in the height concept around churches and in the way the modern annex on top contrasts with the existing part underneath. After times of war, people were devastated by their city being completely fallen apart, but also longing for a new period, which contains a brighter future. A change could be seen as something positive. Modern influences in the city which got rebuilt in a high speed, were criticized, but also accepted for being this new factor. The fact that there got built was more important that to criticize what actually got built. When times got more steady, people longed back to the memory of the old time again. Hiltrud Kier, a city curator of Cologne, fought for bringing back the historical aspects of Cologne's architecture. From the Dom, there is a good vision on the building of Marzellenstraße 1. The historical view would show a pitched roof, which Kier wanted to give back to the city. After a long period of political discussions, she achieved an approval for her to redesign the roof. This got built in 1978, which she would have never achieved a few years later, because in 1980 the monument protection got founded. The owner of the building was fine with the pitched roof to be redesigned, only if he could keep his glass annex of the fifties. This is why the roof got literally built on top of the glass annex. There is positive and negative criticism to this roof-design. The building is a clear example of different ways of thinking in time; it became a ‘bricolaged’ ensemble. In this example Hiltrud Kier was experiencing an epistemic trauma; she was forced to understand the new, but still longed back to the old. In the book ‘Inside Modernism’, Thomas Vargish and Delo E. Mook are explaining the term epistemic trauma explicitly, which is described underneath.

Vargish and Mook start their book by giving a new definition to Modernism; they try to grasp the aspect in a new way, in a way which it hasn’t been approached before. This new approach is also the theme of the book, which is all about forcing to let old logics go and making place for new, incomprehensible logics, which are no logics anymore. This forced understanding of the new, the modernization, causes pain, a trauma, which in this book is called the epistemic trauma. It is true that Modernism could only exist within the general outlines of a previous period or movements, because movements are continuously overlapping and can’t be attached to a specific date. The phenomena that define Modernism are exclusively made up of advanced intellectual and artistic activity on the very front lines of cultural development. To understand and identify Modernism it requires a multidisciplinary approach. Vargish and Mook show that in modernist physics, painting and fiction all a recognizable value can be found. They show this in three cultural diagnostics; Relativity Theory, Cubism and certain modernist narrative. These three developments of advanced intellectual culture are almost perfectly contemporaneous. They possess conceptual distance from each other. They cross national boundaries. They develop rapidly and individually they have a big recognized intrinsic interest. Relativity theory is a theory of the measurement of space and time;
Cubism revolutionized the treatment of space in visual representation; and modernist fiction explores with remarkable concentration to the possibilities of new temporality in narrative. Modernist difficulty is in part a form of simplification by abstracting and streamlining.19

Basically, epistemic trauma is the pain you feel when your truth suddenly is not the truth anymore; when all you have known gets replaced by a new, different knowledge. Applied on Cologne, an epistemic trauma can be found in the period of reconstruction after the demolition by the Second World War’s bombardments. When everything you have gets erased – approximately ninety percent of Colognes inner city got destroyed – there are possibilities in building up the city again in a different way. The building of Marzellenstraße 1 is a clear example for this. The epistemic trauma caused a desperate need back to history; the pitched roof got built back again and appears in a friendly contrast to the flat roofs of its environment.
Marzellenstrasse 1 with its postwar roof annex; 1975
Marzellenstrasse 1 in its present appearance; 1987
INTERVIEWS
Günther Sellen, Ulrich Krings and Manfred Bestgen

To get a broader insight in the context, three interviews with stakeholders for the topic are done. Günther Sellen is employed at the monument protection of Cologne. He knows all about Colognes heritage, modern monuments and the possibilities for designing in an area among monuments. Ulrich Krings is one of Colognes city curators, who has written a lot of literature about Colognes heritage and is specialized in Romanesque churches. Manfred Bestgen is the manager of Ferienwerk Köln, a Christian travel organization which is located in the monument of Komödienstraße 2. He has an admiration for modern architecture. The most valuable quotes for this research are summed up underneath.

Günther Sellen – monument protection

“The pavilion-like buildings at the Komödienstraße are an expression of architecture of the fifties. We have protected more buildings in Cologne from those years as monuments. When we protect a building, we protect it as a whole. When the owners want to change something, they should always agree it with us. For us it is important that a monument stays preserved, but that can only be achieved when it will be used, otherwise it will decay. We should also find purposes for buildings, so we have to accept to let multiple companies use a monument.”

“When constructing next to a monument, it is more difficult when a church is involved, because of the height concept.”

“All churches in Cologne have a ‘Schauseite’, which is not the front portal, but the choir. To Catholic ideas the choir is the centre of the church, the entrance isn’t. The choir is a special part of a church, always the East side, which therefore should always be uncovered.”

“The Dominican monastery of Karl Band could be higher on one side, because the front portal of St. Andreas is located there and not the choir.”

“Cologne is not ready for a big transformation in function in a Romanesque church. There are only a few of them in Cologne. St. Andreas is owned by the archdiocese of Cologne; they won’t accept something like that. Romanesque churches are too special for that.”

“Building an annex as extra storey on top of a monument is more a question of quality. When an extra storey gets designed, which is truly good in an architectonic way, I could imagine it to happen. Something sculptural perhaps. Often plans like that are bad, it wouldn’t show off aesthetically. On top of Komödienstraße 2 I could imagine a storey with a very transparent façade, a space for congresses for example.”

“The way a church should be situated in its urban tissue depends on its history, which is always different. Some churches should be built in, some freestanding. I wouldn’t make that an equal thing for each church. St. Andreas is unfortunately situated next to a crowded street, but I also wouldn’t close it off from the street. The situation is actually not that bad, the square at the church is beautiful, even
Square to the north of St. Andreas, the bank buildings match the church in a sober way.
banks | hotels | offices | public buildings | mixed functions
as the architecture of the Komödienstraße. It's also beautiful that there are multiple passageways to St. Andreas. That was already the case in its historical situation.”

Ülrich Krings – Cologne city curator

“A lot of postwar modern architecture in Cologne got built after ’51/’52. Before ‘48/’49 nothing got built, there was no money. It did get planned in 1946, but people couldn't build it yet. In ’48 the new money came and the constructing could start.”

“Postwar Cologne is a compromise between modern urbanism and reconstruction.”

“When Cologne wouldn't got bombed, it would be the same city, only with a different architecture. The axes are running in a way through the city; that model is still present. War gave people more respect for what they have. The courthouse for example would have been planned again. The bridges, the station, it might have all been broken down.”

“The contents of the Operaprogram are always in the evenings. At this same time people who are shopping, leave the center. Those are two different flows. That is the biggest problem. There should be some attractive functions. The backside also is a problem of Cologne. Now there are placed some shops and apartments, in an absolute B-class.”

“Why can’t we make levelled buildings with both offices and apartments in another range? This model isn’t present yet, which will be often seen as a problem. It would be nice to develop a type in which living and working can be combined in a good way.”

Manfred Bestgen – Manager Ferienwerk Köln

“This building (Komödienstraße 2) matches the church perfectly. Originally, from the inside of the building you could look at St. Andreas through a full glass façade, now this façade is closed. I would like to restore this building to its original state and make a gastronomy downstairs. It would be a nice place for a restaurant. On top I would have my travel company.”

“Where in Cologne can you find another address, where you look at a church, and at the same time to the Dom? You can’t find that anywhere else. This is one of the few addresses in Cologne, where we feel like we’re in a small city. Cologne is not a very open city, but at this place it is, which is really special.”

“The Sparkasse has been in this building for 44 years. In the year 2000 we bought this building, simply because it was for sale and it suited our company.”

“A connection between church and this type of building is not often realized in Cologne. It also matches this street. The monumentality of this building lays for me in the connection with St. Andreas. Also the façade is nice; it is placed a little off-parallel to the street. It is well adapted to St. Andreas and this building line continues in the Dominican monastery.”

“The function which this area needs is a good restaurant, or some function which makes the area accessible for a lot of people.”
One of the starting points of this design studio was a collection of photos of the famous German photographer Chargesheimer. In a unique way he captured photos of Cologne at 5:30 in the morning in 1970. He wanted to show Cologne as it is, without people; the naked image of a city in black and white. Infrastructure is an important aspect in the pictures. Locations for the pictures are chosen carefully. In some way Chargesheimer had an eye for finding places which had a temporary existence. His pictures were collected in a book called 'Köln 5 Uhr 30'. This collection got received with negative criticism, but later the pictures got lots of attention.

The chosen project location is related to one of Chargesheimers’ pictures. This picture shows a part of St. Andreas seen from the Marzellenstraße, looking through a gap of a building block. This gap was still a wound of the war. In the ruin of this plot a fast-food stand has been settled. In the period in which Chargesheimer took this picture, war ruins often got hidden in the background behind new facades in the front.

Twenty-five years later, the photographer Wolfgang Vollmer took another series of pictures, from the same viewing point and with the same techniques as Chargesheimer did. Sometimes an image stayed exactly the same, but often remarkable changes can be noticed. The last has happened in the picture with St. Andreas in it; in Vollmers picture the gap caused by war has been filled up with a new building, which makes St. Andreas not even visible from the Marzellenstraße anymore. Vollmer about his picture:

“Chargesheimer photographed a store that people would dislike, and he knew that this image would be temporary. Now this gap is filled up with a building purely designed functional, without identity, and we long back to the image of 1970.”

An image like that of Chargesheimer perfectly fits the idea of urbanism which creates an artistic effect on the view of a church, to the theory Camillo Sitte. In an analysis of the pictures in the next pages will be shown which elements create the artistic effect. Passing also seems an important factor for this; a church façade suddenly appears and disappears again by passing the Marzellenstraße.
The analysis shows at first the street as a constant element; then a lower bar-shaped volume is placed right in the middle of the composition; on both sides next to this bar, higher volumes ‘frame’ the image; the most important aspect which follows is the noise or disturbance which cover up parts of the church within the ‘frame’; last is the air which can be filtered out and leaves us with the church.
Analysis of the artistic effect of the image Chargesheimer captured
Günther Sellen of Colognes monument protection said:

“All churches in Cologne have a ‘Schauseite’, which is not the front portal, but the choir. To Catholic ideas the choir is the centre of the church, the entrance isn’t. The choir is a special part of a church, always the East side, which therefore should always be uncovered.”

St. Andreas is a Romanesque church, but has a Gothic choir. When comparing Günther Sellens quotation of an uncovered and visible choir to the original situation of a Gothic church in the way Camillo Sitte describes it, there can be noticed a 180 degrees reversed urban situation. This can be seen in the first two diagrams underneath. St. Andreas in its present situation only shows a wide view onto its choir when looking from the Dom. Not only the choir is visible here, but according to the plans of Rudolf Schwarz, the lower modern monuments make the church in its whole visible.

For the masterplan of St. Andreas’ context, a view to St. Andreas from the Marzellenstraße in the sublime way Chargesheimer photographed it, should be given back to the situation. It doesn’t literally have to be a direct view like that; it can also be an architectural aspect that brings in an artistic effect again. The view onto St. Andreas should be only extracted to the choir. By covering up a bigger part of the rest of the church, the view will be more concentrated onto the choir. This means that some parts of the lower volumes of the modern monuments should become higher.

Both of the urban adjustments – compacting and a sublime view – enhance the wishes of Cologne and match the urban theories in research. The adjustments will be explained more in detail underneath.
Present situation St. Andreas (Schwarz)

Tightly built in

View on choir from Dom

Aim for St. Andreas (Iliev)

Compacting

Sublime view
Compacting

Here the difference between 1930 and the present time can be noticed clearly. In 1930, bigger parts of the church are covered by surrounding buildings, which enhances the view on the choir. It is much more appealing when suddenly a church’ façade appears among a densely built up context. In the present, the whole church can be seen at once. When moving towards the church, you won’t experience more than you already saw from a big distance.
Analysis of the view from the Dom
In the image of 1880 a large building, the Hotel de l’Europe, covers the whole church up, except from its choir. The difference with the view from the same perspective in present time is big. There are no objects which take care of some noise or disturbance in front of the church. These are important to create an artistic effect.
Analysis of the view to St. Andreas

street

low bar

‘framing’ elements

noise or disturbance

air
The place where the former Hotel de l’Europe was standing is marked in the diagram. The same part of St. Andreas should be covered, so in red a sight line from the Dom is drawn. In that same direction should be build an annex onto Komödienstrasse 2. A volume study shows that not the whole height of St. Andreas should be covered up. The western wing of the church has a similar architectural language in window design as the choir. When only those windows will be covered up, the view will be more concentrated onto the choir. The annex would fit into the continuity of the Komödienstraße. In the example, a random volume has been drawn; the same effect could for example also be achieved by a tree. For this design studio, this design task won’t be further developed; it will stay in a masterplanning phase. The other urban adjustment, giving back a sublime view, will be developed and designed for this studio.

View on choir not disturbed, but enhanced
A tree could cover up a part of St. Andreas as well

Present street facade

Street facade continues in a consequent way with an annex onto Komödienstrasse 2
Sublime view

The plot, Marzellenstraße 3-5, will be redesigned with ‘sublime views’ to St. Andreas. The image Chargesheimer took in 1970 is the starting point of inspiration. What the term ‘sublime views’ eventually will mean, is explained in the next chapter, in which the principles for design and more points of inspiration will be described. Also the previously mentioned theory of Camillo Sitte stays an important factor for design. Camillo Sittes theory stayed more in an urban level and doesn’t specifically reach an architectural scale. He does give examples of how architecture could help to reach artistic effects, he mentions for example plazas surrounded by arches, but these have an old-fashioned touch. They don’t always fit in more contemporary settings. For Marzellenstraße 3-5, a contemporary design will give an artistic effect in an urbanism sense which will be further developed in the architecture.

In its present state, Marzellenstraße 3-5 is an office building with souvenir shops in its ground floor. A small passage leads to the core of the building, which leads to the offices. Three different companies are settled in the office spaces: at the first floor Linguana (language office); floor two, three and four in use by the Bundespolizeiinspektion and the top floor gets used by the municipality. In the basement a parking space is situated, but unused, because it is only reachable by an elevator for cars. The height of one storey is only 2,5 meters (floor construction measured till ceiling construction). Using these lower storeys in buildings has been introduced in Cologne shortly before the Second World War. When a building with high storeys will be encountered, it is mostly a pre-war building. For the plot a development from this
state till its present appearance is drawn. Remarkable is that the gap photographed by Chargesheimer has been a war wound for 30 years. In 1975 it got filled in as the generic office building as we know it now. The low amount of possibilities with this building leads to the decision to start over again with a completely new building. Besides, it is often more expensive to adapt a building for redevelopment, than to build something completely new.
Andreaskloster
Marzellenstrasse
Komödienstrasse
An den Dominikanern
Burgmauer
4-8
3-5
Street facade of Andrèaskloster with the project location

Street facade of Marzellenstrasse with the project location
Carrying capacity of the center
The new function for this plot has been introduced by Ülrich Krings; he said:

"The contents of the Operaprogram are always in the evenings. This is at the same time as for people who are shopping, to leave the center. Those are two different flows. That is the biggest problem. There should be some attractive functions. The backside is also a problem of Cologne. Now there are placed some shops and apartments, in an absolute B-class."

What he said about the area of the Opera is also valid in the area of St. Andreas, which is surrounded by mainly bank (office) buildings and hotels. People in offices work until 5 pm; people in hotels leave in the morning and come back in the evenings. These flows also don’t cross. Cologne wants to enlarge the carrying capacity of its center. The ‘borders’ of the center are defined by two streets in east-west direction; one of them is the Komödienstraße. St. Andreas is positioned just across this border, accompanied by B-class restaurants and cafés. B-class areas are also characterized in unreadable facades; it is often hard to tell whether a building contains offices, apartments, hotel rooms or any other function. B-class Cologne should become A-class, which is why a good restaurant will be a function to accomplish this. For tourists, but also for employees of surrounding offices, this function will be a useful addition. The size of the plot, approximately 20 by 25 meters, makes room for another function. Ülrich Krings also mentioned:

"Why can’t we make levelled buildings with both offices and apartments in another range? This model isn’t present yet, which will be often seen as a problem. It would be nice to develop a type in which living and working can be combined in a good way."

A combined function of office and living spaces in one apartment complex will prevent separated flows of people; an area will stay lively during the whole day. So live-work apartments will be designed for starting entrepreneurs. Nowadays it is hard to find a job, caused by the financial crisis. This is why people often start their own business. Small apartments with an in-home office at a good location in the city will be very appealing to this group. The restaurant or grand café which will be designed within the program, should also be suitable for business meetings.
ST. PAUL

An interesting fact of the plot is that it is located at the exact place where the former accompanying church of St. Andreas – St. Paul – had its cemetery. This church was founded in 1106 as a church consisting of only a nave, later it got extended with side aisles, it got rebuilt and more later it got some rectory buildings with a cemetery next to it. In 1807 St. Paul got demolished. In the images is visible that the shape of the parcel which in present time is Marzellenstraße 1 descents from St. Paul. The shape of the rectory buildings with the cemetery is similar to the plot of Marzellenstraße 3-5, the parcel to design. A design which ‘flirts’ with churches is hereby given an extra valid, and deep-rooted origin.

St. Paul church in the east of St. Andreas
3. DESIGNING IN CONTEXT

PRINCIPLES AND INSPIRATION
INTRODUCTION

Yet the masterplan for the urban tissue has been set up, there can be searched for principles and inspiration for the design of a building. This in a way that the design descents from the ideas and agreements of the masterplan. In this chapter, the ways to create a sublime view will be illustrated in a fascination for the work of the artist Gordon Matta-Clark; in delving into literature about Walter Benjamin, who explains a way of experiencing a city which can be related to Camillo Sittes ideas; by introducing a new theme for design, density; and by giving a rule for the layout of the building and its façade. In the last paragraph of this chapter, some draft designs for a building by means of the previously mentioned principles are illustrated. This designing process was developed parallel to the gathered sources of inspiration and principles. Step by step, the design grew out to the design which finally is created to embed perfectly in its context and theme. The final design will be illustrated and elaborately discussed in the next chapter.
SUBLIME VIEW TRANSLATED INTO SHAPES

To get a view back which is similar to that of Chargesheimer, a cut out of the volume can be made again. Critique to this is that it makes only one specific point on the Marzellenstraße really important; plus this point can be easily missed. The last wouldn’t even be a bad thing, because if in the triviality of your daily life, suddenly by coincidence a church façade in such artistic way appears, the impact of it will be much more powerful.

It will be more artistic when the journey your eye has to travel to an image crosses various objects. The perspectival effect will give an extra touch to it. In the analysis of the images in the previous chapter, this was called the layer of distortion, which is a necessary factor. The artist Gordon Matta-Clark, used buildings ready for demolition as temporary art objects. He cut mathematical spheres out of the buildings volume, straight through floors, ceilings and walls. When looking through these cuts, your eye crosses all the cut through layers before reaching the view to a point outside of the volume.

This is why the design will consist out of three volumes parallel to the streets; openings between those volumes will be perpendicular to the one Chargesheimer photographed. The contour of the block won’t be intermittent. By looking through the three volumes, St. Andreas will be shown in a sublime way. Because of the plots interesting location in between St. Andreas and the Dom cathedral, the Dom will be part of this play of views as well.
Work of Gordon Matta-Clark
Conceptual diagrams of how the sublime views can be created; preferably with a layer of distortion in front of the view.
WALTER BENJAMIN
Experience in Erfahrung and Erlebnis

Walter Benjamin describes (in ‘Passagenwerk’, 1940) the built environment and an urban experience with his observations and references to architecture. All of those carry a history with them; Benjamin reads objects of a context in time and space. His descriptions as those of a flaneur or pedestrian, who walk through a city without any concrete purpose, experience their surroundings in objects. An object is a physical thing, which can vary from church to street furniture. Benjamin uses the flaneur as a medium to describe all meanings that are bound to conventions, and in his own way of describing he pulls them out of those conventions again. Each object is in fact also influenced by a feeling, a moment, a past and the meaning of it in the present.

For him similarity is the instrument of experience. In Benjamins theory of experience he distinguishes the term ‘experience’ in the German terms ‘Erfahrung’ and ‘Erlebnis’. Erfahrung is about life experience, all gained knowledge in life will be integrated and connected in a broader whole. Tradition and routine are included in how an Erfahrung can exist. In architecture this will come forward in the process of getting familiar to a place; when seeing a place multiple times, you’ll learn and see things you haven’t seen at first sight. You notice more things when repeating something over and over again; you’ll learn. Applied to a sublime view on St. Andreas, this view won’t even be noticed in first instance. By your daily routine, you suddenly by coincidence notice that a part of the rich texture of the church’ façade appears. This Erfahrung part of experience will be applied to the live-work apartments. The triviality of your daily routine is in a big contrast to a volatile appearance of the church.

Erlebnis refers to sensations, which will be reduced to single, instantaneous impressions, not related to each other. While Erfahrung deals with slow initiation in tradition, Erlebnis refers to shallow sensations. Erlebnis only produces a sensational effect for the first time you experience something. A monumental still of an image of a church in its whole can at first be received as sensational; it is something new in your framework. This impression will be saved in your memory, but doesn’t get notable printed in it. When approaching this same image for the second time, it won’t be as sensational as the first time anymore. In the design for the plot of Marzellenstraße 3-5, this would be a great type of experience for the public space: the grand café and its passage through the building to reach it. The static activity of having a lunch or dinner would go well with a monumental, wide view on St. Andreas and the Dom.

Walter Benjamins approaches of the term experience applied to the way churches can be revealed, is similar to how Camillo Sitte describes the way to reach an artistic effect of a church in its tissue:

‘A palace or church should be approached in two ways: once greatly in a big space (Erlebnis) and once in a way that you can see the back of it from a narrow street (Erfahrung). The building will be conceived twice in a different way.’
MVRDV DENSITY STUDIES

As mentioned in the last paragraph, the effect in a view to a church will be more artistic, when conceived twice in a different way, which will also be the difference in experience in Erfahrung and Erlebnis. A variation in density is an important way to reach this.

In their book ‘FARMAX, Excursions on Density’, MVRDV explain a main topic which always comes back in their designs, which is density. They learn from case studies, landscapes, populations and regulations to density. More important might even be how to get around these regulations. They implement that having a mix of functions in a building, gives you more opportunities in density.

This is exactly what will happen in a design for Marzellenstraße 3-5.

“If we want to reach more competitive densities and maintain the byelaws, we will HAVE TO MIX housing with other programmes: offices, storage space, retail, parking, services. The almost historical plea for ‘mixed use’ has been translated into an obligation!”

Examples from Kowloon Walled City in Hong Kong to their own designs become discussed in this book. Daylight standards for dense urban areas get illustrated richly. A remarkable quote, which they apply to their designs and which can be useful in this project is:

“View compensates daylight.”

When designing a building consisting out of slab-shaped volumes close to each other, a dense urban area within a plot gets created. Not every space will get enough daylight according to the standards. Giving these a view outside will compensate this for a big part.

One of their projects, two family house in Utrecht, is a shuffled assemblage of two houses in one building. It consists of a 7 meters wide slab with big parts of the front and back facade made of glass. In the way it is caught in the picture, with a bright sky in the background, it makes you see through the big parts of the volume.

This is inspiring and will give an interesting effect when putting multiple of such slabs behind each other. Of course it will be much harder to gather a see-through, but whenever one is found, even if it is really small, it will give the wanted effect. It might be noticed only a few times a year, when the lightning is optimal, when your neighbor has his curtains open and maybe even when you are standing on the 6th step of your stairs. A very small piece of the richly decorated and textured façade of St. Andreas will expose to you. The term Erfahrung will make its appearance.

Inspiration for sublime views: Double house, Utrecht, 1997, MVRDV
When making an A-location of this place which lies just at the border of the carrying capacity of the center of Cologne, the public grand café should be visible for visitors. The biggest flow of people will come from the Dom cathedrals direction. The standard way of dealing with a residential or office building in the center of Cologne is to place a public function in the ground floor, and the residence or offices on top of that. This location is perfectly suitable for another division; which will neglect the standard layered effect. The public grand café will stand out much more when this gets placed higher in the façade; the grand café won’t be invisible between all the other public functions in the street facades plinth. Seen from the Dom it will gather more attention. The only obligation for the ground floor is an entrance to the building.
FACADE
Generic vs. refined

The image in the opposite page shows the Komödienstraße in 1976. It shows another postwar design by Karl Band which was designed in an ensemble together with the Dominican monastery. Chargesheimer also captured this image in 1970, in which he might also have been aware of the fact that it would be temporary. Günther Sellen (Cologne's monument protection) said it got unfortunately broken down just before the monument protection got founded. The building existed for a small 30 years. The way Karl Band uses generic systems in a refined way, in which it gets readable in the façade, is what a location as that of Marzellenstraße 3-5 needs. The present building of that plot is 100% generic, which is not particularly bad, but for broadening Cologne's city centers carrying capacity, some readability and refinement is necessary. The façade for the building design will make clear that the building exists of apartments and a grand café. Karl Band has been an inspiration for this, with his concrete frameworks which he fills in with contrasting materials.
PROCESS
Design studies

Collecting all these inspirational points of view from literature, examples and history, which can be applied to the topic of research, led to designing principles. They form the base for the concept. In the next pages, some design studies for the plot will be shown and illustrated by a small selection of draft sketches for plans, sections and facades. These studies were done parallel to the search for principles and inspiration. The last study which will be shown in this chapter is the draft version for the final design. In the next chapter, that final design will be explained thoroughly.
Study design 1

A semi-generic facade with its floor heights adapted to the adjacent buildings. These floor heights are woven into each other and where they meet, some interesting voids appear. It has big openings within the volumes to create some see through gaps which give specific views to the top of St. Andreas or the roof of the choir.
Drawings for study design 2
Study design 2

Two volumes parallel to the street and one which is perpendicular to them. This last volume would be a public space or a layered garden. Staircases would lead to a view to St. Andreas.
Drawings for study design 3
Creating a hidden inner garden within the ensemble of the three volumes. The garden would have a narrow vertical entrance in accordance with the verticality of the church’ choir. Offices would be designed separate from the apartments and would be placed as terraces in this inner garden; a green work environment. The garden is walled and only has a small opening. This is how Sitte described a good public garden; it shouldn’t be opened too much.
Drawings for study design 4
Study design 4

A design close to the final design, but with an inner garden hidden on the top floor of the midst volume. Designing the facade in process is shown in the opposite page.
Study design 5

Base for the final design. It consists of three volumes designed as slabs and connected by a public passage of staircases puncturing through all three slabs as in the sectional drawing in the right. A restaurant in the third floor is puncturing through all three shapes. In the alleys between the volumes, facades are green.
4. DESIGN
INTRODUCTION

The final design is a result of all studies, principles and theories mentioned in this report. It is embedded in its urban context and an extra factor is added to that; this building flirts with the two churches. In this chapter the design will be explained, argued and illustrated thoroughly in chronological order of the designing decisions.
EXPLANATION OF THE DESIGN

Volume

The first step was using the whole plot for a building of six storeys with a flat roof. The height of the building is now adapted to the height of the modern annex of the monument of Marzellenstraße 1. The dignity of this monument lays in the fact that it is the only building in its close environment with a high pitched roof; which is in a sympathetic contrast to the surrounding flat roofs. This remains intact.

Slabs with alleys

The next step is cutting two 2,6 - 3 meters wide alleys out of the volume. What is left are three ‘slab’-shaped volumes parallel to the two streets the plot is situated at. This leads to a triangular shaped slab in the middle. The effect of three volumes, perpendicular to the journey your eyes have to travel to reach the view of the church, can be achieved. This can only be provided when designing the apartments mainly in ‘see-through’ spaces (Dutch: doorzonwoning). The alleys won’t be places to stay in for a long time; they are spaces to shift through.
**Staircases**

To experience the contrast between being in a dense, compact volume and a vertically opened alley, the core with staircases is rising diagonally through the three slabs. Therefore, some ‘cubes’ are stepwise cut out of the volumes to become outdoor hallways. Each cut out ‘cube’ is a point of access for two apartments, plus they can be used as semi-private outdoor terraces. Via staircases it is possible to reach a higher placed cube. Each cube, thus apartment, is also accessible by one of the two elevators in the middle slab. From there, all cubes in the outer slabs are reachable via horizontal bridges. The sequence of public open cubes makes people move from Domside to St. Andreas and reversed. Wide, framed views of the churches can be achieved. Walter Benjamins term for experience – *Erlebis* – is applied to this stairwell design.

The building is accessible via one entrance at the Marzellenstraße and one at the Andreaskloster. These entrances will stand out because of their height of two storeys. Two entrances lead to two separate stairway halls moving in opposite directions. The two never meet, but in the third floor it is possible to transfer direction. Therefore, the public grand café will be crossed. By the use of these specific stairwells, the three volumes collaborate as one building.
From both streets, a separate staircase leads upwards
The dynamic of a dense urban area within a plot
Erlebnis of St. Andreas’ choir from a ‘cube’
Grand café

The grand café on the third floor also penetrates through all three volumes and ‘reaches’ a view from the Dom till St. Andreas. Monumental, wide stills of the complete churches will be gathered. The grand café even protrudes from the street facades and gets ‘turned’ towards the sightlines to the churches. Just like in the public stairwells, Erlebnis is the effect of experience. The space for storage, the kitchen and business meeting rooms are placed as loose volumes in this open space. These volumes are having total glass facades in the longitudinal direction, so the view from church to church won’t be disturbed. The floors and ceilings of the parts of the grand café which are ‘hanging’ above the inner alleys are either made out of glass. In this way daylight can enter the stretched volume and people will be very aware of the fact that the grand café crosses the whole three slabs of the building. The grand café has been made more approachable because it is adapted in the public route of the building; the grand café should be passed to transfer to the opposite stairwell.
Third floor of the design with the grand café puncturing the whole and being the cross-over for the two staircases through 'cubes'
Erfahrung in a live-work appartment. A part of the church’ texture is visible dependent of lightning neighbors.
Erlebnis of the church from the grand cafe. The church’ facade is always in a wide view visible.
Division in live-work apartments

Now the three volumes have all have their hallway cubes with each two access points to live-work apartments. The only way to divide the volumes into apartments is to create ‘tetris-shaped’ maisonettes, which will be made visible in the façade. The readability of it is in contrast to the generic façade of the buildings present state.

Facades

Camillo Sitte mentioned that an artistic effect of a church or public building can be achieved by showing it in more perspectives; a façade can be shown in its entirety from a distance; that same façade can achieve a completely different sensation seen up close from a narrow space. This is the reason for designing the facades in the alleys in the same architectural language as the facades facing the streets. The only difference is the orientation of the glass louvers, which are designed in front of every façade to create a desired effect regarding daylighting. The facades facing the street are orientated to the east and west, thus desire averting of direct sunlight. Here the louvers are placed vertically and a film for sun retaining is assimilated in the glass. The panels can be rotated according to the users’ wishes. Noticeable with glass is that it is green when looking through a thick layer, but transparent in a thin slice. This effect will be visible in the facades; when looking at the short or head side of a panel, it has different features than looking through a thin piece of glass. The result is a more closed façade when the louvers are opened and a more transparent façade when they are closed. The facades facing the alleys have their louvers placed horizontally. These are assimilated with a reflective foil and, when rotated in the correct position, make daylight reflect deeper into the space.
Glass louvers in the facade opened, semi-opened and closed; the effect in openness is reversed
Facade of slab to St. Andreas, west and east, 1:200
Facade of in the middle west and east, 1:200
Facade of slab to the Dom, east and west, 1:200
Privacy

With alleys of only 2.6 meters (3.0 meters from window to window), privacy issues can appear. This is why the functions of opposite apartments are carefully chosen. Rules for function division are:

- Living rooms cannot be placed opposite each other.
- Living rooms / kitchens in the slab in the middle should have a view outside through an opened ‘cube’ of an opposite slab. (‘View compensates daylight’, MVRDV)
- Each kitchen has a closed façade over one grid. Any mess in the kitchen won’t be revealed.
- An office is always situated directly beyond the front door. Any business contacts who visit won’t have to get into private living spaces.
- Bathroom and bedroom are placed beyond more closed facades, so they can be divided anywhere in the apartments. Only one small window of one grid is used on both sides of the façade. A translucent sliding door separates the two from each other. When this door is opened, still a view through the volume can be gathered.

An office space is not categorized as a private living space, so any function in the opposite apartment volumes can be placed across an office.
APARTMENT TYPES

Larger and smaller apartments are designed, all in different ‘tetris-shapes’, and in the middle slab none-rectangular floor plans. Because of this, and because of the rules in function division for opposite apartments, there will be various apartment types. The apartment of your neighbors can be completely different, but still composed out of the same elements in the same grid. A selection of three apartment types will be explained in the following pages.

Example type 1

The apartment will be entered in the office. A combined living room and kitchen will follow in the first floor. The kitchen stands, also for constructive reasons, in the middle of the space. In the second floor a wall with an translucent glass sliding door separates bathroom from bedroom. When this door is open, a same see-through effect als the other rooms will be achieved.
Erfahrung of St. Andreas glancing vaguely through neighbors apartments
Example type 2

Entering the apartment in an office is always a rule. Nothing of the private functions above can be seen, but there still is a connection via small voids. A concrete floor never touches the glass facade, unless a closed part of the facade is made, at bedrooms, bathrooms and kitchens. This is a smaller apartment which has all living functions in the first floor. These are classified in the same language as bigger apartments.
Example type 3

This apartment is situated in the middle volume and it has to deal with the elevator which runs through. Private living functions in the first floor are divided into a u-shaped studio. A perfect starters apartment.
The constructive grid is shown in the red lines in the image underneath. Constructive walls exist of precast concrete panels (which are also used for the floors) filled up with in-situ concrete. In this system, pipes can be inserted perfectly. The design doesn’t always follow all the constructive lines. Because of that, sometimes tubular steel beams are hidden in kitchen or bedroom walls, so the construction will never skip a grid. At some places, concrete walls are designed without having a constructive function. At these places there is placed isolation between the precast concrete panels. The overhang of the grand café can be achieved by simply designing the concrete floors with more reinforcing steel.

The concrete frame which is visible in the façade is designed like the floors and walls are sticking out in the outdoor space. In reality, this should be intermittent for isolation. This means that the concrete frame you see in the façade is actually hung up like a separate frame. It is made prefab out of high strength concrete. The overhang of the restaurant seems hard to make, but in fact it is also a prefab element with just a bigger slab than the other prefab elements. All of them can be hung up and adjusted with a bolt. The window frames are hidden in between the actual construction and the prefab frame. In vertical parts, a pipe for water drainage can be placed. Also the wires of the rotatable glass louvers are placed within this concrete prefab frame.

The part of the façade as shown in the image in the opposite page is developed in technical details shown in the next pages.

The build-up of floors within the open ‘cubes’:
- Planks of deckwood, 25x200 mm
- Pine slats, 20x35 mm, center-to-center 600 mm
- Powerdeck isolation, 90 mm, $R_d \ 3,725 \ m^2K/W$,
  lambda 0,024 W/mK
- Precast concrete panels, thickness 80 mm
- In-situ concrete, 90 mm
- Floor heating layer in concrete, 70 mm

The build-up of glazed parts of the façade:
- Revolving panels of glass
- In the apartments: Reynaers aluminum window frame, CS59PA
- In the restaurant: Reynaers aluminum window frame, 3-rail sliding system CP96
- HR++ glazing

The build-up of the closed parts of the façade:
- Revolving panels of glass
- Rockpanel in color RAL7012, 8 mm, glued
- Cavity of 10-12 mm
- Powerdeck isolation, 90 mm
- Limestone, 100 mm
- Rockpanel natural, glued
Horizontal detail H2, scale 1:10
Vertical detail V1, scale 1:10
Vertical detail V2, scale 1:10
Vertical detail V4, scale 1:10
Marzellenstrasse past (1970), present (2012) and future
CONCLUSION

The design for a new part in the building block between St. Andreas and the Marzellenstraße is perfectly embedded in its environment. This building needs its context and the context needs this building; the design is flirting with the surrounding churches and the churches flirt back. The design itself already is an answer to the research question formulated in the beginning of this report:

How should the urban tissue around St. Andreas in Cologne respond to its environment and how can a building be a part of that?

The artistic effect of how a church suddenly appears in between the built environment (Camillo Sitte), is completely perpendicular to the open built up postwar structure of Cologne (Rudolf Schwarz), which is again somewhat different to the aim of Colognes heritage protection of a freestanding choir (Günther Sellen). Between them is mediated with one of Chargesheimers pictures as an argument. This picture perfectly fits to all three above mentioned points of view. A masterplan got drawn which accepts Schwarz’ modern monuments and gives a sublime, artistic view to St. Andreas’ choir. The masterplan answers the first part of the research question.

The second part of the research question, how a building can be part of that masterplan, got answered with the theory of two terms of experience, Erlebnis and Erfahrung (Walter Benjamin). This is consistent with the ideas of the masterplan and it makes the plan rise from an urban level to a level of architectural possibilities. Chargesheimers picture now exists in a much more sublime way of an Erfahrung, which you will only enjoy by a coincidence in your daily routine. A large contrast will be created with the monumental, wide views you achieve by the Erlebnis of going to the grand café. The way this building makes the churches flirt with it, is the same kind of flirt Camillo Sitte admires in churches within a dense urban tissue. This makes the design a good example of the merger of urbanism and architecture.

With a contemporary and modern appearance, the design gathers attention, which is exactly what the location and function need to gather a new flow of people to St. Andreas at the border of Colognes center carrying capacity.
REFLECTION

With a lot of enthusiasm I started the graduation studio ‘Inner City Highway Cologne’. With fresh courage, the studios students and I began analyzing the Nord-Süd-Fahrt with its adjacent buildings. Already very soon I found my own fascination, which derived from this research. ‘The church in the urban tissue’ would be the topic which I would work with for a whole year. It already was a fascination of mine and after this year this fascination only grew bigger. In city trips I always scheduled time for visiting all churches and monasteries in the area. After graduation I will be able to have a more criticized look onto the way a church stands within its tissue.

I can look back at an intense, but educative and diverse year. I’m happy with all the steps I took in my designing process. I didn’t really experience big setbacks, everything fell into place chronological to those designing steps. Sometimes by coincidence; Chargesheimer for example took just the right picture for my research. Sometimes also by the creative advice of my tutors; ir. Daan Lammers for example made me aware of Walter Benjamins theory of experience in Erfahrung and Erlebnis, which connected seamless to what I was researching before and what I wanted to achieve in design.

The most important thing I have learnt in this graduation year is to always stay close to yourself. This approach makes it easier to deal with all steps and decisions to take. Also, being yourself is the way to walk most comfortably through life.

The students in this studio and my graduation committee made this all possible by supporting me

in a positive and involved way. The intensity of this year sometimes took away my self-confidence. They have always motivated me to believe in myself. I am satisfied and proud of the level I have reached and of how my building design has developed itself to a piece that fits in its context in urban, conceptual and architectural features.
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