

RESEARCH PLAN

THE FACADE AS IN-BETWEEN

Vacant Heritage- Spatial Building Typology on Department Stores

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Vacant Heritage - Department Stores V&D's

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CHAPTER 1 | INTRODUCTION

1.1 Personal Motivation for the Heritage Architecture Studio

The studio of Heritage & Architecture (HA) is concerned with one of the most current themes in architecture today, the transformation of cities and buildings. A good balance between old and new is a fundamental interest in contemporary design in architecture. Heritage is concerned with preservation and renewal in existing architecture (De Jonge & Kuipers, 2017). These are buildings that we must keep and that mean a lot to the community. I believe that all heritage buildings should be preserved, with the potential to be redesigned according to their values. Furthermore, I also believe that an architect should become resourceful of existing and obsolete buildings and their values, in order to create an adaptive reuse design for these heritage buildings. This is one of the motivation why I chose this studio. The building sector will see the importance of adaptive reuse projects increasing in the coming years. Due to various crises, such as COVID-19, there is a high vacancy rate of buildings for which a new functional purpose has to be found. In addition to the cultural value of architectural preservation, the restoration of heritage plays a prominent role as an alternative in solving the demand for functional space and user wishes in the market. Making existing buildings more sustainable is an important challenge for the preservation of heritage.

1.2 Context of Research: Department Stores

In this studio of Vacant Heritage we investigate the problem of obsolete buildings. What happens to the traditional twentieth century commercial areas in major Dutch Cities in an era that everyone is shopping online? Online shopping will increase the number of vacant buildings in the city center. In recent decades, there has been a transition from physical stores with social interaction to an individual

and digital shopping environment where everything can be bought online with a few mouse clicks. As a result, the role of the physical store and architecture as an intermediate between customer and product is increasingly fading into the background. With the evolution of retail and the changes in people's shopping habits, a single functioning department store gradually loses its original function. As a result, a large part of the urban block's space in inner cities is vacant. For more than a century, the use of the city center was determined by commercial activity, but today the shopping streets are less crowded. Shops and department stores close and leave a desolate image. Such as the large department store chain of Vroom & Dreesmann (V&D) that has been officially declared bankrupt in December 2015 and all their buildings were empty (V&D, z.d.). The revival as Hudson's Bay for various V&D stores was also unsuccessful.

The bankruptcy of V&D was seen as a major loss, dozens of buildings became vacant, many of them in the heart of inner cities. These department stores were the modern symbols of the community where everyone used to go for school supplies, socializing, etc. The department stores were huge in contrast to other surrounding buildings. These monumental buildings cover a lot of floor space, which makes the buildings both architecturally and socially important, together with their prominent location in the urban fabric of the inner city. The department stores of V&D were like other department stores, a symbol of consumption. They were intended to attract and keep consumers in the building (Whitaker, 2011). The V&D buildings were characterized by the many different departments and their monumental representative facades. These large department stores have cultural values and are therefore in urgent need of transformation to ensure the quality of life in the city center. Most of these vacant V&D buildings are considered monumental heritage due to their historical and social value to the city.

For passers-by and users of these buildings, the huge department store still holds a great heritage importance as long as it exists. This brings us to the present, where the challenge lies in devising a new strategy for these vacant buildings so that they can become a successful part of the city and city life again. Whatever happens, it is crucial that the distinguishing element of the monumental V&D buildings is preserved, as well as its historical and cultural value.

At the moment there is still a lot of discussion about what to do with these department stores. There are so many dilemmas in the redesign of buildings like this one because of their cultural-historical

value and economically feasible interventions. The question that then arises for redesign is, how can an intervention be approached in a respective way that enriches historical values rather than disrupts them? The challenge for us as architects is therefore to find the right balance between the original and the new (De Jonge & Kuipers, 2017). Some of the questions that will then arise for the redesign case include the following: So what to do with these buildings now? Is another store of the same size possible or not? How do you make an adaptive reuse design for these department stores? How do you connect this department store with the city in order to retain meaning for society? Which factors play a role in the vacancy of these buildings?



Figure 1. Depiction of one of the first department stores. Les grands magasin de la Belle Jardinière in Paris, 1878 (Beekun & Kuijt, 2018, p. 14)

CHAPTER 2 | GOAL OF RESEARCH

2.1 Research Topic & Motivation

My personal fascination for the department stores stems from the representative facades and grand interiors with enormous voids, these were the first that drew me to these department stores in my youth. I saw these department stores as places of wealth and consumption, but also of wonder and awe. The sheer scale and open interior of the building also contributes to these experiences. Feeling lost as soon as you enter the ground floor building. The spatial layout of the building made this atmosphere possible due to its closed character.

Department stores are characterized by their enormous void with a large skylight above it (Whitaker, 2011). Important features of many of these department stores are their prominent location in the city centers and their striking facades. The shop windows have been incorporated into these facades, this is the first interaction with the public that reflects the shopping function and forms the boundary between inside and outside. Although many aspects of the V&D department stores are very similar, the facades have undergone significant changes over time. The use of glass and transparency in the façades in particular has undergone major changes, which sparked my interest in the facades of department stores even more.

On the ground floor they had spacious shop windows where the goods could be seen, but the seduction process mainly took place in the closed world around the central light void (Beekun & Kuijt, 2018). This, in turn, gives a sense of privacy, due to all closed facades and their representative facades as if it were a palace for the upper class only. Given the façade's function as an impressive representation of the department store, this research into the façades can help in the development of the reprogramming.

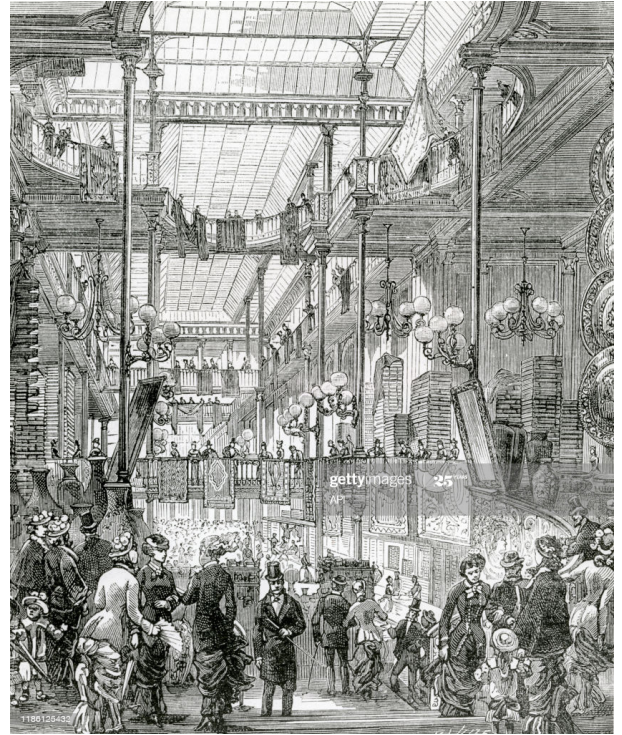


Figure 2. Central void with skylight of department stores. Grand Magasin Au Bon Marche in Paris, 1880 (Beekun & Kuijt, 2018, p. 12)

2.2 Research & Design Problem Statement

What happens to life in the city center now that these buildings are empty? Is a large-scale building with a monumental facade that is closed to the outside and forms an empty hole, a missing interaction with the outdoor space. Once inside you have forgotten the surroundings or you can no longer orient yourself, no view of the surroundings. Now that these buildings need a transformation, they also need to be more open to the public to remain as prominent as they once were. Facades are the first characteristic of a building that stands out, they determine the characteristic appearance. At the same time, these facades are actually the most interesting parts of the building. The facades acted as a way of convincing the consumer to enter the building, while the inside of the building is largely based on functionality. The facades act as an interface between the public and the building. They are the prominent element in a building, it forms the barrier between inside and outside and protects the interior space from the outside climate and environmental factors, such as noise, heat, rain, wind, etc. Their impressive representative facade stood out and promised an interior full of good things. "A successful exterior drew people in, while a good interior kept them from wanting to leave!" (Whitaker, 2011, p. 101). The interaction with the street and the city had disappeared, the department store became an introverted building (Rijnboutt et al., 2007). Due to the idea of keeping people in, there was no interaction between the public space and the building, this must now change. How do you make these buildings open to more interaction with the environment? What can the facade contribute to this? What are the main elements of the facade?

Department stores are not an isolated idea in the city. As described by Kärrholm (2012), department stores can have a cultural aspect to preserve in the city. It often ties in with public events and interest in attracting people. It changes themes, programs and functions to stay relevant to current trends. It also often connects with the surrounding stores to create an experience of the city, making shopping a sequential experience rather than an isolated one.

The fact that these department stores are now empty leaves an obsolete image in the city, an empty shell. The lack of interaction with the outside world is now more evident due to the building's current state as an empty space. There are only facades with nothing behind them, only empty spaces. As I see it, the facade is the boundary between the indoor and outdoor space and must become more transparent for more interaction and a more liveable city center.

In short, the problem is that department stores now have a closed character to the public space, it gives an introverted feeling that everything is hidden within. This means there is no interaction with the outside and less daylight is created. This also influences the visitor experience in the building, such as comfort and a good indoor climate. The facade is what the user sees first and serves as the face of the building, what to expect. The facade is also the most important element in terms of durability, thermal layer and insulation of a building. The technology part of the facade is not discussed in detail in this research.

2.3 Research Aim & Focus

As described in the previous paragraph 2.1. I have a personal fascination with the facades of the department stores. They are always important elements in the architecture of the building. In order to better understand the idea behind the facades of the V&D buildings, my research will focus on their development and their influence on the spatial layout of the building, in particular the interaction between inside and outside. How this relates to experience and the connection between inside and outside. Outside is how the building represents itself and the public space around it. Inside is how the space behind the facade is arranged, the space plan, the view and the structure itself. That is why it is interesting to investigate the influence of facade composition on spatial layout and experience (perception). This is related to the terms of openness, view and daylight that influence the experience and ensure a comfortable environment.

The aim of this research is to better understand the facade in relation to the spatial layout and qualities of the building itself and its historical, urban and social context. The research will contribute to the revitalization of the department store in the historic city center. Creating a redesign approach based on existing department stores and forming indicators based on positive and negative aspects of the facade types for input on possible solutions in the redesign of these buildings. This research will provide and inform the redesign options. All in all, the main goal of this research is to find a solution for these vacant heritage buildings, by providing new insights and improving the original buildings. Create an open building with more interaction with the outside world, which improves the quality of life in the city. An adaptive integral reuse project that maintains its historical values, is sustainable and economically feasible and ultimately designs a project that adds value to society.

2.4 Research Questions

2.4.1 Collective SBT Research

This individual research fits into the broader theme of spatial building typology. A collective study of spatial building typology examines typologies in a different approach. The more traditional research methods into typologies based on functions are not used here. As the function and use of the original buildings are changing nowadays, instead of the functions, space is central.

Research into similarities and differences in the spatial characteristics of a collection of buildings, which were originally realized for one specific function, yields a series of spatial characteristics that can give direction to the possibilities for redesign. With the central research question (De Jonge, Meijers, Quist, Spoormans & Zijlstra, 2020):

“How and why do certain series of spatial aspects on four scale levels influence the design possibilities with regard to the redesign of a specific group of buildings with the same original function?”



Figure 3. V&D in Haarlem, with its impressive identity as a landmark with its characteristic facades.
Retrieved from: <https://www.werkaandemuur.nl/nl/werk/Haarlem-V-amp-D/239621?size=55x70&mediumId=1>

2.4.2 Individual Research

My personal research topic covers different scales and also focuses on different aspects of collective spatial building typological research. For my personal research I focus on the 'facade' as the central theme. As indicated in my defined problem statement and research goal, I will conduct this research into the spatial layout and experience in relation to the composition of facades with its interaction between inside and outside. As mentioned before, the facades are the most representative part of a building, it gives people an idea of what to expect. The facade is the first characteristic of a building that stands out and determines its characteristic appearance and is often the subject of controversial discussion in redesign assignments. Most of these facades of V&D buildings can be regarded as monumental facades. They also dictate a certain approach when it comes to the redesign because of their practical properties and values. The facades can be decisive or not, this also gives an indication of whether there are many possibilities in the redesign or not. Furthermore, the facade also influences the spatial layout, whether there is an office, museum, depot or hotel behind the representative facade. Which leads to the main 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?

To answer the main question, the following sub-questions are answered:

- How have department store facades evolved over time?
- What are the visual elements in the facade that determine the facade qualities, the identity of the building?
- How does the facade contribute to the experience of the space?
- What is the relationship between the outside space and the spatial layout, relationship between inside and outside?
- What redesign approaches does the facade of V&D department stores require when transforming the different types of facades?

2.5 Research Frame of References

A lot of research has been done into the technology part of the facade and its durability, but not really into the facade typology itself in relation to space. Jürgehake (2016) conducted research in her PhD research into the facade of residential blocks where she provides a lot of information about facade typology and their role as an intermediate element in housing. Wattjes (1926) researched the construction and architecture of shop fronts, down to the details of materialization, display position and dimensions. This research contains examples in various Dutch cities and shows the evolution of shop fronts in the 1920s. Another relevant literature is the book 'Doorway' by Simon Unwin (2012) which describes the doorway in detail. The doorway as the main intermediate element between the two sides. How doorways affect the experience in different ways, they can change the way we behave, protect our territories, and change how we see our environment and our relationship to space. "From a person who is lost in outer space to a person who knows where they are" (Unwin, 2012, p. 12). In contrast, in the book *Surface Architecture* by Leatherbarrow & Mostafavi (2005), they describes

the correlation between facade and building construction. It is a study of the building surface, in which the relationship between structure and skin is central, a distinction is made between production and representation and between structural and non-structural elements.

My research focuses on a combination of all this relevant literature and increases knowledge about the facade of the department stores. By using the definition and description of doorway (2012) as an intermediate element to analyze the entrances of the department stores and their relationship with the outside context. In addition, by following *Surface Architecture* (2005) methods of separating construction from the skin and relating this to my research on how these two elements work in department stores, whether they have a closer relationship with each other. By using the sharing-layers of Brand (1994) and thus discovering the influence on the space plan, structure and skin.

CHAPTER 3 | METHODOLOGY

3.1 Introduction

The research method is divided into a collective and an individual part. The general methods and structure of the research will be based on architectural research methods of Groat and Wang (2013) and the reading of the Research Plan, by Klaske Havik, entitled Methods of Analysis on September 3, 2020 (Havik, 2020). This research takes advantage of some of their methods and combines them with others when needed. To study and understand the vacant historic buildings, the research starts with Spatial Building Typology of former V&D department stores in the Netherlands. The methods explained below are divided into the methods used for research into spatial building typology. The method chosen is aimed at obtaining comparable drawings and information of each building in order to compare them and define the typology of the department stores. Followed by the methods used for the individual research in the theme of facades in relation to interaction to find indicators and define facade typologies.

3.2 Research Methods

3.2.1 Collective SBT Research

In order to study and understand the vacant monumental buildings, the research starts with collective research into the spatial building typology of former V&D department stores in the Netherlands. In the collective study, eight V&D department stores at different locations are analyzed on 12 aspects that play a role in the spatial characteristics and qualities of the space, divided

over four scale levels (city, building block, building and facade & roofs). The collective research into the spatial building typology will consist of four steps. First of all, archival research will be done by collecting documents from local archives and using them in the planning analysis of the buildings. The first step is to create a location document with 12 aspects for the eight V&D buildings. This is done using Hausmann methods, with reduction drawings where most of the drawings are black and white and only deal with the most important aspects per drawing (Jallon & Napolitano, 2017).

In the second step, the research results are compared per aspect on the basis of plan analysis, so that generic, spatial typological conclusions can be drawn. Comparing these locations leads to a better understanding of the characteristics that other department stores have in common and the unique characteristics of the specific location. In the third step, follow the options for redesign by aspect, which are related to the conclusions defined by aspect. Finally, step four reflects on all steps of elaborated redesign solutions per location. With the aim of developing a spatial typology for the former V&D department stores (De Jonge, Meijers, Quist, Spoormans & Zijlstra, 2020).

3.2.2 Individual Research

Parallel to this collective research there is the personal research. The second, more individual study, will focus more on the aspects and scale levels that I have chosen. This research will be a combination of historical literature, comparative research and case study research (Groat & Wang, 2013).

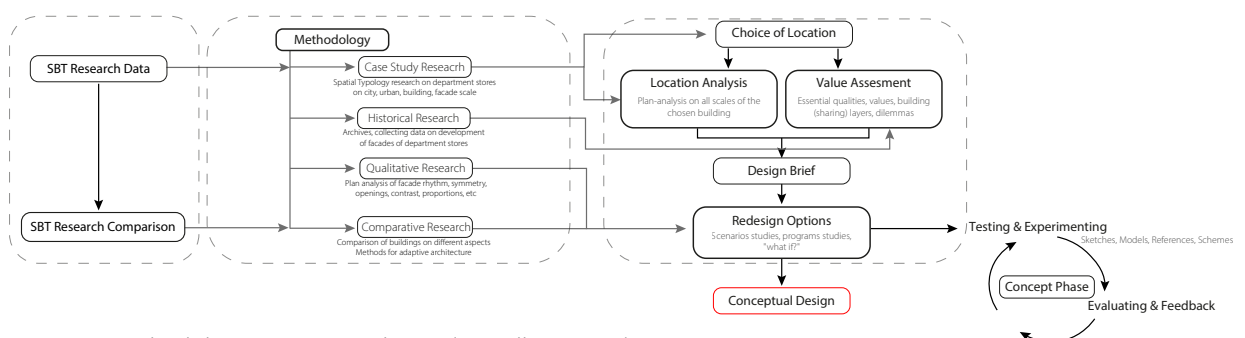


Figure 4. Methodology Structure scheme (own illustration)

Furthermore, this research will be related to the collective research of Spatial Building Typology. In this research I will focus more on the scale level of building and facade, but I will also involve the other scale levels. For example, when examining the relationships between inside and outside, the scale of the building block and street profiles determines how the facade of the building connects and relates to the immediate environment. Finally, there is a coherent conclusion that answers the main research questions and the main findings in a diagram. This will be the starting point for creating scenarios and possibilities for the redesign case.

LITERATURE RESEARCH

First of all, a literature search will be done to define and understand the topic and terms used. To understand facades and their associated terms, it is important to study the concept of facade in the context of a theoretical framework. This theoretical framework discusses the most important definition of the concepts and theories about facades and forms a basis for the research. To gain a better understanding of facades, identity, their importance for interaction and the role that facade can play in the experience of the space. Various relevant literature is consulted for this, such as Derwig & Mattie (1991), Jürgenhake (2016), Alexander (1977), Leatherbarrow & Mostafavi (2005), Pevsner (1997), Kärholm (2012), Unwin (2012).

HISTORICAL RESEARCH

In addition, after definitions of concepts and formation of theoretical frameworks, historical research into department stores is investigated. One cannot look into the future without first exploring the past. The vacant monumental V&D department stores are a reflection of former social values and arise from the needs of society. To get a better grip on department stores, I will be doing historical research into the development of department store facades over time. How the facades evolved over time in relation to the environment and what were the intentions behind their design. Furthermore, to learn more about why department stores have such an introverted and closed look, it is relevant to read more about the history and strategy behind

department store design. In this research I use literature from Beekun & Kuijt (2018), Chung et al (2001), Crossick & Jaumin (1999), Whitaker (2011) and Ferry (1960) on the history of department stores. In addition to literature, it is relevant to analyze historical photos of V&D from archives in order to discover the architectural features of the facade over time. The idea is to combine these photos into a collage and create a timeline. The collages allow to interpret the history of the department store facade and the department store architecture. The conclusion of this historical research can be used in the value assessment and analysis of the chosen location.

COMPARITIVE & QUALITATIVE RESEARCH

After defining a theoretical framework and conducting historical research. In this part, use is made of the documentation and analysis of the eight locations (floorplans, facades and sections) results from the first phase of the collective SBT research. For the analysis of the interaction between interior and exterior and transparency in the existing situation, the relationship open-closed per facade is first of all examined. Subsequently, it is investigated which elements determine the identity of the facade by splitting the facades into layers and analyzing various aspects, such as doorways, rhythm, decorative elements, shape, opening, supporting elements, contrast and color. The findings from this are then compared per eight locations. Finally, the findings can be used to determine what the current facades look like and what are important elements. To find out the indicators, values, essence, patterns of the facade. This will help to create an indicator list for the redesign case and criteria for testing. Ultimately, the collected data is converted into small diagrams with conclusions. The diagrams clarify patterns, explain and evaluate these findings. Furthermore, this comparative analysis of the V&D buildings should provide insight into the idea behind the facades and discover a typology or particular pattern. This insight is important in order to be able to properly assess and value the facade and to understand the relationship of the facade with its environment.

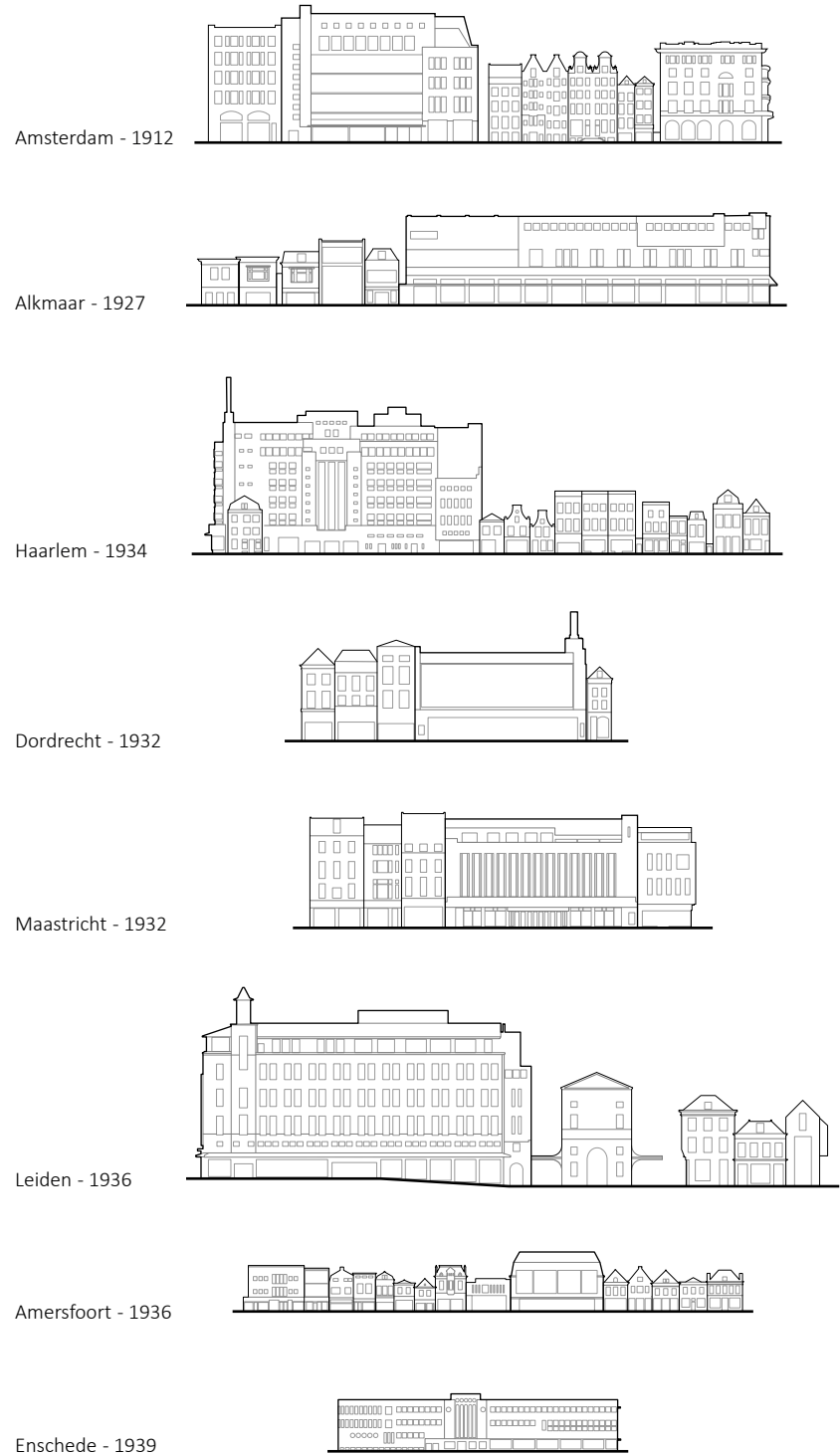


Figure 5. Representation of the main facades of the eight V&D Department stores. Scale 1:1000. (SBT Urban Block, 2020)

CASE STUDY RESEARCH

Yin (2018) describes the purpose of a case study, “as a real-life case that you want to understand and assume that such an understanding is likely to provide important contextual conditions relevant to my investigation” (Yin, 2018, pp. 45- 46). To answer the question, how the facade affects the space, I will look at a case study in which the facade played an important role in the redesign case. Investigate how architects have dealt with the facade in adaptive redesign by examining existing projects through of case study research. What the architects did with it in the redesign and how it was before. So a comparison between the old situation and the new situation and how the facade and spatial layout have changed. Looking at the old situation versus the new situation, how they have changed it. How have they improved to deal with connecting with the public space outside. The analysis of these projects by means of redrawing provides important conceptual and spatial ingredients for the opening of the building in the future. The case study research is not only conducted with the aim of discovering measures that increase the interaction of the building with the outdoor space. It also provides information about where the measures in the facade are applied and what impact this will have on the existing building with regard to possible future functions. The case studies that will be selected are adaptive reuse projects in which adjustments have been made to an existing building and facade. This with the aim of obtaining the widest possible range of measures to make the facade more open and connected with the environment.

Some interesting case studies are shown on the next page. With transformation to housing (St Jobsveem), renovation V&D in The Hague and future renovation of bank building in Amsterdam (DNB). It is also interesting to see what a contemporary department store looks like. Some new department store construction by OMA showing the modern side are the Galleria department store in Gwanggyo which was completed in 2020 and the ongoing KaDaWe project in Vienna.

3.3 Design Methods

Design process is a repeating circular loop, in concept, preliminary and final elaborated design. The design phase has many research phases and is related to the research carried out. The design process itself is not a continuous line, but consists of different cycles in which there is always an evaluation and feedback moment that goes back to the beginning (Nijhuis et al., 2014, p. 263). The design process often starts with making sketches. This method provides a quick and spontaneous way to visualize ideas, space and concepts. Then the design is developed by alternately testing and experimenting with different design methods, such as sketch models, concept models and section models are used to validate the design goals. In the later stages of design development, engineering research will provide the design with crucial and valid information to make the design comfortable and durable. This is research for design, which focuses on examining design problems that are specific and individual cases that provide information for that unique situation (Frankel & Racine, 2010, p. 4). For example, the design of a particular facade element requires specific research to that element.



Figure 6. Redevelopment of the former V&D department store in The Hague by Kentie en Partners Architecten in 2017. Retrieved from: <https://www.kentie-partners.nl/project/voormalig-vd-gebouw-den-haag/>



Figure 7. The Sint Jobsveem in Rotterdam by Mei architects in 2008. Retrieved from: <https://mei-arch.eu/projecten-archief/jobsveem/>



Figure 8. Renovation of the De Nederlandsche Bank (BNB) in Amsterdam by Mecanoo. Retrieved from: <https://architectenweb.nl/nieuws/artikel.aspx?ID=47242>

MODEL MAKING

First of all, I started the design research through making, by making essence models. These physical models were created to capture the essence of the vacant department store buildings. This will lead to a study of the principles and current values and problems of the different buildings. Based on the archival drawings of the SBT location documents, we conduct research into modeling, by creating a 3D model that shows the essence of the building. Making a model with a specific importance of the building as a tool to better understand the spatial qualities and the building system in 3D models (Mills, 2011). The purpose of these models is to understand the essence of the building through different models, including facade models, interior study models and circulation models. Mills (2011) provides useful information about different types of models and the use of models in the design process. This literature can be useful in exploring ideas and testing the research indicators with models in the design process later on as well.

VALUE ASSESSMENT

Secondly, the value assessment based on the historical research serves for the design, a value determination is made. By identifying dilemmas and balancing values, a position can be formulated with regard to the obligations involved in adaptive reuse of a heritage site. Together, these form the starting point and the course for future design strategies, justified with full recognition of both the irreplaceable heritage values and the need for cultural-historical continuity through carefully designed interventions (De Jonge & Kuipers, 2017). In addition to the value assessment, plan analysis is also done at the chosen location in more detail. At the end of this phase, the first design ideas are developed on the basis of sketches, schemes, sketch models and references. An important part of this process is the translation of the transformation framework and the values found into an intervention strategy and subsequently into a meaningful and detailed design.

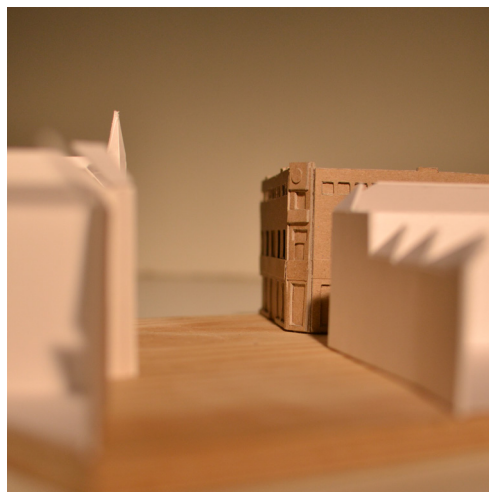


Figure 9. The striking sight lines on the corner of the V&D building in Alkmaar (photo Carmen)

3.4 Relation between Research & Design

The relationship between research and design is what always goes together in architecture. I think there is no design without research, you are always researching, especially with areas like heritage. In architecture you always need different research methods to improve your design output. I see research as an important strategy during your design in which you can create a framework with your research results, in this case indicators for the redesign case. This immediately gives you a framework where you can test your design decisions to see if it fits your research results and design brief. The research is intended as a basis for answering the design questions and is used as a guideline and framework for the design. The process of research and design will be intertwined because they feed each other. It gives the design a better 'foundation' on which to base, as it can support many design decisions.

The figure on the next page shows the relationship between research and design schematically. It highlights the different steps of the collective research, personal research and design, as well as multiple moments of reflection on the process. It is a diagram consisting of multiple interactions between research and design to ultimately have an integral research-based design (Figure 10).

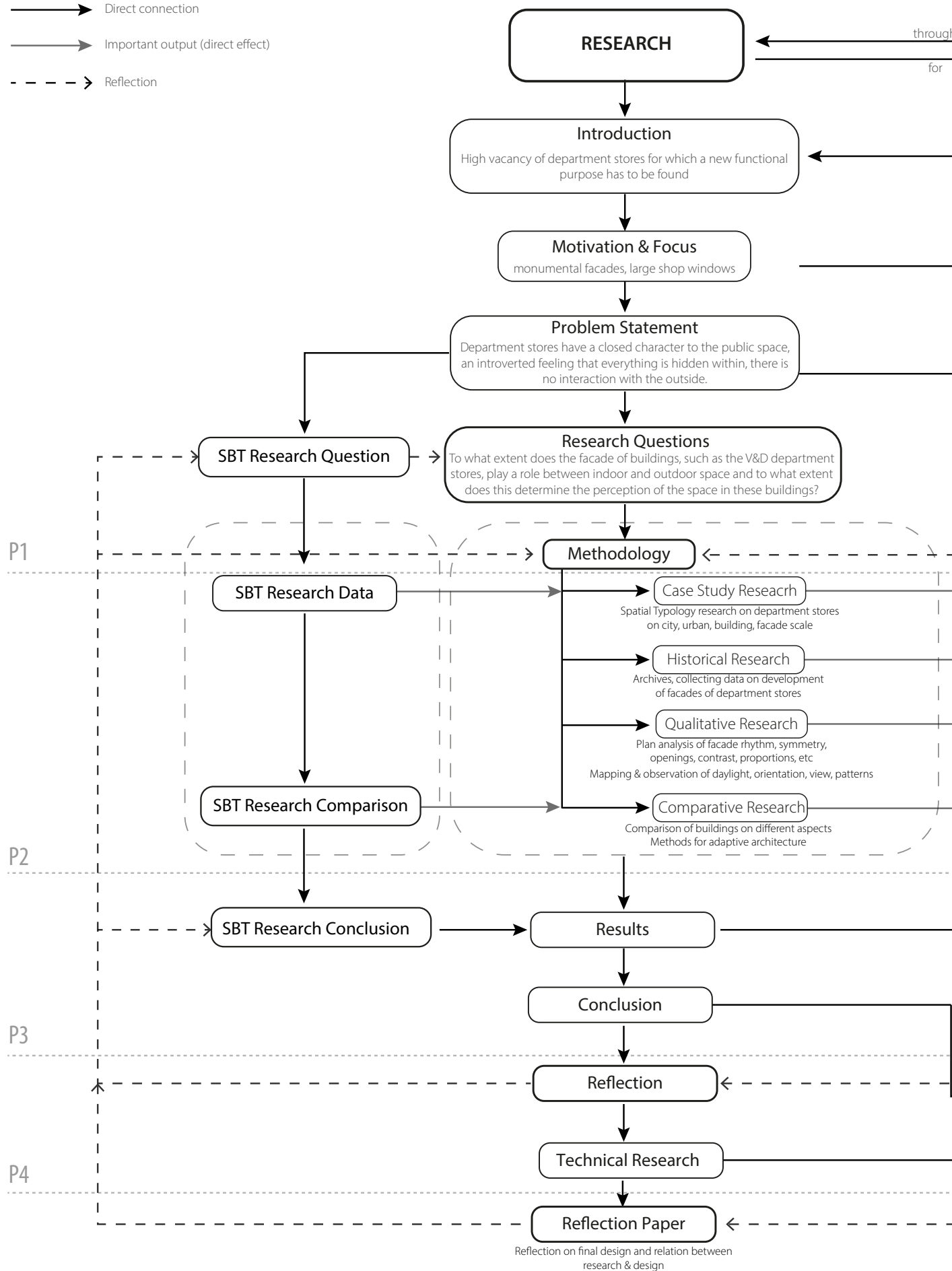
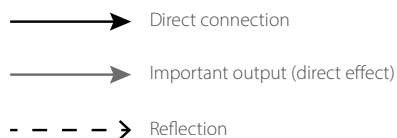
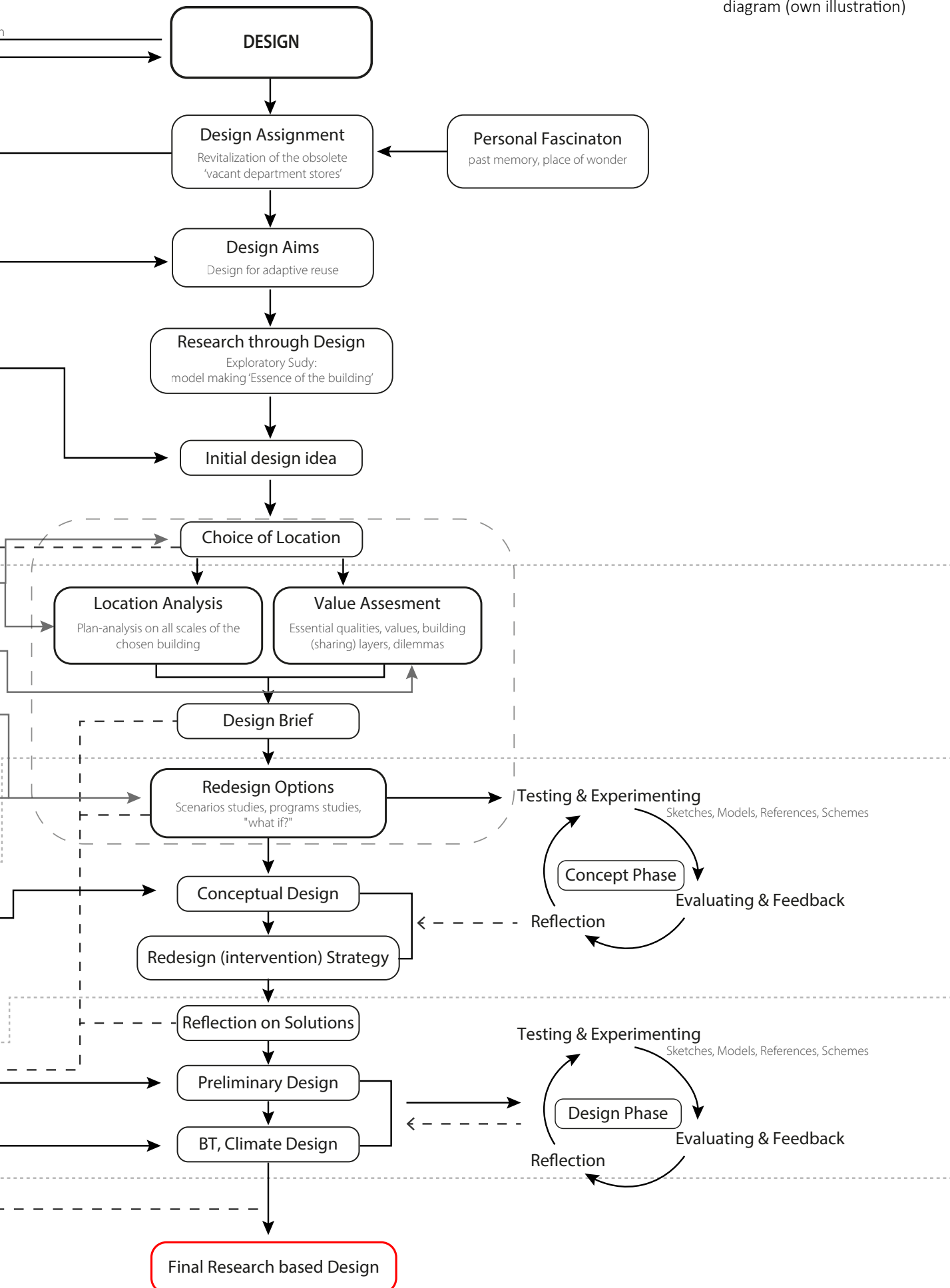


Figure 10. Research & Design diagram (own illustration)



CHAPTER 4 | REFLECTION ON RELEVANCE

4.1 Relevance Collective SBT Research

The collective group research into the spatial building typology develops a building typology based on the spaces of department stores. This research enables us to divide the spaces of the department stores according to different spatial aspects and scales instead of according to previous functions. The different scales used to analyze the buildings provide an overview of the existence of the building in context, from the connection with the city, the spatial configuration to the facade composition of each building. This provides insight into the spatial characteristics that can be used in the (re) design of these buildings, but also for other vacant buildings with a different function. The knowledge gathered in the SBT result serves as a good foundation for understanding these 20th-century department store buildings. By doing this research on vacant former department stores, it helps to provide a dictionary on these buildings for future use and redesign.

4.2 Relevance Individual Research

With this graduation research I try to analyze and classify the quality of the facades themselves. The subject facade has a lot to do with the studio subject of department stores. Because the department stores have a monumental representative facade that gives the building its identity and is the first element that attracts the visitor's attention. For the purpose of this research, to find out what the future facade should look like in order to have more interaction from both sides. This also determines the elements of the facade that influence the spatial layout and experience. The result offers starting points for use in the redesign project. These points can be used in the redesign of the building and how do you deal with the existing values and characteristics of the facades. Moreover, facade is an important element in the field of architecture, and actually one of the most important elements in the creation of architecture. Given the graduation year, this is also a relevant research theme, it can be used for future projects but also as a supplement to existing research into facades. It can serve as

an indicator for the construction of new facades, demolition of facades or renovation of facades. Knowing which aspect to take into account, given its importance as an intermediate element and boundary between building and outdoor space.

This research can be useful as scientific literature in the future, as other architecture students try to investigate the features of department store facades. This provides their existing knowledge where they can build further.

In addition, my graduation project offers architects a new renovation strategy, knowledge and toolkit that can solve many of the current problems such as lack of interaction, transparency, vacancy and the social problems of redundant department stores. It broadens the theoretical framework of the concept of department store facades in relation to their environment. There is not much in-depth research on this theme, so this will help the existing knowledge and develop it further with more detailed aspects of department store facade typology.

The research aims to reflect and emphasize the importance of facade design. The end result, consisting of a research paper and a design proposal for adaptive reuse of a V&D department store, will inspire and underline the redevelopment possibilities of vacant department stores in the Netherlands.

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