Spatial Building Typology
Vacant Heritage: Department Stores | V&D’s
MSc3/4 AR3AH105 - Fall 2020-2021
Colophon

This is a publication by the students of MSc3/4 Vacant Heritage: Department stores.

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1. PROMOTIONAL MATERIAL FOR THE V&D FRANCHISE (ZIJLSTRA, 2020)
1. Introduction

On 31 December 2015, the department store of Vroom & Dreesmann (V&D), which was founded in 1887, officially went bankrupt. This ended the rich history of a department store that had branches in many Dutch cities and towns.

This raises the question: what happens to the traditional twentieth century commercial areas in major Dutch cities in an era that everyone is shopping online? In the historic city centres of Haarlem, Leiden, Dordrecht and Amersfoort for example, many buildings are vacant because traditional retailing is almost impossible. For over a century, the use of the city centre was dictated by commercial activities yet nowadays shopping streets are empty. Shops and department stores are closed, leaving a desolate image. In 2016 V&D went bankrupt and all their buildings became vacant. The revival of Hudson’s Bay for several V&D buildings was not successful either. These large buildings with clear corporate identities and the smaller retail shops are in urgent need of transformation to secure liveability. This research contributes to the broader question of Vacant Heritage: can you find indicators for building typologies that will become obsolete and are there general concepts for revitalisation?

In this book, eight different vacant department stores from the V&D will be analysed. All buildings are located in large or small cities throughout the Netherlands: Leiden, Alkmaar, Amsterdam, Haarlem, Amersfoort, Maastricht, Enschede and Dordrecht. These department stores were all developed within the historic city walls, in what we now call the historic centers.

The typological research for this book is linked to the Vacant Heritage studio. Traditional research methods into typologies in architecture almost always assume typologies based on functions. Typology = ‘the study of types or the systematic classification of the types of something according to their common characteristics’ (Wikipedia). However, as the function and use of the original buildings change nowadays, a different approach is needed to investigate building typologies. Instead of the functions, the space becomes central. Research into similarities and differences in the spatial characteristics of a collection of buildings, which were originally realized for one specific function (group), yields a series of spatial properties that can give direction to the possibilities for redesign. Spatial building typology = the study of types and systematic classification of the types of buildings according to their common spatial characteristics and qualities.

Over the years, various buildings originally designed for one specific function have been the subject of education and research at Heritage & Architecture (HA). As there are: churches, monasteries, department stores, museums, factory buildings for production, educational buildings, etc. The research builds on the research carried out by HA in the tradition of Building Analysis.
2. Research approach

The research is linked to the Heritage & Architecture LAB of the TU Delft. In the studio research vacant V&D department stores will be the research topic.

Research goal
The V&D Department store was founded by the brothers in law Willem Vroom and Anton Dreesman in 1887. During its prime-time, the chain was the largest department store group in the Netherlands and had more than 70 establishments spread through the country. On 31 December 2015, the concern of the V&D Department Stores were declared bankrupt.

The bankruptcy of V&D caused a significant increase in vacant retail area and is part of an ongoing trend in the shift towards online shopping caused by the digital revolution. In most cases, we are not just talking about insignificant buildings too but about monuments that are embedded in the collective memory of generations of Dutchmen. Consumption is universal and for almost a century, this commercial activity took place in these temples of consumption. Now that this era has come to an end, it is urgent that we look for a new purpose for these physical places with great cultural value. To achieve a meaningful transformation, it is important to study the typology of the department store and look for common spatial identifiers.

Research process
At 8 locations the former V&D buildings will be examined at four scale levels, with three aspects linked to each scale level. This research yields results per location and across all locations per aspect. Conclusions are drawn from spatial typological features that are ultimately important for the redesign option for a location or for more locations in general. The research process has four steps. In step 1, a location-specific document is made for each location in which all 12 aspects for that location are listed and worked out. In step 2, the research results are compared per aspect, so that generic, spatially typological, conclusions can be drawn. In step 3, individual research and design topics are addressed. Options for re-design follow per location, which are related to the conclusions defined per aspect. Finally, the reflections are addressed on the detailed design solutions per location, on the previously formulated redesign options and on the generic spatial and typological conclusions (Zijlstra, 2020).

Location choices
The chosen locations in chronological order are Amsterdam, Alkmaar, Maastricht, Leiden, Haarlem, Dordrecht, Amersfoort and Enschede. The choice of location and the number of locations are based on a number of aspects. First of all, the number of eight locations depended on the time in which the research could take place. An attempt was made to choose a representative selection of locations within the available time. The choice of location depended on suitable information available in the archives. Various locations were suitable for research, but after inventory of information it seemed that no suitable drawings were available in the archive. Finally, the choice of locations is also partly based on the students' preference for a particular location in relation to their own research.

Research question
During the first semester, a research about the Spatial Building Typology of department stores is performed under the guidance of Hielkje Zijlstra. This is a collective effort of 13 students, subdivided in smaller groups who for each scale level produce analytical drawings of a preset amount of V&D case studies. Parallel to this collective research, students also work on their personal research. In order to perform our personal research, we need to draw conclusions based on the spatial building typology of the case studies. Therefore, the main research question that is explored throughout this collective effort is:

What are common spatial identifiers that form the typology of the department stores of the former Vroom & Dreesmann?

Research methods
After the choice of locations, information about the 8 chosen locations is collected, selected, ordered, and shared through archival research, literature research and research from other sources. The aspects are further explored in literature through specific topics and areas of special interest. At the
6. Research approach

Introduction

Research is an important factor in your graduation project. It sets a standard for academic thinking. It is linked to the design assignment for Heritage & Architecture. The base for a future design is imbedded in the past and the present.

In this studio you can choose to do a more design-oriented (I) or a technically-driven (II).

I Spatial Building Typology as Basis for Re-Design (mentor: Hielkje Zijlstra)

Introduction

This research is linked to the Vacant Heritage studio and is about building typology. Traditional research methods into typologies in architecture almost always assume typologies based on functions. Because the function and use of the original buildings change nowadays, a different approach is needed to investigate building typologies. Instead of the functions, the space becomes central. Research into similarities and differences in the spatial characteristics of a collection of buildings, which were originally realized for one specific function (group), yields a series of spatial properties that can give direction to the possibilities for redesign. Over the years, various buildings originally designed for one specific function have been the subject of education and research at Heritage & Architecture (HA). As there are: churches, monasteries, department stores, museums, factory buildings for production, educational buildings, etc. The research builds on the research carried out by HA in the tradition of Building Analysis.

Research

In the studio the department stores (of V&D) will be the topic in the Heritage & Architecture LAB. Striking, large-scale buildings at locations in the city centre which are currently vacant or temporary only partially in use. At various locations (Loc 1- Loc 10) the former V&D buildings will be examined at four scale levels, with three aspects linked to each scale level. This research yields results per location and across all locations per aspect. Conclusions are drawn from spatial typological features that are ultimately important for the redesign option for a location or for more locations in general. The research process has four steps. In step 1, a location-specific document is made for each location in which all 12 aspects for that location are listed and worked out. In step 2, the research results are compared per aspect, so that generic, spatially typological, conclusions can be drawn. In step 3, the options for redesign follow per location, which are related to the conclusions defined per aspect. Step 4 reflects from detailed design solutions, per location, to the previously formulated redesign options and the generic spatial and typological conclusions.

2. RESEARCH OUTLINE SPATIAL BUILDING TYPOLOGY (ZIJLSTRA, 2020)

level of analysis of the information at scale and aspect level, drawings are used as much as possible. Maps, sections, floorplans, reduction drawings, diagrams, schemes will be used for the final output. During the research the students made use of one handwriting and a guideline for scale and format based on the “Haussmann method” (Jallon & Napolitano 2017). The locations are examined and made comparable for each aspect via reduction drawings, re-drawing and mapping. This is supplemented by some text blocks for the introduction, explanatory text for each aspect and a concluding text for each scale group.

At the location level and at the aspect level, the drawings form the basis for the Location Document (step 1) and the conclusions on the spatial typological aspects per aspect (step 2). In step 3, diagrams are generated with the options for redesign per location at aspect level and in step 4 the elaborated solutions are translated into diagrams so data can be compared during the whole process.
3. Theoretical framework and methodology

As mentioned in the introduction, there is a need to develop a building typology that is based on space rather than functions. A lot of buildings are empty and will be redesigned for a different purpose, function and use in the future. They are reprogrammed. In order to clarify the qualities and aspects of the possibilities for the redesign, an analysis of the spaces is indispensable. An analysis of buildings can be helpful here.

This method of research has a long history within the Faculty of Architecture at TU Delft. J. Molema supervised many exercises in this area in the years 1970-2000. Students studied work by Gaudí, Duiker and others (Molema et al. 1979 and 1982). Usually the oeuvre of one architect was central. In the education of the faculty, the analyses of buildings are taught as a basic teaching method, particularly throughout the bachelor phase by M.J. Hoekstra, W. Wilms Floet and others. In the graduation studios of the Heritage & Architecture section, analysis as a research method is also central to explore and understand the locations. The analysis is divided between the domains Architectural Design, Building Technology and Cultural Values. In my own PhD research, the analysis of buildings was also the guiding principle for arriving at the 'ABCD in time research method' to analyse, in particular, post-war buildings on their qualities before the re-design (Zijlstra, 2009).

Research into building typology starts with Durand in the 18th century. Both Durand in 1799 and De Quincy 1788 to 1825, define typologies of buildings based use and character (Madrazo, 1985; Güney 2007 and Moneo 1978). Studies into typologies have also been carried out on the basis of form, such as Fonatti in 1982, or series of floor plans for houses are grouped on the basis of dimensions and accessibility like Schneider in 1994. But, in the scope of the change in functions and use when buildings become vacant, there is a need for a typology based on space because space doesn't change.

Over the years, I have evaluated numerous methods for researching, analysing and evaluating the spatial qualities of buildings. I go into this in detail in the introductory lectures for the Vacant Heritage Spatial Building Typology Research studio. Various methods for drawing techniques, schematizing and comparing spatial qualities are possible. This is shown for instance by Komossa in 2011 with Tekenboek Stadsgebouwen in 2011; Lewis in 2016 with the Manual of Section; by Bacon in 1974 with Design of Cities. Graff and Fortier respectively show an integrated approach for Nice in 2000 and buildings in an urban context in Paris in 1989. Eisenmann in particular in 2003 and in 2008 and Unwin in 1997 and 2010 apply their analysis methods to individual buildings.

On a building level, the methods of Radford in 2014 and Haraguchi in 1988 are useful because they provide insight into the understanding of the buildings through a simplification in drawing technique (Radford) and a total comparison of aspects of all buildings (Haraguchi). However, a very good example is shown in the exhibition and the accompanying 2017 publication on the Haussmann’s interventions in Paris (Jallon & Naplitano, 2017). In it, the spatial implications at all scale levels from city to building detail are accurately drawn and made comparable, after which conclusions are drawn. Finally, more generic topics are added such as daylighting, durability and resilience. This way of working has been chosen as the method for the Spatial Building Typology in the Vacant Heritage studio, which examines the vacant V&D buildings at eight locations. In addition to this ‘Hausmann method’, the students looked closely at the drawing techniques that are discussed in other methods in order to develop their own style and methodology on the basis of this. The eight V&D's have been subjected to this method, comparisons are made on twelve aspects and the link is made with design and research. The individual research topics of the students are discussed in the third part, after which the possibilities for the design are elaborated and the final design solutions are reflected.

The spatial buildings typology research into the V&D's is the first publication in a series to be developed in the Heritage & Architecture graduation studios. Students worked on the V&D research in an inspiring and very passionate way, resulting in a grand overview of spatial insights and design options.

Hielkje Zijlstra
research mentor of the HA Vacant Heritage graduation studio Fall 2020-2021
General references


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PART 1
LOCATION ANALYSIS
4.1 Amsterdam
4.1.1 City Centre
4.1.1.1 Introduction

Amsterdam is the capital of the Netherlands. The municipality of Amsterdam is the largest municipality in terms of population. The city, also called Mokum (originating from Yiddish), is located in the province of North Holland, along the IJ, the North Sea Canal and the mouth of the Amstel. The municipality of Amsterdam has 869,709 inhabitants. The number of different nationalities in the municipality is among the highest in the world.

Amsterdam owes its name to its location near a dam in the Amstel river, built in the 13th century. Shortly after 1300, the place was granted city rights, and in 1345 became a pilgrimage site due to the Miracle of Amsterdam.

The proportion of people over 65 is smaller in Amsterdam than in most other Dutch cities. On average the Amsterdam population is younger because there is more education and employment,
Attracting a relatively young population. In addition, the suburbanization of the 1960s and seventies resulted in many families exchanging their hometowns for a more spacious home in the region. The young parents of that time have their place in the city ceded to a younger generation and become now old in the region they are currently living in.

Amsterdam is known worldwide for having good facilities for bicycles, therefore it is also known as a bicycle city. Also a lot of transport in the city is done by foot, as the canals create a pleasant environment for walking. In addition, compared to other Dutch cities the public transport is much used to travel around.


3. BUILDING AGE

1.1.1.2. Building Age

As seen in the plan above most buildings that are located in the Grachtengordel (Canals), which marks the centre of historical Amsterdam, were built before 1800. Most of these buildings are former warehouses that were built there around 1700, during the Golden Age when the Dutch travelled the world to do trade. Although most of the buildings in the city centre are quite old, during 1900-1960 lots of houses have been renovated in the West of Amsterdam, which is known as the Jordaan. This former working class neighbourhood was in really bad condition, with small houses and bad hygiene. Due to these renovations, the area is now a popular neighborhood.
Amsterdam

1800 - 1900

1900 - 1960

1960 - 2005

2005 >

4. PUBLIC SPACES

1.1.1.3. Public Spaces

The public space is where Amsterdam’s city life plays out and flourishes. Many of the old squares are positioned close to churches. These squares are still surrounded by restaurants and cafes and are used all year round for festivities and markets. In addition, in the old heart of the city some canals have been closed to create space for children’s playgrounds, markets and parking spaces. The former V&D building is positioned in the heart of the city at the end of the Kalverstraat and along a busy crossing.
Amsterdam is a relatively 'flat city' with an average building height of 15 meters in the historic center. Strikingly most of the city's highest buildings are located around the Dam square, such as the Paleis op de Dam, the Nieuwe kerk, Magna Plaza and the Bijenkorf building. The V&D building in Amsterdam is also one of the higher buildings in the old centre. On the contrary, there are only a little amount of lowrise buildings between the canals as well.
6. HISTORICAL DEVELOPMENT OF AMSTERDAM

1.1.2. Historical Development

The V&D of Amsterdam is located inside the oldest part of Amsterdam. It is located at the end of the shopping area between the 'Singel and the Rokin'. The 'Singel' was part of the first City wall of Amsterdam and the 'Rokin' was one of the most important canals of the city. When the city extended through time, this location remained crucial since some important roads from the newer parts of the city ended here. The 'Leidsestraat', connected to 'Leidseplein' and the 'Vijzelstraat' both lead to the location of the V&D. This made this location attractive for the V&D to be built on this spot.
1.1.3 Spatial Development

Amsterdam being the capital and most visited city of the Netherlands, the retail sector has a large number of visitors. Therefore the number of vacant shops around the V&D building is very low. Also there is no pattern to distinguish in the vacancy of the buildings.
8. STORES THAT ARE EMPTY ON 18 OCTOBER 2020.
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3.1.2. Urban Block
3.1.2.1 Configuration

1. STREET ELEVATION COLLAGE
1. STREET ELEVATION COLLAGE

Amsterdam
2. HISTORICAL DEVELOPMENT
Historical development

Historical maps from 1909 indicate that the building block for the V&D was divided into small lots with a large plot at the northern end of the urban block. In 1912 several lots and a Roman Catholic church had to make way for the emergence of the V&D building. After construction, the V&D complex was rebuilt several times and several lots were added to the block next to the building. This created a rich layering of buildings pulled together with different appearances. Another good example of transformation in this urban block is the Sint Jorissteeg. In 1932, this alley became part of Kuijt’s renovation design, so that the V&D building merged two pieces of building block together into one urban block. Until 2019, this alley functioned as a passage for the V&D. The historic alley was brought back during the last renovation in 2019. Over the years, the center of gravity of this urban block has shifted from the northern end to the southern end at the Muntplein.
Configuration

Both the plots and the roof structures are oriented towards the important Kalverstraat and Rokin. Due to the commercialization of these streets, the block consists of a high density of shops and restaurants. Several lots have merged over time into larger lots where shops have utilized every square meter. The roof structure has been layered through all the changes over time, but now consists mainly of flat roofs with installations and skylights.
4. ROOF STRUCTURE
3.1.2.2 Streets

ROKIN

KALVERSTRAAT

MUNTPEIN

ST JORISSTEEG

5. STREET ELEVATIONS
5. STREET ELEVATIONS

The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. The facade along the Rokin facing the canal contributes to the commercial image of the block. The facade on the ground floor of the V&D building along the Kalverstraat is composed of big-size glazings with similar rhythms as the one of Rokin. The facades along the Rokin and Kalverstraat also have the openness to connect the two streets together. There are many huge display windows along the Olieslagerssteeg, which is a narrow street without entrance.

When placing the parcels of the block and the unfolding facades together, it is obvious that the classifications of facades are not always consistent with the legal parcels. Most of the facades are divided into two or more parcels.

6. PARCELS VS FACADES

Parcels vs facades

The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. The facade along the Rokin facing the canal contributes to the commercial image of the block. The facade on the ground floor of the V&D building along the Kalverstraat is composed of big-size glazings with similar rhythms as the one of Rokin. The facades along the Rokin and Kalverstraat also have the openness to connect the two streets together. There are many huge display windows along the Olieslagerssteeg, which is a narrow street without entrance.

When placing the parcels of the block and the unfolding facades together, it is obvious that the classifications of facades are not always consistent with the legal parcels. Most of the facades are divided into two or more parcels.
This building is facing three different streets, each completely different in character and size. First, the Kalverstraat (A). This is Amsterdam's busiest, most expensive shopping street. It runs parallel to Rokin. This building block is the southern end of the Kalverstraat, which ends in Muntplein. This large traffic square connects eight different streets. Rokin is a very broad street: over 60m. To the north, the canal is filled in to make room for motorized traffic. On both riversides, the streetprofile is designed in such a way that it allows pedestrians to walk along the river. The western bank is an important traffic artery for the city. It has broad pedestrian sidewalks, also two biker lanes, one way car traffic and a double tramline. The eastern side has a more relaxed atmosphere as the wooden pier is an attractive public space where people sit and watch the water. The third street, the narrow Sint Jorissteeg, has only recently been restored as office Winhov freed it of its built tissue.
8. STREET PROFILES
3.1.2.3 Accessibility

The V&D in Amsterdam has a prominent location in the urban center of Amsterdam. The location on the crossing of the Rokin and Kalverstraat makes the building an accessible central point in an existing shopping area, which is only accessible to pedestrians. The V&D building is also part of the decor of the Muntplein traffic junction, where busy routes of tram and car traffic intersect.

Due to the commercialization of this building block, the streets mainly consist of public structures and shops. Entrances to those shops can mainly be found in the crowded Kalverstraat and the wide street of the Rokin. The smaller Olieslagersteeg and the renewed Sint Jorissteeg now serve as a connection between the shopping street and the Rokin. With the renovation in 2019 one can also enter the former V&D building also from the Sint Jorissteeg.
The urban block is situated in the southern border of Amsterdam’s historic inner centre. The shape of the block follows the lines of the old canals and the old Kalverstraat. That means the block is slightly curved. Due to this bend, the V&D is visible from a far distance when walking alongside the water. But in more narrow streets, such as the Kalverstraat, the bend has the opposite effect: the building can only be seen from a close proximity. Still, one cannot miss the large glass shop windows when passing by, as the ground level seems to have been pushed out of the buildings perimeter. Along the water, the building stands out alongside its brick neighbours, as the water reflects in the glass facade.
12. PERSPECTIVES

VIEW A

VIEW B

VIEW C

VIEW D

Amsterdam
Conclusions Urban Block - Amsterdam

1. Position - The V&D has a strategic position and functions as the head of the building block. It is nevertheless remarkable that the building is clearly visible from the Rokin, but less well from the shopping street.

2. Scale - Compared to V&D buildings in other cities, it is a large building volume because this building is the very first V&D department store. Still, this size is in line with the size of the other lots in this building block.

3. Configuration - Over time, the building has been renovated several times. This complex is a succession of separate buildings where the different layers of time are visible. In this building block, the V&D also connects two separate building block parts.

4. Point of gravity - This building block has a center on the south side with the V&D building and on the north side with the H&M building. But because of its function as a gateway to the shopping street, the V&D is the most important building in this building block.

5. Facade - This V&D building stands out among the other buildings of the block thanks to its materialization.

6. Routes - The entrances to the shops are mainly found in the shopping streets that are only accessible to pedestrians. The Sint Jorissteeg and other alleys function as circulation between the shopping street and the Rokin.
3.1.3. Building Object
3.1.3.1. Configuration

1. CONFIGURATION DIAGRAMS

Spatial configuration

The V&D building in Amsterdam was the first branch of this department store chain. The 3D exploded view above shows the spatial configuration of the building in its current form, after transformation by Office Winhov. The building consists of one rectangular shaped main volume with curved corners. Unlike other V&D buildings, this one in Amsterdam V&D has no additional units, at least expanded horizontally. The building can be divided vertically into three parts. The first part is the plinth of the building that protrudes and is curved at the corners with a lot of glazing. The second part is the intermediate volume, the most monumental part of the building. The third part consists of the last floor and the roof, which have various shapes and heights. Adjacent to these units there are also outside terraces and a large skylight that is positioned at the main loft of the building and forms a kind of atrium. These three horizontal volumes are characterized by their different facade compositions, whereby the building can be divided into these three main parts. In general, the building consists of one whole volume.
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The building was originally designed by Francois Caron and was redesigned with Jan Kuyt, and lastly by Office Winhov. In the current condition, the plan revolves around the escalator and void situated in the middle of the building. The rest of the space is defined by columns. The building has two entrances on the opposite sides. The visitor's elevators, the logistical elevators, and emergency stairs are grouped and placed in the north-west side of the building. The technical rooms are placed in the basement. On the upper floors there are narrow terraces to look over the surrounding areas.

2. GROUNDFLOOR PLAN (1412 M²)

Floorplans
3. FLOORPLANS
4. SECTION A

Sections

The Amsterdam Rokin V&D building has six floors above the ground and one basement in total which are connected by two main vertical circulation systems. Central escalators connect the building from the basement to first floor while the rest of the space, that is from second to fifth floor, is linked with the staircase. The ground floor has the highest floor height (5.45m) and the rest floors are about 4m in height with the basement as an exception. The building has both entrances on Rokin and Kalverstraat with big openings on the street-front facade. The new transformed facade allows for much more interaction between inside and outside.
5. SECTION B
3.1.3.2. Structure

6. STRUCTURE GRID OF GROUND FLOOR

Structure

The former V&D building at the Rokin in Amsterdam has been recently transformed in 2019. The building consists mainly of columns and some load-bearing walls for the stairwells and are the core for stability. The columns consist of different sizes and shapes on an irregular grid. New columns have been added in the redesign case by Office Winhov, where also some steel I-profile columns have been added. The dimensions of the main grille are approximately 6.9 by 7.2 meters, but it differs sometimes. The building mostly has open facades on Kalverstraat and Rokinstraat, which is also the most open construction consisting of only free-standing columns. The other two sides of the building are more closed, where most of the load-bearing walls and stairwells are located. In the middle of the building is the void for the escalators. The columns on these grid lines in the middle go from the basement to the top and are the tallest columns in the building. This part of the building also has the most flexibility due to the main construction principle of free-standing columns in the centre of the building.
7. AXONOMETRIC STRUCTURE SYSTEM
Circulation

The former V&D in Amsterdam Rokin has two entrances, located at Rokin and the Kalverstraat. On the ground floor, the customers can reach former retail areas by circulating around the escalators. The other floors can be accessed in three ways: by escalator, staircase or elevator. These vertical means of transportation are located near each other at the left part of the building. On the other floors customers can also walk around the escalators to reach different parts of the building. The personnel of the former department store largely use the same routes as the customers, while there is one main central staircase and escalator system. The only exception is that the personnel can also access parts of the building where more private functions are placed, like an expedition space.
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

The first perspective shows a stairwell which consists of two staircases, a monumental (bottom) and a more modern one (top). In this stairwell, old monumental elements, like stained glass windows, and more modern elements, like steel, are present. The second perspective, taken from the fourth floor, shows a modern open stairwell, which was added during the renovation by Office Winhov. The open stairwell has a transparent character. It is materialised with a lot of glass and views are possible to different spots on a single floor and to multiple floors in the courtyard. The same open stairwell is visible on the third perspective, taken from the fifth floor. On this top floor, the stairwell ends in an open space in which the atmosphere is enhanced by a large skylight.
3.1.3.4. Conclusion

UNIT TO WHOLE

SYMMETRY AND BALANCE

HIERARCHY

10. SPATIAL COMPOSITION

Essence of building

The building consists of one whole / main unit, as we can see in the 2D schemes. The main unit can be divided into smaller units with cores for stairs and stability. There is no symmetry in the unit, due to the sloping side and curved corners that do not have the same shapes. The unit has a large skylight in the centre of the main unit that allows daylight to enter the building.
Conclusions Building Object - Amsterdam

1. Spatial configuration - The building in Amsterdam was the first branch of this department store chain and is quite small compared to the others. The building consists of one rectangular shaped main volume with two curved corners, a beautiful skylight and has no additional units.

2. Floorplans - The floorplans are defined by the facade, columns, central void, and vertical circulations. The building has one core containing the service areas.

3. Sections - The building has six floors above the ground and one basement in total. Central escalators connect the building from the basement to first floor while the rest of the space, that is from second to fifth floor, is linked with the staircase. The ground floor has the highest floor height (5.45m).

4. Structure - The structure consists mainly of open space with columns and some load-bearing walls for the stairwells and forms the core for stability. The columns consist of different sizes and shapes on a varied grid with main spans of approximately 7 meters.

5. Circulation - The building has two entrances. On all the floors people can walk around the escalators to get to different parts of the building. Other floors are reached by escalator, staircase or elevator.

6. Spatial and visual orientation - The perspectives show parts of the circulation system: like a staircase with stained glass windows and a staircase positioned in a multilevel void.

3.1.4. Facades & roof
3.1.4.1. Configuration

1. ROOF OF THE AMSTERDAM V&D

Facades & roof

The V&D building in Amsterdam features three facades, two of which can be considered as main facades and one can be identified as a ‘back facade’. The facade facing the Rokin features two distinct visual identities. On the right, the remains of the former department store as built by Francois Caron can still be traced whereas the extensive Amsterdam School renovation by Jan Kuijt is now a lot more dominant. The steel curtain wall is one of the key elements that is used to make a connection between the inside and the outside. The rounded extrusion frames the building and provides a point of focus for the building, which is in line with the other V&D’s having a tower-like construction to attract the attention. The facade on the Kalverstraat is more defined by the former facade and is richly decorated as was the standard in the early 1900s. The facade facing the alleyway connecting the Rokin and the Kalverstraat is clearly functional. The openings are only located where they are needed for inner functions and seem irregular from the outside.
2. FACADES OF THE V&D IN AMSTERDAM
Composition

Interestingly, the three facades are composed of different buildings, creating different rhythms for each facade. The Rokin facade is composed out of two buildings where the Kuijt extension is most dominant. The large curtain wall is framed by the protruding round tower and the facade of the former department store. The curtain wall provides a grid that has a main division of 3 by 3 and is then subdivided into smaller segments.

On the Kalverstraat, the composition is dominated by the facade of the former department building. The vertical windows form the rhythm of the facade whereas the Kuijt extension plays the more secondary role. The later added alleyway is composed of a lot of different bits and pieces which is the result of the alleyway being paved through the building block only quite recently.
3. COMPOSITION OF THE FACADES
4. COMPOSITION OF THE FACADES
3.1.4.2. Use of materials

In this drawing, a close up of the facade is drawn in more detail. On the right, there is a matching picture of the same fragment displaying the materials in colour and with full texture. The main material used is Brickwork in a “Noorskettingverband”. There is a newly renovated steel curtain wall window frame, and between the bricks is highlighted with natural stone. Since the facade of the building is located on the main street of Amsterdam, you can see that it is designed with colorful colors and materials.
6. FRAGMENT PHOTOGRAPH OF THE ROKIN FACADE

Figure 6. Office Winhou, 2019. [Closeup picture of the current situation of the Rokin facade] [Photograph].
3.1.4.3. Components

7. THE ELEMENTS THAT FORM THE LANGUAGE OF THE BUILDING

Language

Looking at the Rokin facade, we can dissect the facade separating the most characteristic elements. As with most Kuijt buildings, there is a protruding element that is higher than the rest of the building to attract the attention of bypassing pedestrians. The ground floor is very transparent to allow pedestrians to have a look inside and look at the goods. The dominant curtain wall is probably the most characteristic element. This type of facade is an innovation at that period of time. Apart from that, the Kuijt building is rather sober which contrasts the facade of the Caron building, featuring ornaments and a rather classical composition of windows.
3.1.4.4. Conclusion

8. PHOTO OF THE CURRENT SITUATION OF THE ROKIN FACADE

Conclusions

1. Representation - As with many Kuijt V&D's the dominant element of the facade is the curtain wall that looks over the Rokin. The primary representation of this facade is a mix of both the style of Caron's original design and the Amsterdam School style of Kuijt.

2. Configuration - Through all the facades you can see the built up layering of the juxtaposed renovations and extensions. The connection of the St. Jorissteeg was closed and a new connection passage was added between the Rokin and Kalverstraat.

3. Use of materials - As is often with V&D's, a mix of stone and brick form the facade, plus the steel used in the curtain wall. The colour of the material is also very striking and recognisable.

4. Language - The Rokin facade is a patchwork of many renovations and redesigns, therefore there is a multitude of elements that form the full elevation. The Caron portion of the facade features much more decorative ornamental elements than the Kuijt side which is more sober and modern.
9. PHOTO OF THE CURRENT SITUATION OF THE KALVERSTRAAT FACADE
3.2 Alkmaar
3.2.1 City Centre
3.2.1.1 Introduction

1. LEFT: THE OLD CENTRE OF ALKMAAR.
2. RIGHT: MAP OF THE NETHERLANDS SHOWING ALKMAAR

Alkmaar is a city in the province of North Holland. The city has about 108,000 inhabitants, making it the fifth largest municipality in North Holland in population. Alkmaar is the centre of an agglomeration and city region which is also called Alkmaar.

In 1254 the Alkmaar received city rights from Willem II and played an important role in the fight against the West Friesians for centuries. In 1573, the city withstood an attack from the Spanish Army. It was the first time since the Eighty Years’ War that a Dutch city had been able to withstand an attack from the Spaniards, and this was therefore an important milestone that is still celebrated as Alkmaars Ontzet.

The city is known as "the cheese city": for centuries the world famous cheese market has been held on Friday mornings from April to September.
A resident of Alkmaar is called a Alkmaarder, but is also called a kaaskop (cheese head) in the vernacular. In addition to the cheese market, Het Hollands Kaasmuseum is also located in Alkmaar.

As can be seen in the graph, there are not a lot of people between the age of 15 and 25. The reason for this is that Alkmaar does not have a university and therefore a lot of young adults leave the city to study somewhere else. In addition a lot of people move to the Randstad to find work and therefore compared to the average of the Netherlands Alkmaar has quite an old population.

3. BUILDING AGE

Building age

What is relevant in Alkmaar’s building age is that the historical building collection is not that big. The city is labelled as a development city for the Randstad, citizens moved from dense cities towards Alkmaar. Therefore most buildings within the city centre developed between 1900 and 1960, like the housing stock and the necessary facilities (map N.3). Also the former V&D building is built in that time in which there was a lot of new retail development. After the 1960s also cultural clusters developed in the northern and southern districts, in addition to the retail centre around the V&D.
Alkmaar

1800 - 1900

1900 - 1960

1960 - 2005

2005 >

4. PUBLIC SPACES

Public spaces

The old centre of Alkmaar has four public squares. The Waagplein is considered the centre of the city and all the important sights of Alkmaar are gathered around it. Here you can find the Waaggebouw, built in 1390. The building was used as a chapel until the end of the 16th century and was subsequently converted into a weigh house. From a historical point of view, the Canadaplein is also an important destination, because the Grote Kerk is located here. It was built in the early 16th century. Today, the church attracts thousands of tourists, who come to listen to the music of the church's old organ.
5. BUILDING HEIGHTS

Building heights

Only two buildings stand out in their height, one old church and one new residential building with facilities on the plinth. The residents appreciate the characteristic low-level heights in city centre of Alkmaar: a tiny old town. Therefore, there aren’t any outstanding building heights created in the centre. Zooming into the former V&D situation of Alkmaar, you can observe that the V&D is higher than its surrounding, which are smaller retail buildings or other facilities. In general Alkmaar its landscape surface is quite flat. But walking in the streets of Alkmaar gives the visitor a slight difference by height (one or two levels).
3.2.1.2 Historical development

6. HISTORICAL DEVELOPMENT OF ALKMAAR

Historical development

The V&G of Alkmaar is located right in the historical city centre. The building is located at the 'Laat' which is one of the shopping streets in the city centre. An interesting feature of Alkmaar however is the fact the retail is spread quite evenly over the city centre. In comparison to most other cities there is no clearly defined main street in which all the retail stores are located. The 'Laat' however is one of the bigger streets in Alkmaar.
3.2.1.3 Spatial development

The V&D in Alkmaar is a bit near the edge of the retail centre. Spread around the city centre there are vacant stores. Even though the pattern of this spread is not very obvious, it appears like there are a few more vacant buildings around the V&D building.

The fact the V&D is near the edge of the retail area could have caused a shift in the behavior of the visitors when the V&D became vacant. It could be that the area around the V&D became less interesting for shopping. Which might have led to harder circumstances for the surrounding retailers.
8. STORES THAT ARE EMPTY ON 8 OCTOBER 2020.
9. DENSITY OF ALKMAAR

Density

Being an old city, the centre of Alkmaar has a high density compared to younger Dutch cities. The total area of the city centre is around 702.940 m² of which 298.840 m², 42% is private. This surface is almost completely built area therefore the GSI is also 0.4.
3.2.1.4 Relations & connections

Road networks

The primary routings are situated around the city centre of Alkmaar, along the old canals. One main road from east to west is the Oudegracht, two the streets behind the former V&D. As well the canals lead to the primary networks. Secondary roads are defined by function, wider street profiles offer more space for people to move. For example, the Laat - the street where the V&D is situated - is an important route from east to west. These secondary networks are still accessible for cars and cyclist. Moreover are most tertiary networks only accessible by foot, in protection of the old city centre. There are many tiny streets between the buildings, called alleys or in Dutch 'steegjes'. Moreover these provide the connections between north and south.

10. ALL ROAD NETWORKS
11. PRIMARY ROAD NETWORK
12. SECONDARY ROAD NETWORK
13. TERTIARY ROAD NETWORK

Vacant Heritage - Department Stores V&D's

AR3AH105 Graduation Studio Adapting 20th Century Heritage

1. Building age - The inner city centre of Alkmaar contains mostly buildings from 1900 as well the V&D is developed in 1900.
2. Public spaces - The V&D in Alkmaar is located in a large shopping street.
3. Building height - Alkmaar has a flat city landscape. The V&D fits into this landscape.
4. Historical development - During the last medieval extension a new shopping street emerged, later the V&D was built on this street.

5. Spatial development - The vacancy of the V&D most likely has caused more vacancy in the surrounding retail area.
6. Density - The GSI of Alkmaar is 42% which is a bit denser than most old Dutch towns, but can be explained by the fact Alkmaar has barely any canals.
7. Road networks - The canals define the main networks in the city, the main direction of the canals goes from north-east to south-west.

Conclusions city scale - Alkmaar
3.2.2. Urban Block
3.2.2.1 Configuration

1. STREET ELEVATION COLLAGE
2. HISTORICAL DEVELOPMENT
Around 1850 this urban block was situated between two canals: the Oudegracht and the Laat. De Laat ran through the current shopping street, but was filled in in 1871 for hygienic reasons. Due to the growth of Alkmaar’s V&D it was decided to build a new building with an eye on the city block on Laat /Ridderstraat. Several small lots were purchased and a request was made to the municipality to put the building line back a few meters. This improved the design of the building and the Ridderstraat.

The new V&D opened on March 13, 1927. Due to the success of the shop, new expansions quickly followed. In 1959 the V&D extended to the Oudegracht, connecting the two separate building blocks into one building block. In the early 1960s, plans were made for the demolition of the original building and a new building for the entire block on Ridderstraat. After many overhauls, the original building was allowed to remain and in 1969 a modern extension was built on the side of the Laat.
Configuration

The arrival of the V&D had a major spatial impact on the urban block. The original building block of de Laat/Ridderstraat was separated into two smaller building blocks by Het Vijvertje. These two blocks consisted mainly of narrow individual lots with sloped roof houses surrounding an open courtyard. The newly built V&D in 1927 formed a large building mass on the corner of the Laat and Ridderstraat that contrasted with the other modest structures in the urban block. Various extensions of the V&D over time have formed a whole of the two separate building blocks. Also, Het Vijvertje is now functioning as a small alley instead of a street. Parts of the original courtyard can still be seen in the roof plan, but this open space has largely been filled in by the V&D. It can be said that the building block has been transformed into a closed building block that is dominated by the building mass of the V&D.
4. ROOF STRUCTURE
3.2.2.2 Streets

V&D BUILDING

OPENINGS

LAAT

RIDDERSTRAAT

OUDE GRACHT

HOFSTRAAT

5. STREET ELEVATIONS
6. PARCELS VS FACADES

Parcels vs facades

The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. The facades of the V&D building make up a large proportion of the block's facades. The facades on the ground floor of the V&D building along the Laat and Ridderstraat are composed of large-sized glazings, which contribute to the commercial atmosphere of the block. In contrast, the facade of the V&D along the Oudegracht is more closed than the others and is not communicating with the storefronts of surrounding small shops. Most buildings along the Hofstraat are private houses, which is why the facade is not inviting for the public. When placing the parcels of the block and the unfolding facades together, it is evident that the classifications of facades are not always consistent with the legal parcels. For the most part, each facade belongs to one parcel. Some facades on the southwestern part of the block are divided into two parcels.
7. BLOCK IN URBAN CONTEXT

Streets

The main network of Alkmaar’s inner city consists of streets and canals running from north-west to southeast. The building block is sandwiched between two parallel streets: Laat, an important shopping street, and de Oudegracht, which, despite its wide street profile, has a more private and residential character. To the east and west, the block is defined by the perpendicular Hofstraat and Ridderstraat, which connect the main streets. The V&D clearly defines the north-western corner of the block. The slight setback of the building widens the street profile of the Ridderstraat, a street that continues towards the Emmabrug, which connects the city centre with the surrounding residential neighbourhood. The street would have felt very narrow if not for this setback. Over the years, the V&D has stretched out all the way to the Oudegracht. The logistics shifted from Het Vijvertje to the Oudegracht.
8. STREET PROFILES
SECTION D
PRIMARY STREET

8. STREET PROFILES
3.2.2.3 Accessibility

Accessibility

The Laat and the Ridderstraat form public shopping streets where only pedestrians and cyclists are allowed. These streets consist mainly of shops that are simultaneously an extension of the public space of the streets. There is often also a residential function above the shops, which can be entered from an entrance at street level.

The streets along the facade of the V&D are reserved for parking bicycles. Cars are allowed up to the Oudegracht, but not in the shopping streets. The service entrances for freight traffic of the V&D building are therefore located on the Oudegracht. The entrances to the shops are mainly oriented on Laat and Ridderstraat. Entrances to private ground-level homes can be found on the quieter Hofstraat, Het Vijvertje and Oude Gracht.
Vistas

As seen from the perspective of Laat, the V&D properly follows the building-outlines of the rest of the shopping street (view A). The trimmed corner makes an inviting gesture to both streets, making clever use of its corner position (view B). The V&D is slightly higher than most of its surrounding buildings. The width is what makes it stand out from the rest of the street. To the Ridderstraat, the building is slightly set-back from the building-line, leaving open space to a street that otherwise would have felt quite narrow and dark. The effect of this setback, as seen from the Ridderstraat (view C), is that the V&D is not dominating the street view: its total volume cannot be experienced since it is hidden behind other buildings.
12. PERSPECTIVES

VIEW A

VIEW B

VIEW C
1. **Position** - The V&D building has a strategic position in relation to the shopping streets. Different streets have a visual relationship with the complex.

2. **Scale** - The building is a large, predominant volume compared to the small individual lots of the rest of the block.

3. **Configuration** - Over time, the building has been expanded several times due to space requirements. Due to these extensions, the two separate blocks in the building block have grown into a large building block.

4. **Point of gravity** - The V&D building is the obvious center in this building block because of the strategic position and it’s building volume.

5. **Facade** - The facades on Ridderstraat / Laat are public fronts. The facades in the Hofstraat and Oudegracht are the private rear sides of the block.

6. **Routes** - The public front of the V&D is connected to the pedestrian streets Laat / Ridderstraat. The service entrance is connected to the Oude Gracht where trucks can deliver goods.
3.1.3. Building Object
3.1.3.1. Configuration

1. CONFIGURATION DIAGRAMS

Spatial configuration

This 3D exploded view shows the spatial configuration of the building volumes. The former V&D Alkmaar consists of one rectangular main volume in the corner which is also the most representative volume of the building. A second volume was later added to this main volume in the eastern part of the main volume to make it a larger space. In addition to this merged main volume, there is also a third part on the south side of the main volume. This third volume is connected by a bridge on the first floor, which forms a viaduct on the ground floor. The main volume, located on the corner of Laat and Ridderstraat, is a rectangular volume and the most monumental part of the building. In the alley "Het Vijvertje" is the other addition of the third volume on the south, this is an almost closed facade and can be seen as the back of the main building. These three volumes are characterized by their different facade compositions.
2. GROUND FLOOR PLAN (3546 M²)
3. FLOORPLANS

Floorplans

The corner building of the former V&D building in Alkmaar has an open plan with columns that define the space. An escalator is placed in the center of the building near one of the main entrances. The main elevator for visitors and goods are placed on the south-west wall of the building. The technical spaces are placed in the basement. The department store uses another building on the south-west side by creating a narrow bridge connecting the first and second floor of the building. In the additional building, the plans are also open with columns forming the space. On the upper floors of the extension, there are terraces.
4. SECTION A

5. SECTION B

Sections

The former Alkmaar V&D building has three floors above ground with a central escalator connected vertically and one basement with a separated staircase connected with the ground floor. The building contains two main volumes and they are connected by a skybridge on the first and second floor. The ground floor has the highest floor height (5.2m) while the other floors are similar to each other (4.25m). The basement is located at the northern part of the building while it only has a floor height of 2.85m. The building has a classic column-beam structure. In addition, the building has big opening on the street front facade towards both Aalmarkt and Ridderstraat while only a window opening towards Breestraat.
3.1.3.2. Structure

The former V&D building in Alkmaar can be identified by the representative corner with the clock on it. The building consists of two parts that are connected by a bridge. Both parts of the building consist of columns, beams and load-bearing walls in concrete. The columns determine the space in the building with their span. The columns are of different sizes and shapes, depending on the load bearing capacity and irregularities in the grid. The dimensions of the main grid are approximately 4.4 by 5.8 meters, but it is different every time. The extensions of the building on the east side and on the south side both have larger grid sizes of approximately 8 meters, which provides more flexibility in those areas. There is one large void in the middle of the building for the escalators in the middle and there are several stairs between the load-bearing walls that are a core to the stability of the building. Due to the main construction principle of free-standing columns with some load-bearing walls, this building has in principle quite a bit of flexibility.
7. AXONOMETRIC STRUCTURE SYSTEM
3.1.3.3. Circulation

8. CIRCULATION DIAGRAM

Circulation

The former V&D in Alkmaar has five entrances, located at the street ‘Laat’ and the alleyway ‘Het Vijvertje’. The original building has entrances at both public spaces, while the added building only has an entrance at the alleyway. In the original building, customers can reach former retail areas by circulating around the stairway and escalators. The other floors can be accessed in three ways: by escalator, staircases or elevator. Note that this is different for the basement, as an escalator is missing there. Due to the building’s separation on the ground floor, only a single staircase is available in the added building to go up. On the upper floors, customers can reach both buildings via a ‘bridge’ that links them.

The personnel of the former department store largely uses the same routes as the customers. The only exception is that the personnel can also access parts of the building where more private functions are placed, like offices.
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

The first perspective, taken from the basement, shows a staircase which leads up towards the ground floor, near one of the entrances. This perspective also highlights some structural elements of the basement. The same staircase is also visible on the second perspective, taken from the ground floor. Here the structural grid of columns can clearly be seen. In the far left, one can catch sight of the escalators which go to the upper floors. The third perspective, located in the western corner of the first floor, shows the remains of the former boardroom. This room is materialised with old wooden elements and stained glass windows. The fourth perspective offers a view from the original building towards the added building. The last perspective shows the added building in more detail, highlighting for example the skylights and the floor to ceiling high windows of the facade at the Oudegracht.
3.1.3.4. Conclusion

10. SPATIAL COMPOSITION

Essence of building

The building consists of several interconnected units, as we can see in the 2D schemes. These three different units play a role in the spatial perception of the building as a whole. Many of these units have their own room dimensions due to their individual grid lines. These units also have their own facade composition to get enough daylight into the spaces and to influence the experience of the spaces.
Conclusions Building Object - Alkmaar

1. Spatial configuration - The building consists of one main volume and has been expanded over time due to space requirements. Due to these expansions, two new volumes have been added to the main volume and the building has grown into a large volume.

2. Floorplans - The floorplans are defined by the facade, columns, central void, vertical circulations and building extensions. The buildings are connected with a skybridge on the first and second floors.

3. Sections - The building has three floors above ground with a central escalator connected vertically and one basement with a separated staircase connected with the ground floor. The building contains two main volumes and they are connected by a skybridge on 1F and 2F. The ground floor has the highest floor height (5.2m).

4. Structure - The structure consists of three different structure grids and span dimensions corresponding to the three volumes. The building has spans of around 6 meters in the main volume and larger spans of around 8 to 9 meters in the later additions.

5. Circulation - The building has five entrances. In the original building people can walk around the escalators to get to different parts of the building, including the addition. Other floors are reached by escalators, staircases or elevator.

6. Spatial and visual orientation - The perspectives show parts of the circulation system: like the volume connecting the original and added building and a staircase between the basement and ground floor.
Vacant Heritage - Department Stores V&Ds
3.2.4. Facades & roof
3.2.4.1. Configuration

The V&D in Alkmaar is located on the corner of an urban block within the city centre. Unlike most V&D buildings, the one in Alkmaar fits smoothly in the urban fabric as the building height matches the scale of the surroundings. Once again, the facades of the building facing the shopping streets share a uniform representation with open shopfronts on the ground floor. The corner of the building plays an important role in its facade, as the corner is chamfered, leaving room for the accentuation of that corner with a clockwork and a small balcony. This gives the building the allure of a civic building along with the brick materialization and the stained glass windows. The facades on the backend are far less representative and due to the inconsistent rhythm of the windows there, it is clear that the facade has a far more practical function.

1. ROOF OF THE ALKMAAR V&D

Facades & roof

The V&D in Alkmaar is located on the corner of an urban block within the city centre. Unlike most V&D buildings, the one in Alkmaar fits smoothly in the urban fabric as the building height matches the scale of the surroundings. Once again, the facades of the building facing the shopping streets share a uniform representation with open shopfronts on the ground floor. The corner of the building plays an important role in its facade, as the corner is chamfered, leaving room for the accentuation of that corner with a clockwork and a small balcony. This gives the building the allure of a civic building along with the brick materialization and the stained glass windows. The facades on the backend are far less representative and due to the inconsistent rhythm of the windows there, it is clear that the facade has a far more practical function.
2. FACADES OF THE V&D IN ALKMAAR
Composition

The composition of the facades of the Alkmaar V&D is horizontally defined by the awning and the sandstone details. Vertically, the composition is defined by the horizontal accents of marble on the ground floor and further defined by the vertical window openings. The ground floor features large window openings, reinforcing the relationship between the interior and the exterior. On the first and second floor, the window openings are smaller and reveal less of the shopping floor inside.

The later added facade of the extension facing the Laat is completely closed off on the higher floors, which disturbs the rhythm of the facade. The composition of the Vijvertje facades appears to follow a less organized rhythm, revealing the services that are behind the facade. The last facade, facing the Oude Gracht, was also constructed later and is completely closed on the ground floor because behind that facade there is the storage.
3. COMPOSITION OF THE FACADES
4. COMPOSITION OF THE FACADES
5. COMPOSITION OF THE FACADES
3.2.4.2. Use of materials

The fragment that is most characteristic for the Alkmaar facade is the chamfered corner where the two main facades of the Laat and the Ridderstraat meet. The exterior of most Alkmaar department stores is decorated with red bricks. The clock at the highest point is made of steel, and the brick pattern around it is arranged similar to the shape of a clock. Limestone is emphasized between bricks, and the window frame is made of steel. Overall, it can be seen that bricks and natural stones are arranged uniformly.
7. FRAGMENT PHOTOGRAPH OF THE LAAT AND RIDDERSTRAAT FACADE
3.2.4.3. Components

8. ELEMENTS THAT FORM THE LANGUAGE OF THE RIDDERSTRAAT FACADE

Language

Looking at the architectural language of the facades, we can conclude that an attempt was made to convey a noble image. The windows, which are repeated in a clear order, feature a division which reminds of historical buildings that had a similar window division as a status symbol. The accents in natural stone refine the facade and add plasticity to the otherwise flat facade. Interestingly enough, the later added extension on the Laat is not as representative as the main building. The window openings have been left out, creating a strange response to the building as there was an attempt to mimic the natural stone accents in the new facade.
9. ELEMENTS THAT FORM THE LANGUAGE OF THE LAAT FACADE
3.2.4.4. Conclusion

10. PHOTO OF THE CURRENT SITUATION OF THE LAAT FACADE

Conclusions

1. **Representation** - The facades facing the Laat and the Riddlerstraat can be seen as a continuous front facade, following having the same representation of materials and rhythm. The emphasis on the corner with a clocktower and balcony give the building a civic appearance.

2. **Configuration** - The configuration of the main facades is determined by the rhythm of the windows and the horizontal accents of natural stone. There is a clear separation between the display windows on the ground floor and the upper floors.

3. **Use of materials** - The use of materials is limited to brickwork in various bonds and accents in a natural stone. The windows are composed of steel window frames.

4. **Language** - The language of the facade is quite expressive, using many decorative elements. The facade is enriched with bronze letters of the V&D and elements such as a clock and an awning.
11. PHOTO OF THE CURRENT SITUATION OF THE LAAT FACADE
3.3 Haarlem
3.3.1 City Centre
3.3.1.1 Introduction

Haarlem is a city and municipality in the Netherlands and the capital of the province of North Holland. The city lies along the river Spaarne and in the South Kennemerland region. Haarlem is one of the medium-sized cities in the Randstad. The municipality of Haarlem includes the city of Haarlem and the western part of the village of Spaarndam. Haarlem has 162,962 inhabitants, making it the second largest city in North Holland after Amsterdam and the twelfth largest municipality in the Netherlands.

Haarlem is mentioned for the first time in history in a document from the 10th century. In 1245 it received city rights from Willem II of Holland. At the end of the Middle Ages, Haarlem had become one of the most important cities in Holland. In the Early Modern Period the city developed industrially as a textile city and culturally as a city of painters.
Its location along the river Spaarne has given the city the nickname ‘Spaarnestad’. A resident of the city is called an Haarlemmer, but is also referred to as a mug (mosquito). Its origin is not known with certainty, but ‘mug’ was already used as a swear word in the 14th or 15th century.

Haarlem has acted as an ‘overflow’ of Amsterdam since the late 1990s. Because houses in Amsterdam are scarce and expensive, more and more former Amsterdammers chose Haarlem. House prices in Haarlem have therefore risen. This also explains why Haarlem has such a large group of inhabitants between the age group of 25 and 65.

As can be seen in the maps on this spread, Haarlem has a fairly old centre. Most of the old buildings are situated around the Grote Markt, which existed since the 10th century. At the beginning of the 19th century, Haarlem was one of the first cities in the Netherlands where the economy grew. Its function as a garrison town and provincial capital was an important impetus for this and was accompanied by the construction of a barracks, courts and a prison and an extension of the city centre. In the 19th century, the V&D was built on the Botermarkt and many buildings in the city centre were renovated.
4. PUBLIC SPACES

Public spaces

In the historic heart of Haarlem the Grote Markt is located, right next to the stately Grote Kerk. All year round festivals, concerts and markets take place on this imposing square. The weekly commodity market is also held here every Saturday and Monday. The V&D in Haarlem is located in the heart of the city along a square called the Botermarkt. More hidden are the famous Haarlemse courtyards, such as the Hofje van Oorschot and the beautiful Hofje van Bakenes. The more than 40 courtyards form oases of tranquility in the dynamic city and are certainly worth a visit.
Haarlem is a ‘grown’ city with a centre of medieval origin, of which the historic urban design is still present. There is no metropolitan grandeur with boulevards or height accents on street corners or as the termination of a line of sight. City formation (at the end of the 19th and first half of the 20th century) has led to an increase in scale with the realization of bank buildings, post offices, shops and De Koepel, but not a leap in height. The former V&D building is also an example of this.
3.3.1.2 Historical development

6. HISTORICAL DEVELOPMENT OF HAARLEM

Historical development

Haarlem is situated right next to the ‘Spaarne’ river. From the river banks the city started to grow westward. The V&D of Haarlem was built next to the location of the oldest city walls, which were filled to make space for a big road, the ‘Gedempte oude gracht’. This road functions as one of the main arteries inside the historic city centre.

Where the V&D was built this important road crosses the ‘Grote Houtstraat’ which is the most important shopping street in Haarlem. The crossing of these streets made the location very attractive for the V&D.
3.3.1.3 Spatial development

Since the V&D closed its doors a number of shops became vacant. There is no clear pattern in the vacant shops to be distinguished. However there is a small group of shops near the southern end of the ‘Grote Houtstraat’ which might give a slight hint that the centre of the shopping district shifted a bit northward since the closing of the V&D.

7. STORES SURROUNDING V&D

Spatial development

Since the V&D closed its doors a number of shops became vacant. There is no clear pattern in the vacant shops to be distinguished. However there is a small group of shops near the southern end of the ‘Grote Houtstraat’ which might give a slight hint that the centre of the shopping district shifted a bit northward since the closing of the V&D.
8. STORES THAT ARE EMPTY ON 20 OCTOBER 2020.
Density

Being an old city centre, the centre of Haarlem has a high density compared to younger Dutch cities. The total area of the city centre is around 267,000 m² of which 108,000 m², 40% is private. This surface is also almost completely built area therefore the GSI is also 0.4.
3.3.1.4 Relations & connections

Road networks

In the predominantly wet and therefore difficult to access Dutch landscape, the beach walls have traditionally formed important and strategic connecting arteries between the north and south of cities. These old country roads can often still be recognized by the name “Here(n)weg”. Also in Haarlem this road, together with the east-west running Zijlweg and Kleverlaan, still form an important connection in the old centre of the city.

It is also noticeable that the most important main roads are mainly located on the outer edge of the centre and that Haarlem has many alleys and smaller streets that belong to the tertiary networks.
11. PRIMARY ROAD NETWORK
12. SECONDARY ROAD NETWORK
13. TERTIARY ROAD NETWORK

bels/000000/off
Conclusions city scale - Haarlem

1. **Building age** - The city growth in 1900 is determining the building age of Haarlem.
2. **Public spaces** - The V&D in Haarlem is located along a busy market square.
3. **Building height** - The city’s landscape of Haarlem is made outstanding by multiple tall buildings in the inner city, such as the landmark of the V&D.
4. **Historical development** - The canal that was the border of the old medieval centre was filled, creating an important road forming the ideal location for the V&D store.
5. **Spatial development** - The vacancy of the V&D left the southern end of the retail area empty, resulting in a shift of the retail area northward.
6. **Density** - Haarlem has a very average Dutch density with a GSI of 40%.
7. **Road networks** - The old country side roads determine the main networks of Haarlem on the edges of the city centre.
3.3.2.1 Configuration

1. STREET ELEVATION COLLAGE
2. HISTORICAL DEVELOPMENT
Historical development

The building block is located at the intersection of four streets: Grote Houtstraat, Verwulft, Gedempte Oude Gracht and Gierstraat. The Gedempte Oude Gracht refers to the old city canal that served as the city boundary and ran in this street until 1859. This building block consisted mainly of modest lots, oriented on the Grote Houtstraat and Gierstraat, and was divided into two smaller building blocks. From 1934 this building block was radically changed by the arrival of the new V&D complex. For the construction of the complex, various plots were bought at the head of this building block. However, the owner of the drugstore Van der Pigge refused to sell his property. That is why the new V&D complex was built around the drugstore. With the arrival of the V&D, the two separate building blocks became a whole. Thus this building block acquired a central significance in the city.
What is immediately striking about the roof landscape and the configuration is that the building mass of the V&D is disproportionately large compared to the small lots of this building block. About a third of the floor area of this building block is occupied by the V&D. Due to the presence of commercial space, there is virtually no vacant space available. In addition, the orientation of elongated plots on the Grote Houtstraat and Gierstraat is striking in the configuration of this building block. With the arrival of the V&D, the building block has been separated into two parts with different characteristics in terms of orientation and scale. The V&D seems to have landed as a strange object on top of this building block.
4. ROOF STRUCTURE
5. STREET ELEVATIONS

- GROTE HOUTSTRAAT
- GIERSTRAAT
- GEDEMPTE OUDE GRACHT
- NIEUWSTRAAT

V&D BUILDING
OPENINGS
The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. It is obvious that the facade of the V&D Haarlem is the largest and highest when compared to other buildings of this block. The V&D building is located on one side of the block and its three facades along the Grote Houtstraat, Gierstraat and Gedempte Oude Gracht contribute to the commercial image of this block. There are continuous big-size glazings around the ground floor of this block, making this block a public space in the city centre.

When placing the parcels of the block and the unfolding facades together, most facades themselves indicate the parcels of the buildings because this block mostly consists of small individual stores.

Parcels vs facades
The V&D is situated at the northern head of a building block enclosed by parallel streets Grote Houtstraat and Gierstraat, facing the Gedempte Oude Gracht. Although both parallel streets are similar in size and building typology, the Grote Houtstraat is more significant. The Grote Markt is the centre of the city, which has a radial structure. The Grote Houtstraat is the main shopping street and connects the Grote Markt to the southern border of the city centre. As the name reveals, the Gedempte Oude Gracht owes its broad dimension to the former canal. Now this street is the main traffic archery within the inner city of Haarlem. It is a one way street -excluding busses- running from south to north - towards the station, with some parking spaces alongside. The V&D also sits next to the Botermarkt. This square hosts markets on Saturday. The building is enormous, but thanks to the large canopy and the setback of the top layers it still relates to the human scale.
SECTION A
SECONDARY STREET

8. STREET PROFILES

Haarden
SECTION C
SECONDARY STREET
3.3.2.3 Accessibility

Due to the commercialization of Grote Houtstraat and Gierstraat, these consist almost entirely of semi-public structures, such as shops. Private homes are located above the shops on the ground floor. These homes are accessed by entrances at street level or from alleys in the building block. The V&D is located at the beginning of pedestrian streets Gierstraat and Grote Houtstraat. These shopping streets are interrupted by the Oude Gedempte Gracht and the Botermarkt, which are accessible to fast traffic. The service entrance of the V&D is located on Gierstraat. Various bicycle parking facilities can be found around the V&D. The V&D is therefore accessible for both fast and slow traffic.

9. ROUTES & PARKING
10. STRUCTURE & PUBLIC SPACE
The V&D and the St. Bavo Church are the two giants in Haarlem's inner city. The building has a clear landmark function and guides you through the city. Being more than double the height of the average building, you'll often see the upper floors of the V&D peeking out above the street that you're walking in. Though at a certain point, when getting closer, the V&D will shortly be blocked out of sight by other buildings at eye-level. Once reaching the open space of the Gedempte Oude Gracht or Botermarkt, the building again reveals itself. This surprising effect makes the building appear even larger.
12. PERSPECTIVES
1. Position - The V&D building has a strategic position as the head of the building block on Oude Gedempte Gracht. The building is also very visible from the city due to its height and the tower on the roof. It functions as a landmark in the city.

2. Scale - This building is gigantic compared to the surrounding buildings. Other lots in this block are much smaller in scale, which makes the V&D building appear disproportionately large.

3. Configuration - Due to the construction of the V&D, two separate pieces of building blocks have become one large building block. It is remarkable that this building was built around the drugstore Pigge, creating an interesting configuration.

4. Point of gravity - The centre of this building block is completely determined by the V&D.

5. Facade - The size and materialization of the facades are eye-catching and distinct from the other buildings.

6. Routes - Haarlem's urban fabric is radially structured. A centre at the church with streets in a radial from there. The V&D is on one of these major routes into the city centre. In addition, the V&D is enclosed by two shopping streets that are only accessible to pedestrians.

Conclusions Urban Block - Haarlem
Vacant Heritage - Department Stores V&Ds
3.3.3. Building Object
### 3.3.3.1. Configuration

**Spatial configuration**

The following 3D exploded view shows the spatial configuration of the V&D building in Haarlem in its current form. The building is a massive block and much higher in relation to its context with many height differences in volume. Different outdoor spaces have been created on the rooftop. One of them is a beautiful roof terrace with a view of Haarlem. The configuration of the building consists of a main volume with many curved corners. This V&D in Haarlem has no extra parts that belong to the main volume, but there is a small external drugstore ‘Pigge’ volume incorporated in the main volume. To indicate the height differences, the building is divided horizontally into three parts. The first part is the plinth of the building which is designed with a lot of glass surface for the shop windows. The second part is the intermediate volume, the most monumental part of the building that runs from the first to the fourth floor. The third part consists of the last two floors where terraces and outdoor areas exist. These three horizontal volumes are not much different from each other, only in terms of functional floor space (the higher the less floor space). In general, the building appears as one solid whole.
2. GROUNDFLOOR PLAN (2253 M²)
The building has an open plan with columns and facade defining the space. The ground floor has one corner entrance on the north side whilst the main grand staircase is located in the west or back side. An escalator with a rectangular void is located at the center of the building. Originally, the void was bigger with a hexagon shape. The first to third floor has similar floorplans and the higher floors from fourth to fifth floor have a roof terrace on the north-east side.

3. FLOORPLANS

Floorplans

The building has an open plan with columns and facade defining the space. The ground floor has one corner entrance on the north side whilst the main grand staircase is located in the west or back side. An escalator with a rectangular void is located at the center of the building. Originally, the void was bigger with a hexagon shape. The first to third floor has similar floorplans and the higher floors from fourth to fifth floor have a roof terrace on the north-east side.
4. SECTION A
5. SECTION B

Sections

The former V&D building in Haarlem has a gigantic structure with seven stories above ground and two stories of basement. The building with nine stories in total is connected by escalators that were placed at the central atrium. While the emergency staircase was also placed at the side of the building as a secondary circulation. Among all the floors, the ground floor has the highest floor height (4.89m). The rest of stores share a similar floor height of 3.75m with the exception of the B2 floor (2.7m).

The facade of the building has big openings on the ground floor towards the Gedempde Oude Gracht street. The window openings on this facade also allow much interaction between the interior and the street. The transparent facade with stained glass at the Gierstraat side makes that the building has a long linear opening and welcomes sunlight. The building adopts a classic column-beam structure and shows a rigid structural grid in the section.
3.3.3.2. Structure

The former V&D building in Haarlem has a gigantic image on the corner of an important intersection. The building consists mainly of an open space with columns and some load-bearing walls for the stairwells, which are the core of stability. The columns are made of concrete and have an octagonal shape. The columns are on a clear grid of 6.3 by 6.3 meters. In the redesign, in the middle around the escalators, new columns have been added. Here the large void has been replaced by a smaller void where extra columns have been added. There used to be no columns around this void and now that the void has been made smaller, extra columns have been added. The facade is quite massive and self-supporting with a lot of closed surface and small openings for windows. This building also has the most flexibility due to the main construction principle of free-standing columns.

6. STRUCTURE GRID OF GROUND FLOOR
3.3.3.3. Circulation

Circulation

The former V&D in Haarlem has three entrances, one located at the corner of the Grote Houtstraat and Gedempte Oude Gracht and two at the Gierstraat. On the ground floor, the customers can reach former retail areas by walking around the escalators. The other floors can be accessed in three ways: by escalator, staircase or elevator. On the other floors customers can also walk around the escalators to reach different parts of the building.

The personnel of the former department store largely uses the same routes as the customers. The only exception is that the personnel can also access parts of the building where more private functions are placed, like offices.
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

The first four perspectives show the central monumental staircase of the building. The first highlights the start of the central staircase. The second, third and fourth perspective show that the staircase consists of three parts: a first part which goes to a split level and gives a view on stained glass windows, a second part which is the split level (platform of staircase) where you can turn left or right and a third part which leads to the next floor. The difference between the second and third perspective is the wall with a window display that partly hides the stained glass windows. This is only the case on the split level between the ground and the first floor. All these perspectives indicate that there are two elevators (glass appearance) positioned at either side of the staircase. The fifth perspective offers a view on the main space of the upper floors, showing the system of escalators.
3.3.3.4. Conclusion

 Essence of building

The building consists of one massive whole / main unit, as we can see in the 2D schemes. This main unit has a small external unit buried in the main volume, drugstore “Pigge”. The main unit can be divided into smaller units with cores for stairs. To the west of the main volume, this unit can be split off from the main unit and can be seen as a space for personnel consisting of smaller spaces. There is no symmetry in the unit, but the escalators and the void are located in the middle of the main unit.
Conclusions Building Object - Haarlem

1. **Spatial configuration** - The building is a huge block with a large tower and much higher in relation to its context. The configuration of the building consists of one main volume with many curved corners and the volume is built around a small drugstore 'Pigge' on the corner, the in-between external volume.

2. **Floorplans** - The floorplans are defined by the facade, columns, central void, added central escalators, and original staircase. Moreover, it is also formed by a small building in between the structure.

3. **Sections** - The building has a gigantic structure with seven stories above ground and two stories of basement. Among all the floors, the ground floor has the highest floor height (4.89m). The rest of stores share a similar floor height of 3.75m with the exception of the B2 floor (2.7m).

4. **Structure** - The structure of the building consists mainly of an open space with octagonal columns and some load-bearing walls for the stairwells that are the core of stability. The building has a clear structure grid and span dimensions of 6.3 meters.

5. **Circulation** - The building has three entrances. On all the floors people can walk around the escalators to get to different parts of the building. Other floors are reached by escalator, staircase or elevator.

6. **Spatial and visual orientation** - The perspectives show parts of the circulation system: like the central staircase and the building's escalator system. The use of stained glass windows becomes prominent when walking through the building.

Vacant Heritage - Department Stores V&Ds
3.3.4. Facades & roof
3.3.4.1. Configuration

Facade & roof

The V&D building in Haarlem is remarkable in many ways. Recognizable for its prominent tower, the building functions as a landmark in the urban fabric. Its sheer size compared to its neighbouring shops gives the V&D an imposing stature. This effect is reinforced by its rather all-embracing facades where the composition is interrupted by the drugstore of Van der Pigge, which is the result of a dispute between the V&D and the druggist.

The facades features characteristic elements that are distinctive for the architecture of Kuijt, such as the tower and the Amsterdam School influences that are expressed in the rounded corners. Large shopfront windows seduce the passers-by to have a look at the products and invite them to come in.
2. FACADES OF THE V&D IN HAARLEM
Composition

The composition of the facade is structured through a vertical grid of windows and a horizontal grid of the layered bricks. The ground floor features large window displays that put emphasis on the relation between the exterior and interior. An awning provides a cover for the pedestrian and makes it comfortable to take a look at the goods on display. Although all the three facades are equally dosed out in decorations and share similar Amsterdam School characteristics, the ground floor facing the Gierstraat is more closed off. On this side of the building, the services are located, like the central staircase, the access for employees and the logistical entrance. The central staircase is also distinguishable from the outside due to the richly decorated stained glass which accentuate the vertical movement behind the facade. This facade also envelopes the drugstore which is an exception in the composition of the facade.
3. COMPOSITION OF THE FACADES

SHOPPING FLOORS

Haarlem
4. COMPOSITION OF THE FACADES
3.3.4.2. Use of materials

Use of material

The materialization of the facade is very characteristic for the general appearance of the building. The red brick made of Klezoorverband mainly forms the exterior of the building, and limestone is a band between the bricks. Between the windows on the top floor, carved limestone is regularly arranged, showing repeatability on the facade of the building. Stained glass is used on the windows to give a colorful pattern.
6. FRAGMENT PHOTOGRAPH OF THE GEDEMPTEOUDE GRACHT FACADE
3.3.4.3. Components

Language

The architectural language of the V&D in Haalem is quite elaborate, yet has a high level of repetition. The main elements are the windows featuring a top of stained glass, which are repeated throughout the three facades in a similar rhythm. The shopfronts on the ground floor are also a key part of the language that speaks for the building. The landmark position of the V&D is accentuated by the tower of which the function is solely to attract the attention of the city dweller.
7. THE ELEMENTS THAT FORM THE LANGUAGE OF THE BUILDING
3.3.4.4. Conclusion

8. PHOTO OF THE CURRENT SITUATION OF THE GIERSTRAAT FACADE

Conclusions

1. Representation - Though during its construction the Haarlem department store was criticised for its dominating size, it has come to be a celebrated landmark in the cityscape. The tower at the corner of the Gedempte Oude Gracht and Gierstraat facades gives the building a sense of importance and is highly representative of the image of Vroom and Dreesman. This element became a common feature of Kuijt’s work and is seen in other V&D’s such as Amsterdam, Dordrecht and Utrecht.

2. Configuration - The integration of the Van der Pigge drugstore gives the building a very unique character as such an inclusion is so unusual. The facades are all stacked in a similar configuration; a typical glazed shop front on the ground floor with the staggered layers of blocks above.

3. Use of materials - The materiality of the facade is also very striking with the horizontal banding of alternating yellow brick and natural stone that bring the eye up to the traditional Dutch stained
glass windows. All these elements come together to form a highly recognisable, imposing image.

4. Language - Even though the facades are great in size, the individual elements that make them up are few. There is a high degree of repetition in the composition of the facades, yet these repeated elements are utilised in various combinations depending on the hierarchy of the facades. There is also a heavy use of curved walls and symmetry as seen in the Gierstraat facade.
3.4 Dordrecht
3.4.1 City Centre
3.4.1.1 Introduction

Dordrecht is, with 119,300 inhabitants, the fifth largest municipality in the province of South Holland. The city is located where the Merwede river splits into the North and the Oude Maas. The municipality of Dordrecht encompasses the entire Eiland van Dordrecht. The residents of Dordrecht often call their city Dordt.

Dordrecht was first mentioned in a text from the twelfth century, when the city was still referred to as Thuredrech. The city was granted city rights in 1220, making it the oldest city of the Netherlands. In the Middle Ages, the city developed as an important trading city and depot and was one of the six major cities in Holland. Later the importance of the city declined, but the city centre still reminds of this rich past.

Inhabitants of Dordrecht are called Dordtenaren or Schapenkoppen (sheepsheads), a name that is
probably based on a saga, which may date from the Middle Ages when there were still toll walls around the city. In an attempt to evade tolls on livestock, people from Dordrecht put a sheep in human clothes in order to smuggle it within the city walls. However, the deception came true: just when they wanted to go through the gate with the sheep, the animal started to bleat.

The demography by age in Dordrecht is striking enough, almost equal to the demography of the whole of the Netherlands. Because there is no university, many young people leave the city to study elsewhere. However due to its location close to large cities like Rotterdam and Utrecht, many families settle here.
Along the canal sides of Dordrecht there are mostly typical old canal houses. Moreover, the cityscape is defined by the canals but there is more urban development behind the streets. The former inner city of Dordrecht was adjusted from 1900 to 2000. Slowly, several cultural buildings are renovated or rebuilt. Not a particular type of urban block has been developed. Therefore the buildings in Dordrecht are quite old, but the city has developed over time and has also introduced new buildings.

3. BUILDING AGE

Building Age

Along the canal sides of Dordrecht there are mostly typical old canal houses. Moreover, the cityscape is defined by the canals but there is more urban development behind the streets. The former inner city of Dordrecht was adjusted from 1900 to 2000. Slowly, several cultural buildings are renovated or rebuilt. Not a particular type of urban block has been developed. Therefore the buildings in Dordrecht are quite old, but the city has developed over time and has also introduced new buildings.
4. PUBLIC SPACES

Public spaces

One characteristic of Dordrecht is the extensive lack of squares of any size due to the limited market. Goods were sold immediately, taken to the quay or brought to one of the many warehouses. The current squares in the city were all created later by greatly enlarging the existing (Tolbrug, Scheffersplein) and by demolishing buildings (Grote Markt, Statenplein and Otto Dickeplein). In addition to these larger squares, there are various smaller squares or open spaces in the city. Sometimes it is the front space of a special building, such as the City Hall, the Grote Kerk, the Hof and the Nieuwkerk. Smaller open spaces, squares and piers in the city are located at or on the site of the (former) city gates or at the harbors on the quay. The layout of these places often fits seamlessly into the immediate surroundings.
5. BUILDING HEIGHTS

Building heights

The typical landscape of Dordrecht is determined by the narrow and petite canal houses in the inner city centre. Likewise, the former V&D is situated at the backside of the canals. Also the building height of the V&D respects the height of these old canal houses. Overall the city landscape of Dordrecht is flat, with one exception: the old church onze Lieve-Vrouwekerk as a landmark of height.

6. HISTORICAL DEVELOPMENT OF DORDRECHT

Historical development

The city of Dordrecht is located in the south of Rotterdam. During the 15th century the city grew enormously. After the medieval period the growth of the city stagnated until the first half of the 20th century. The ‘Scheffersplein’ is located in the middle of the medieval city centre with the V&D next to it. The retail centre was originally around the ‘Scheffersplein’ and the ‘Voorstraat’ and ‘Groenmarkt’. But this was later relocated when new shopping centres were built to the south of the V&D.
3.4.1.3 Spatial development

Since the V&D closed its doors a number of shops became vacant. The number of stores closed is relatively low compared to other cities. The pattern of scattering is random and therefore the closing of the V&D had probably no influence on the vacancy of these stores.
8. STORES THAT ARE EMPTY ON 31 OCTOBER 2020.
9. DENSITY OF DORDRECHT

Density

The city centre of Dordrecht is that of a typical old Dutch town with medieval roots. The total area of the city centre is around 842,000 m² of which 330,000 m², 39% is private. This surface is also almost completely built area. Therefore the GSI is also 0.39.
3.4.1.4 Relations & connections

10. ALL ROAD NETWORKS

Road networks

Since Dordrecht is an old city, there are many streets that were not designed for the car. Small roads between blocks of buildings that derive from the street networks are also a strong quality of the city. The two bridges between the two sides of Dordrecht are also still part of the primary transportation network. The connection between the primary, secondary and tertiary networks is not gradual. There are only a few main roads leading into the city center.
12. SECONDARY ROAD NETWORK
13. TERTIARY ROAD NETWORK

Conclusions city scale - Dordrecht

1. **Building age** - The historical centre of Dordrecht is mostly determined by the old harbour buildings.
2. **Public spaces** - The V&D in Dordrecht is connected to two squares.
3. **Building height** - The city’s landscape can be described as tiny and small, only one church is taller than other buildings.
4. **Historical development** - The V&D store is located in the very heart of the oldest part of Dordrecht. The store therefore has always been in a very important location.
5. **Spatial development** - The vacancy of the V&D in Dordrecht did not leave a mark on vacancy in the surrounding retail area.
6. **Density** - Dordrecht has a very average density with a GSI of 29%.
7. **Road networks** - The canals shape the networks of Dordrecht, the waterfronts are the main networks.
AR3AH105 Graduation Studio Adapting 20th Century Heritage
3.4.2. Urban Block
3.4.2.1 Configuration

1. STREET ELEVATION COLLAGE
2. HISTORICAL DEVELOPMENT
The V&D building block is located on the central Scheffersplein in the center of Dordrecht. The original building of the V&D on this square consisted of a combination of several smaller lots. Until 1931 this was a closed building block that enclosed an open courtyard. After a major fire in this building block in 1931, the various parcels of V&D were developed by Kuijt. Since then, the V&D has been the determining building mass in this building block in terms of size. Scheffersplein is now the scene of several terraces, but used to be a place that was accessible to cars. Historical photos show bus stops where buses drop people off in front of the V&D. In 2000 both the V&D and the building block were renovated, modernized and considerably expanded in terms of retail space. During this transformation, only the main facade facing the Scheffersplein was untouched.

### 3. BLOCK INFO

**Configuration**

The urban building block of the V&D consists entirely of shops and restaurants. This composition is visible in the flat roofs with installations and skylights. Due to a modernization and extension in 2001, this building block has merged into a large building mass, as can also be seen in the roof landscape. In addition, it is striking that no undeveloped area can be found within this building block. Each plot is used for commercial space.
4. ROOF STRUCTURE
3.4.2.2 Streets

5. STREET ELEVATIONS
The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. The main facade along the Voorstraat is really open and accessible with the facade of V&D as the dominant part. This vertical lantern-like accent forms a nice contrast with the rest of this facade, which is horizontally oriented. The two long facades along the Kolfstraat and the Tolbrugstraat Landzijde have large continuous glazings on the ground floor. By contrast, the facades of the upper floors are more closed with little windows. The facade along the Statenplaats is mainly composed of big windows with a huge entrance towards the V&D building.

When placing the parcels of the block and the unfolding facades together, it is obvious that the classifications of facades are not always consistent with the legal parcels. The five facades along the Voorstraat belong to two parcels.
7. BLOCK IN URBAN CONTEXT

Streets

The urban block is situated on the transition between the historical inner city and later urban expansions. To the north, we recognize narrow, wavy streets, to the south the parcels and the streets become larger in scale. The V&D has become an important link between both neighbourhoods.

The Kolfstraat is a busy shopping street. It feels quite narrow as it is always crowded with people. The Tolburgstraat is clearly less inviting and has been designed as a servicing street. The northern end of this street is characterized by the touristic ‘Dordrechtse Kauwgummuur’, a wall covered by chewing gum. The Voorstraat suddenly opens up into the Scheffersplein, as a very wide bridge connects it to the Wijnstraat. This square is full of activity and terraces, and offers a nice view on the backside of the canal houses.
8. STREET PROFILES

SECTION A
SECONDARY STREET

SECTION B
TERTIARY STREET
7. BLOCK IN URBAN CONTEXT

Streets

The urban block is situated on the transition between the historical inner city and later urban expansions. To the north, we recognize narrow, wavy streets, to the south the parcels and the streets become larger in scale. The V&D has become an important link between both neighbourhoods.

The Kolfstraat is a busy shopping street. It feels quite narrow as it is always crowded with people. The Tolburgstraat is clearly less inviting and has been designed as a servicing street. The northern end of this street is characterized by the touristic ‘Dordrechtse Kauwgommuur’, a wall covered by chewing gum. The Voorstraat suddenly opens up into the Scheffersplein, as a very wide bridge connects it to the Wijnstraat. This square is full of activity and terraces, and offers a nice view on the backside of the canal houses.
8. STREET PROFILES
The V&O department store is an important link in the transition from the fine-meshed historic city center to a new building block with modern shops and houses. The main entrance for shoppers can be found at Scheffersplein. This square is a central place in the city center of Dordrecht, accessible to pedestrians and fast traffic from the Groenmarkt. Service entrances for the V&O and other shops in this block are located at Statenplein and Tolbrugstraat Landzijde, which are accessible to fast traffic.

Via the more narrow streets Kolfstraat and Tolbrugstraat Landzijde, this square is connected to the Botermarkt and other modern shopping areas. In the Kolfstraat there is access to an underground bicycle shed, to keep the Scheffersplein free of bicycles.
10. STRUCTURE & PUBLIC SPACE
3.4.2.3 Accessibility

Vistas

The building’s main entrance faces the Scheffersplein. The wide facade and the square seem to be a harmonious composition, as if it is designed to be the forecourt of the V&D. The building fits gently in its context. The high, tower-like accent on the right seems like a lantern that tops the building off (view C & D). Yet, the facade is hardly visible when following the Voorstraat. Today one easily passes the building, as your eyes are drawn towards the lively, open space of the square. In 2000-2001, the building has increased in size towards the east side. The corner is slightly set back, marking the entrance of the building. The shop-specific architecture on this side is lost. Instead, the entrance is part of a series of store-fronts, united by an overarching architecture as designed by Rijnboutt Architecten. Due to the bankruptcy of the V&D, this entrance is now closed, hiding the large commercial volume that is inside of this urban block.
12. PERSPECTIVES
Conclusions Urban Block - Dordrecht

1. **Position** - The V&D covers a large percentage of the building block, but feels rather hidden inside of the block, as only the northern entrance is still visible.

2. **Scale** - This urban block is an important connection between the scale of the historical inner city, consisting of an intricate network of narrow streets, and the scale of later expansions with large stores and apartment buildings.

3. **Configuration** - The typology of the urban block has changed from an open courtyard to a closed mass by the expansion of the V&D over the years.

4. **Point of gravity** - Historically, the point of gravity of the block was facing the Scheffersplein to the north. But due to the recent developments of the shopping district, the south-eastern corner has increased in importance.

5. **Facade** - The design of the northern facade can be considered as a typical late design of Kuijt for the V&D. The horizontal brickwork and glass with
steel frames forms a nice contrast with vertical, the lantern-like tower to the right. The other facades are not representative.

6. Routes - The northern facade faces a historical route alongside the canals in the inner cities, while the southern facade is oriented to the main shopping route through the city.
AR3AH105 Graduation Studio Adapting 20th Century Heritage
3.4.3. Building Object
1. CONFIGURATION DIAGRAMS

Spatial configuration

This 3D exploded view shows the spatial configuration of the building volumes. The building as a whole has a large rectangular shape, which is divided into V&D in the middle and surrounded by smaller volumes. The former V&D Dordrecht consists of one main volume in the middle with adjacent small volumes that form part of other stores and have different floor heights including a mezzanine. There is an external volume in the corner consisting of three smaller volumes between the main volume. In general, the building consists of a whole volume, which can be split into smaller corresponding volumes and an external volume in between. In the middle we can see the main volume with three corresponding smaller volumes belonging to other stores and a corner volume that is external (and again consists of three smaller volumes). Above this main ground floor volume there is a second volume (1st and 2nd floor) that also belongs to the V&D building. This upper volume has larger spaces and has a large skylight on top for daylighting. This total of five volumes and one external volume form the entire volume block of V&D in Dordrecht.
3.4.3.1. Configuration
2. GROUND FLOOR PLAN (3970 M²)
The building consists of four floors. On the ground floor, there are two main entrances on opposite sides with different forms. One is straight and in line with the buildings beside them and the other one is curved and pushed back from the building line. According to the plans, there are stores and rooms surrounding the outer part of the building creating an open plan in the inner part of it with an escalator and void in the middle of it. Similar with the other former V&D store buildings, the plans are defined by the columns and facade. Moreover, on the first and second floor, on top of the north-west side there is a glass facade for the window displays. The location of the stairs and lift are attached to a wall similar to the other buildings.
4. SECTION A
5. SECTION B

Sections

The former V&D building in Dordrecht, has a height difference at different entrances. This building with four stories is connected by escalators which were placed at the central atrium. Among all the floors, the ground floor has the highest floor height (4.38m). The rest of stores share a similar floor height of 4m with the exception of the basement (3.58m).

The facade of the building has big openings on the ground floor towards the Voorstraat and Statenplaats. The huge window openings on this facade also allow much interaction between the interior and the street.
3.4.3.2. Structure

6. STRUCTURE GRID OF GROUND FLOOR

Structure

The former V&D building in Dordrecht, located on Voorstraat, has a representative facade on Scheffersplein. The building consists of one block, with the V&D building in the middle and all kinds of smaller shops around it. The building mainly consists of columns and some partitions for the smaller shops around. The columns have different sizes and shapes due to the different spaces. The dimensions of the main grid are 7.34 by 7.34 meters, so consisting of clear square grid boxes. There are also three cores for the stairwells and elevators that also serve for the stability of the building, where the load-bearing walls are located. The main core is located on the closed facade on the alley “Tolbrugstraat Landzijde”, where most of the vertical stability elements are located. This building has the most flexibility due to the open space with freestanding columns and the cores in the corner or adjacent to the facades for stability.
7. AXONOMETRIC STRUCTURE SYSTEM
3.4.3.3. Circulation

Circulation

The former V&D in Dordrecht has three entrances, located at the corner of the Kolfstraat and Statenplaats, at the Voorstraat (square) and the alleyway the Tolbrugstraat Landzijde (for personnel only). When entering the building at the Kolfstraat, the customers need to take a staircase, escalator or plateau elevator to reach the main ground floor. On the ground floor, the customers can reach former retail areas by walking around the escalators. The other floors can be accessed in three ways: by escalator, staircase or elevator. Note that the basement and ground floor are not connected with escalators. On the upper floors customers can also walk around the escalators to reach different parts of the building.

The personnel of the former department store largely use the same routes as the customers. The only exception is that the personnel can also access parts of the building where more private functions are placed, like offices.
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

The first perspective shows a small height difference between the actual ground floor of the department store (in the back of the sketch) and the ground floor near the entrance at the Kolfstraat (in the front of the sketch). The height difference is bridged by two escalators and two stairs. The second perspective shows the monumental staircase of the building which lies along the facade of the Tolbrugstraat. The perspective highlights the staircase’s path and shows that it wraps around an elevator. When taking the staircase up or down, one will notice the presence of stained glass windows. The building’s basement exists of different levels, whereby the transition between those levels (a staircase) is for instance articulated in the third perspective. The spatial character of a part of the basement is shown in the fourth perspective.
3.4.3.4 Conclusion

10. SPATIAL COMPONENT

Essence of building

The building consists of several interconnected units, as we can see in the 2D schemes. These different units play a role in the spatial perception and hierarchy of the building as a whole. Many of these units have their own space dimensions, but relate to the main grid lines of the main unit as they are still part of the building except for the external unit. There is more or less balance in the unit, but no real symmetry. The main unit has a large skylight in the centre that allows daylight to enter the building.
Conclusions Building Object - Dordrecht

1. **Spatial configuration** - The building as a whole has a large rectangular shape, which is divided into V&D in the middle and surrounded by smaller volumes. The configuration of the building consists of a main volume, which can be split into smaller corresponding volumes and an external volume in between.

2. **Floorplans** - The floorplans are defined by the facade, columns, central void and vertical circulations. In Dordrecht, the ground floor area is also shaped by the surrounding smaller shops on the outer side.

3. **Sections** - Having four floors in total, the building is connected vertically by the central escalators. The ground floor has the highest floor height (4.38m). There is a height difference between each entrance.

4. **Structure** - The structure consists mainly of columns, load-bearing walls for the stairwells and some partitions for the smaller shops around. The building has a clear structure grid with a main span of 7.34 meters and some deviations with smaller spans.

5. **Circulation** - The building has three entrances. On all the floors people can walk around the escalators to get to different parts of the building. Other floors are reached by escalator, staircase or elevator.

6. **Spatial and visual orientation** - The perspectives show parts of the circulation system: like the stairs and escalators near the back entrance and the monumental staircase.

3.4.4. Facades & roof
### 3.4.4.1. Configuration

The main facade of the V&D in Dordrecht is facing the Voorstraat as constructed by Kuijt in 1932. Yellow bricks and a large steel curtain wall make materialize the facade. A tower-like element crowns the building like a lantern. In 2000-2001, the building was extended by Rijnboutt. These facades feature large glass shopfronts and a combination of red bricks and a steel structure.

#### Facades & roof

The roof of the Dordrecht V&D department store has skylights on the roofs like roofs of other department stores. It can be seen that this is to bring light into the interior of the department store, which is about 80m deep. There is a roof garden in the southwest corner, so you can see that there is an awning. In the north, the entire building was expanded using the roof of the existing small canal house. Overall, there are volumes on the flat roof for water tanks, supplying facilities, etc.
2. FACADES OF THE V&D IN DORDRECHT
Configuration

The configuration of the Voorstraat facade is rather horizontal. The tower-like element forms a vertical contrast with the horizontally aligned facade. The facade by Kuijt forms an important transition from the small shops to a larger urban block. The composition of the facade facing the Statenplaats is clearly defined by the structural grid. All the window openings are aligned according to that grid.
3. COMPOSITION OF THE FACADES
4. COMPOSITION OF THE FACADES
5. COMPOSITION OF THE FACADES
3.4.4.2. Use of materials

Use of material

The main facade of Dordrecht V&D is designed with windows. Glass is sandwiched between the white aluminum frames and covers the entire facade. The other parts are decorated with yellow bricks. Between the ground floor and the 1st floor, an aluminum awning protrudes and crosses the building horizontally. Between the aluminum awning and the glass window, the border is divided by natural stone with a width of 900mm.
7. FRAGMENT PHOTOGRAPH OF THE VOORSTRAAT FACADE

3.4.4.3. Components

8. THE ELEMENTS THAT FORM THE LANGUAGE OF THE BUILDING

Language

The language of the facade of Kuijt is very limited and clearly has the same expression as the other Kuijt V&D’s. The open shopfront on the ground floor is complimented by the large curtain wall on the upper floors and a tower-like element once again crowns the building and attracts the attention of bypassing pedestrians.
3.4.4.4. Conclusion

Conclusions

1. **Representation** - The main facade of the Dordrecht department store, like other department stores, consists out of white window frames and yellow bricks. The Scheffersplein square in front of the main facade acts like a department store lobby.

2. **Configuration** - Overall, the building emphasizes horizontality, except for the Voorstraat, which is the main facade. The main facade and other facades have different designs that are difficult to see as one department store. However, the ground floor is also made up of small shops and show windows, so you can see how it is open to people passing by.

3. **Use of materials** - Unlike other department stores, the color of the bricks in the main facade and other facades is different. The overall design is made of red brick, but the facade on the Voorstraat side is decorated with yellow bricks. From this, it can be seen that the design time is different. The facade facing the Statenplaats Square reflects the design of the 2000s, and is dominated by steel.
4. **Language** - The design is concentrated in repetitive windows in the long elevation and vertical white window frames in the main facade. On the facade in the direction of Statenplaats, the roof garden protrudes into a round terrace, which welcomes people.

10. PHOTO OF THE CURRENT SITUATION OF THE STATENPLAATS FACADE
3.5 Maastricht
3.5.1 City Centre

3.5.1.1 Introduction

Maastricht is a city and municipality in the south of the Netherlands. It is the capital of the province of Limburg and has 118,636 inhabitants. This makes it the largest municipality in the province of Limburg. The old centre of Maastricht is located on both sides of the river Maas. The boundary on the western bank of the Maas is more or less formed by the canals, which were part of the former Ring Maastricht.

Maastricht originated at a ford on the river Maas, from which it owes its name. Maastricht has been continuously inhabited for two thousand years. The city has a long and eventful history, as testified by the numerous historical buildings and art treasures in churches and museums.

In the rest of the Netherlands, the city is often seen as “foreign”, mainly because of its peripheral location near Belgium and Germany, but also
because of the atypical landscape, the Mosan houses, the different history, the complicated language situation, the dominance of Catholicism (in the past more than now), the strong emphasis on community life (brass bands, carnival, processions) and the alleged Burgundian way of life.

Since the 1990s, the population of South Limburg has been aging and shrinking due to a low birth rate, a high death rate and sometimes a negative migration balance. This is also the case in Maastricht, although the negative natural population growth is somewhat offset by the increase in the number of students at Maastricht University. The university and other study programs also ensure that the population of Maastricht is younger than that of other South Limburg municipalities.
3. BUILDING AGE

Building age

Maastricht is one of the oldest cities of the Netherlands, but the building age map reflects something different. The old building collection was adjusted or rebuilt around 1930. However, the left buildings developed before 1900 are spread throughout the city. In several districts of Maastricht its city center, new buildings were realized between 1975 and 1995. Mostly these new buildings were meant to restore the old cityscape. By observing this map, the conclusion can be drawn that the building age of Maastricht is quite diverse. But the actual experience does not reflect the same conclusion.
4. PUBLIC SPACES

Public spaces

Maastricht has many squares and public spaces, most of them traditionally built near churches. The most famous square is Het Vrijthof. Around the Vrijthof are historic buildings that still remind of the time when Maastricht was a religious centre and a military fortress. Such as the Sint Servaaskerk, Sint Janskerk, the Spanish Government, the Hoofdwacht and the Generaalshuis. Another well-known square in the city centre is the Markt. This square is named after the commodity markets that have been taking place here for centuries. Maastricht City Hall and a large number of catering establishments are also located on the Markt. As seen in the plan the V&D in Maastricht does not have any relation with a public space, however it is connected to the main shopping street.
Looking at the general building height of Maastricht, it is obvious that there are many tall monumental buildings. These are very noticeable in the city's landscape because of their history. The 'new' buildings were designed in such a fashion, that their height was used to make a statement in the city. At the former V&D site, the height difference of the city landscape is not readable in the map. I suggest for further research to look into the height difference of the cityscape of the former V&D area.

3.5.1.2 Historical development

Maastricht is one of the oldest cities in the Netherlands. Originally a Roman settlement the city grew on both sides of a bridge that crossed the ‘Maas’ river. The settlement on the west bank became the larger and more important town, while the eastern settlement remained smaller. In the medieval period the western part expanded while the eastern part of the city kept its size until the 19th century.

The V&D is located right in the heart of the medieval city centre on the ‘Grote Straat’. A street connecting the ‘Vrijthof’, a large square, to the ‘Sint Servaas’ bridge, the oldest bridge in the Netherlands. From a historical viewpoint a very important road, and also the heart of the retail area in Maastricht.

6. HISTORICAL DEVELOPMENT OF MAASTRICHT

Historical development

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3.5.1.3 Spatial development

Since the V&D closed its doors, a large number of shops in the surrounding area became vacant. The pattern of vacancy is widespread throughout the city centre.
8. STORES THAT ARE EMPTY ON 25 OCTOBER 2020.
Being an old city centre, the centre of Maastricht has a high density compared to younger Dutch cities. The total area of the city centre is around 1,783,000 m² of which 675,000 m², 38% is private. This surface is also almost completely built area. Therefore the GSI is also 0,38.
3.5.1.4 Relations & connections

10. ALL ROAD NETWORKS

Road networks

As Maastricht is an old city, many of the roads are designed to be car free. The overall network map concludes that the general type of street width, which are narrow roads in between buildings, is the spatial quality of Maastricht. Thereby are the two bridges across the Maas still part of the primary network of traffic. The connection between the primary, secondary and tertiary networks are not gradually. Finally, there are only a few main networks to move into the city center.
12. SECONDARY ROAD NETWORK
13. TERTIARY ROAD NETWORK

beds/000000/off
Conclusions city scale - Maastricht

1. Building age - Maastricht is one of the oldest cities in the Netherlands, also the building collection is still old and maintained.
2. Public spaces - The V&D in Maastricht is located in the shopping street and does not have any connection to the large number of public squares in the city.
3. Building height - Due to the elevated landscape, there are also multiple tall buildings represented in the city's landscape.
4. Historical development - The oldest bridge in the Netherlands connects both sides of Maastricht for pedestrians, at the extension of this pedestrian artery the V&D was built.
5. Spatial development - There is quite some vacancy around the former V&D store, however the shape of the retail area did not change.
6. Density - Maastricht's city centre density is relatively low with a GSI of 38% because of the river through the city.
7. Road networks - The two bridges divide the main networks of the city, however the inner city centre is not fully accessible for car traffic.
3.5.2 Urban Block
3.5.2.1 Block configuration

1. STREET ELEVATION COLLAGE
2. HISTORICAL DEVELOPMENT

Historical development

Throughout history, this prominent urban block in the Maastricht urban fabric has changed dramatically. After 1900 the small-scale character of Maastricht’s centre streets changed as craftsmen and small workshops left the streets. The small plots made way for the arrival of branches of chain stores. The V&D started in a modest building on the Grote Staat and grew through the purchase of various surrounding buildings. In 1932 Kuijt replaced the separate shop facades for a large complex. The store occupied three quarters of the built-up area in this block in 1970. From 1970, a part of the V&D complex was transformed into the Grand Bazar department store and the Maastrichter Brugstraat was redesigned into the current shopping street where only pedestrians are welcome. The last transformation was in 2001, when the Bijenkorf was housed in a new built building on the location of the former Bazar. The V&D has shrunk over time to a quarter of the built-up area in this urban block.
What is striking in the configuration of this urban block is that approximately three-quarters of the built-up area is occupied by the Bijenkorf and the former V&D. Many installations can be seen on the flat roofs of the department stores. There are relatively small parcels with gabled roofs adjacent to the Kleine Straat.
4. ROOF STRUCTURE
7. BLOCK IN URBAN CONTEXT

Streets

The block has a pentagonal shape, and thus is enclosed by five streets: the Grote Staat, Kleine Staat, Kersenmarkt, Vijfharingenstraat and Achter het Vleeshuis. All streets are rather narrow (<10m) and fully pedestrianized, as this block is part of the historic city centre of Maastricht. The Maastrichter Brugstraat leads to the Maas and the St Servaas bridge, which is the country’s oldest pedestrian overpass. Needless to say, this is a historic route through the city centre. When entering the city this way, the facade of the Bijenkorf, formerly the facade of the V&D, is prominently visible at the heart of this t-junction. The V&D building now remains only in the north-western corner of the building block. The building line makes a little jump in Achter het Vleeshuis, where this street meets the Minckelerstraat.
SECTION A
SECONDARY STREET

8. STREET PROFILES
SECTION C
TERTIARY STREET

Achter het Vleeshuis

1 1.6 1

3.6
3.5.2.3 Accessibility

Accessibility

The urban block of the V&D is located on the Grote Staat, the Kersenmarkt and the Maastrichter Brugstraat. These streets are part of the important route from the station, via the Sint Servaasbrug to the Vrijthof. The building block including the V&D consists entirely of shops and franchises. Three quarters of the built-up area are occupied by the former V&D and the Bijenkorf. This urban block has a clear front- and backside. The frontside is located along the main shopping streets, which are only accessible to pedestrians. At the backside of Achter het Vleeshuis there are some service entrances. This makes the V&D accessible from the Maastrichter Smedenstraat and the Minckelerstraat for fast traffic.
The V&D in Maastricht has grown over time, taking over more and more of the neighbouring buildings. Until the V&D itself was conquered by the Bijenkorf and handed it some of its m² to this rivaling department store. Due to this shuffling of retail space, it is sometimes hard to recognize what belongs to whom. Full facades as designed by Jan Kuijt can be found in the Grote Staat and the Vijfharingenstraat (view A, C, D) while the corner of these streets has a very different architecture (view B). Kuijt’s facades has features crossing the Nieuwe Zakelijkheid and expressionism, with outstanding basket weave brick. The Vijfharingenstraat is slightly curved. On eye-level, the building outlines follow this concave curve. The stories above are slightly set back, allowing more daylight in the street and building (view B, C). In the Grote Staat, the full facade follows the buildings outlines.
Conclusions Urban Block - Maastricht

1. **Position** - The V&D, reduced to the northwestern corner, seems to be hidden opposed to the prominent location of the Bijenkorf.
2. **Scale** - The commercial space of the Bijenkorf and the V&D together covers 75% of the footprint of the urban block. In scale, it stands out in the context of the historical buildings.
3. **Configuration** - The block has been transformed from an enclosed block with open courtyard, consisting of many small parcels, to a closed mass that mainly consists of two very large parcels.
4. **Point of gravity** - After the split of the V&D and the Bijenkorf, the point of gravity has shifted to the Bijenkorf, as its entrance has a very prominent position facing the T-junction to the St. Servaas bridge.
5. **Facade** - Different corners of the building block have different commercial images, ranging from fully transparent facades to traditional commercial spaces. The warehouses stand out in scale and materialization in relation to the other, historical buildings.
6. **Routes** - On the route from the station of Maastricht to the heart of the city, after crossing the St. Servaas bridge it is the first building you see from the building block.
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3.5.3. Building Object
3.5.3.1. Configuration

Spatial configuration

The former V&D building in Maastricht has an L-shape and is recognizable by the representative facades on both sides. The building was one building, which was later split into two buildings in 2002, the Bijenkorf and the former V&D building. In this way, the building is used more efficiently, with V&D withdrawing into one part and the Bijenkorf into the vacant part. The 3D exploded view shows the spatial configuration of the building in its current state with the Bijenkorf as the new separate volume. The main volume is located in the Grote Staat shopping street, now the former V&D building. The second volume on the Kersenmarkt on the north side of the main volume is the current Bijenkorf. This volume is actually larger and higher than the main volume, with some roof terraces and recently renovated and equipped with a completely new facade. The third small volume belongs to the V&D building, but can be seen as a separate volume that connects the two volumes in the corner. These two units of volume are characterized by their different expressions, one more traditional and the other more modern, and form one large whole.
2. GROUND FLOOR PLAN (4701 M²)
The floorplans clearly show the merging of two buildings. Each part has an escalator and void as the center and an entrance from different streets. Alike the other former V&D, the plans are open and empty with columns defining the spaces. The service areas are placed away from or on the back areas from the entrances. From the ground floor to the third floor, the floorplans are similar and the fourth floors are partly rooftop areas with some closed spaces with terraces.
Sections

The former V&D building in Maastricht has a beam-column structure with five stories above ground and one basement. Central escalators connect the building from basement to second floor. There is a huge skylight with angled shape at the central atrium that allows much sunlight penetration. The staircase is also placed at the side of the building as a secondary circulation. Among all the floors, the ground floor has the highest floor height (4.5m) and the floor height decreases when it goes higher, 4m for first floor, 3.8m for second floor, 3.6m for third floor.

The facade of the building has big openings on the ground floor towards the street and the central escalator is placed near the entrance.
3.5.3.2. Structures

Structure

The V&D building in Maastricht is one L-shaped building, which was later split into two buildings of the Bijenkorf and the former V&D building. The L-shape shows that the building consists of two overlapping parts. Both parts of the building consist of columns and load-bearing walls. There are two systems of grid lines for each part. The more rectangular (the former V&D building) part of the building consists of tight grid lines of 7.5 by 5.85 meters, with narrower columns. The longer rectangular part (the Bijenkorf) consists of larger grid lines of approximately 7.8 by 7.8 meters with some deviation and larger dimensioned columns.

In both parts there is a void in the middle of the building for the escalators with skylight for daylight. In addition, there are two main cores for stairwells and elevators that also serve to stabilize the building, where the load-bearing walls are located. Where the representative facades are located, few load-bearing elements can be found to remain as open as possible towards the shopping streets. Furthermore, a wall has been built to divide the two buildings, but it is not load-bearing. This building has the most flexibility due to the open space with columns.
7. AXONOMETRIC STRUCTURE SYSTEM
3.5.3.3. Circulation

The former V&D in Maastricht has multiple entrances. The ones for both the customers and personnel are located at the Grote Staat, Achter het Vleeshuis and Kersenmarkt. The building is currently split in two parts (due to a partly change of owners around 2004), meaning the circulation is also separated (third floor is exception). At each part the customers can reach the former retail areas by walking around the escalators (accounts to most levels, including ground and first floor). The other floors can be accessed in one or two way(s): by escalator or elevator, depending in which part of the building you are. The northern part has a monumental staircase and elevators, however these are now used as emergency route instead of circulation.

The personnel largely use the same routes as the customers. The only exception is that the personnel can also access parts of the building where more private functions are placed, like dressing rooms.
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

Firstly, a brief history of the owners. The Maastricht building exists out of two parts, the Bijenkorf (southern part) and the former Hudson's Bay (northern part). Before 2004 the whole building was occupied by V&D. In 2004, the Bijenkorf moved into a part of the building, the rest was still in use by V&D. After V&D's bankruptcy, Hudson's Bay took over their part of the building (Boetsen, n.d.).

The first perspective, taken from an upper floor, shows the escalator system of the Bijenkorf part of the building. It highlights the path of the escalators to different floors and the semi-circular void in which this takes place. The second perspective gives an image of a typical view of the upper floors of the Bijenkorf part of the building. It describes the character of the space and looks directly at a glass façade. The third perspective shows the escalator system of the former Hudson's Bay part of the building. This also emphasizes the escalators' paths and the rectangular void. In this perspective, the spatial character is also shown.

3.5.3.4. Conclusion

10. SPATIAL COMPOSITION

Essence of building

The building consists of two interconnected main units, as we can see in the 2D schemes. There are two different department stores in these two different units. These two units provide a nice hierarchy of the whole, and have more or less equal dimensions in terms of surface area. The small unit can be seen as the center of the connection between these two main units. Both units have their own space dimensions due to their individual grid lines and have no symmetry. Furthermore, these units also have their own facade composition on the shopping streets and both have a skylight to get enough daylight into the units.
Conclusions Building Object - Maastricht

1. **Spatial configuration** - The building has an L-shape and is recognizable by its representative facades on both sides. The configuration of the building consists of a main volume belonging to the V&D and a second volume belonging to the Bijenkorf, this volume is actually larger and higher than the main volume.

2. **Floorplans** - The floorplans are defined by the facade, columns, central void, vertical circulations and building extensions. The building has its staircase closed off because of the heritage status.

3. **Sections** - The building has five stories above ground and one basement. Central escalators connect the building from basement to second floor. There is a huge skylight with angled shape above the central atrium. The ground floor has the highest floor height (4.5m).

4. **Structure** - The structure of the building consists of two overlapping parts, both parts of the building consist of columns and load-bearing walls. There are two systems of grid lines and span dimensions for each part. The more rectangular part of the building consists of spans of 7.5 by 5.85 meters, while the longer rectangular part consists of larger spans of approximately 7.8 by 7.8 meters.

5. **Circulation** - The building has multiple entrances. On most of the floors people can walk around the escalators to get to different parts of the building. Accessing different parts is limited due to the building’s separation. Other floors are reached by escalator or elevator. The personnel largely use the same routes as the customers.

6. **Spatial and visual orientation** - The perspectives show different parts of the circulation system of the building: like the escalator systems.
3.5.4. Facades & roof
3.5.4.1. Configuration

1. ROOF OF THE MAASTRICHT V&D

Facades & roof

The department store of the V&D is interwoven in a dense urban fabric. Because of this, the facades are quite fragmented and are composed of many different smaller plots. One thing they have in common is that they feature ground floor that have a clear visual connection between the exterior and the interior. The later added extensions by Rijnboutt aim to respond to the complex urban facades by framing the new extensions in a contemporary fashion. The Bijenkorf facade, located on the Kersenmarkt, could be seen as a modern response to the original Kuijt facade, with a large curtain wall starting from the upper floors.
2. FACADES OF THE MAASTRICHT V&D
Composition

One of the biggest features of Maastricht V&D department stores is that each facade has a different design, giving the passing people the feeling that they are not the same building. For example, the elevation of the Grote Staat and the elevation of Kersenmarkt give the impression of a completely different building from material to design. The facade of the Grote Staat is based on the Amsterdam school style of the 1900s, giving the impression of an old building with brick and glass, while the facade of Kersenmarkt is designed to match the modern city image with a curtain wall made of glass and steel frame.
3. COMPOSITION OF THE FACADES
4. COMPOSITION OF THE FACADES
5. COMPOSITION OF THE FACADES
3.5.4.2. Use of materials

In Maastricht V&D department stores, the boundary between the ground floor and the first floor is clearly separated by natural stone. A stone are arranged at 1.5m intervals, and underneath it is made of glass and frame, so you can see how it is open to customers. From the 1st floor, mainly yellow bricks cover the entire wall, and you can see that the 1.5m wide glass windows are regularly repeated. Therefore, it can be seen that the horizontal ground floor elevation and vertical repetitive windows are in harmony.
7. FRAGMENT PHOTOGRAPH OF THE GROTE STAAT FACADE

3.5.4.3. Components

8. THE ELEMENTS THAT FORM THE LANGUAGE OF THE BUILDING

Language

The original facade of the V&D as designed by Kuyt is recognizable for the elements that repeat themselves. The protruding tower element sticks out of the facade and captures the attention of bypassing pedestrians. Once again, there are vertically aligned window openings on the higher floors that extend over the entire facade.
3.5.4.4. Conclusion

Conclusions

1. Representation - One of the biggest features of Maastricht V&D department stores is that each facade has a different design, giving the passing people the feeling that they are not the same building. For example, the elevation of the Grote Staat and Kersenmarkt give the impression of a completely different building from material to design.

2. Configuration – On each and every facade one can see that several buildings have been continuously expanded. Overall, it is a single building, but the elevation is divided as if other buildings were continuous. Therefore, it can be seen that it is divided on and on like other small buildings in the city.

3. Use of materials – The facade of the Grote Staat is based on the Amsterdam school style of the 1900s, giving the impression of an old building with brick and glass, while the facade of Kersenmarkt is designed to match the modern city image with a
10. PHOTO OF THE CURRENT SITUATION OF THE KERSENMARKT FACADE

curtain wall made of glass and steel frame.

4. Language – The main facade, designed by Kuyt, is repeatable like other department stores. Windows of the same size are arranged in succession, showing a design that attracts the attention of people passing by.
3.6 Leiden
3.6.1 City Centre
3.6.1.1 Introduction

Leiden is a city and municipality in the northwest of the Dutch province of South Holland. The Oude Rijn flows through Leiden before it flows into the sea a little further on.

Thanks to the textile industry, Leiden was one of the largest cities in the Northern Netherlands from the late Middle Ages to the 17th century. Today, with 123,655 inhabitants (1 August 2020) by population, it is the fourth largest municipality in South Holland, after Rotterdam, The Hague and Zoetermeer. Leiden is the centre of an agglomeration and urban region including Katwijk.

Leiden is known as a student city; it has the oldest university in the Netherlands. It is also a tourist attraction, thanks to nationally known museums and the old town with canals, monumental buildings and courtyards. The nickname is the Key
City, referring to the keys in the city's coat of arms. This typological analysis focuses on the old centre of the city which was originally protected by a city wall. The former V&D building is located in the middle of this old centre.
The Dutch city of Leiden is famous for its old city centre. You can therefore observe that most buildings, like churches and castles but even the buildings on the canals, are developed before 1800. Looking at the building age map now, quite a development at the city centre edges took place. Some renewed corners of building blocks are recently done, likely the public plinth is reconstructed for some reason. Even though buildings are reconstructed or rebuilt in Leiden, the overall city centre is maintained in its glory. Looking at the specific building age around the former V&D we can observe that the building block itself is quiet ‘new’. Some edges in the reachable distance of the V&D have already been renovated. This could reflect the need of transformation around the area, but also the fact that the former V&D is quite modern and it good quality perhaps.
4. PUBLIC SPACES

Public spaces

As can be seen in the plan above, the old heart of the city of Leiden has only 5 public squares, which are mostly located close to churches and public buildings. The canals form an important green area for the city, where various parks such as the Plantsoen, Ankerpark, Huigpark and the Hortus Botanicus have been constructed on the site of the former city walls.
Because Leiden is a city built along the canals, the canal house is the most common building type in the city centre. This canal house is defined by three layers of housing, with sometimes a basement as a fourth layer. The common building height is therefore defined by a range from 8.5 till 12 meters most of the time. For sure there are some exceptions within the typology of a canal house, for instance the municipality building designed above that range. Overall we can conclude that the city landscape is dominated by this similar height. The building blocks are quite larger at the city edges, compared to the oldest ones in the centre, the building height inside those blocks became lower. This is because of the backyard facilities or expansions of buildings.

5. BUILDING HEIGHTS

Building heights

Because Leiden is a city built along the canals, the canal house is the most common building type in the city centre. This canal house is defined by three layers of housing, with sometimes a basement as a fourth layer. The common building height is therefore defined by a range from 8.5 till 12 meters most of the time. For sure there are some exceptions within the typology of a canal house, for instance the municipality building designed above that range. Overall we can conclude that the city landscape is dominated by this similar height. The building blocks are quite larger at the city edges, compared to the oldest ones in the centre, the building height inside those blocks became lower. This is because of the backyard facilities or expansions of buildings.
3.6.1.2 Historical development

6. HISTORICAL DEVELOPMENT OF LEIDEN

Historical Development

The V&D of Leiden is located in the oldest part of the city centre. The city of Leiden started to exist near the bridge across the Rijn. Near this bridge a fort was built and on the south bank a small town started to appear. The street that passed the houses, the Breestraat, is still one of the most important streets in Leiden and is since the very beginning an important street for trade.

Around this bridge the city slowly started to grow. Also on the north bank houses were being built where another important street for trade emerged parallel to the Rijn. These streets formed the commercial centre of Leiden which remains today.

The city of Leiden kept expanding through time, the commercial centre however never changed. The houses around the old city centre are mainly for living. When the location for the V&D was chosen its surroundings were therefore already made for shopping and retail. The V&D was placed on the prime spot next to the bridge that connects the two shopping streets, Haarlemmerstraat and the Breestraat.
### 3.6.1.3 Spatial development

#### Spatial development

The V&D is in the heart of the retail area of Leiden as can be seen in the image above, where the grey buildings have a retail function. The Haarlemmerstraat and Breestraat can clearly be distinguished but also the area between the Botermarkt and the Nieuwstraat. The V&D almost acts like a connection between the shopping areas.

Since the closing of the V&D some shops became vacant. The vacant shops are scattered around the shopping district. A relation between the closing of the V&D and the closing of the smaller shops can therefore not confirmed.

#### 7. STORES SURROUNDING V&D
8. STORES THAT ARE EMPTY ON 8 OCTOBER 2020.
9. DENSITY OF LEIDEN

Density

Being an old city centre, the centre of Leiden has a high density compared to younger Dutch cities. The total area of the city centre is around 1,789,800 m² of which 713,880 m², 40% is private. This surface is also almost completely built area therefore the Ground Surface Index (GSI) is also 0.4.
3.6.1.4 Relations & connections

10. PRIMARY ROAD NETWORK

Road networks

After retrieving data on the use of bicycles in the city of Leiden, it was clear that the city itself is very accessible by bike. Therefore the cyclist is using certain main roads to move from north to south. The bridges within the old inner city are also frequently used because the centre is divided by water of course. With respect to the old city centre, and also the hustle and bustle of the streets, citizens take often the route around the inner city. This is a main route as well for other traffic. Zooming in on the target area along the V&D, we can observe a bigger intensity of cycling use at the backside of the building: Breestraat. This mobility by bike is important for the city of Leiden, and therefore something to keep in mind.
11. SECONDARY ROAD NETWORK
12. TERTIARY ROAD NETWORK
13. TERTIARY ROAD NETWORK

bdio/000000/off
Conclusions city scale - Leiden

1. **Building age** - Most of the buildings of the inner city of Leiden date back to before 1800 but the V&D is developed in 1900.
2. **Public spaces** - The V&D in Leiden is located along a lively road.
3. **Building height** - The canal house typology determines the building height of Leiden, where the V&D stands out.
4. **Historical development** - The medieval heart of Leiden is located exactly where the V&D is.
5. **Spatial development** - The vacancy of the V&D did not cause significant vacancy in the surrounding retail area.
6. **Density** - The city centre of Leiden is around 1,790,000m² of which around 714,000m² is built area. The GSI of Leiden's city centre therefore is 40% which is a very typical density for an old Dutch town centre.
7. **Road networks** - The canals define the main networks in the city, thereby having many small alleys that link the network.
3.6.2. Urban Block
3.6.2.1 Configuration
2. HISTORICAL DEVELOPMENT
Historical development

The building block has been shaped throughout history by trading activities. The city of Leiden does not have a central market square compared to other Dutch cities. Trade was mainly conducted from the quays. Historical maps show that until 1850 the building block was closely linked to the Oude Rijn. After the construction of the Van Nelle building in 1920 and the V&D in 1936, this building block underwent a spatial transformation. Although the building block became more closed in mass, it opened to the public. The demolition of the Van Nelle building in 1976 left an empty space at Aalmarkt 17, which was then used to supply the V&D. During the Aalmarkt project in 2017, this gap was partly filled with new shops and partly intended as a new route to Breestraat connected with the new pedestrian bridge. By means of the new Catherinasteeg, the building block was opened up more and the Breestraat was better connected to the Aalmarkt. Nowadays, this urban block consists mainly of shops, the former V&D being the most prominent.

A number of aspects stand out from the schemes of the roof landscape and structures.

First of all, the drawn roof landscape of the urban block and the inventory of structures seem to contrast. The roof landscape shows fragmentation and diversity, while the building block is divided into a few large structures. Due to the scaling up of the shops, several small lots have been turned into one large lot over time. Over the years, for example, V&D has bought up several lots and added them to the store, which means that it is now connected to both Breestraat and Aalmarkt. The V&D block developed from a block with a courtyard to a closed building block.
4. ROOF STRUCTURE
3.6.2.2 Streets

BREESTRAAT

MAARSMANSTEEG

AALMARKT

MANDENMAKERSSTEEG

5. STREET ELEVATIONS
The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. The storefronts on the street level of Aalmarkt, Breestraat and Maasmansteeg are always composed of big-size glazing with contrast to the above floors. This contributes to the consecutive commercial atmosphere of this block in the center of Leiden. However, the facade of the Catharinasteeg is composed of some new forms of architectural elements like the steel structure and larger glazing. Although this facade of the block is more open than the others, it is perceived as the display windows of stores or restaurants with less access.

When placing the parcels of the block and the unfolding facades together, it is obvious that the classifications of facades are not always consistent with the legal parcels.
The block of the former V&D building in Leiden is wedged between Breestraat and Aalmarkt. The V&D building designed by architect J. van der Laan and built in 1936 is located on the southeastern part of the block. The canals of the Oude and Nieuwe Rijn converge at this spot on the Aalmarkt. The Aalmarkt is connected to the rest of the city by means of the Visbrug and a pedestrian and a cyclist bridge near Catherinasteeg.

The collage of two main facades on the Aalmarkt and Breestraat gives the impression that this block is an important shopping area with many retail units in the historic center of Leiden. Most of the historic buildings are well preserved and modern retail spaces are connected to these historic buildings, creating a special shopping atmosphere in this area.
MANDENMAKERSSTEEG

MAARSMANSTEEG

SECTION B
TERTIARY STREET

SECTION C
TERTIARY STREET
SECTION D
SECONDARY STREET
3.6.2.3 Accessibility

Throughout history, more and more shops have taken up residential buildings in the urban block of Aalmarkt. As a result, there is an increase in semi-public space through shops, but a decrease in private space. After the arrival of the V&D building, the type of building block has changed from a closed building block with an open inner area to a closed building block.

In addition, it is noticeable that the entrances to the shops are mainly located at Aalmarkt and Breestraat and that the Catherinasteeg, Mandemakerssteeg and Maarsmansteeg serve as circulation between these two important shopping streets. The alleys are mainly private homes. A public connection has also been made in the new Catherinasteeg with the courtyard of the Catherina Gasthuis.
10. STRUCTURE & PUBLIC SPACE

- BLOCKS
- SEMI PUBLIC
- PRIVATE
- PUBLIC SPACE
Walking through the shopping streets of Leiden, the primary facade facing the Aalmarkt clearly stands out to the neighbouring buildings thanks to its width and height. The small tower is positioned in such a way that it catches the eye from a far distance. Doing so, this element connects different (shopping) streets. It puts the building in a central position within the network of the city.

Vistas

The facade facing the Breestraat is less prominent as it blends in with the rhythm of the rest of the street. The building can only be recognized from a closer proximity.

11. VIEWPOINTS
12. PERSPECTIVES
Conclusions Urban Block - Leiden

1. **Position** - The building is very central, as if the V&D is the center of the city. The placement of the tower makes it a landmark in the cityscape.
2. **Scale** - Many of the buildings in this block have increased in scale over the years. Still, V&D is by far the largest building.
3. **Configuration** - The building block typology has changed since the arrival of the V&D. From a building block with open space in the middle to a closed one.
4. **Point of gravity** - Originally, the Waag was the most dominant building for the block. That changed after the arrival of the V&D. The V&D has taken over the economic significance in the city from the Waag as a place of selling goods.
5. **Facades** - The façade on the Aalmarkt is clearly the most prominent facade. The facades in the alleys have virtually no architectural value.
6. **Routes** - The alleys mainly serve as a circulation and connection between the Breestraat and the Aalmarkt and as an entrance to the remaining private homes.
3.6.3. Building Object
3.6.3.1. Configuration

1. CONFIGURATION DIAGRAMS

Spatial configuration

This 3D exploded view shows the configuration of the building volumes. The building consists of one rectangular main volume in the middle with several smaller volumes around this main unit. The volume of the facade which is located on the Aalmarkt is a rectangular volume and the most monumental part of the building. The main volume in the middle also has two skylights above for plenty of daylight, as it is too deep and surrounded by other volumes. In the Maarsmansteeg the almost closed facade can be seen and can be translated into the most closed volume of the building. You will also find three small volumes in Breesstraat that were later connected to the building during the expansion. The middle volume of these three also has a skylight in the hallway that connects to the main volume. These three volume units are characterized by their monumental character with sloping roofs.
2. GROUND FLOOR PLAN (3077 M²)

Floorplans

The ground floor of the former V&D department store is dominated with retail space surrounding the elevator in the center. All sides of the ground facades have window displays facing the streets. As for the storage rooms, most are located on the same areas in each floor which has direct access to the service lift. Some storage is placed behind these window displays which can ease the change of the displays. The 1st to 3rd floor has a similar layout of storage and retail space. However, on the higher floor, there are less areas that belong to the building as there are other tenants located towards Beerstraat. On the 4th floor, the area of retail space has decreased, and the technical rooms are placed here near the terrace. As for the highest floor, the area of the floor is the smallest and used as office space only.
3. FLOORPLANS
4. SECTION A

Sections

As shown in the section, the former V&D in Leiden contained two volumes, namely a five-storey building and a four-storey old building. All floors of the volumes were at different heights so that stairs were added to connect them with each other. The ground floor had both openings towards Aalmarkt and Breestraat to allow multiple access to the building. In addition, the ground floor has a floor height of 5.9m, which is much higher compared to other floors with a height of 3.9m. The escalators were placed at the centre of the building and functioned as the core of the vertical circulation. Each floor had a drop ceiling while the space between it and the slab may have been the place for the installations. In addition, all the volumes shared the feature of a pitched roof at the building top made of mezzanine. There are two circulation cores within the building, which are the central escalator and the staircase placed at side of the building.
5. SECTION B
3.6.3.2. Structure

The structure is needed to support the building and therefore limits the designer in realizing his ideas without large interventions. In this building it consists of columns, walls and beams, thought of in terms of frequency, circulation, pattern, simplicity and regularity for a department store. The former V&D in Leiden has a skeleton of columns for its construction. Consisting of different dimensions of columns based on a grid of 7.2 by 7.2 meters. Furthermore, the floor and the three cores for the stairs secure the structural stability. There are two large voids in the centre of the building, one for the escalators in the middle and one for the main staircase. In which daylight enters from the skylight in both voids. As such, structure can also be used to define space, create units and composition, articulate circulation and suggest movement. In principle, there is therefore quite a bit of flexibility in this building due to the main structural principle of free-standing columns with little load-bearing walls.
7. AXONOMETRIC STRUCTURE SYSTEM
3.6.3.3. Circulation

The former V&D in Leiden has three entrances, located at the Breestraat, Maarsmansteeg and Aalmarkt. On the ground floor, the customers can walk in two parallel ways from the entrance at the Breestraat towards the centre of the building. Here customers can walk around the escalators to get to the former different retail areas and other entrances. The customers can reach the other former retail floors in three ways: by escalator, staircase or elevator. On the other floors customers can also walk around the escalators to reach different parts of the building. This route is a bit different on the fourth floor.

The personnel of the former department store largely use the same routes on the ground floor. The only exception is that they can access a part of the building where more private functions are placed, like lockers, and therefore use a slightly different route. To reach the other floors the personnel can of course use the same means of transportation as the visitors, but to reach the former office part of the building on the top floor, they can only use the upper emergency staircase.

8. CIRCULATION DIAGRAM
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

Some perspectives of the spaces on the ground floor are shown here. One perspective shows the long main hall which you are at when entering the building from the Breestraat. In the roof above the main hall, stained glass windows are visible. The other two perspectives show the central staircase, where one focuses on the multilevel void with skylight and the other articulates the start of the staircase.

For the first floor the perspective shows the start of the staircase as well as some stained glass windows. These stained glass windows are also used at other levels, this can for example be seen in the perspective for the third floor. The perspective at the fourth floor shows the multilevel void again, but now looking from the top of the staircase.
3.6.3.4. Conclusion

10. SPATIAL COMPOSITION

Essence of building

The relationship of units to whole explores architecture as units that can be related to create buildings. In this context, units are considered to be adjacent, separate, overlapping, or smaller than the whole. The building consists of several interconnected units, as we can see in the 2D diagrams, how these different units play a role in the spatial experience of the building. Many of these units have their own daylight, from the glass roofs or from the windows in the facade. To get enough daylight you have to focus on the locations of the units to see how daylight can enter a building in all associated units, daylight influences the perception of mass and volumes.
Conclusions Building Object - Leiden

1. Spatial configuration - The building consists of one rectangular main volume in the middle with several smaller volumes around this main volume in each direction. The volume located on the Aalmarkt is the most monumental volume of the building. In the back there are three smaller volumes that were added to the main volume during the expansion of the building.

2. Floorplans - The floorplans are defined by the facade, columns, central void, vertical circulations and building extensions. The floor areas are smaller on the higher floors.

3. Sections - The building contained two volumes, including a five-storey building and a four-storey old building. The escalators were placed at the centre of the new building and functioned as the core of the vertical circulation. The ground floor has the highest floor height (5.9m).

4. Structure - The structure consists of free-standing columns with single load-bearing walls. The columns consist of different sizes on a clear grid with main spans of 7.2 meters. The structure determines the space and flexibility in this building.

5. Circulation - The building has three entrances. On most of the floors people can walk around the escalators to get to different parts of the building. Other floors are reached by escalator, staircase or elevator.

6. Spatial and visual orientation - The perspectives show parts of the circulation system: like the central staircase in a multilevel void. The use of stained glass windows becomes prominent when walking through the building.
3.6.4. Facades & roof
1. ROOF OF THE LEIDEN V&D

Facades & roof

The V&D building in Leiden features three facades which differ vastly from each other. Starting with the front facade facing the Aalmarkt. There is a consistent vertical rhythm based on the vertically accentuated windows. The facade appears to be referencing the facade of the town hall of Leiden as designed by C.J. Blauw and constructed in 1934.

The facade facing the Maarsmansteeg begins with the original building by J.A. van der Laan and has been connected with the adjacent premises facing the Breestraat. The facade of the Maarsmansteeg is considerably more closed which can be explained by the close proximity of the facing buildings which are inhabited to oppose privacy issues.

The facades of the Breestraat are fragmented yet connected internally and feature the pre-existing facades.
2. FACADES OF THE LEIDEN V&D
Configuration

The V&D building in Leiden features three facades which differ vastly from each other. Starting with the front facade, the one facing the Aalmarkt. There is a consistent vertical rhythm based on the vertically accentuated windows. The facade is clearly referencing the facade of the town hall of Leiden as designed by C.J. Blauw and constructed in 1934. The facade facing the Maarsmansteeg begins with the original building by J.A. van der Laan and has been connected with the adjacent premises facing the Breestraat. The facade of the Maarsmansteeg is considerably more closed which can be explained by the close proximity of the facing buildings which are inhabited to oppose privacy issues. The facades of the Breestraat are fragmented yet connected internally and feature the pre-existing facades.
3. COMPOSITION OF THE FACADES
4. COMPOSITION OF THE FACADES
3.6.4.2. Use of materials

Use of material

The main façade of the Leiden V&D department store is the elevation facing Aalmarkt. The building is mainly decorated with yellow bricks. In particular, the tower part, which is the most prominent feature, is designed with natural stone sandwiched between bricks. The window frame is designed in the same color yellow. In addition, the tower’s natural stone has been carved to emphasize the splendor. The facade of the building is designed with repetitive windows throughout, except for the tower.
6. FRAGMENT PHOTOGRAPH OF THE AALMARKT FACADE
3.6.4.3. Components

The Vroom & Dreesman expansion replaced typical Dutch housing with a building of modern construction. It is deemed valuable due to its architectural-historical qualities in the Traditionalist style. These were inspired by the Scandinavian architecture of G. Friedhoff and A. van der Steur, which is rare in shop architecture.

The warehouse is built up of five stories with an overhanging roof of copper while the core comprises of concrete columns connected to the marble and concrete floors. The front representative facade is made of yellow brick primary and accented with sandstone decorations and reliefs. The upper floors feature steel window frames while the impressive ground floor height is articulated in the facade through the display windows under the copper awning. Five of these shop windows still retain their original wooden frames.
3.6.4.4. Conclusion

Conclusions

1. **Representation** - The Leiden V&D has a different representation across the three facades. The Aalmarkt facade is the main facade, being richly decorated and featuring a protruding tower to provide a landmark status.

2. **Configuration** - The configuration of the three facades stand on their own. The main facade is constructed of a transparent ground floor with a clear shopping identity whereas the higher floors follow the rigid rhythm of the windows. The Breestraat facade is composed of various premises as a result of timely expansions leaving a disjointed image.

3. **Use of materials** - The use of materials is defined by the main material of brick and is decorated with natural stone accents around windows.

4. **Language** - The language of the building is defined by the windows with steel frames and the sandstone decorations which can be seen across the facade.

8. PHOTO OF THE CURRENT SITUATION OF THE AALMARKT FACADE
9. PHOTO OF THE CURRENT SITUATION OF THE BREESTRAAT FACADE
3.7 Amersfoort
3.7.1 City Centre
3.7.1.1 Introduction

Amersfoort is a city and municipality in the east of the Dutch province of Utrecht in the centre of the country. The city of Amersfoort has about 141,000 inhabitants who are called Amersfoorters. In terms of population, it is the second largest city in the province of Utrecht and the fifteenth in the Netherlands.

Amersfoort is a growing city and economically fulfills a regional function with a strongly grown business. It has one of the largest railway junctions in the Netherlands and it is an important garrison city. The city centre has a medieval character with canals. Already in 1259 Amersfoort received city rights from Bishop Hendrik van Vianden, which gave the city its own administration. Prosperity increased and it did not take long before there was enough money for a stone city wall, which is still partly standing. Together with the Koppelpoort, Monnikendam, Muurhuizen and the Lange Jan, this city wall reminds us of Amersfoort’s rich past.
This page includes pie charts representing the demoGRAPHY and moBILITY of Amersfoort.

**MOBILITY**
- 23%
- 36%
- 39%
- 2%

**DEMOGRAPHY**
- 15% < 15
- 19% 15 - 25
- 12% 25 - 45
- 27% 45 - 65
- 15% 65+

Amersfoort has 141,000 inhabitants.

In the old city centre of Amersfoort (<1800) the buildings are also maintained in their original composition. Around the Hof, the oldest buildings are situated. Some particular buildings in these streets were exceptionally built later from 1850 till 1900. The second observation is that the area of the second canal ring developed after 1900. This is also the time when the context of the former V&D was constructed. The east side of the city centre of Amersfoort was expanded around 2000 when the cultural sides of Amersfoort were upgraded.
4. PUBLIC SPACES

Public spaces

There are several squares in the city centre of Amersfoort. The largest square is the Hof. Smaller squares include the Groenmarkt, Appelmarkt and Lieve Vrouwenplein. You will find shops, restaurants and cafes around and on the squares. The Lievevrouwentoren is located on the Lieve Vrouwenplein. This tower is positioned at the cadastral centre of the Netherlands.
In the old city centre of Amersfoort are the church and a tower, which are the only two tall buildings within the urban landscape. Furthermore, it is quite relevant to highlight that there is a diversity in building heights, from common to lower heights. This means that also in the old centre the cityscape is fluctuating like in more new built areas. On the other hand the V&D situation is equal to its building heights. The newly built cityscape around the V&D is adjusted to the height of the V&D.
3.7.1.2 Historical development

6. HISTORICAL DEVELOPMENT OF AMERSFOORT

**Historical development**

The V&D of Amersfoort is located inside the most recent city walls but outside the oldest part of the city centre. It is built at the Utrechtestraat, which is the extension of the oldest and most important shopping street of Amersfoort, the Langestraat. The old canals around the city centre were partly turned into roads in the 1960’s. This made the accessibility of the V&D a lot better.
3.7.1.3 Spatial development

The V&D is at one end of the shopping area in Amersfoort. Stores that currently are vacant are mostly located towards the ends of this shopping area. The pattern of the vacant shops however is not strong enough to lead to conclusions.
8. STORES THAT ARE EMPTY ON 8 OCTOBER 2020.
9. DENSITY OF AMERSFOORT

Density

Being an old city centre, the centre of Amersfoort has a high density compared to younger Dutch cities. The total area of the city centre is around 640.510 m² of which 263.980 m², 41% is private. This surface is also almost completely built area therefore the GSI is also 0.4.
3.7.1.4 Relations & connections

10. ALL ROAD NETWORKS

Road networks

The primary routing in the city of Amersfoort is guided by canals. But the largest canal ring has more space for primary networks. One main connection from north to south, which is also determined by a canal, is the Oude Gracht. Thereby are the secondary networks more focused on connection from east to west. Large shopping streets like the Langestraat and Kamp are important in the city but smaller in its street profile than primary routes. The tertiary networks are mostly bridges and alleys between the building blocks, which are created by urban configuration.
11. PRIMARY ROAD NETWORK
12. SECONDARY ROAD NETWORK
13. TERTIARY ROAD NETWORK

Conclusions city scale - Amersfoort

1. **Building age** - The inner city centre is shaped after 1800. In addition the western district was enlarged around 1900 with the V&D building for instance.
2. **Public spaces** - The V&D in Amersfoort follows the shape of the square on which it is located.
3. **Building height** - The city's landscape is quiet mediocre, the balance between medium and low buildings determine the city's landscape.
4. **Historical development** - The filling of the outer canal created a large road around the centre, therefore the V&D was located near this traffic artery instead of in the very heart of the city centre.
5. **Spatial development** - The vacancy of the V&D did not cause any change in the vacancy of the surrounding retail area.
6. **Density** - Amersfoort has a very typical density as well, but a bit less water which is reflected in the 41% GSI.
7. **Road networks** - The inner city centre is divided by two canal rings, which also divide the main city networks.
3.7.2 Urban Block
3.7.2.1 Configuration

1. STREET ELEVATION COLLAGE
2. HISTORICAL DEVELOPMENT
Throughout history, the urban block on Utrechtsestraat has been located on the edge of Amersfoort’s city centre. Around 1850, this block was not as dense as it is now due to its location on the outskirts of the city. The plots were oriented towards the Utrechtsestraat and the Sint Jorisstraat and enclose an open area within the building block. For a long time, the V&D was the largest building in the block. In 1958 the Singel was filled in and the current Stadsring was constructed. The city centre became more accessible, so that from 1960 more and more shops were established in the Utrechtsestraat. The amount and density of buildings in this block also increased. In 1999 a major construction project was realized on the Sint Jorisplein with 45 shops and 90 apartments. The V&D complex was also expanded with a new building on Hellestraat and an entrance on Sint Jorisplein. Nowadays this block consists mainly of commerce, concentrated around the Sint Jorisplein.
Configuration

The building block of the V&D is divided into three parts by public streets with an oval square as the centre. What else is striking in the configuration of the building block is the interference of the V&D complex within the other commercial buildings. The fusion of old and new buildings is visible in the roof landscape. The newly built roof landscape around Sint Jorisplein consists mainly of flat roofs, with space for the many installations of shops. In addition, some roofs are part of a roof garden that is accessible to neighboring residents. Narrow gabled roofs can mainly be found on the Utrechtsestraat. In the V&D building itself, one also sees the amalgamation of old and new, especially in the roof landscape.
4. ROOF STRUCTURE
3.7.2.2 Streets

UTRECHTSESTRAAT

HELLESTRAAT

TORENSTRAAT

STADSRING

5. STREET ELEVATIONS
The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. The facades of the V&D building make up a large proportion of the block’s facades. The facades on the ground floor of the V&D building along the Laat and Ridderstraat are composed of large glazing, which contribute to the commercial atmosphere of the block. By contrast, the facade of the V&D along the Oudegracht is more closed than the others and is not blending in with the storefronts of surrounding small shops. Most buildings along the Hofstraat are private houses, which is why the facade is not inviting for the public. When placing the parcels of the block and the unfolding facades together, it is evident that the classifications of facades are not always consistent with the legal parcels. For the most part, each facade belongs to one parcel. Some facades on the southwestern part of the block are divided into two parcels.
7. BLOCK IN URBAN CONTEXT

**Streets**

The block is surrounded by the Stadsring, Utrechtsestraat, Hellestraat and Torenstraat. The St. Jorisstraat, Riddergang and St. Jorisplein pierce through the block and have opened the block’s interior to the public. The Stadsring is a main traffic artery for the city. With the development of the St. Jorisplein and its underground parking, this has become the starting point for many visits to the city centre. Even though this shopping hub is very popular, with a high density of stores, the Utrechtestraat is still a more prominent shopping route, as it leads onto the Langestraat – the main shopping street. The main entrance of the V&D, which is located at the Utrechtestraat, is one of the first points of recognition. A welcoming gesture for visitors. The Hellestraat is clearly of lesser importance (section C). The Riddergang completely covers up the side facade of the V&D building with another layer of stores (section B).
SECTION C
SECONDARY STREET
3.7.2.3 Accessibility

This urban block is mainly accessible from the shopping streets Sint Jorisstraat and Utrechtsestraat. The V&D building has three entrances at different locations in the block and is therefore connected to a large area of the Amersfoort shopping area. The main entrance is located at the important shopping and walking area of the Utrechtsestraat. There are also two side entrances, Hellestraat for service and Sint Jorisplein for shoppers.

Accessibility

Since 1999, this block has mainly consisted of commercial structures with apartments and houses above the shops. On the ground floor, the shops are extensions of the public space of the shopping street. The building block is easily accessible by car from the western side of the city ring. Moreover there is a large parking lot to the north of this block and you can also park a car beneath the Sint Jorisplein.
10. STRUCTURE & PUBLIC SPACE
Jan Kuijt’s design includes a glass-in-steel facade that runs along the full width of the building. The scale of glazing stood out in comparison to the smaller scale shop windows in the context. Thanks to the building’s slanted roof, the architect still managed to fit the large building in its context, without disrupting the continuity of the street (view A & B).

Over time, new large-scale buildings have emerged (such as the HEMA) that were not designed with the same subtle approach as the V&D. Eventually the building expanded. The St Jorisplein shopping mall was built in 2016. Seen from this square (view C), the V&D is a part of a bigger configuration and does not stand out at all. There no longer is a shop-specific architecture.
12. PERSPECTIVES
Conclusions Urban Block - Amersfoort

1. **Position** - The block used to be the edge of the city, but has become a central place since the St. Joris development.
2. **Scale** - The block is a centre in itself within the city, due to the high density of commercial activity. The V&D is still the largest commercial building in the block, but is not as apparent as it used to be.
3. **Configuration** - In the past, the perimeter of the current block consisted of two enclosed building blocks: one rectangular and one triangular. The blocks have been combined and inversed: the block now consists of three building blocks surrounding an oval square.
4. **Point of gravity** - Within the urban block, the St. Jorisplein is the central element. But from the point of view from the pedestrians and city centre, the Utrechtsestraat remains the most prominent street, as it connects to the rest of the shopping streets.
5. **Facade** - In the context of the St. Jorisplein, the V&D is only a small part of a dominant, overarching architectural expression. The V&D has disappeared in the building mass. In the Utrechtsestraat, the architectural expression of the shop it is still recognizable.
6. **Routes** - Thanks to the St. Jorisplein and parking, this block has become a transitional area from motorized to pedestrian traffic of people arriving in the city centre.
3.7.3. Building Object
3.7.3.1. Configuration

Spatial configuration

The 3D exploded view below shows the spatial components of the V&D building in Amersfoort. The building has an L-shape, where two buildings are connected from two directions. The main volume is located on Utrechtsestraat and has a beautiful skylight above the atrium and a beautiful representative facade on the shopping street. The main volume facade faces south on the main shopping street. The building’s configuration consists of a monumental main volume with a second volume added later on the north side of the main volume. This second volume on the north side of the main volume on the Hellestraat is more modern with various setbacks in the facade and outdoor terraces. On the ground floor there is a third smaller volume that forms a tunnel through the shopping center to Sint Jorisplein. These three volumes are characterized by their different external compositions and all form one large whole.
The original V&D building is located on the south side facing the Utrechtstraat. The building was then extended towards the north side. Now, the whole building has three entrances in different directions. The volume of the north-west entrance are only on the ground floor. As for the circulation, the escalator is placed in the void in the middle of the original V&D building. At the south part two grand staircases and elevators are positioned.

The floorplans of the building are defined by columns, circulation areas, and facades. The columns of the original building are spaced similarly. However, in places where the original building meets the building extension, the columns of both creates an irregular placements. The irregularities are also present in other V&D buildings that have been extended to surrounding buildings.
3. FLOORPLANS
4. SECTION A
The former V&D building in Amersfoort has a beam-column structure with three stories above ground and one floor basement. The building has four stories in total and is connected by escalators as the main circulation. Above the central atrium, there is a huge skylight with angled shape and allows much sunlight penetration. The emergency staircase is also placed at the side of the building as a secondary circulation. Among all the floors, the ground floor has the highest floor height (4.5m) while the first floor and second floor is 3.9m and 3.5m.

The facade of the building has big openings on the ground floor towards the Utrechtsestraat and the central escalator is placed near the entrance. Since the building is surrounded by the neighbourhood, most of the facade have few openings.
3.7.3.2. Structure

6. STRUCTURE GRID OF GROUND FLOOR

Structure

The former V&D building in Amersfoort has an L-shape and is recognizable by the representative facade on the shopping street and the nice skylight. The building consists of two parts that flow into each other. Both parts of the building consist of columns and load-bearing walls. There are two systems of grid lines for each part. The more rectangular shaped part of the building consists of grid lines of 6.95 by 6.35 meters, with narrower columns. The more square shaped part consists of larger grid lines of approximately 8.57 by 7.77 meters with larger dimensioned columns. There is one hexagonal void in the center of the building, for the escalators with the skylight above for daylight. Furthermore, there are three main cores for staircase and elevators that also function for the stability of the building, where the load-bearing walls are located. This building has the most flexibility due to the open space with free-standing columns and the cores in the corners next to the facades for stability.
7. AXONOMETRIC STRUCTURE SYSTEM
3.7.3.3. Circulation

8. CIRCULATION DIAGRAM

Circulation

The former V&D in Amersfoort has three entrances, located at the Utrechtsestraat, Hellestraat and Riddergang. On the ground floor, the customers can reach former retail areas in various ways, depending where they enter the building. For example, when you enter at the Utrechtsestraat, you will definitely walk around the escalators. The other floors can be accessed in three ways: by escalator, staircases or elevators. These vertical circulation means are grouped in three circulation systems, whereby two are located near the entrance at the Utrechtsestraat. On the other floors customers can walk around the escalators to reach different parts of the building. However this is not necessary due to the escalators' decentralised position in the building.

The personnel of the former department store largely use the same routes as the customers. The only exception is that the personnel can also access parts of the building where more private functions are placed, like offices.
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

The first perspective, taken from the first floor, shows the monumental staircase located near the entrance at the original part of the building. It highlights the path of the staircase leading up and the adjacent elevator. While walking up the staircase, stained glass windows are visible. The staircase's path and nearby elevator can also be seen at the second perspective. The third and fourth perspectives show the atrium with skylight, which is located near the monumental staircase in the original part of the building. This atrium is part of the vertical circulation of the building due to the presence of escalators. The atrium's skylight is filled with stained glass windows, which make this circulation space very special.
3.7.3.4. Conclusion

 Essence of building

The building consists of several interconnected units, as we can see in the 2D schemes. These three different units play a role in the spatial configuration and hierarchy of the building as a whole. Many of these units have their own space dimensions due to their individual grid lines, so no symmetry. These units also have their own facade composition to get enough daylight into the units and to influence the experience of the space. For example, the monumental hexagonal skylight in the main unit.
Conclusions Building Object - Amersfoort

1. Spatial configuration - The building has an L-shape, where two volumes are connected from two directions. The configuration of the building consists of a monumental main volume to which a second more modern volume was later added. On the ground floor there is a third smaller volume that forms a tunnel through the shopping center to Sint Jorisplein.

2. Floorplans - The floorplans are defined by the facade, columns, central void, vertical circulations and two directions building extensions. With the new extensions, new entrances are also created.

3. Sections - Connected by central escalators as the main vertical circulation, the building has three stories above ground and one basement. Above the central atrium, there is a huge skylight with angled shape and allows much sunlight penetration. The ground floor has the highest floor height(4.5m).

4. Structure - The structure of the building consists of two parts that overlap. There are two systems of grid lines and span dimensions for each part. The more rectangular part of the building consists of spans of approximately 7 meters and the more square part consists of larger spans of approximately 8 meters with larger dimensioned columns.

5. Circulation - The building has three entrances. Due to the decentralised position of the escalators, people can choose to walk around the escalators to get to different parts of the building. Other floors are reached by escalators, staircases or elevators. The personnel largely use the same routes as the customers.

6. Spatial and visual orientation - The perspectives show different parts of the circulation system of the building: like the monumental staircase and the escalator system in a multilevel void. The use of stained glass windows becomes prominent when circulating through the building.
3.7.4. Facades & roof
3.7.4.1. Configuration

Facades & roof

The department store building overlooking Utrechtsestraat in Amersfoort was designed by Jan Kuyt Wzn in 1934. The ground floor is designed to be open towards the road for customers or passengers coming for shopping and has been refurbished over time. From the first floor, opaque glass was used to make the interior visible, and this serves as a show window rather than spatially affecting the interior. The facade on the side facing Hellestraat has been renovated so that it is not possible to directly see the facade of the existing building because a white steel layer is covered in front of the existing facade. The hipped roof is located on the south side of the overall rectangular structure. When viewed from Utrechtsestraat, it has a characteristic that makes it look like a building. The biggest feature is that in the 1990s, a stained glass dome with an escalator was established in the middle of the roof, allowing the interior space to receive light. This stained glass is mainly yellow and blue colored.
2. FACADES OF THE AMERSFOORT V&D
The V&D building of Amersfoort covers a large floor area although its facades are rather timid. The original façade as designed by Jan Kuyt is designed in a traditional way, with large shopfront windows on the ground floor and a curtain wall composed of steel window frames on the higher level. The roof is striking in the composition of the façade and crowns the building. The composition is very understandable and due to its symmetry, it has an almost monumental stature.

The later added extension on the Hellestraat is completely different and with its shifts in the rhythm gives off a rather chaotic composition.
3. COMPOSITION OF THE FACADES
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Vacant Heritage - Department Stores V&Ds

FACADE HELLESTRAAT

SHOPPING FLOORS

FACADE FRAMES
4. COMPOSITION OF THE FACADES

Facade Frames

Shopping Floors

Amersfoort

Facade Sint Jorisplein
3.7.4.2. Use of materials

Use of material

The arrangement of opaque glass and window frames starting from the first floor was designed at regular intervals. The wooden frame painted white and the yellow bricks stand out as if they were old and new. Utrechtsestraat’s facade is perfectly symmetrical. Yellow rectangular bricks and gray concrete tiles cover the surface. The window frame is divided into thin frames. The ground floor is separated from the first floor by a wide concrete canopy.
6. FRAGMENT PHOTOGRAPH OF THE UTRECHTSESTRAAT FACADE
3.7.4.3. Components

7. THE ELEMENTS THAT FORM THE LANGUAGE OF THE BUILDING

Language

The elements of the main facade of the Amersfoort V&D are quite limited. There are the shopfront windows on the ground floor, which are very similar to the other V&D’s. The most prominent element is the curtain wall which is repetitive and mainly functional.
3.7.4.4. Conclusion

8. PHOTO OF THE CURRENT SITUATION OF THE UTRECHTSESTRAAT FACADE

Conclusions

1. **Representation** - The design by Kuijt for the main facade is heavily influenced by the Amsterdam School style with its expressive volumes, fine mesh rod curtain wall and dominant high rise hip roof.

2. **Configuration** - The facades at the Amersfoort V&D have a clear hierarchy in importance, the facade at Utrechtsestraat is the main representative facade that includes the store entrance while the two facades of Sint Jorisplien and Hellestraat are more subdued and confused in their appearance.

3. **Use of materials** - The main facade of the Amersfoort department store is comprised of a symmetrical brick volume with grey concrete tiles and a large triple floor height curtain wall which swings out at the corners. Together they form a strong character.

4. **Language** - The front facade is primarily composed as one piece in its design rather than of individual elements. The already dominating character of the facade is united further through this design choice by Kuijt.
9. PHOTO OF THE CURRENT SITUATION OF THE UTRECHTSESTRAAT FACADE
3.8 Enschede
3.8.1 City Centre
3.8.1.1 Introduction

Enschede is a city and municipality in Twente, in the east of the Dutch province of Overijssel. The city has 158,918 inhabitants with approximately 160 nationalities. Enschede is the largest city in Overijssel and the fourteenth municipality in the Netherlands by population.

In history, three major fires raged in the city of Enschede, in 1517, 1750 and 1862. Because of this fact, Enschede and its inhabitants are sarcastically nicknamed ‘Brandstichters’ (arsonists). As a result, there are few medieval buildings made of stone and wood in this city. In addition, on May 13, 2000, the city was hit by a major fireworks explosion, killing and injuring many people. An area of 42 hectares was destroyed, 450 houses were completely lost and another 1,500 homes were damaged. The site of the disaster, the “Roombeek” district, has now been completely rebuilt in a modern style.
The population in Enschede has increased by about 50% after the Second World War. In 1950 the city had a population of just under 110,000 and in 1995 more than 147,000. Despite this, Enschede has lagged behind the rest of the Netherlands in terms of population growth. The population in Enschede consists of a relatively large number of elderly people and many young people under the age of twenty-five (students from the Hogeschool and the University). Many (especially young) families have moved to new housing estates in the south of Enschede in the past five years. The centre, as in many other large cities, has many single and two-person households.


3. BUILDING AGE

Building age

The city of Enschede can be labeled as a quite ‘new’ city. There are only two buildings around 1800 present in the cityscape. Many large buildings are developed at the outside ring of the inner city, for instance at the Hendrik Jan van Heekplein.

The second new batch of buildings was created between 1900 and 1960, just like the former V&D building. This is the oldest building collection which is nowadays present in the city. Most buildings were recently built in the years from 2000, this collection reflects the cityscape of Enschede.
4. PUBLIC SPACES

Public spaces

The small centre of Enschede has 17 public spaces. Most shops are located in the area around the Van Heekplein and most cafés can be found on and around the Oude Markt.
5. BUILDING HEIGHTS

Building heights

The city of Enschede does not retain their building collection as an old inner city. Therefore the building height is very regular. At the edges of the city centre there are some big and tall buildings. Those buildings reflect the city’s landscape at the outside but in the city centre the city’s landscape is very regular.

3.8.1.2 Historical development

6. HISTORICAL DEVELOPMENT OF ENSCHEDE

Historical development

Enschede is situated near the eastern border of the Netherlands. As medieval city it was very small and of little importance. The large growth of Enschede came after the industrial revolution when factories made its way to the Netherlands and also to Enschede. This sparked Enschede’s development and the city grew quickly.

When the V&D was constructed Enschede was still developing, they decided to make a ‘modern’ retail area to the south of the medieval city centre. Here the V&D building is located in between large retail buildings and ‘malls’.
3.8.1.3 Spatial development

Since the V&D closed its doors a number of shops became vacant. These stores are however all located in the city centre, not in the area of the V&D. Therefore the closing of the V&D had probably no influence on the vacancy of these stores.
8. STORES THAT ARE EMPTY ON 31 OCTOBER 2020.
The city centre of Enschede is partly old, and partly new. The old medieval part of the city centre has a very typical density for Dutch cities. The newer part is much denser, this is due to the fact that the new buildings are mostly large shopping centres. Therefore the density in Enschede's city centre is relatively high compared to the other Dutch city centres.

The total area of the city centre is around 372,000 m² of which 212,000 m², 57% is private. This surface is also almost completely built area therefore the GSI is also 0.57.
3.8.1.4 Relations & connections

10. ALL ROAD NETWORKS

Road networks

The network of Enschede is structured by two secondary network loops in the city centre. In addition, there is one primarily route from east to west across the centre, and one primarily route around the edges of the centre. What is outstanding is one other primarily route into the city centre, just along the former V&D building. However its networks are quite traditionally divided, the exception in relation to the department store is remarkable.
11. PRIMARY ROAD NETWORK
12. SECONDARY ROAD NETWORK
13. TERTIARY ROAD NETWORK
Conclusions city scale - Enschede

1. **Building age** - The city centre of Enschede is shaped after the second world war. Only two historical buildings from 1800 still exist.
2. **Public spaces** - The V&D in Enschede is not located near a square.
3. **Building height** - Since the building age of Enschede is quite 'new', the buildings are generally larger but lower compared to other cities.
4. **Historical development** - The V&D in Enschede is located outside of the medieval city centre, since the city and it’s retail area largely grew in a much later period.
5. **Spatial development** - The vacancy of the V&D did not change the vacancy in the surrounding retail landscape.
6. **Density** - Enschede has a high GSI of 57%, which resembles the younger nature of the city centre. Buildings have larger footprints and are relatively low in height.
7. **Road networks** - Primary routing can be found throughout the inner city centre, streets have a large width.
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3.8.2 Urban block
3.8.2.1 Configuration

1. STREET ELEVATION COLLAGE
2. HISTORICAL DEVELOPMENT
Enschede has grown in history as a production centre for textiles and fabrics. Especially the 19th century was a period of chaotic growth for the city due to industrialization. Around 1900, the building block adjacent to the station square provided space for a large steam weaving mill. In addition, there were some buildings on the shopping street, the Korte Hengelosestraat, and some loose buildings on the Piet Heinstraat.

In 1939 one of the last establishments of the V&D was built in this block. With this, the centre of gravity of this building block shifted to the intersection of the Korte Hengelosestraat and the Brammelerdwarstraat. Nevertheless, the construction rate in this block remained low. In the 1960s, a large parking garage was built behind the V&D complex and several offices appeared on the side of the station. Today, the building block consists of shops on the Korte Hengelosestraat and offices on the side of the station.

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**Built Area**
8402 m²

**Empty Area**
2198 m²

**Parcels**
17

**Footprint V&D**
27%
Two defining elements of this building block in both the configuration and the roof landscape are the V&D and the adjacent parking garage. The centre of the urban block is therefore located at the section of the Brammelerdwarsstraat and Korte Hengelosestraat.

In addition, the separation between the original buildings from 1900 and new buildings from 1960 is clearly visible in the roof landscape of this building block. The flat roofs halfway along the Korte Hengelosestraat, including the parking garage, and the gabled roofs on the station square. Also striking is the amount of unbuilt space in this building block, compared to V&D complexes in other cities. In its current state, the building block encloses a relatively large inner area that is accessible to the car from several sides.
3.8.2.2 Streets

KORTE HENGELOSESTRAAT

STATIONSPLEIN

BRAMMELEDWARSSTRAAT

5. STREET ELEVATIONS
The diagram of the continuous facades of the block demonstrates the openness and accessibility of the facades. The facades of this block along the Brammelerstraat and Korte Hengeloestraat have continuous large glazings on the ground floor level, which contribute to the commercial atmosphere of this block. The facade of the V&D Enschede is larger than that of the surrounding commercial buildings. The facade along the Stationsplein also has continuous glazings on the ground floor level but is less accessible than the main facades. The facade along the Brammelerdwarstraat is not continuous.

When placing the parcels of the block and the unfolding facades together, the facades of the V&D and buildings on the northeastern part of the block indicate their parcels, while other facades are not consistent with their parcels.
Enschede is a relatively young city compared to the other Dutch cities that have been studied. This is clearly evident in the street profiles. The main shopping streets, as well as the buildings, are of larger scale and proportion. Though car access is limited, the streets offer plenty of space for transport. The V&D building is situated at the crossing of six streets. When arriving in Enschede from the station, this square symbolizes the entrance of the city centre. The streets profiles are flat, indicating the dominance of slow traffic. The streets to the west and north are of larger proportions, as they are important traffic archeries of the inner city. With the station to the north and the large parking lot right next to it, the V&D is one of the first things people see upon their visit to Enschede's city centre.
8. STREET PROFILES
SECTION B
TERTIARY STREET

Brammolloordwarsstraat

0.3 4 1.5

5.8
SECTION C
SECONDARY STREET
What is striking is that the building block is located in an area that is very focused on accessibility by car. Almost every street around this block is accessible by car and this block contains a large parking lot for the shopping area of Enschede. In addition, the building block is located on the station square, making the V&D easily accessible for train travelers. The main entrance of the V&D building is located at the intersection of Brammelerdwarstraat and Korte Hengelosestraat. Other service entrances are located in the Brammelerdwarstraat.

It is also characteristic that the building block contains a separation between public structures on Korte Hengelosestraat and Brammelerdwarstraat and private office buildings on Piet Hein Street and Stationsplein.
10. STRUCTURE & PUBLIC SPACE
3.8.2.3 Accessibility

Vistas

The V&D building of Enschede is placed on a very visible corner. View A shows how the V&D building is visible all the way from the other corner of the block - the first street you enter after leaving the train station - thanks to the slightly curved street. A similar effect is visible as can be seen in view B. The rounded corner is a nicely designed response to the open square that lies in front of it. Even though the view on the building is slightly covered by trees, as shown in view C, the curved edge really stands out compared to the neighbouring buildings. The V&D thus has an important landmark position in the network of the young inner city of Enschede.
12. PERSPECTIVES
Conclusions Urban Block - Enschede

1. **Position** - The V&D building covers the full south end of a rather large building block. The corners of the building cleverly respond to this position.

2. **Scale** - Though the building has a large footprint, the building does not seem out of place in terms of scale, as the urban tissue in general is larger in scale compared to other Dutch cities.

3. **Configuration** - Over time, the configuration of the V&D in Enschede has not changed. The store did out-grow the building, but it simply moved to another building.

4. **Point of gravity** - Upon the arrival of the V&D building, the centre of gravity shifted towards the south side of the building block.

5. **Facade** - This V&D building stands out thanks to its expressionistic design in yellow brick. Striking features are the rounded corners, large canopy, round windows and monumentally designed staircases.

6. **Routes** - The building block in which the V&D is located is one of the first blocks you’ll encounter upon entering the city centre of Enschede, when arriving from train.
3.8.3. Building Object
3.8.3.1. Configuration

Spatial configuration

The 3D exploded view above shows the spatial configuration of the V&D building in Enschede in its current form. The building is a representative rectangular block with curved corners. The configuration of the building consists of one main volume. This V&D in Enschede has no additional units that belong to the main volume. To indicate the layout of the volume, the building is divided vertically into two parts. The first part is the plinth (ground floor) of the building, which is slightly covered and with some glazing on the short sides for the shop windows. The second part is the upper volume, the most monumental part of the building, with the first and second floor. This volume has the main staircase in the middle of the long facade, with stained glass facades and two protruding brick shapes as turrets. These two vertical volume units do not differ much from each other, only in terms of opening in the facades and some extra small units on the plinth. In general, the building consists of one solid whole.
2. GROUND FLOOR PLAN (2321 M²)
The building has four floors with similar floor plan configurations. The floors are defined by the facades and columns inside. The columns that define the space have various shapes and sizes but the distance between them are similar and thus create a grid. The service areas are located on the north-west and south east walls. Unlike the other former V&D buildings, the added escalator is not placed right in the center of the building. Nor does the lift, which is located on the opposite side of the escalator.

3. FLOORPLANS

Floorplans

The building has four floors with similar floor plan configurations. The floors are defined by the facades and columns inside. The columns that define the space have various shapes and sizes but the distance between them are similar and thus create a grid. The service areas are located on the north-west and south east walls. Unlike the other former V&D buildings, the added escalator is not placed right in the center of the building. Nor does the lift, which is located on the opposite side of the escalator.
4. SECTION A
5. SECTION B

Sections

The former V&D building in Enschede has a beam-column structure with one floor basement and three stories above ground. Central escalators function as the main vertical circulation and connect the floors above ground. Above the central atrium, there is a huge skylight allowing much daylight penetration. Among all the floors, the ground floor has the highest floor height (4.4m) while the first floor and second floor are 4m. The basement has the lowest floor height, which is 3.36m.

The facade of the building has big openings on the ground floor towards the street and allows much interaction between interior and exterior.
3.8.3.2. Structure

The former V&D building in Enschede is a representative building, consisting of a rectangular shape with round corners. The building consists mainly of columns and some load-bearing walls for the stairwell, which are the core of stability. The columns consist of different sizes and shapes on a slightly varied grid. For example, round columns can be found around the void and some larger columns in the middle. The dimensions of the grid are approximately 6.6 by 8.8 meters, but the horizontal grid line varies in dimensions. The building has mostly open facades on the short sides with the curved corners, on the Korte Hengelosestraat and Brammelerdwarssstraat. The main stairwell is located in the middle of the long side wall, this is the main core of the building. The other parts of the building have the most flexibility due to the main construction principle of free-standing columns and no load-bearing walls.

6. STRUCTURE GRID OF GROUND FLOOR
7. AXONOMETRIC STRUCTURE SYSTEM
3.8.3.3. Circulation

8. CIRCULATION DIAGRAM

Circulation

The former V&D in Enschede has two entrances, located at the corner of the Korte Hengelosestraat and the Brammelerstraat and at the Brammelerdwarsstraat (only for personnel). On the ground floor, the customers can reach former retail areas by walking around the escalators. The other floors can be accessed in three ways: by escalator, staircase or elevator. Note that there aren’t any escalators between the basement and ground floor, those floors are only connected by staircase and elevator. On the upper floors customers can also walk around the escalators to reach different parts of the building. However this isn't needed because the escalators have a decentralized position in the building.

The personnel of the former department store largely use the same routes as the customers. The only exception is that the personnel can also access parts of the building where more private functions are placed, like the canteen on the ground floor.
9. INTERIOR PERSPECTIVES

Spatial and visual orientation

The first perspective shows the monumental staircase located at the facade of the Brammelerstraat. It highlights the broad space in which the staircase goes around a central void with an elevator. When walking up or down the staircase one notices the presence of stained glass windows. The building contains an escalator system with a void, which is seen on the other three perspectives. These perspectives are made on the top floor. The perspectives all show the escalator system from a different distance and angle. This is done with the reason to show the void's size and the characteristics of the space around it.
3.8.3.4. Conclusion

10. SPATIAL COMPOSITION

**Essence of building**

The building consists of one main unit/whole, as we can see in the 2D schemes. This main unit has smaller units on the long side that act as the core of the building for the stairs and stability. There is more or less balance in the unit, due to the elongated rectangular shape and the curved corners on both sides. With this, the unit forms a little bit of symmetry and balance in the space. This unit has a large skylight that allows daylight to enter the building.
Conclusions Building Object - Enschede

1. Spatial configuration - The building is a simple rectangular shape, with curved corners. The building configuration consists of one main volume with curved corners, it has no additional volumes belonging to the main volume.

2. Floorplans - The floorplans are defined by the facade, columns, added central void, and vertical circulations.

3. Sections - The building has three stories above ground and one basement. The central escalators function as the main vertical circulation and connect the building from the ground floor to the second floor. The ground floor has the highest floor height (4.4m).

4. Structure - The structure consists mainly of columns and some load-bearing walls for the stairwell, which are the core of stability. The columns are of various sizes and shapes on a slightly varied grid with span dimensions of approximately 6.6 by 8.8 meters.

5. Circulation - The building has two entrances. On all the floors people can walk around the escalators to get to different parts of the building. Other floors are reached by escalator, staircase or elevator.

6. Spatial and visual orientation - The perspectives on page 539 show parts of the circulation system: like the monumental staircase and the building’s escalator system. The use of stained glass windows becomes prominent when walking through the building.

3.8.4. Facades & roof
3.8.4.1. Configuration

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1. ROOF OF THE ENSCHEDE V&D

Facades & roof

The facade of the V&D in Enschede is quite frugal in its appearance. Ornaments are scarce, if there are even any and the expression mainly is given through the black steel window frames, the rounded brick corner elements and the horizontality given by the protruding awnings. The facade facing the Brammelerstraat has a monumental stature given its symmetrical axis in the middle and due to its steel window frames and scarce ornamentation it has an almost factory-like appearance.

If you look at the roof of the Enschede V&D department store, you can see the overall symmetry. Nevertheless, the corners of the building in the northeast are not perfectly symmetric because the tower-shaped mass protrudes. Also, since the building is about 34m deep, the skylight is located in the center. The main entrance of the building is located in the southeast, so you can see that a small skylight is located only in the west.
2. FACADES OF THE ENSCHEDE V&D
Configuration

The configuration of the facades is very simple and follows an uninterrupted rhythm. Starting with the front facade facing the Brammelerstraat, the vertical rhythm is defined by windows which are aligned both horizontally and vertically. An accent is placed on the original entrance of the building where also the main staircase is located. Large, vertical window openings are placed here and they are crowned with round window openings. Horizontally, the windows are aligned according to the floor divisions. The same is applied in the side facades, facing the Brammelerdwarsstraat and the Korte Hengelosestraat. The only exception in this vertical rhythm takes place in the ground floor where the large shop displays follow a different rhythm.
3. COMPOSITION OF THE FACADES
Vacant Heritage - Department Stores V&Ds
AR3AH105 Graduation Studio Adapting 20th Century Heritage

FACADE FRAMES

FACADE BRAMMELERWARSSTRAAT

SHOPPING FLOORS

FACADE FRAMES
4. COMPOSITION OF THE FACADES
3.8.4.2. Use of materials

Use of material

The main facade of the Enschede V&D department store is from the Brammelerstraat. It can be seen that mainly yellow bricks are arranged in regular intervals. Between the first floor and the second floor, there is a long division with natural stone. Walls made of concrete tiles are divided in regular intervals between the windows. All windows, natural stone, and other decorations are designed in a way that emphasizes horizontality to match the shape of the building.
6. FRAGMENT PHOTOGRAPH OF THE BRAMMELENSTRAAT FACADE
3.8.4.3. Components

7. THE ELEMENTS THAT FORM THE LANGUAGE OF THE BUILDING

Language

The architectural language of the facade of the V&D consists of a few elements which are repeated numerously. The most speaking elements are the windows that determine the composition of the facade. Made of black steel window frames, these windows are seen throughout the entire facade. Alterations of these windows can be seen as round windows, large vertical windows and smaller window openings on the ground floor. Furthermore, the tower element on the corner captures the attention of bypassing pedestrians and signifies the V&D in the urban fabric.
3.8.4.4. Conclusion

Conclusions

1. **Representation** - The Enschede department store is characterized by its low and long shape and its thin tower. It consists of three stories that are relatively low compared to other analysed department stores. Overall, the building looks symmetrical, but at both sides the repetition of windows differs in the overall composition of the facade.

2. **Configuration** - The facade is composed of simple repetitive windows, so you see a continuous rhythm. The tall vertical windows and small round windows located at the centre emphasize the original entrance of the building. The round corner with the tower on top indicates the second entrance. Also, like other V&D department stores, the ground floor has large shop windows, allowing people to see the display of goods.

3. **Use of materials** - Repetitive windows in the yellow brick façade and long horizontal bands of natural stone add to the horizontal appearance
of the building. In addition, at certain places the symmetry is emphasized by introducing vertical elements like the protruding windows in the middle and some bay windows at other places made from steel and glass.

4. **Language** - The building is built up like a surface or skin with horizontal and vertical arranged windows. About nine different types of windows are placed in different rhythms. The differences are used to play with symmetry, to emphasize the entrances and the corner. It generates a complexity to the facade design.

9. **PHOTO OF THE CURRENT SITUATION OF THE BRAMMELEERSTRAAT FACADE**


Figure 9. [Photograph]. (2010, September 5). Entrance at the intersection of Brammeler and Korte Hengeloestraat. Retrieved from https://nl.wikipedia.org/wiki/Korte_Hengeloestraat_1#/media/Bestand:RM510612_-_Enschede_-_Korte_Hengeloestraat_1.jpg
PART 2
ASPECT COMPARISON
AR3AH105 Graduation Studio Adapting 20th Century Heritage
City Scale
Density

AMSTERDAM
35 %

ALKMAAR
42 %

MAASTRICHT
38 %

LEIDEN
40 %
City

HAARLEM
40%

DORDRECHT
39%

AMERSFOORT
41%

ENSCHENDE
57%
Public spaces

AMSTERDAM
59 total

ALKMAAR
22 total

MAASTRICHT
39 total

LEIDEN
41 total
HAARLEM
22 total

DORDRECHT
33 total

AMERSFOORT
23 total

ENSCHERDE
17 total
Networks overall

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Vacant retail 2020

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Density

When we put the cities in order of density (GSI), we can conclude that the density of built area is directly related to the amount of water in the city centres; Amsterdam 35%, Maastricht 38%, Dordrecht 39%, Haarlem 40%, Leiden 40%, Amersfoort 41%, Alkmaar 42%, Enschede 57%. The more canals there are in the city, the larger the space between the buildings. Due to the poor hygienic conditions of the water, and the fact they were no longer needed as defense works, many of these canals were filled (gedempt) in the end of the 19th century. However these former canals still provide space in the city center as they are largely unbuilt space. The only exception to this is Maastricht, which has no canals but a lower density due to the river the Maas, that is flowing through the heart of the old city. In all cities the densities, in terms of GSI, are very similar except for Enschede. This can be explained due to the fact that Enschede is also the youngest city, which experienced a large growth mainly after the 19th century. The other cities in the comparison share a period of large growth during the middle ages and/or the golden age, and are therefore more comparable. The cities which grew during the earlier centuries are more compact as people would build their houses inside the city walls for safety reasons. The houses cover a smaller area but compensate in height. As Enschede grew in a period where this was no longer an issue, being compact was not necessary. Enschede has buildings which in general cover large areas but are of relatively low height.

Public spaces

When looking at the connection of the V&D buildings to the surrounding public space there are two main types to be recognized. The first type are V&D buildings connected to a larger public space and the second type are V&D buildings positioned in a shopping street. All the researched V&D buildings are connected to a shopping street. Here the space in front of the building mainly functions as a space for walking. However in Dordrecht, Enschede, Leiden and Haarlem the buildings are also connected to a public space on one side of the building. This larger public space is not necessarily a square, but in all examples it functions as a space for meeting and connection.
**Vacant retail 2020**

The V&D used to attract high numbers of consumers. The retail around the V&D used to benefit from this attraction but since its closing this benefit is gone. The disappearance of this large consumer flow through the city made circumstances for the surrounding retailers more difficult. There are two locations where the vacancy of the V&D department store has influenced the retail landscape. In both Haarlem and Alkmaar the center of gravity of the retail areas has shifted. By the disappearance of the department store, large numbers of consumers tend to shop in the other parts of the city centre. Therefore the center of gravity in the retail areas shifted in both Alkmaar and Haarlem away from the location of the old department store. On the other locations the disappearance of the V&D did not result in a shift of the retail area. While circumstances for the retail sector might have become more difficult, the vacancy of stores is spread randomly. In these instances the disappearance might have influenced the individual shops, it did not influence the retail area in general.

**Networks overall**

The historic canals shape the leading networks in the inner cities. There is more space between the buildings, like the water and the quay, and therefore more space for citizens to move through the city. But the city of Enschede is an exception in this matter because of the type of landscape in the north-eastern part of the Netherlands. The historical development of the city is the main explanation of why the networks are shaped this way. The edges and boundaries of the inner cities are defined by waterways or traffic, and these are the cities’ primary networks. In addition, most V&D locations are situated at a primary network of their city. The buildings are positioned on nodes in the city that provide space for a large building and are easily accessible. The only exceptions to this are Alkmaar and Amersfoort, which are situated at the secondary road network. The building age of cities reflects the number of tertiary networks in the inner city. For instance, the historical city of Leiden has many narrow and short roads between the buildings. Haarlem’s inner city consists of long and linear roads that are defined as a secondary network. Lastly, the V&D building of Maastricht is remarkable due to its approach. The routing towards the V&D is the primary network into the city centre. The bridges determine the main networks of Maastricht.
Urban block
Block configuration

BUILT AREA [M2]

4350
7743
5304
4482

EMPTY AREA [M2]

93
816
113
73

PARCELS [N]

22
46
35
2

FOOTPRINT [%]

44
44
39
55

AMSTERDAM
ALKMAAR
HAARLEM
DORDRECHT
Roof structures

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
HAARLEM

DORDRECHT

AMERSFOORT

ENSCHENDE

Urban Block
Routes & parking

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Main facades
HAARLEM
DORDRECHT

AMERSFOORT
ENSCHEDE
Parcels & facades

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Block configuration

In many cases, the character of the urban block has drastically changed since the introduction of the V&D department store. The footprint of the first store was often already in the first design large in size compared to the other parcels in its direct surroundings. The success of the stores resulted in a need of extra retail and storage space. Several parcels, historically rather narrow and very deep in dimension, were merged into a large, more rectangular parcel. In the case of Dordrecht, other than the V&D only one other parcel is left. This way, the footprint of the V&D expanded. In many cases the V&D covers almost half of the block. In some cases, even narrow streets (steegies) were overtaken by the V&D. This growth has altered the character of many urban blocks, changing it from a building block with open courtyard into a closed mass, with little empty space, or in the case of Maastricht no empty space at all.

The V&D department stores are cleverly located within the urban block. You'll often find the V&D situated at the corner of the block, covering the full width of the end of a block, or directly located to a prominent square or busy shopping street.

The point of gravity of the urban block in many cases shifted to the V&D. But recently, other forces are starting to take over, such as the Bijenkorf in Maastricht and the development of the St. Jorisplein in Amersfoort. In all the other cases, the V&D is still the largest player in the field of the urban block.

Roof structure

A number of conclusions can be drawn from the comparison between the roof structures of the various urban blocks. First of all, the different historical layers of each urban block are clearly visible in the roof landscapes. The roof structure of the urban blocks consist of an configuration of large flat roofs and smaller gabled roofs. Gabled roofs often belong to smaller and narrower buildings, remaining from the historic city. Flat roofs often refer to a commercial building, most of the time with a more recent construction year, and these roofs are predominantly used for installations.

Second, the contrast of some V&Ds with the surrounding buildings is clearly visible in the roof landscape. The buildings of the V&D have large flat roofs and contrast in scale and shape with the fragmented and gabled roofs of the surrounding buildings. This contrast is best seen in Alkmaar and Haarlem, where the V&D has replaced a lot of demolished small buildings and dominate the urban block. The V&D buildings in Amsterdam, Alkmaar, Haarlem and Enschede are leading and distinctive in terms of scale and position in the urban block, and this is also reflected in the roof structures. Third, despite the enormous scale of these buildings, in Maastricht, Leiden, Amersfoort and Dordrecht, the roof structure has been woven into the urban fabric of the urban block over time. One explanation for this is the small-scale start of the V&D and the gradual growth of the buildings over time. For example in Amersfoort, new constructions overgrow the V&D building and put the focus on another point in the urban block. Last, despite the amalgamation of structures in the urban block, the V&Ds are easily identified by general architectural features. For example, the V&D is distinctive in the roof structures due to the use of a skylight. This is a common feature of all these buildings.
Routes & parking

A number of conclusions can be drawn from the comparison between the routes and parking of the various V & Ds. First of all, the urban blocks of all V&D buildings border on busy shopping streets, often only accessible to cyclists and pedestrians. This shows the strategic position with regard to shoppers and the good accessibility from the city. In addition, the urban blocks of the V&D in Amsterdam, Alkmaar, Maastricht, Amersfoort and Enschede have a clear front and back side. The front is often adjacent to a busy shopping street, and the rear is adjacent to an access road. The separation between the front and rear of the urban block often has to do with routing and accessibility. For example, the busy streets are often walking areas, where cyclists are also allowed, and the quieter streets are accessible to fast traffic. This distinction between traffic is clearly visible in Alkmaar and Haarlem. It is remarkable that the urban blocks in Leiden and Dordrecht have two front sides, adjacent to a busy street or a square.

In all the blocks, the alleys have an important function for the routing in the urban block. They are often accessible to cars and trucks and that is why the service entrances to the V&D buildings can also be found here. In Leiden, Dordrecht and Amsterdam, the alleys also serve as a connection between two important streets.

A similarity between all V&D buildings is the good accessibility by bicycle. Within the urban block there is always an opportunity to park the bicycle, often even right in front of the V&D itself. Dordrecht and Leiden even have parking basements for bicycles.

Finally, two V&D buildings are notable for their accessibility by car. Enschede stands out because this urban block is fully equipped for accessibility by car. Amersfoort also has many parking facilities for the car in the urban block itself.

Facades

A number of conclusions can be drawn from the comparison between the main facades of the various urban blocks.

Firstly, the V&D building is the most dominant for its urban block, making the main facade the point of gravity in the block. The dominance of the V&D's facade lies in its height and length. For example, it is obvious that the main facades of the Haarlem and Leiden V&D are much higher than surrounding buildings. Other V&D buildings like the Alkmaar, Maastricht and Amersfoort V&D are much longer than the surroundings with similar heights.

Secondly, the big-size glazing on the ground floor of the urban block is continuous, contributing to the commercial environment of the shopping area in the city centre. Some V&D buildings in Amsterdam, Dordrecht and Amersfoort have huge display windows on the facade of upper floors, making them stand out from the surroundings. Other V&D buildings have solid and closed upper facades with small-size windows.

In conclusion, all the V&D buildings are the most outstanding points in the urban block. When people approach the site, they could immediately recognize the V&D building. On the ground floor level, similar spatial characteristics blend the V&D building with its surroundings, providing a constant shopping experience for the pedestrians.
Parcels & facades

A number of conclusions can be drawn from the comparison between the parcels and facades of the various urban blocks.

Firstly, it is clear that the classification of the facades is not always consistent with the legal parcels. The V&D building could only have one parcel, like the Enschede, Haarlem and Alkmaar V&D, while other V&D buildings like the Leiden and Amsterdam V&D, are broken into several different parcels. What is special is that the urban block where the Dordrecht V&D is located has only two parcels, and almost all the buildings belong to one parcel. So when looking at the facade of the V&D building, it is impossible to recognize the parcels behind it.

Secondly, most surrounding buildings in the urban block are small stores or individual houses. In most cases, the facade represents its own parcel, similar to the surrounding buildings in Alkmaar and Haarlem. However, the parcels of some buildings in Leiden and Amsterdam are divided into several facades, which is different from the situation of the V&D building.

In conclusion, the relationship between facades and parcels is complicated and different in both V&D buildings and surroundings. However, the relationship indicates the story and development behind the buildings, which is especially crucial for these commercial buildings.
Building Object
Ground floor plans

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Sections

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Structure

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Circulation

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Spatial Configuration

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
Conclusion

Ground floor plan

According to the floorplans of the eight V&D buildings the main typology is based on an open plan defined by the columns and facade with an escalator in the middle. The columns sizes are similar to each other and have a rhythm because of the same distance between each other. The column sizes are similar to each other and their arrangement can be described as ‘rhythmic’ due to the even distances between them. However, some parts of the current building belong to an extension of the original building and in the parts where the extension meets the original building, the columns are positioned irregularly.

The staircases in the centre of the buildings are surrounded by a void giving a vertical visual connection. Moreover, every building has a staircase, which is positioned on the side of each of them. To be usable as evacuation stairs, they are positioned on the corner of the building. Lastly, seven out of eight buildings have a skylight.

Sections

After comparing the sections of the former V&D buildings, some conclusions have been drawn. Firstly, in the set of eight former V&D buildings, the core escalators placed at the central atrium of the building function as the main vertical circulation. These atriums are small and in a rectangular shape, at which size just fit the escalators. Some of those buildings have a skylight above the atrium.

Secondly, the ground floor of these former V&D buildings always has the highest floor height and big openings towards the outside, including showcases, entrances, and glass curtain walls. The basement always have the lowest floor height while the rest of the floors above ground share a similar floor height.

Structure

A number of conclusions can be drawn from the comparison between the structures of the eight different V&D buildings.

First of all, the overview clearly shows that there are quite a few similarities in the structural elements of each building. The main structures consist of free-standing columns, load-bearing walls and cores.

Secondly, the contrast of the building dimensions and the associated grid lines and span dimensions is also clearly visible. The buildings of V&D have the characteristics of department stores, so large spans and lots of open space. This enormous span is best seen in Maastricht, Dordrecht and Leiden, all with spans of more than 7 meters. It is striking that in Alkmaar the later addition also includes larger spans. But in the old part of the building, the span is quite small, making Alkmaar the building with the most variation in spans and grid structure, with a difference of 3 to 9 meters. The grid here is the most irregular of all in these eight buildings. The V&D buildings in Amsterdam, Haarlem and Enschede are prominent and distinctive in terms of scale and clarity. They consist of only one main part and are smaller in comparison to the other V&D buildings. The V&D in Leiden distinguishes itself from the other seven locations. This building added three residences to the construction in the later extension, all of which have load-bearing walls. This can be seen by the fact that there are almost no columns visible in that part of the building.

Thirdly, despite the enormous scale of these buildings, in Maastricht, Alkmaar and Amersfoort the grid structure of the parts is interwoven. The grid structure parts in these buildings have small angular deflection from the each other. In Maastricht, for example, two parts intersect in an L-shape and still maintain a fairly clear structure with two different span dimensions and angle. Where the two parts meet, the columns have an irregular placement.

Finally, the structural features such as shape, dimensions of columns of the spans define the similarities as well as the distinctions of the the V&D's.
Spatial Configuration

The spatial configuration of the buildings is shown in abstraction schemes of the floor plans. A number of conclusions can be drawn about the V&D buildings from these diagrams.

First of all, the overview clearly shows that there are many units that make up each of these buildings. There are exceptions for V&D buildings that consist of only one main unit, such as in Haarlem, Amsterdam and Enschede. These three locations all consist of one main unit, with indoor units for the important elements such as stairwells and skylights.

Second, it can be seen from the symmetry and balance of the buildings that none of them are symmetrical. Some, such as Haarlem, Amsterdam and Enschede, which consist of one unit, have more or less balance in their spaces. In contrast, the other buildings that have had multiple extensions or consist of multiple interconnected units are more difficult to have a balance.

Third, due to the sheer scale of these buildings, most of them have a skylight in the centre above the escalators to make daylight enter the units. One reason for this is the depth of the buildings, there is not enough daylight inside, while daylight is an important element in the perception of spaces.

Finally, all buildings have an important staircase core in addition to a skylight or central void for escalators. In most buildings, this is placed in the centre against the facade, which is also converted by decorations from the outside of the building, for example with stained glass.

Circulation

The eight analysed V&D locations all have multiple ways to enter the building. The amount of entrances varies from two till six (including the personnel only entrances), whereby three entrances are most common. The entryways are always located at different sides of the building. On the ground floor the circulation is characterised by moving around a pair/system of escalators to get to former retail areas. This principle also applies to most of the upper floors of the various buildings. In every location the upper floors are reached by escalator, staircase and elevator, with the exception of Maastricht where there isn't a publicly accessible staircase. The number of escalator systems, staircases and elevators differ per building, however one of each is most common. In all locations the personnel largely use the same routes as the customers. The difference between them and the customers is that they can also access more private parts of the building, like offices, shipping spaces and dressing rooms, and therefore have a slightly different route.
Facades & roof
Representation

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AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
HAARLEM

DORDRECHT

AMERSFOORT

ENSCHERDE
Facade frames

AMSTERDAM

ALKMAAR

MAASTRICHT

LEIDEN
HAARLEM

DORDRECHT

AMERSFOORT

ENSCHDE
Language
Use of materials

AMSTERDAM

MAASTRICHT

ALKMAAR

LEIDEN
HAARLEM
DORDRECHT
AMERSFOORT
ENSCHERDE
Conclusion

Representation

In most cases, we can conclude that there is one dedicated front facade which is more decorated compared to the other facades. Decorations in those facades include: corner stones, sculptures, accentuations in more expensive materials. Seven out of eight V&D department stores include a protruding tower-like structure that attract the attention of pedestrians and form a point of recognition in the urban fabric. Four out of eight V&D department stores include a curtain-wall, or a facade including a large surface area of windows to strengthen the visual relationship between inside and outside.

Facade Frames

We can conclude that in all of the case studies, the ground floor of the facade is opened up as much as possible providing a display of products for people passing by and inviting them to come in. We can conclude that the rhythm of the facade is determined by the horizontal and vertical rhythm of the windows.

Lastly, we can distinguish two types of department store buildings by looking at the windows. First, there is the traditional department store in which windows are placed in the front facade surface following a rhythm. These include the front facades of the V&D in Leiden, Alkmaar, Enschede and Alkmaar. The other type is defined by the buildings of which the window surface is dominant and of which the window front comprises a large surface area of the facade. These buildings feature the predecessors of modern curtain wall shopfronts. The V&D buildings of Amsterdam, Amersfoort, Maastricht and Dordrecht are cases of this type.
Language

Though generally the facades we have studied of the V&D stores are all large in both presence and scale, through the component analysis we can see how the elements that form their architectural language are fewer in reality. There are also many elements in common through the facades, for example; the towers, large curtain walls, long strip glazing, canopies and of course ground floor store fronts. Even with these similar elements there is still varied ornamentation and forms that make each facade unique in its overall design. The contrast in scale and number of elements is made evident when grouped as in this style of drawing. It is interesting to see plainly the similarities and differences that are present in buildings of the same function.

Use of materials

Looking at the characteristics of the materials that make up the facades of V&D department stores, it can be seen that basically 7 of the 8 buildings are made of brick works. Bricks in all department stores are decorated with natural stone to emphasize horizontality. The ground floor of the building is mostly made of aluminum window frames and is designed to allow pedestrians to look inside. Bricks are used in various colors from red to yellow. The small window frame is designed to be thin and vertical in accordance with the Amsterdam school style of the time, and in the case of Haarlem, the window frame is divided into finer pieces. Four of the eight department stores are designed with large windows facing the street. All four of these are made of white window frames, and you can see that they emphasize verticality rather than horizontality. It can be seen that the small design details are designed only in natural stone.
PART 3

INDIVIDUAL RESEARCH
THE V&D DEPARTMENT STORE FACADE

A research on the change of the V&D department store facade through time and on how to approach the transformation of the different types of V&D facades?

Keywords: department store, V&D, facade, style, comparison, evolution, details, time, adaptation

When looking into the buildings of the V&D department stores, a large number of them is listed as a monument. When reading the monument listings often the facade is the architectural part that is most valued. Not surprising for the department store typology which often has a decorated outside but houses dull floors that are mere functional.

The facades in department store have a very special function. They are not just a barrier between inside and outside, but also connect to everyone in the street. Every passer-by is a potential consumer, and with that goal in mind this facade tries to lure everyone inside. On top of enhancing the consumption the facade is also used to display a certain brand image. (Beekum, 2018) Therefore these facades are built with a whole other goal in mind than most other monuments. So how to approach these valuable department store facades?

The question that is being researched is: Which design interventions can be defined when transforming the different types of front facades of the vacant V&D buildings? Extra attention is given to the case of Leiden as this is the subject of the design assignment.

Firstly it is necessary to discover how the different V&D buildings relate to one another. After that groups are made based on the style of the facades. (Figure 1).

The groups that are most interesting from this heritage research point of view, are the art-deco and late art-deco group, and Leiden which is from the same time, but does not necessarily belong to the art-deco or late art-deco group. The earlier groups don't have a clear corporate image and the latter ones are less valued because of their younger age. From the art-deco and late art-deco group one building is chosen. Together with Leiden these three are compared.

FIGURE 1 - TIMELINE WITH STYLE GROUPS

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FIGURE 2 - DECORATION LOCATIONS
Decoration
Of the three groups Leiden has the most decorations. (Figure 2 & 3) Chronologically this is remarkable as over time the V&D became less decorated. In the case of Maastricht you can see the decoration can only be found in the art-deco styling with the vertical windows and the small details like the French balconies. The art-deco decorations slowly disappear over time. In Dordrecht you can already see that the only form of decoration is the rounded expansion. In the case of Leiden the decoration also has a symbolic meaning: a family depicted on the corner of the building symbolises the importance of family in society and the image of the V&D being a store for the whole family. (Rijksdienst voor het Cultureel Erfgoed, 2020) In all stores there is a tower as a form of decoration. This made the buildings recognizable throughout the country, and served as a landmark in the city.

Brickwork & Materials
In all three buildings the same kind of brick is used with the same masonry. The older buildings do often use a darker stone, for example: Den Bosch, Alkmaar, Arnhem. In the later art-deco buildings this is replaced by the lighter brick which has remained as the V&D building colour for a long time.

The difference between the groups is mainly in the details of the masonry. In the art-deco group, brick is used to accentuate parts of the buildings like window frames, often addressing the vertical lines. This disappears in the later building group, where horizontal lines are accentuated more clearly. (Beekum, 2018) This becomes stronger through time and almost results in 'streamline-design'.

Leiden uses a more classical way of decoration in the masonry. Edges, window frames and constructional features are accentuated with sandstone. Also there are horizontal lines of sandstone applied in the flat facade to make the facade appear less monotonous. In all buildings the window frames are made of steel.

Essence
Even though Leiden is younger than Dordrecht and Maastricht, its style is actually the most traditional when it comes to the appearance. This is one of the only V&D buildings which has not been built in the V&D corporate style. This gives

Leiden a unique position in the V&D real estate. Because of its traditional style, the building of Leiden fits better in its environment compared to most others. Because this is the only one that is built in this traditional style, and therefore fits the location so well. This results in an interesting question: why did they make this choice especially for Leiden? Also the symbolic decoration connects to the consumers in a different way as this decoration was used to show the V&D is a store for the whole and every family.

Conclusions
The most important elements of the facade in Leiden are the sandstone elements that create this traditional style and connect the style of the V&D and the Waag and the brickwork and colour that matches the surrounding. The shape with the recessed top floor matches the size of the surrounding buildings. The window frames are placed in a traditional way. The tower is the most recognizable element.
SUSTAINABLE RETAIL IN A VACANT HERITAGE BUILDING USING THE 3R AND 5R STRATEGY

A research on sustainable strategies for redesigning vacant former department stores building.

Keywords: sustainable strategy, reduce reuse recycle, retail, department stores, heritage building

The former V&D building in Leiden is on a cycle of unsustainable function. After the bankruptcy of V&D, another department store tried to reuse the building but failed. After all, retail is the type of buildings with the shortest time of use (Karrholm, 2012, p. 2). What is a possible sustainable approach for retail?

Unsustainable Cycle of Retail
Currently, only the ground floor is used and accessed by visitors. The heritage building is disconnected to the city and the people in terms of its values. This condition is described by Schmidt III and Austin (2016, p. 99), as a phenomenon where a change in the society can cause discrepancy between the use of the building and the capability of the building.

Sustainable Strategies
The goal of this research and redesign is to find a possible sustainable redesign by using the strategies of 3R (Reduce, Reuse, Recycle) by Petzet and Heilmeyer (2011) for the heritage building and the 5R (Reduce, Reuse, Recycle, Redesign, Reimagine) for retail by Esty and Winston (2006). The results gained from the Spatial Building Typology (SBT) research forms the basis of the spatial knowledge for the sustainable strategies. To support the data gained from the SBT, research of values, society, and historical development, the methodology from Designing from Heritage by Kuipers and Jonge (2017) will be used. The results will be used to determine the implementation of 3R in the vacant department store building.

To sustain, The Context and The Building
To research and implement the sustainable strategies to the former V&D Leiden building, methods such as collages and sketches were used to analyse the context and building configurations. The collages were used as a tool to analyse the potentials and challenges of the context and the building. From the collages, sketches of the conclusions were drawn for the redesigns. Therefore, the implementation of Reduce Reuse Recycle Reimagine Redesign will be specific to the contextual and building’s condition and demands.

FIGURE 1 - SUSTAINABLE STRATEGY
FIGURE 2 - CONTEXTUAL COLLAGE
FIGURE 3 - CONCLUSION SKETCHES

THE INTROVERTED DEPARTMENT STORE

A research on the architectural development of department stores.

Keywords: introverted, Vroom & Dreesmann, architectural development, heritage, department stores.

Although the department stores studied in this book are very different from each other, they also have a lot in common as shown in Chapter 2. One thing they have in common is that all buildings have an introverted and closed character. This essay addresses the question why department stores are introverted.

Emergence of department stores

To explain why department stores have an introverted character, it is interesting to understand how and why the first department stores emerged. Until the end of the nineteenth century, markets, street traders, peddlers and artisan shops were the most important locations for trade in Western Europe. However, with the emergence of the bourgeoisie in the first half of the 19th century, passages, bazaars and luxury fashion stores arose from a need to shop without being bothered by traffic, street rubbish and beggars. Due to the growing prosperity and the success of these new shopping typologies, fashion stores started selling a broader range of products, which caused the development of the first department stores (Janssen, 2011).

Architectural development

The architectural development of these department stores is complex, due to the many developments that have taken place over time in the field of architecture and business. Generally, the architecture of the department stores has developed in three phases:

In the first phase the department store was characterized by a vertical facade structure, round towers at the corners and light courts. Above all, the building and interior had to impress the customer, therefore the buildings were palatial buildings that were heavily decorated with sculptures and stained glass (Janssen, 2011). Au Bon Marché (1852) and Le Printemps (1865) in Paris, Harrods (1849) in London, Wertheim (1875) in Berlin and also the first department stores of the Bijenkorf and Vroom & Dreesmann were created in this period (Kooijman, 1999).

The second phase is determined by the Jugendstil or Art Nouveau. During this architectural period the innovative combination of steel and glass made it possible to build buildings more transparently (Kooijman, 1999). Also, due to the freedom that the material brought, the department stores could be made larger, more spacious and more imposing (Janssen, 2011). A lot of steel was already used at Au Bon Marché in Paris, which allowed daylight to penetrate deep into the building. However, the steel columns in this building appeared to be wood. In the Jugendstil materials were no longer hidden. The Jugendstil period only lasted between 1890-1920 (Kooijman, 1999). The V&D building of Amsterdam (1912), which is analysed in this book was built in this period by the renowned Dutch architect François Caron. The building was very large at that time (1100 m2) and extremely modern, with a void for daylight, Stigler-lift and electric lighting in the shop windows (Stadsarchief Amsterdam, 2016).

In the third phase, which started approximately in the roaring twenties, the department stores started to develop, as luxury products became accessible to a larger target group due to the emerging middle class, the development of ready-to-wear clothing and growing prosperity. However, the biggest change in the department store typology happened after the Second World War, when the extroverted buildings became introverted. The accent shifted from impressing the customers with the architecture of the building, to strategical architectural choices in terms of business (Kooijman, 1999).

Introverted buildings

First of all, the department stores got a more introvert character because the glass voids were closed. Although the light courts contributed to the appearance of spaciousness, the light courts also took up a lot of potential sales space. Moreover, the light courts were also technically outdated, as an important function of the light court was, in addition to providing daylight, also ventilation. The development of the air conditioning made
it possible to close the "air courts" (Kooijman, 1999). This technique was first used in retail at the Abraham & Strauss Department Store in New York in 1919 (Chung, Inaba, Koolhaas & Leong, 2001). In addition, modern electric lighting was also a much better alternative to daylight, as individual goods and stands could be illuminated more specifically (Kooijman, 1999).

Secondly, the department stores became more introverted as facades were blocked or closed. The original idea behind the transparent facade was that the entire interior had to be made visible from the outside to attract visitors. However, the transparent facades had the disadvantage that - once inside - there was backlight, which casted a shadow on the products (Kooijman, 1999). In addition, due to daylight products would discolor more quickly. Moreover, a closed façade provided more shelf space. Therefore, the transparent façade was replaced by the shop windows (Janssen, 2011).

Lastly, the character of department stores became more closed by the arrival of the escalator, as this invention made it effortless to wander around the different floors of the department store. In opposition to the elevator which is limited in the amount of people it can transport, the escalator efficiently created a transition between the different floors (Chung, Inaba, Koolhaas & Leong, 2001). Shopping was made as comfortable as possible, in order to retain potential customers. The goal was to keep people in the store as long as possible (Rijnboutt & Vermeersch, 2007).

All the other seven buildings that have been researched in this book (Alkmaar, Haarlem, Dordrecht, Maastricht, Leiden, Amersfoort and Enschede) were constructed during this period. Although the buildings of Haarlem (1930), Dordrecht (1931), Maastricht (1932), Amersfoort (1936), and Enschede (1939) originally had voids when they were built, most of them were closed or made smaller in the fifties. Escalators were installed in the original voids in many of these buildings.

Another big transformation that happened during this renovation, was the removal of the window display passages at the ground floor level of some of the researched buildings (Amsterdam, Haarlem, Dordrecht, Maastricht, Leiden, Amersfoort and Enschede). This was mostly done to create more potential sale space. However, these passages originally formed a transition zone between the interior of the building and the surroundings of the city, so by removing these shop window passages this transition suddenly became much ‘harder’. As the facades became more closed, the building also became more introverted. Moreover, on higher floors many windows were blocked, closing off the interior of the department store from the outside world.

**Conclusion**

In conclusion, over the years the V&D department stores have undergone large transformations. Most of the early alterations were based on architectural developments, such as the emergence of new materials and building techniques. Later also changing business strategies played an important role in these transformations. To increase potential sales space, atriums where closed, windows where blocked and escalators where installed and the window display passages where removed, giving the V&D buildings a more introverted character.
IN-BETWEEN SPACE

Creating soft spatial transitions on different scale levels during the process of adaptive reusing the heritage buildings

Keywords: in-between space, department store, interior spatial transition, open city membrane, psychologically transition

With a massive volume, former V&D buildings located in the principal area of Dutch city centres have become a significant component of the urban block. These vacant buildings, which used to have close interactions with Dutch citizens’ urban life, are not accessible anymore and are gradually segregated from the vibrant urban life. They are urgently in need to transform to rescue the liveability.

In-between space as individual focus

According to the previous Spatial Typology Research and a general research on retail buildings, I found that department store buildings’ interior space tends to be fully defined by commercial activities: every inch of area was used to display commodities to maximize the profit (Figure 1). Consequently, the building has a homogenized and low-quality indoor space (Figure 2). In addition, the street-front plinth tends to be an enclosed glass showcase, while the rest of the facades are mostly closed brick skin. So, there are a few interactions between interior space and exterior urban space. Architectural space always ends up with specific forms and functions. Though insufficient spatial transition, the buildings worked well due to their perfect match with retail function. However, since traditional retail is almost impossible in the future, the problem of the lack of in-between space needs to be addressed. Therefore, my hypothesis is: in-between space will be a bridge to reconnect vacant heritage buildings and citizens in the future redesign. Therefore, in-between space will be the focus of the individual research.

Definitions of In-between space

Literally speaking, In-between space means the sequence of space between one space to another. While from an architectural perspective, it has been defined by some famous architects and scholars. For instance, Aldo Van Eyck described the in-between realm as a meaningful, psychologically

![FIGURE 1 - CLOSED BOUNDARY BETWEEN BUILDING AND STREET(SBT,2020)](image1)

![FIGURE 2 - BUILDING’S INTERIOR SPATIAL TRANSITION (OWN ILLUSTRATION)](image2)
effective transition. Richard Sennet said it is a porous edge membrane that stimulates vigorous public activities. While Kisho Kurokawa defined it as an interior place that contains all humans’ fun and further expands their living space.

**Research Question**
Considering the situation of those former V&D buildings, I would like to limit my research scope to: How can involving ‘In-between Space’ in the design process contribute to the final result of the adaptive reuse design of a department store, with regard to creating spatial transitions between (1) building and urban block, (2) building and street, (3) different interior space.

To answer this question, I need to figure out: What is the current situation of spatial transition inside the vacant department store buildings. Therefore, to understand its redesign possibility, I choose the site in Dordrecht and investigate its in-between space in different scale levels (Figure 3). In addition, to know the strategy of involving in-between space during the adaptive reuse of heritage buildings, I conduct case study research and compare my site with those case studies.

**FIGURE 3 - BUILDING’S CONNECTION WITH CONTEXT (ILLUSTRATION BASED ON SBT RESEARCH OUTCOME)**

CHANGING IDENTITY

A graphical study of the impact of Vroom & Dreesmann Leiden on its location and the experienced sense of place of the site.

Keywords: sense of place, spirit of place, place identity, intangible values, placelessness

In the previous chapter, the team of urban block recognized the large impact of the department store on the site and its direct surroundings for each location. The large scaled building easily overruled its neighbours.

Spirit of place
Naturally, such developments alter the character of a place. Character, identity, spirit of place, sense of place: these words are often used interchangeably. But there is a slight difference between the definition of the first three and the latter, as displayed in figure 1. Spirit of place can be understood as a quality of a site, both inherent and emergent. Sense of place is your ability to experience and grasp this quality.¹

The identity of a place consists of three components: form, meaning and function (Figure 2). Rather than a mere summation, it is the dialectical links in between that are of importance in order to grasp the spirit of a place.² The spirit of a site makes it possible that distinctiveness can persist despite of changes in these components over time.³

FIGURE 3 - HAND DRAWN SECTION ANNO 1936

This theoretical framework was a useful guideline to structure the site analysis. The main question of this research was: what impact did V&D Leiden have on the sense of place of the site?

**Vroom & Dreessmann Leiden**

The physical appearance of Leiden has changed drastically since V&D. The V&D started off as a little shop in the plinth of the corner building of Maarsmansteeg and Aalmarkt in 1903. Thanks to a successful retail concept the store continued to grow in size, took over neighbouring parcels, used the existing building to expand retail area. In 1934-1936 the first big alteration was made, as J.A. van der Laan his design for V&D was realized. Though many buildings were demolished, newspapers of the time mention how the grand building was welcomed by the general public. It seemed a fitting image to public image of Aalmarkt. With its decoration, the architect intended to link the building to the location and to the catholic community. This genuine expression of society in built form and respecting attitude towards an existing site is what Relph calls **authentic placemaking**. This generates a strong link between people and places: places you feel at home.

**Placelessness**

On the other hand, Relph warns of a growing **placelessness**: a reduction of places to mere abstract spaces by the processes of globalization, mass culture and focus on efficiency. In the final stage,
V&D's footprint covered more than half of the urban block of Leiden. Examining the current site, one could argue that little authenticity is left. Trying to compete with international brands, V&D's modernization flattened the experience and image of the building's interior. Over time, historical structures were covered (Breestraat), or totally erased (Maarsmansteeg). One could conclude that V&D has reduced the experience of the urban block from a site with a high diversity to a rather monotonous one, with little engagement to its direct surroundings.

**Experience maps**

Figure 3 and 4 show two sections based on the method of Jan Rothuizen. In his 'Soft Atlas of Amsterdam' Rothuizen tries to capture the experience of a site by means of hand-drawn maps which are filled with people's activities and his personal thoughts. To compare the spirit of the site over time, I've drawn two sections of two moments in time. These sections were a useful tool to study the building critically. Form, function and meaning come together, summarizing my research.

**Conclusions for design**

This research has revealed the stories that are hidden under the surface of V&D Leiden. The goal of my re-design for this complex is to fight the growing placelessness by restoring the layered experience of the site. In the end, a third section will be produced for the new situation.

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4. Sections based on method Jan Rothuizen (as in Rothuizen, J. De zachte atlas van Amsterdam. 2009. Amsterdam, Nieuw Amsterdam.)
DAYLIGHT INGRESS IN FORMER V&D DEPARTMENT STORES

A study to the current daylight situation of eight former V&D department stores and their similarities and differences.

Keywords: daylight ingress, daylight-related aspects, daylight typology, department store, V&D

In 2016, the department stores of V&D went bankrupt, resulting in many vacant buildings. These vacant buildings have to be transformed to preserve their important values. The ingress of daylight plays a crucial role in the transformation of these buildings. The department stores consist of large floor surfaces and usually have largely closed facades and roofs, resulting in little or no daylighting at spots further away from openings. On the contrary, the amount of daylight in the building can be too much nearby openings.

Analysis daylight-related aspects

For my personal research I look into this aspect of daylight and its influence on perception and the possibilities for the redesign. A part of my research is linked directly to the SBT research. For that part I analysed the current daylight situation of the eight former V&D locations with the aim of developing a typology based on common building characteristics related to daylight ingress. For the analysis I looked at a number of, so called, daylight-related aspects, like the position in the urban block, the amount of skylights and the percentage of open facade. All these aspects give information about the current state of daylight ingress. Figure 1 shows the results of the analysis in quantitative data. Looking at these results, it can be noticed that the percentages of open roof in relation to total roof are very low (with the exception of Amsterdam), while the percentages of open facade in relation to total facade are much higher.

Comparison daylight-related aspects & typology

After analysing the daylight-related aspects, I compared the results of them per location. For this comparison I labelled the results as low-medium-light, small-average-big etc. based on the average value of each daylight related aspect. The results of this comparison are visualised in some graphs.

FIGURE 1 - TABLE WITH ANALYSIS OF DAYLIGHT-RELATED ASPECTS PER LOCATION

FIGURE 2 - COMPARISON OF DAYLIGHT-RELATED ASPECTS PER LOCATION
(Figure 2) and drawings (Figure 3). Analysing the results, I noticed that the locations cannot simply be grouped in types based on all the aspects, because these are different per location. Therefore we should group the locations in types based on one aspect that includes most/all information of the other aspects and thus is most representative. The aspect ‘relation open skin and volume’ is chosen as determinant for grouping locations in types, because this is the aspect in which most information of the other aspects are included. This leads to three types (Figure 4), which together make up the typology based on daylight characteristics.

**Typological conclusions**

Next to this created typology, some typological conclusions can be made based on the results of the comparison. Firstly, the locations which take up an integrated position in the urban block (thus having very few free facades), all have average to high percentages of open facade i.r.t. total facade which makes sense. Secondly, the buildings with a big footprint have a low percentage of open roof i.r.t. total roof. This is weird because you would expect a building with a large footprint, thus consisting of deep spaces and more eager to have problems with daylighting, to have a relative big open roof area.

When analysing the historical development of the department stores, I found that it was typical for the building to have a big atrium and a skylight on top. During the years, this atrium was reduced to a void and sometimes the skylight was closed (Figure 5). These events severely decreased the daylight ingress into the building.

These results form valuable additional information for the SBT research, since daylight is a factor that influences the design possibilities of a redesign.
SOCIALIZING SPACE TYPOLOGY

What are the possible spatial aspects to re-use if the heritage department store is transformed into a social public space?

*Keywords: public space, park, socializing, plaza, V&D, entrance, connection, hidden space, sequence*

“The main square or plaza is the most recognizable and traditional civic form of public space. If you think of the main squares of our towns and cities, they are usually situated in front of municipal buildings and mark the notional center.” (Gaventa, 2006)

**Socializing at parks and squares**

According to Gaventa, historical spaces such as squares have long been considered important to citizens. Also, the importance of such a plaza continues to this day. For example, there is the square in front of most European train stations. Numerous street performances take place, and people sit around the fountain, enjoy a break and relax, talk and ask each other’s best regards.

In addition, today, not only plazas but also parks are playing a role as an important socializing place for the public in the city center. Another example is that the Central park in Manhattan provides shelter to people within a dense city center. Located in the city center, where streets and avenues are finely divided, the large park is not only a park for people to exercise, but also a desert oasis where families, couples and friends can meet, chat and walk around on weekends. The Central park is used by people and affects the entire city. In other words, it stimulates people to feel social value between the city and the park.

**Redesign a heritage building into a public space**

Huge department stores are vacant in the city centre. City centres should be shared by the public and also vacant department stores should be returned to the public too. Then how can we redesign this heritage building into a public building? Which spaces are good places for people to communicate and socialize? The socializing space is theoretical and abstract to analyse. Therefore, in order to solve an abstract and theoretical problem, it is the basic theoretical framework to analyse the ‘space’ that remains unchanged and see if there is a possibility to change it physically. Abstract aspects of socializing can be translated into “space” and be compared to V&D Department stores’ typologies which we found before these chapters.

Through this research and project, I will focus on the social value of heritage architecture. People's attention is focused on how to make community, health, well-being and social sustainability. Accordingly, I intend the project with the goal of one renovation architectural project, how to create a sustainable society, and in what space people can socialize. It is no longer architecture from the past, but aims to play a role as a hybrid park of a heritage department store with a new function as a park and public space in the future.
Comparison between park and V&D

To investigate what behaviors people are doing in public space, the qualitative research methodology is necessary. In addition, in order to compare the spatial characteristics between public space and the V&D department store, it is necessary to check in which space the socializing pattern appears. After then, it is need to research how a design solution can come out while comparing two spaces with completely different purposes and functions through the common traits of spatial characteristics.

After examining the spatial characteristics of parks and plazas in Dordrecht, they were reclassified into five characteristics and compared to spaces with other functions such as department stores and parks. Therefore, this research will help to explore the possibility of designing a department store into a park.

Finally, looking at this research as a broader scope, we can also see the impact that heritage architecture can have on cities and people when department stores in the center of the city return to the public.

THE GAP IN THE MARKET
A STRATEGY FOR CIRCULAR V&D HERITAGE

A circular design strategy for adaptive re-use of the V&D department store in Leiden, contributing to acceleration of the circular economy.

Keywords: circular economy, department store, V&D, heritage, circular potential, circular values

Today we have to deal with the challenge of vacant department stores because of the bankruptcy of V&D in 2016. But the vacancy of the department stores is part of larger challenges we face in the building sector.

Linear way of building
As Thomas Rau (2017) mentioned: “everything is temporary, but the consequences are permanent.” Needs and desires in society change rapidly. But buildings are designed and build as tailor-suits, rigid and unable to be disassembled after the end-of-life phase. The result is often demolition of a building after end-of-life and the loss of valuable materials. This linear way of building heavily affects the environment by pollution and CO2 emissions, the extraction of raw materials and creates an enormous pile of waste, in which the building sector takes into account 40% of the total waste in the Netherlands (PBL, 2017).

As a sustainable alternative, the Circular Economy is gaining momentum. Its main focus is on the better management of resources. In the transition towards a fully Circular Economy by 2050, the existing building stock, including the heritage V&D buildings, is crucial. But the application of the Circular Economy on buildings encounters a few problems, especially on heritage buildings (Pomponi & Moncaster, 2017). The main problem is a gap of knowledge on the application of the circular economy on building with a long lifespan.

Circularity vs. heritage?
The definitions of architectural heritage (ICCROM, 2005) and the CE approach on buildings (Leising et al., 2017) seem contradictory on first hand. This contradiction consists out of a focus on continuity for architectural heritage versus a focus on renewal and temporality for the CE approach on buildings. However heritage buildings do not seem to be sustainable and able to become circular, their potential is actually big. In heritage buildings one can find preciousness/age and accommodation capacity. These are two aspects by which heritage buildings distinguishes themselves and through which sustainability can really work in existing buildings. In heritage buildings, people can connect emotionally with the building and the building itself can accommodate relevant functions with some adjustments. The result is a continuation of the building and a saving a lot of materials. Preciousness and accommodation capacity can both be found in the frame of the building, which holds the most important architectural or social values and creates

FIGURE 1 - CIRCULAR VALUES OF V&D DEPARTMENT STORE LEIDEN (OWN ILLUSTRATIONS)
Circular approaches to buildings
But how do we deal with the determined frame in a circular way, and even increase the circular potential of this frame?

Three main goals for circularity in the built environment are reduction of the amount of waste, reduction of dependency on raw materials and design for adaptability. To reach these goals there are three possible approaches with its own unique design actions.

One can choose for an eco-efficiency approach. This means doing more with less, by limiting - reuse and recycle. Especially reduction is one of the central terms in eco-efficiency. But reduction does not stop waste of resources or damage to the environment and is not an inspiring goal to achieve for people (McDonough & Braungart, 2010).

Cradle-to-Cradle offers an eco-effectivity approach on how we can design in a better way with circular starting points at the beginning of a design. It is about rethinking the way we design and build. But eco-effectivity is mostly applied to new building designs and is harder to apply to existing buildings (Braungart & McDonough, 2010). Because in case of heritage buildings, there is already an existing frame. Therefore another approach is needed: eco-continuity, which is focused on extending the lifespan of a building through adaptation with its heritage values and potential circular values (Leupen, 2005).

Existing circular values
The chosen department store for adaptive re-use is the V&D in Leiden. This department store already has the following potential circular values: the facade as main value carrier around generic space (1), demountable steel constructions (2), freedom by column structure (3), large floor spans and ceiling heights (4), lightweight structures on solid base structure (5) and different compartments with their own circulation, based on historical layers (6).

FIGURE 2 - RESEARCH SCHEME CIRCULAR V&D HERITAGE (OWN ILLUSTRATION)
FIGURE 3, 4, 5 - THREE DIFFERENT CIRCULAR APPROACHES (OWN ILLUSTRATIONS)
WANDERING FROM THE SHOPPING STREET INTO THE DEPARTMENT STORE

The vacant department store influences the experience of the shopping street. The research presents the study on the defined space of the shopping street related to the department store's perception.

Keywords: shopping street, department store, V&D, perception, cityscape, public domain, spatial characteristics, architectural components

The experience and desires of shopping and other cultural activities have changed over time. As well as the vital function of the department store within the retail district. When the former V&D buildings became vacant, the building is experienced as a void within the shopping street, especially in the city of Alkmaar, which therefore is the research and design location. Therefore, the research into the shopping street builds up on the former department store’s perception within the cityscape. The experience will be defined by the public domain and spatial characteristics of the shopping street.

Urban component
The first step is to take a further look into the urban fabric of the department store’s context. The SBT research base is an understanding of the city networks and accessibility of the urban block. The urban fabric of Alkmaar is translated into continuity mapping of the amenities and functions related to each other (Figure 3). This confirms the retail district’s void and the opportunity to develop a new lively building program to boost the shopping street.

Plinth component
The spatial aspect of a building in the shopping streets plinth is experienced on eye-level. In combination with the facade compositions drawn in the SBT research, the street rhythm was analyzed. The spatial character that influences the perception is the proportion of architecture (Rasmussen, 1964). The department store is also standing out in this rhythm of the shopping street.

Domain component
To obtain research that translates a space into place, the interpretation of this is the next research component. The SBT research is only built upon the street profiles’ proportion but does not focus on the shopping street. Therefore, this component is a granting of the SBT research documented with field trips to the city centre of Alkmaar. The crucial observation in this research was that without the people within the shopping street of Alkmaar (due to the pandemic), there were no characters that defined the space of the public domain (Figure 4). Because people and activities move other people, except when you stay and enjoy senses and expectations (Zumthor, 2006).

Perception component
The last research component looks into the perception of the shopping street moving towards the former department store of the V&D. The object of a store is to highlight the interior experience by the exterior perception. The challenge of architecture is, therefore, to focus on the exchanging phenomena of activity and leisure (Holl, 2006). The department store’s design is intended to keep people inside. However, to improve the shopping street’s perception the next re-design should interact with function inside and the surrounding public domain.

To conclude, the department store’s spatial characters within the shopping street are summarized in Figure 1. These will be propositions for the re-design of the V&D in Alkmaar. After all, the new buildings’ design should create a public area for lingering in order to heighten the shopping street experience.

FIGURE 1 - MORPHOLOGICAL RESEARCH CONCLUSIONS
FIGURE 2 - USED ANALYSIS COMPONENTS OF EXPERIENCE

FIGURE 3 - URBAN CHAIN OF FUNCTIONALITIES

FIGURE 4 - LACK OF DEFINED SPACE IN THE SHOPPING STREET OF ALKMAAR

FACADE AS BOUNDARY OF INTERACTION

A study of the facade typology of former department stores and its impact on the interaction between inside and outside.

Keywords: facade, interaction, department store, public space, plinth, transition, in-between space, entrance

As mentioned in the introduction, there is a need to develop a building typology based on space rather than functions. An important aspect that influences spaces is the facades. As can be seen in the comparison chapter 2, the facade is the unique element of each department store. Where every department store is characterized by a staircase, escalators, light atrium and ‘plan libre’, it is the facade that makes the difference. The facades of a department store have a very special function, they are not only a barrier between inside and outside, but also attract potential consumers. Each department store is characterized by their representative facade architecture that exudes a certain brand image and determines their identity and character. In this research I will investigate the composition of facades and the influence on the interaction between inside and outside. Which leads to the following research question:

‘To what extent does the facade of buildings, such as the V&D department stores, play a role between indoor and outdoor space and to what extent does this determine the experience of the space in these buildings?’

Architecture viewpoint on facade

To begin with, a facade is part of a building and can be viewed from different perspectives of building physics, construction and architecture. The architectural perspective is to consider the facade as an independent element that creates a separation between inside and outside. Openings such as windows and doors enable the relationship between inside and outside and thus have an important functional and architectural significance. The facade creates both a separation and a connection between inside and outside (Leatherbarrow & Mostafavi, 2005). In addition, buildings sometimes accommodate different functions, so the relationships between inside and outside are different and therefore also the appearance of the facade. The facade is not only an external boundary of the own spaces, but together with the facades of other buildings, it also forms the walls of the urban space. The ambiguous character of the facade is also that it encloses the interior space and determines its atmosphere, but that it also determines the atmosphere of the outdoor space (square, street). The public outdoor space also influences the appearance of the facade (Rongen et al., 1994).

Analysis of facade typology

The facades can be decisive or not, this also gives an indication of whether there are many possibilities in the redesign or not. Based on the facade drawings in Chapter 1, I used them for further research on facades and to categorize them into different types. First of all, it is necessary to discover the different aspects that determine the appearance of the facade. Some aspects to analyze the facades, but also to classify and assess them are: facade types,
building style, directions in facades, composition systems and quality (Rongen et al., 1994). By means of comparative research I compared in figure 1 the eight chosen location facades with each other on the basis of the following aspects; open & closed (percentage of glass), flat & plastic (protruding parts), complex & simple (composition), vertical & horizontal (directional elements), large & small elements (construction). Based on this, I divide the eight different facades into typologies based on openness, direction, composition and architectural style. Alkmaar, Haarlem & Enschede are more of the classic facade with small vertical elements, protruding parts and belong to the art-deco style. While Leiden is more monumental with a tower as a landmark in the city and small vertical openings in the surface. In contrast, we have Amsterdam, Dordrecht, Maastricht and Amersfoort with the large storey-high rectangle element, simple and reasonably flat surface.

The importance of the plinth
In addition to the entire façade of the department store, which forms the identity in the urban fabric, the ground floor (shop windows & entrance) plays a major role on the human scale. The products are displayed on the plinth in the shop windows, which forms the interaction and transition between inside and outside. That is why I look at how the plinth is arranged in such a way that it is a point of attraction and is visible. Five ways of doing this are shown in figure 2. In addition to the five ways of organizing the plinth, it is also noticeable that there is often an overhanging (canopy) separation between the plinth and the upper part. Moreover, often also a material transition from natural stone on the plinth to masonry above, which is the case in Haarlem. Figure 3 shows the four facades of the Haarlem building in context. Here you can see how the canopy forms the dividing element between the plinth and the upper part. As a result, the building fits better into its environment by aligning with the plinth of surrounding shops (Figure 3), in order to maintain the perspective on a human scale in the shopping streets.

Conclusion for redesign
This research has highlighted the different aspects of the facade that should be taken into account in the redesign. The facade certainly plays an important role between indoor and outdoor space, and the plinth in particular has a major influence on this. I can say that the plinth design plays the leading role in the question to what extent you want to interact with the outside space and experience an entrance as a transition zone. With the five methods of plinth design and the knowledge gained, redesign options are presented in the next chapter.
PLACE IDENTITY AND REDESIGN STRATEGY

An exploration into the meaning and consequences of place identity in architecture, studied against a recently realised redesign case using analytical mapping methods.

Keywords: place, architectural identity, spatiality, evolution, critical reconstruction, analytical mapping, framework, value matrix, transformation framework.

In my individual research I aimed to answer the research question ‘How can a space become a place and form a comprehensible identity in the urban fabric?’ Exploring themes of place and identity and their meanings in architectural terms.

To establish this first I had to define and discover what a place is in architecture and encountered many differing theories such as the idea that place is space experienced, passed through the subjective filter of perception conditioned by our previous experiences, our language and our culture (von Meiss, 2014).

Through conducting this theoretical study, I constructed a framework that can be referred to as a guide on transforming a space into a place with a strong identity. Some of the essential elements to consider are; the building must be rooted in time and history, and it must work as a backdrop for everyday life, it must also be appropriable for users and not rigid in design, recognisable in its form and signage while being memorable in its spatiality whilst offering rich experiences. These aspects are vital when working on a redesign project as incorporating them allows the architect to consciously design a new 21st Century layer while still recognising the existing. These elements have already proven guiding for the design stage as they aid greatly in the decision making process.

Alongside this literary research, I conducted a study into an already redesigned Vroom & Dreesman store as an example case. I aimed to explore how the department store can evolve from its conception to its redesign and develop an understanding of heritage valuation from the perspective of a realised project. The reasoning for

FIGURE 1 - ILLUSTRATOR JAN WIEGMAN DREW THIS SCENE IN THE LUNCHROOM OF THE HAARLEM V&D WHILE ENJOYING A CUP OF COFFEE, DECEMBER 30, 1958
The focus on this case is partly due to it being a redesign from a highly recognised architectural practice (they received a nomination for the National Steel Prize 2020 for the project and also a nomination for Architect of the Year 2020 Architectenweb Awards as an office.) In addition to this, it also is an exemplary example of the possibility in the redesign of the department store typology. The transformation project was also selected for the Architectuur Jaarboek 2019-2020. The Office was featured twice in the Jaarboek, highlighting the significance of their current work and perspective in architectural discourse.

The case in question is the V&D Amsterdam, designed by architect Caron in 1918, renovated countless times over the years by architects such as Kuijt and Groosman, then finally transformed by Office Winhov in 2019. Another primary motivation for this study is to see what can be learnt in terms of redesign strategy from the approach of Office Winhov.

To investigate this, I underwent a series of analytical mapping studies including forming a value matrix and a transformation framework as described in Designing from Heritage (Kuipers, Jonge, 2017). This was carried out from the perspective of Office Winhov, using project documents and an interview with a project architect as a research base. From this study I was able to formulate conclusions on valuation and implement these in my own design project. One such conclusion is the theory of critical reconstruction; this is a significant approach used by the Office, whereby they aim to unravel the layers of time by taking a critical position on what to keep or not and why. Another overarching idea was to let the original concepts of the early architects be guiding in the redesign process.
December 31st, 2015 marked the end of an era: the bankruptcy of the V&D - a symbol of what once was epitome for modern consumption in the Netherlands. Department stores were a new building type and consequently direct manifestations of the new functions that related to the rapidly changing world of the industrial revolution.

Territorial box
The recurrent demand for new functions coupled with uncertainty about future demands resulted in a large number of type or model solutions. These changes during the nineteenth century contributed to the establishment of a kind of material and territorial principle we could call the territorial box: a large number of buildings had a uniform territorial skin, and an emptiable/refillable interior, established in order to accommodate a general territorial order. The same applies to the V&D stores where the stairway was always a fixed unit, whereas the rest is primarily characterised by permanent change produced by a constant exchange and flow of new goods and merchandise.

As society has gotten used to commodities and has replaced the physical act of purchasing such goods with online-shopping, the vacancy of such prominent department stores has left a soring gap in historic city centres. As generations move on to the next, the public opinion may change and quondam attractions might fade. What is left would be the common value of the interior related to conventional urban usage and its general contribution to the network of public space - if it has any (Harteveld, 2012). To comprehend the cultural value of a building like the V&D in Leiden, it is crucial to understand the building in relation to its surroundings, its development over the years, its cultural and social value and lastly to compare these values in relation to a larger framework.

Public interiors
The intriguing interior world is the focus of this research. Formerly accessible, the interior of the V&D department store formed an important extension to the public realm. In archival photos and drawings of these interior spaces, it is clear that these spaces were intended to attract and captivate people. It should be noted that this attraction was intended to stimulate people to purchase goods and thus contribute to the success of the department store as a business. The by-product of this was however the societal contribution these interiors sustained. These bourgeoisie palaces have become places to meet people which in turn has created a win-win situation in which both the business and people profit. Despite this seemingly ideal situation, one would not be so fast to consider the interior of these department stores as equally public as the interior of a library or a train station. An obvious hypothesis would be that because these civil buildings are paid for with tax money, they ‘belong’ to the public and thus are used as such. As Harteveld (2014) has stated, “interior public spaces are not in the scope of urban theorists and designers following mainstream as long as they are not really defining them as such. As long as they keep focusing on the publicly-owned and forget the publicly-used, they make a professional blunder, because these spaces are crucial for the city and its culture.”

Territorial appropriation
Interestingly enough, the V&D has become so engraved in the collective memory not only as a brand but also its physical embodiment of their
buildings that people feel that it “belongs” to them. Kärrlholm (2012) has described this phenomenon “as territorial appropriation, where territories are produced through a repetitive and consistent use of an area by a certain person or group who, at least to some extent, seem to perceive this area as their own”. Related to this notion, territorial association represents the claiming of an identifiable area for a certain function, and as such characterised by certain conventions and regularities. The territory does not necessarily have to be considered by any person or group as ‘their own’ - but are nevertheless associated to by others as pertaining to a certain function or category or function. Territorial association thus represents territorial productions that are not planned or intentionally established, but where the territory is produced is a consequence of established and regular practices. Implicitly, this suggests that because the building is recognized as a department store, it grants the right to stroll through it, observe its goods and claim space as yours.

Now that the former department stores of V&D are vacant and closed, it leaves a conflict where it becomes painfully obvious that what once was considered public territory no longer can be accessed. After more than 100 years of V&D, the territory of the department stores must be singularized, which is the trajectory from a certain territorial sort, type or category towards a new and unique identity. The process of singularisation means that the territory becomes less and less interchangeable and redundant.

**Interstitiality**

Consecutively, interstitial production is dependent on, and can even be defined in terms of, how they relate to one or more adjacent or overlapping territorial productions. This indicates a double identity of being (a) and being (b). Per example, the coming of the Hudson's Bay to Leiden meant that the building had both the identity of the former V&D as well as the identity of the Hudson's Bay. It also implies a sequential transformation from (a) and (b) and then on to something else (c). Interstituality can be described as spatial production through territorial transformation. Interstitial production can take advantage of weak or heterogeneous territorial programs in-between stronger ones. They can, however also 'carve' out space within strong territorial strategies, for example, by means of territorial association, thus creating uncertainties and new rules that defy existing classifications. Interstituality could prove a valuable asset for this particular adaptive reuse project. The joint existence of permanent reference of the V&D and random happening, of the private and the public, of innovation and tradition is what constitutes the challenge.

**Conclusion**

Interestingly enough, territorial sorts, as well as building types, are complex. A territory can be produced by way of association, where the proper usage is induced by the association of one place with another of the same 'sort'. While the V&D functioned as the sort of a department store, future functions might entail different territorial sorts. As the variety and the total number of distinct configurations of a specific sort increase, the possibility of making an association increases as well. This phenomenon can be understood in retail trends of ‘blending’, where various functions are hybridised. IKEA has an entire restaurant with IKEA products, the V&D had a tearoom and a restaurant, and places like Starbucks have become flexible offices. It seems as if hybridisation is a requirement, as monofunctional buildings are vulnerable for the ever changing demands.

**FIGURE 2 - GIAMBATTISTA NOLLI’S MAP OF ROME (NOLLI, 1748)**
**FIGURE 3 - NOLLI MAP OF LEIDEN (OWN ILLUSTRATION)**
**FIGURE 4 - INTERIOR SCENES OF THE V&D IN LEIDEN (ERFGOED LEIDEN, 1940)**

AR3AH105 Graduation Studio Adapting 20th Century Heritage
PART 4

RE-DESIGN OPTIONS
DE OUDE V&D - MIXED USE AND HIGH DENSITY.

While the department stores are in heavy weather the need for housing is increasing everyday. How to adapt a monumental department store in a building that mixes housing and public functions?

Keywords: department store, V&D, high density, housing, dwelling, heritage, mixed use
GROUND FLOOR PLAN

BEFORE

AFTER

TYPICAL FLOOR PLAN

BEFORE

AFTER

Alexander Witkamp

Re-design options
SECTION

BEFORE

AFTER

FACADE

BEFORE

AFTER
De Oude V&D - Mixed use and high density.

While the department stores are in heavy weather the need for housing is increasing everyday. Re-designing the old department stores to be used as housing is a necessary solution. So how to fit apartments in a large building that is so unfit to be used for housing in its current condition?

While researching the V&D department store in Leiden it was confirmed that the building needed thorough changes to adapt to a housing function. To adapt the building for its new function the building block is changed into an open-block structure. Resembling the structure used in most high density urban environments. At the same time this open structure compliments the already existing connection between the Aalmarkt and Breestraat side of the building. While opening up the building it was important to preserve its valuable elements, and where elements were removed or introduced, to relate to the original department store.

The result is a building with a stepped open-block structure to balance the amount of light, floorspace and functions. The open structure creates terraces for the apartments which also serve as traffic space. An open public courtyard is introduced on the ground floor, reintroducing the old connection through the building. The inside of the building and the Marsmansteeg get new facades, using materials that relate to the main facade at the Aalmarkt.

Using the valuable old V&D store a building is created which mixes public functions and housing in the heart of the city, while trying to address the current housing challenge in the Netherlands.
**GREEN RECYCLED RETAIL**

Reducing based on value, reusing the heritage building's configuration, and recycling the space with green intervention in redesigning the former department store building into a mixed use building.

*Keywords: sustainable strategy, reduce reuse recycle, retail, heritage building, green*
GROUND FLOOR PLAN

BEFORE

AFTER

TYPICAL FLOOR PLAN

BEFORE

AFTER

Re-design options
The former V&D building in the center of Leiden are formed by several buildings with different characters. One of the buildings that is listed as Rijksmonument in Breestraat 84 is located right in the middle of the building complex. This configuration creates a fragmented complexity within the building resulting in isolated, small, and dark spaces that is unsuitable for retail. Therefore the spatial ambition of this project is to connect the building complex with functions that reuse the building’s potential.

The fragmented parts of the building are used as offices for the retail that is placed in the center of the building reusing the escalators and the monumental staircase. The large windows with view at the Aalmarkt are used as a library for the public to use. To connect this mix of functions, a green intervention was chosen as it universally caters the function's needs in a sustainable way.

The green exists in the building by reusing the enlarged courtyard in the inner and center part of the building complex functioning to enhance the wellbeing of the employees. The green on the roof reusing the vacant rooftop areas acts as a point B for the retail to attract people to go upstairs. Meanwhile the green facing Maasmanteeg hopes to benefit the cafes across it by providing green views to the surrounding areas.

The green exists as a connective tissue between the mixed functions, the building and the context. It exits as a literal interpretation of sustainability and a symbolic one to the people of Leiden.
KRUISBESTUIVING
HAARLEM

If the vacant department store is transformed into a centre for biodiversity, what are the possible ways of opening up the building?

Keywords: heritage, park, squares, biodiversity, V&D, entrance, connection, atrium, butterfly garden
Vacant Heritage - Department Stores V&D's

AR3AH105 Graduation Studio Adapting 20th Century Heritage

SECTION

FACADE

BEFORE

AFTER

BEFORE

AFTER
Opening up the department store
When the V&D in Haarlem was first built in the 1930s the building had a very open and inviting character. However this changed after the 1960’s when, the shopping window passages where closed, views through the windows where blocked and escalators where installed. To make matters worse, the store went bankrupt in 2016, which meant that the shops also literally had to close. However this large and flexible building at a prominent location in the centre of Haarlem asks for a re-design to open up the building.

When researching the department store, it was noticable that although Haarlem is a city surrounded by green the centre is lacking this quality. Therefore the design tries to open up the building by creating space for learning, social encounter and biodiversity.

This is done on the ground floor by bringing back the window passage halls as an intermediate space between city life and the interior of the department store. In this way these shopping window passages open up the department store by blending the outside with the inside and enhancing flows of mobility. In addition, a butterfly garden is installed in the core of the building, which opens up the building by maximizing views, inviting more natural daylight and integrating green.

Also on the higher floors large squares are installed, which open up the building due to the mixed and diversified programme. Lastly, the use of the roof and balconies is encouraged by adding green spaces to the building.
BRIDGE THE COLLECTIVE MEMORY
DORDRECHT

Restore the identity as former public interior space, integrate with the urban routing, reveal the heritage values, fit better into context

Keywords: in-between space, department store, interior spatial transition, bridge and canal

N 0 50M

BLOCK

BEFORE

AFTER

ROOF

BEFORE

AFTER
SECTION

BEFORE

AFTER

FACADE

BEFORE

AFTER
Urban living room for Dordrecht city centre

The value of the heritage buildings will be the starting point of the redesign process: restore the previous identity, responding to its historical events, and capturing the core values as the redesign concept.

To begin with, one question needs to be answered: what type of architecture should it be? The building was used as an interior gathering space for almost one century and became part of the urban routing. In addition, the building is located in the prime area inside the historical city centre and surrounded by the typical urban fabric consists of canal & bridge. Therefore, I would like to extend the public characteristics and make the building an extension of the public space. To create a similar spatial experience inside the building, ‘bridge’ is used as the main spatial concept for the interior design.

Then, what had the building been through, and what was the most important value? The building had been through phases of construction, reconstruction, and extension. It was firstly built in the 1920s with mushroom columns while lost most of its structure in 1932 due to a big fire. Then the building was rebuilt with bolted steel structure and brick facade, then being seen as the most important elements. Therefore, my design strategy was to create transitional spaces there and make them the center of the building. Also, due to those buildings’ central location and strong attachment to people’s public life, Urban Living Room became a new possible building typology for redesign.
CHANGING IDENTITY
A graphical study of the impact of Vroom & Dreesmann Leiden on its location and the experienced
sense of place of the site.

Keywords: sense of place, spirit of place, place identity, intangible values, placelessness, spatial experience

Before

After

Before

After
GROUND FLOOR PLAN

BEFORE

AFTER

TYPICAL FLOOR PLAN

BEFORE

AFTER

Re-design options
Narrative of V&D reinterpreted

Vroom & Dreesmann Leiden complex consists of several buildings. From the outside, the pluriformity is still visible. Over time V&D has glued all these structures together. The building's interior has been transformed into a tabula rasa in order to sell products. This blank interior has flattened the experience of the site.

In my design proposal, I aim to increase the experience to the complex and make the structure legible. The complex is transformed in a new public attraction: a cultural warehouse. It hosts a variety of exposition spaces, workshop and rehearsal spaces, a concert hall, theatre, several cafes and a large rooftop garden on top. The ‘glue’ is removed and space is created where the different entities meet, exposing the time layers that this complex consists of. The intervention restores the structure of the urban block, with an indoor street referring to the historical alley (Vispoort). The porosity of the building is increased, stressing the public function. A new entrance is made in the heart of the building, creating a shortcut from the public bike park in the basement to the heart of the building. A zig-zag facade on ground level attracts the eyes of passengers of the Maarsmansteeg. In Breestraat the original entrances to the individual buildings have been restored. On top, a new roofing structure is added, following the original grid lines. New elements are materialized in wood with brass accents.

The spirit of V&D remains in the complex's intangible values: the site is still a 'discovery landscape', with a welcoming atmosphere and attractive vertical movement. But now, this 'warenhuis' sells experiences instead of stuff.
RELIGHT V&D HAARLEM

[How to improve daylight conditions in the adaptive reuse of a former V&D department store?]

Keywords: daylight ingress, daylight conditions, atrium, spatial experience, perception, V&D
Reintroduce daylight in the V&D Haarlem

The former V&D building in Haarlem is a height building which consists of deep spaces. The relative small transparent openings in the facades and closed roofs creates limitations in daylighting for a new use. After looking into the program demands of Haarlem, a library (including an archive) and dwellings were chosen to place in the building. Housing a library and dwellings brings the demands for much and controllable daylightingress. Based on my research about daylight and this program, an atrium was chosen as the main intervention of the building to shine light again in the current dark core of the building. This atrium is put at the heart of the building where it connects the numerous floors, shines light to them and plays a central role in the public function of the library. On the ground floor it forms a central bright social meeting space where different public activities of the library happen. On the upper floors of the library it shapes the adjacent bright circulation space with workplaces, while on the dwellingfloors it highlights the routing towards the private dwelling entrances. Next to the atrium, other spatial interventions, like a skylight, are created to adjust the daylightingress. The daylightingress was also altered on a more perceptual level by treating surfaces with different finishes. In the project different materials, colours and textures are used to influence the perception of spaces and to strengthen the different spatial ideas. In the end this building contains of various daylight conditions (qualities and quantities), resulting from different spatial interventions and materialisation, leading to different spatial experiences in a former department store.

**FIGURE 1 - SPATIAL CONFIGURATION OF ATRIUM IN PROJECT**
**HERITAGE PARK 2.0**
**DORDRECHT**

If the heritage department store is transformed into a social public space, what are the possible spatial aspects to re-use?

*Keywords: public space, park, socializing, plaza, V&D, entrance, connection, hidden space, sequence*

![Diagram of BEFORE and AFTER changes in Heritage Park 2.0, Dordrecht.](image-url)
New park and square for the Dordrecht city

Architecture can only exist within the context of the city. So how Dordrecht’s new squares and parks should be designed? While observing and researching the city of Dordrecht, it was confirmed that the community has been formed mainly in small and private spaces such as narrow alleyways and small corner spaces rather than large squares. Reflecting on this, the Dordrecht V&D department store is designed as a small city. The ground floor, which is the connecting passageway used by the citizens, was preserved. And then main programs are designed by dividing it into an external park and a square using the grid system. Around the park, there are a cafe, restaurant and library which are surrounded by the park. It can generate new communication between people of different purposes around the park.

The new park was designed in the city today, but it may not fit the Dordrecht in the next 10 or 20 years. Therefore, the park 2.0 project was considered by being divided into a part that should be kept on the ground floor and a space that can be transformed. The external park exists in a 7m grid system, and the space consisting of stairs and external decks is intended to give flexibility so that it can be transformed. As we designed the space freely in the grid system of the V&D department store, I tried to give the next generation of architects the expandability and adaptability of the heritage. Since the modern society is rapidly changing, the heritage architecture also is able to be transformed according to the situation of the times.
TOWARDS CIRCULAR V&D HERITAGE LEIDEN

How can circular design principles be implemented in the adaptive re-use of the heritage V&D building in Leiden?

Keywords: V&D, circular economy, adaptive re-use, circular principles, atriums

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Before and after diagrams illustrating the adaptation of the V&D building in Leiden.
SECTION

BEFORE

AFTER

FACADE

BEFORE

AFTER
The complex V&D building in Leiden and the historic building block reflect the temporality of needs in a rapidly changing society. Three different compartments have merged over time into one large agglomeration: the V&D department store. For the adaptive reuse, I investigated how circular design principles can be implemented in a heritage V&D building. The future program will consist of a collaboration between recreational, educational and innovative functions that share common circular goals. Circular shops and a food court can be found on the ground and first floors. Above this are a lecture hall, various study places and a library. Various start-ups will have an office space on the top floors.

The two core interventions of the design are two atriums. The Vispoort atrium refers to a former alley in the building block and the In Den Vergulden Turk atrium connects the old Breestraat with the new Maarsmansteeg compartment. These atriums ensure a better entry of daylight into the building, create clarity in the building, connect the various compartments and functions by circulation and are therefore the core of the design.

To accommodate the new functions and make the building future-proof, the facade and floors on Maarsmansteeg have been opened in various places. First of all, to make a better connection in the building itself, but also with the urban context. Finally, a new roof shape gives structure to the roof landscape and an appearance towards the city. Reuse, addition of value, adaptability and minimal demolition are the circular principles with which this building is transformed for the future.
MARKTHAL V&D (VERS & DELI)  ALKMAAR

The former department store of Alkmaar is transformed by adding a public passage where markets shape the spatial experience and where local initiatives are situated in a shared food centre.

Keywords: public space, market, domain, passage, V&D, shopping street, connection, local, sequence
SECTION

BEFORE

AFTER

FACADE

BEFORE

AFTER
New market hall and leisure in Alkmaar
The shopping street of Alkmaar, the Laat, is in need of a new public function that creates a domain to stay. The vital location of the former department store offers a space directly into the cultural centre of the city, close by terraces, shops, or other amenities. The local culture of the city of Alkmaar has determined the new experience of the former department store. By studying the possibilities of the city became clear what the development of Alkmaar is about. In the past or even nowadays, is the marketplace a public domain where people visit weekly or even need fresh products daily. In addition, Alkmaar is a city with a large countryside area. Therefore, the former department store transformed by adding a public passage where markets shape the spatial experience and where local initiatives are situated in a shared food centre.

The design of the market hall contains several interventions that together shape the new domain. The shelter was a strong architectural element of the building, which is enlarged and reshaped in the new design. By design will the approach of the building be guided by the canopy, and the perception of the new market space be improved. The addition of the passage creates more connection towards the multiple contextual edges of the building, more possibilities to stay. The alley t’Vijvertje has acquired a new function for take-out goods, made possible by initiatives. The new alley function creates more run-up into the building program. The new interior passage enclosed by two markets and a lobby redefine the public domain of the shopping street.
REVITALIZE V&D HAARLEM INTO A NEW HUB

If the historic department store is transformed into a mixed-use building, what are the key elements to make it work and maintain its quality?

Keywords: public space, community, interaction, plinth, spatial experience, atrium, entrance

N 0 50M

BLOCK

BEFORE

AFTER

ROOF

BEFORE

AFTER
SECTION

BEFORE

AFTER

FACADE

BEFORE

AFTER

Vacant Heritage - Department Stores V&Ds

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A new community HUB
The location of my project is V&D Haarlem, a special V&D building with a high-quality facade and serves as a landmark in the city center. The V&D in Haarlem needs a new public function that creates a place to stay with interaction with the environment. By studying the possibilities of the city, I arrived at a multifunctional building where people can recreate, meet, learn and live. The project consists of a mixed building with retail and catering on the ground floor, the education center (library) in the middle and apartments on the top. The design of the building contains various interventions that together shape the new domain. First, the plinth I've been researching is reope by removing some of the shop windows and walls behind it and keeping it in a recessed facade to create a nice exterior walkway along the building. Through this opening plinth I create more connection with the contextual edges of the building, more possibilities to stay and increase the porosity of the building. Second, the main entrance is recessed into the plinth, to create an interspace transition for entry. This enhances the interaction between inside and outside and creates a more lively plinth where a natural flow of people flows through the building. In addition, an atrium has been created in the core of the building, creating space inside for an open atmosphere with more daylight, maximum view between floors but also the environment and having a green open heart on the 4th floor. The building is a huge building that required a lot of work to come up with a good proposal. In my design proposal I increased the spatial experience of the complex and made it more open to the environment.
**CULTURAL PALACE**

**HAARLEM**

What is essential to transform the department store from a closed typology to a collective cultural space which is offered back to the city?

*Keywords: Place identity, value matrix, place-making, collective, multiplicity, critical reconstruction, original concept*
A Cultural Hub in the Heart of Haarlem

Seen as a landmark within the city, the V&D Haarlem stands out with its strong architectural character and important placement within the urban fabric. There are additionally many elements of the building that have been lost to time due to the countless renovations throughout the decades, such as the central atrium and top floor lunchroom. These spaces were characteristic of the V&D Haarlem and without them, the space has also lost some of its life and unique spacial quality. By bringing these significant aspects back from the orginal concept, the building regains its heart through the experience of a bright and lively atmosphere.

By utilising various heritage approaches within the project, depending on the element and its valuation, it is possible to establish an approach to reuse that is both reserved and bold. This is an approach of consideration, by carefully researching and analysing the existing and lost aspects, it is possible to form a critical position on what is integral to the design and what is an area of intervention.

The building began life as a monument to retail but with its decline, an unprecedented opportunity for reuse has opened. The loose floorplan and landmark quality lend themselves well to cultural use as proven in many art based events that have been held there in recent years. Over the many renovations, the building has also closed itself off from its surroundings; by creating new entrances and offering exciting collective functions, the V&D becomes an inviting and vibrant city within the city.
WARENTHUIS: REVITALIZING THE ROLE OF A DEPARTMENT STORE AS PUBLIC INTERIOR

How can adaptive reuse of vacant department stores contribute to the revitalization and development of public interiors in historic city centres?

Keywords: public interiors, mixed-use, adaptive reuse, in-between space, territorial complexity, territorial association
GROUND FLOOR PLAN

BEFORE

AFTER

TYPICAL FLOOR PLAN

BEFORE

AFTER

Vincent Versluijs
A former department store as urban living room

For over a century, the use of the city centre was dictated by commercial activities yet nowadays shopping streets are empty. During its prime-time, the V&D was the largest department store chain in the Netherlands and had more than 70 establishment spread throughout the country. On 31 December 2015, the concern of the V&D Department Stores was declared bankrupt.

Now that this era has come to an end, it is urgent that we look for a new purpose for these physical places with great social and cultural value. Formerly accessible, the interior of the V&D department store formed an important extension to the public realm.

In this research and design, the flexible and open-plan typology of department stores is used for a plinth that functions as a space of encounters between different users of the building. The building houses a fluid mix of retail, co-working spaces on the ground floor and hotel rooms accompanied by a restaurant on the upper floors.

Within the building, a carved-out atrium creates lines of sight between the different functions. By physically sharing space, occupants not only connect with each other socially and professionally, but proudly contribute to the shared identity of the building and its community (Studioninedots, 2021). The interior interventions are all conducted to contribute to this feeling of a shared home.

FIGURE 1 - THE ATRIUM AS SHARED SOCIAL SPACE FOR DIFFERENT USERS

Studioninedots (2021), WeSpace. Retrieved from: https://studioninedots.nl/wespace/ on 7 May 2021
PART 5

REFLECTION ON DESIGN SOLUTIONS
REFLECTION ON DESIGN SOLUTIONS

'Architecture, however—the world of objects created by architecture—is not only described by types, it is also produced through them. If this notion can be accepted, it can be understood why and how the architect identifies his work with a precise type. He is initially trapped by the type because it is the way he knows. Later he can act on it; he can destroy it, transform it, respect it. But he starts from the type. The design process is a way of bringing the elements of a typology—the idea of a formal structure—into the precise state that characterizes the single work.' (Rafael Moneo 1978)

The comparative study of this graduation studio deals with the spatial building typology of department stores, and specifically that of the former department stores of Vroom & Dreesman in the Netherlands. First, the analysis of eight locations was made at four scale levels on twelve aspects. The buildings itself have been developed gradually by including the nearby plots over time.

As we can conclude from the analysis on various scale levels that the type of a V&D department store building in the first half of the twentieth century is a building with a central atrium that is covered with a skylight. The buildings from a later period (from the 1960's) have a different spatial structure. The American influence is then noticeable and the department stores become closed boxes without a representative facade and without a skylight or courtyard. So, the basic type of the researched eight V&D buildings in this study is the atrium building. Around the atrium are three to eight floors which are mainly structured by columns and at the perimeter amenities, stairwells, elevators and facilities are placed. The buildings are part of an urban block on two or three sides or became a block itself over the years. The buildings have one or two representative facades with main entrances.

FIGURE 1 - SECTION AND TYPICAL FLOOR PLAN OF THE DEPARTMENT STORE WITH SPATIAL TYPE: ATRIUM

Due to the recent vacancy of the V&D department stores, twelve students have made designs for the re-use of these buildings at five locations: Leiden, Haarlem, Dordrecht and Alkmaar. The solutions themselves are covered in Part 4. Here, the question is explored in what typology the re-design solutions resulted.

After analysing the twelve designs at four locations, five solution types can be distinguished: courtyard, atrium, atriums, street and passage. These are the characteristics of the types:

- courtyard: an open space in the middle of the building not covered at the top
- atrium: an open space centrally located in the building that is covered (transparent) at the roof
- atriums: several open spaces on different levels in the building that are covered (transparent) and sometimes uncovered
- passage: a connection straight through the building that does not run over its full height and covered at the roof
- street: a connection straight through the building that continues its full height and is not covered at the roof
The redesign type atrium therefore corresponds to the basic type of the V&D department store: atrium. The original light court has in some cases been reduced or closed off over time, but is still present in the structure. In the redesigns, the characteristics of this basic type are strengthened or reused. This type appeared in five of the twelve redesign proposals and in one in a combination.

In some plans, apart from the atrium several openings have been added leading to the type atriums. This occurs three times. The complete opening up of an inner court, type courtyard, has been worked out twice and the type of passage in which a horizontal connection is laid through the building and is closed off at the top can also be distinguished twice. The type of street does not exist in the redesign solutions. Likely because it splits the building too much and the weather than play a great role. When only a connection is made on one or two floors, we name it the passage type. It appeared twice and the combination of atrium & passage once.

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**FIGURE 2 - OVERVIEW OF TYPES OF REDESIGN OF THE TWELVE V&D DESIGN SOLUTIONS.**

**Reflection of the redesigns per vacant department store.**

1. Mainly the type of atrium is chosen for the former V&D in Haarlem. All redesigns for this building are of this type. This is due to the size and presence of the existing structure of the original opening and the compact organization around this atrium. One proposal enlarged the opening substantially so the organisation of the floorplans became much clearer. No reasoning has been made in the urban scale or interior to make a horizontal connection or passage. The atrium structures the organisation of the new programs. The hermetic, monumental facades are preserved and not provided with very large openings. Sometimes entrances have been reintroduced or entrances have been highlighted and, on the roof, later additions have been removed and terraces enlarged.

2. The building in Dordrecht, has one redesign of the type courtyard and one type with a combination of passage and atrium. The current Dordrecht building consists of a sequence of several buildings that has grown almost into one block. The surrounding streets invite you to restore the original connection throughout the building. In the re-
design of the courtyard type the building is hollowed out from inside out to add more daylight, space and creates more overview and possibilities to orientate better. The other design an atrium is combined with a passage to reconnect two parts of the city through the building. It acts like a covered street and an inner square.

3. Leiden is a composition of different buildings that have been linked together over time, three types appeared in the redesign solutions: in one redesign the courtyard, where houses are grouped around a big courtyard. Three times the type of atriums is used. Several openings (covered with glass) are made to introduce daylight deep into the building. In addition, one case uses the type of passage. It connects, in the longitudinal direction, both sides of the urban block.

4. In the design for Alkmaar, the two building parts are connected by the combination of types of a passage and an atrium. This passage runs internally through the building for spatial and logistical reasons and the atrium provides more daylight one building part.

In conclusion, we can say that the spatial basic type of atrium in the V&D buildings led to three variants of this type, depending on the location, by optimizing the central opening (passage, atrium), repeating it (atriums) or enlarging and breaking it open and has no longer be covered (courtyard). In various ways, the existing type of the atrium has been leading in the redesign solutions that have been developed at the four locations.
FIGURE 2 - FIVE TYPES OF TWELVE REDESIGN SOLUTIONS FOR FOUR V&D DEPARTMENT STORES
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PART 6

FINAL CONCLUSIONS
FINAL CONCLUSIONS

In the previous Parts 1 and 2, the spatial typology of the department store was explored through various analyses of eight locations of V&D buildings in the Netherlands: Leiden, Alkmaar, Amsterdam, Haarlem, Amersfoort, Maastricht, Enschede and Dordrecht. By identifying the locations at various scale levels, conclusions could be drawn per location, per scale area and for the (V&D) department store in general. Subsequently, twelve themes were explored by the students to discover underlying meanings, personal fascinations and possibilities for new programs (Part 3). Subsequently, twelve redesigns were made at four locations.

The detailed analysis in Part 1 was required to distinguish what spatial aspects are important to take in to account by defining a spatial typology for department stores and to discover how these aspects could be compared and how they are related to each other. The main conclusions from this are the following.

We see that the V&D buildings are located in prominent places in the middle of the historic city centres.

Vacancy opportunities and program in the urban configuration and setting

The vacancy of the V&D buildings had a negative impact on the vacancy of surrounding retail properties, yet shoppers still pass these buildings. They offer opportunities to be reactivated and to be used for public functions (at least at the ground floor) to be part of urban life and activities. The relationship between public spaces and the V&D buildings was strong. They are located on squares, main shopping streets and along common routes. In the redesigns, we therefore see many public and cultural functions reflected in the program choice: library, food court, market, retail, education, etc.

The original facades were designed as shop windows and offer possibilities to give them a much more open design. The monumental façades, however, require a careful approach, but many changes have already been made over time. The buildings themselves changed over time also. The chain store has swallowed up neighbouring lots, but the main
structure of the original buildings is still recognizable in the current structure, cross-sections and floor plans. The V&D buildings often had an atrium. Sometimes this was reduced in size, closed or filled with escalators. Because the buildings have large dimensions the court creates the potential for admitting natural light deep into the building. To enable other uses than retail or storage, the buildings can be divided up again or broken up.

The statements in Part 2 of this study show that the V&D buildings could be compared to the twelve spatial aspects very well and that therefore overall conclusions could be draw for this spatial typological research. We started the spatial building typology research with the question: how and why do specific series of spatial aspects (on all different scale levels) influence the redesign possibilities of a specific group of buildings with the same original function?

Several redesigns were influenced by the (former) existing structure of the spatial building typology research. By studying the existing from the scale level of urban context till the detailing of the façade questions raised of what was still in the building of the vacant department stores. Visiting the buildings and their sites answered the questions of the structure, interior spaces and level differences, heights and materiality. A lot of spatial qualities have been defined.

The discovery of the former alley Vispoort in Leiden, the structure of the atrium in Haarlem, the ‘stijlkamer’ in Alkmaar, the blocked daylight in the facades, the use of materials gave direction to the different redesigns.

The position in the urban fabric that blocked former connections and made a redesign of the building context necessary like the Verwulft in Haarlem. In some cases it created opportunities for the design process like the Vispoort connected to the Schefferplein and Statenplein in Dordrecht, and a logistic zone related to a canal in Alkmaar.
This research could be further elaborated with the materiality of the interior of vacant department stores and how that has changed through the years. The development of showcasing of retail, from an open building like the Glaspaleis in Heerlen from Peutz form 1933 till the closed off concrete boxes from the 1960’s.

From the analyses and comparisons in Part 1 and Part 2 of this research, we came up with a basic type of the V&D buildings in spatial terms: the atrium building. In the redesigns, the atrium type is also the most chosen type. The original courtyard was restored or expanded and new features are arranged around it. In a number of cases, the buildings were further hollowed out to create more daylight or public space, or openings were created right through the buildings to make connections on both sides of the building block. Twelve very different designs have emerged that show four spatial redesign types originated from the basic type: atrium, atriums, courtyard, passage and a combination of passage & atrium.

The project has shown that an in-depth study of the spatial aspects of a specific group of buildings, which were chosen as design brief, has paid off. A number of very interesting spatial solutions have been worked out and twelve challenging redesigns have been worked out. Finally, some details of worked out plans are illustrated on the following pages to show how spatial aspects have been researched on building level to create opportunities in the design regarding the existing spatial qualities of the buildings and optimize those in the final design solutions.

FIGURE 3 - ENLARGING THE ATRIUM THE ATRIUM IN THE BUILDING CREATES A MORE LOGICAL STRUCTURE OF THE FLOOR PLANS (HAARLEM CARMEN VAN DEN HOOGEN)
FIGURE 2 - THE DEVELOPMENT OF THE V&D BUILDING IN LEIDEN OVER TIME IN 1936, IN 2015 AND POSSIBLY IN THE FUTURE BY THE REDESIGN SOLUTION FROM 2021 ILLUSTRATED BY THREE SECTIONS ON THE SAME SPOT (IRIS JANSEN)
AR3AH105 Graduation Studio Adapting 20th Century Heritage

GASTHUISVIERENDEEL ANNO 1936

STHUISVIERENDEEL ANNO 2015
Dit boek is het resultaat van 9 maanden werk binnen de afstudeerstudio Heritage & Architecture aan de faculteit Architecture in the built environment van de technische universiteit in delft. Een groep studenten heeft aan de hand van acht locaties van leegstaande V&D warenhuis gebouwen in Nederland deze onderzocht op hun ruimtelijke kwaliteiten. Hieruit was een ruimtelijke gebouw typologie af te leiden op stads, blok, gebouw en materiaal niveau. Naast het gemeenschappelijk onderzoek zijn er individuele thema’s uitgewerkt. Vervolgens zijn er herontwerpen gemaakt op vier locaties. Ook de herontwerpen zijn typologisch vergeleken en hebben geleid tot een ruimtelijke typologie. De methode van ruimtelijk gebouw typologie wordt de komende jaren ook op andere voor andere gebouwsoorten toegepast.

Hielkje Zijlstra

This book is the result of tenmonths of work within the Heritage & Architecture graduation studio Vacant Heritage in 2020-2021 at the Faculty of Architecture in the built environment of the Delft University of Technology. A group of thirteen students investigated the spatial qualities of eight vacant V&D department store buildings in the Netherlands. A spatial building typology (SBT) could be derived from this at city, block, building and material scale level. In addition to the joint research, individual themes have been worked out. Subsequently, redesigns were made at four locations. The redesigns have also been compared typologically and have led to a spatial typology. The method of spatial building typology will also be applied to other building types in the coming yearsin the Heritage & Architecture studio.
Spatial Building Typology

Vacant Heritage: Department Stores | V&D’s

MSC3/4 AR3AH105 - Fall 2020-2021