A study on industrial heritage and building reuse in redevelopment processes.

A case study on the industrial heritage and redevelopment of Västerbro

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Abstract

There is a trend in urban planning to redevelop industrial areas within cities into new modern residential districts. Considering sustainability goals and heritage conservation, many of these areas are often redeveloped through partial material reuse or full adaptive reuse of buildings. The thesis aims to uncover the actors, networks and processes in the redevelopment and planning processes to understand *how cultural heritage is constructed and negotiated in relation to the reuse of buildings in a redevelopment project*. This will be done through the analysis of planning documents and strategies, as well as antiquarian investigations on the industrial heritage in the case of Västerbro in Lund, Sweden. By analysing these processes and documents through ANT, assemblage theory, critical heritage studies and relational geography, I found that the extensive network of actors is incredibly complex and constantly changing as new relationships and actors emerge during the redevelopment process but lastly stabilises in the last binding planning documents. The heritage process has an intrinsic social dimension that makes it inherently political, but also personal, while representing the contemporary needs of society. In the case of Västerbro, the image of heritage was completely restructured during the planning process due to the complex web of relations, actors, emerging networks and assemblages that constantly restructured the value and 'make-up' of the industrial heritage. The material reuse of the historic buildings played a major role in the reconstruction of what could constitute heritage values in Västerbro. There were extensive plans for adaptive reuse for many of the industrial heritage buildings, which were eventually reduced to accommodate new developments in the area. In the end, the main reuse of industrial heritage was the reuse of an industrial chimney and the material reuse of bricks to make ornamental pieces for Västerbro which represents its history.

Key words: Industrial heritage, reuse, assemblage theory, ANT, critical heritage, relational space

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1. Introduction

Human geography and the wider academic field have increasingly drawn attention to the need for sustainable urban development. More recently, scholars have also raised the question of how urban metabolism, the process by which urban areas efficiently consume and transform their resources, must include the adaptive reuse of buildings to ensure a sustainable future (Shah et al. 2023).

The European Union is working towards climate protection, carbon neutrality and sustainable growth through initiatives such as The Green New Deal and Fit for 55. These agreements oblige the Swedish government to plan for urban development in a more sustainable way (European Council, n.d.; European Commission, n.d.). Furthermore, the UN Sustainable Development Goals for 2030 have recognised the need for sustainable cities as well as the need for responsible production and consumption (UN, n.d. https://sdgs.un.org/goals). The goal states that:

> "Encouraging industries, businesses and consumers to recycle and reduce waste is equally important,...". "By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse."
> (UNDP, n.d. https://www.undp.org/sustainable-development-goals/responsible-consumption-and-production)

In 2021 the Swedish construction- and real estate industry contributed to approximately 22% of the greenhouse gas emissions in Sweden (Boverket, 2024). According to the Swedish Climate Act (2017:720) paragraphs 2.3 and 3, Sweden should reduce their greenhouse emissions significantly. The current goal is to have reached net zero emissions by 2045. This is forcing the building sector to rethink its current way of building. Among the Swedish planning actors there are now ongoing extensive discussions on how to build towards a circular economy. Many of these discussions revolve around reuse/recycling which, has become more common in building processes, both to lessen the co2 impact and to reduce the cost of building.

The discussion on urban reuse is now being debated more than ever, through multiple different actors and researchers in related fields people are calling for action. The debate on urban reuse in planning, design, and construction can be seen among private actors such as consulting firms and private citizens, but also among public actors, where more investments and initiatives are being created to promote the reuse of buildings. The latest issue of the

journal of the Swedish Society of Urban Planning discusses the reuse of buildings, showing that the discussion on reuse is very active. Even as this thesis is being written the Center Party (a Swedish political party) has put in a formal request to rewrite the Swedish Planning and Building act in order to include "...*clear requirements for the reuse of materials can be set in connection with the granting of a demolition permit*?" (Bergenblock, C. & Riksdagsförvaltningen 2024, translated by the author, p.1). This request is based on the Swedish climate goal which states that 70% of construction and demolition waste must be reused/recycled or be prepared for reuse by 2025 (Boverket, 2023a).

Some examples on building reuse initiatives in the Swedish public sector include Region Hallands, IVL Swedish environmental institution, Energy and climate centrum and Varberg municipality's reuse and circular economy initiative "Bruka Halland". Bruka Halland aims to create a platform to increase knowledge and enable large-scale reuse in the construction and real estate industry, contributing to the circular economy (Bruka Halland, n.d.). An example from the private sector comes from one of Europe's largest architecture and technology consultancies. In their proposal, they push the issue of reuse and its potential to reduce construction costs, and they call for climate preserving action through building reuse (Sweco, n.d.(a)). Sweco then refers to one of their projects where building reuse was crucial to the redevelopment of the city block Blästerns. The project concerns the now hotel Blique which had sustainability as the main objective, exploring both the environmental and social/cultural sustainability. This was achieved through energy-saving practices and materials, as well as strategies to exhibit the history of the house and the area (Sweco, n.d.(b)). For example, the firm claims that the history of the block is made visible through that "... *the raw concrete has been exposed and the saw surface from the joists has been left visible in the lobby.*" (Sweco, n.d.(b) *translated to eng. from Swedish. by author*). The raw concrete might refer to the original building's yellow/yellow-brown painted concrete facades - it is said to have looked quite sensational (Stadsbyggnadskontoret Stockholm Stad, 2016).

Reuse has long been utilised in building processes and has, as many other methods, come and gone in popularity. Right now, together with the new climate goals, the idea of the sustainable city has grown immensely as a planning ideal. Through this green wave in planning the concept of urban reuse has grown even more, causing discussions on how our heritage is used and what parts of the city are to be preserved and what is to be redeveloped (Cedeño Valdiviezo, 2023). Building reuse has become a way of preserving parts of the former culture, history, and identity of building sites. A common example in Sweden is to preserve the industrial heritage through adaptive reuse or upcycling of some of the industrial building parts (e.g. bricks, wood or beams). As mentioned above, one of many examples is the

Blästern district, a former industrial and office area that has been redeveloped through adaptive/material reuse to be environmentally friendly and preserve parts of the area's heritage and architectural history (Sweco, n.d.(b) & Stadsbyggnadskontoret Stockholms Stad, 2016). While reuse of heritage sites has a clear impact on the sustainability of urban redevelopment projects, it is important not to forget the impact and reconstruction of the space it occupies and the social and political implications it generates.

1.1 Aim and research questions

The aim of the study is to examine building reuse in urban planning and renewal in a Swedish context. My focus will be the redevelopment of industrial areas and how heritage is scrutinised and constructed through the redevelopment and planning process.

This will be achieved by analysing the main research question:
How is cultural heritage constructed and negotiated in relation to the reuse of buildings in a redevelopment project?

My research question will be answered through document analysis, theoretical approaches, and the case study of Västerbro, Lund. To address the specifics of my research I have a set of sub-questions:
- *What actors are influencing cultural heritage conservation in Västerbro?*
- *How is the industrial heritage considered in the planning documents?*
- *How is reuse understood as a heritage practice in the planning documents?*
- *How is the heritage-reuse discourse negotiated and implemented in the planning process?*

To answer the research question, I will conduct a case study on an area in Lund, Sweden, called Västerbro. The case study will be conducted through document analysis and Actor Network theory (ANT). To encompass the methods, I will lean into theoretical discussions through critical heritage theory and assemblage theory – this will be done from a relational ontological and relational geographical position which will be further discussed at the end of chapter 3.1.

The document analysis will use the detailed development plans and the deepened comprehensive plan of the area and the municipality, as well as other policy documents and Swedish legislation. Having chosen to situate myself within a relational ontology, I see the world as built upon relationships between different actors - both human and material. This

has led to a theoretical framework based on assemblage theory and critical heritage theory, using ANT as a method. Finally, in order to understand urban reuse from both a practical and theoretical point of view, I will look at Swedish legislation on heritage and reuse, as well as previous studies on urban reuse and its impact on heritage conservation and creation.

1.2 Delimitations

There are some delimitations to the project which will be accounted for here. A well-defined urban area as Västerbro has its own history. It has been planned, lived, used, and re-planned throughout the last century. It has its own distinct features, as well as similarities with comparable areas in Sweden. My aim is to examine the heritage and reuse within the areas on-going redevelopment. The aim is thus not to say whether all urban reuse in planning reflects the history of an area, or whether or not it is good or bad, but rather to contribute to the field of human geography and the discussion on building/material reuse of heritage buildings in planning processes.

Regarding the study of Västerbro's place identity and heritage there will be a limitation to what form of claimed place identity I will be examining in this thesis. I will delimit the study only to scrutinise what is understood as historical place identity. This has been decided since a place's identities can be vastly different depending on who is claiming it and to what purpose, what memories different people have to the place and which feelings it stirs. A place's identity and culture can be both relational and subjective. It can be both highly personal, socially connected to a specific group or culture, or generated from municipal goals and plans for instance. Therefore, the identity is understood from an industrial historical perspective. Heritage is also a tricky concept, interpreted in different ways by different disciplines, cultures and individuals. I have therefore chosen to limit my discussion of what buildings in the area that are heritage to the municipality's own regulations on what is designated as heritage, but an explanation of how this heritage is preserved or selected by the municipality will be given later in the text.

It should also be noted that the redevelopment of Västerbro is an ongoing project and that not all the detailed documents for the area have been finalised. When the final plans concerning the area are settled it may slightly shift some of the conclusions regarding Västerbro made in the paper. Though, the ongoing discussion in the documents up to date reflect the debate and how the actors construct and reconsider reuse and heritage.

I have chosen the case of Västerbro as it is a well-defined area with ongoing redevelopment plans where main actors as for example the municipality, property developers, industrial buildings and street plans come together and highlight my research aims. The case is one of many on-going redevelopments of similar areas in Sweden, such as Årstaberg (Stockholm Stad, 2024) and Högsbo (Göteborg Stad, n.d.s). It has its own peculiarities and history but still facing the same ongoing processes where the politics of reuse and environment are affecting how we understand both heritage and urban development. Thus, Västerbro contributes in its own right to a larger discussion within human geography and society at large. There will be further information and discussions on the choice of Västerbro as a case study in chapter 2.1 and sub-chapter 4.1.1.

1.3 Disposition

From here on, the structure of this thesis will be as follows. Chapter 2 aims to situate my thesis in its geographical context and history, the legal situation around reuse and heritage in Sweden, and a brief look at previous studies on reuse and heritage practices. **Chapter** 3 explains the theoretical framework of the thesis, which is based on a relational geography and ontology that draws on assemblage theory and critical heritage studies. **Chapter 4** outlines the research design and methods. It is a singular case study design explored through document analysis and actor network theory. **Chapter 5** presents the results of the case study, presenting the actors and networks from the document analysis. The chapter also presents the analysis of the results. **Chapter 6** realises a short discussion on the results of the analysis and concludes by presenting the findings of the thesis answering the research questions. Lastly, the bibliography is presented in **References**.

2. Background

Chapter 2 aims to situate my thesis in its geographical context and history, in the legal situation around reuse and heritage in Sweden, and a short look at previous studies on reuse and heritage practises. Firstly, I start with situating Västerbro in history, to give context to how it has been given its features and how land and property use has formed the present district. Thus, it also points out the first premises to discuss Västerbro´s predispositions to be understood as heritage. Secondly, I present the legal conditions of reuse and cultural heritage in Sweden which is knowledge needed to understand the process of redevelopment and its uses of heritage. The third aspect discussed are previous studies that will enlighten my research questions and be helping in the analysis of Västerbro.

2.1 Västerbro

The case study concerns the district of Västerbro in Lund, Sweden. Västerbro stands before a huge redevelopment spanning over the next decade and the area is going to change from a diverse industrial area to a "classical neighbourhood" district (Lund Municipality, 2024). The classical neighbourhood (*swe: kvartersstaden*) is a planning principle which proposes a denser city district with blocks of living accommodation that makes it possible for different services within the neighbourhood such as cafes, shops, public service/transport etc. (Fastighetsägarna, 2022). The idea of the "classical neighbourhood" as planning doctrine has been strong in Sweden but not without criticism (Tunström 2009). Västerbro is located in the northeast of Lund and borders to different residential areas and a shopping centre (See figure 2), the industrial area has the classical industrial big quarters with few but wide roads.
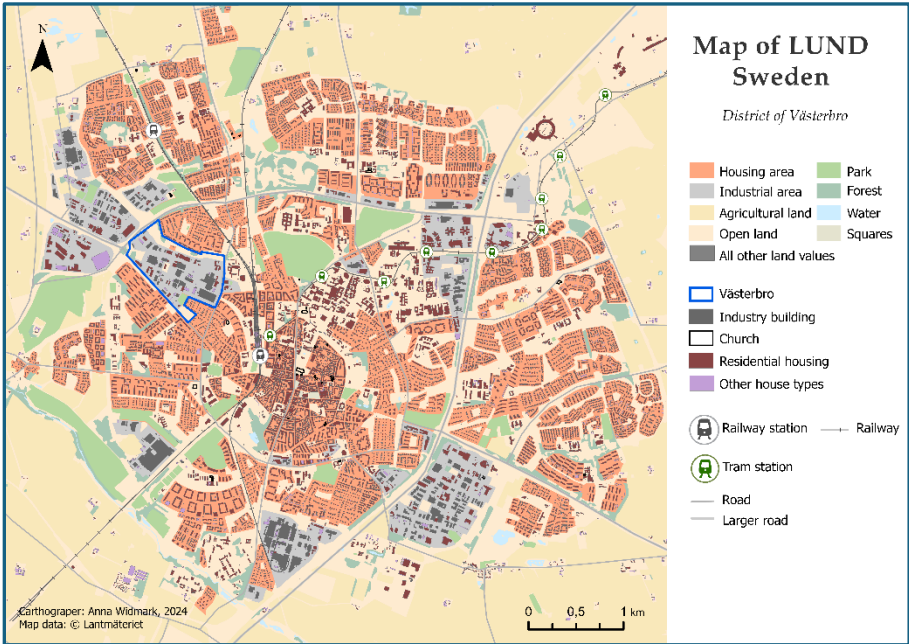

Figure 1: Map of Lund, focus Västerbro. Source: Anna Widmark, 2024. Data: © Lantmäteriet
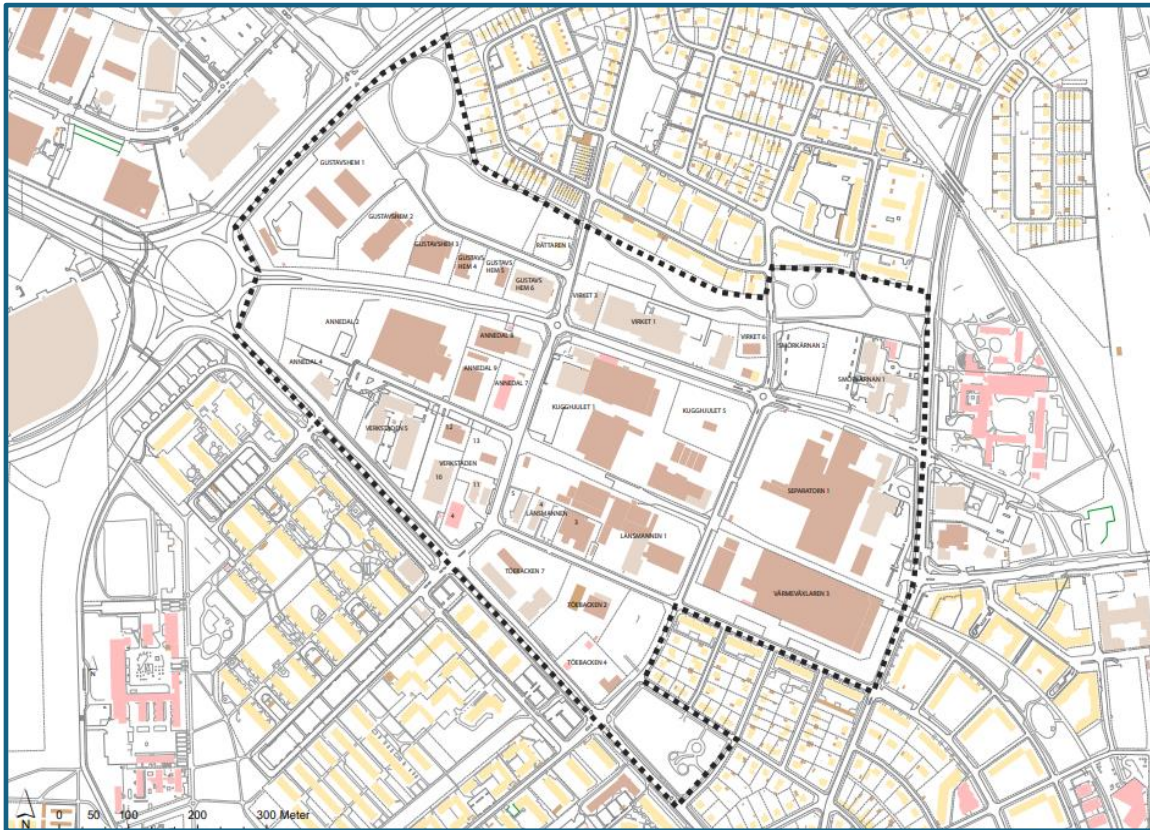
Figure 2: District of Västerbro in Lund, Sweden
Source: Lund Tekniska Förvaltning, Lund municipality 2019 in Västerbro program p.5.

Before the early redevelopment of Västerbro the area was predominately agricultural land, as most parts surrounding Lund was. During the early 20ᵗʰ century, the municipality made a general plan for the undeveloped areas around Lund, and it was then Västerbro first came to be pointed out as a potential future industrial area. At that time the area was called Oresund's Road Industrial Area (*swe: Öresundsvägens industriområde*). One of the reasons for the placement of the new industrial area was the then existing Bjärred railway which was bordering to the planned area. Although it was first after World War 1 that the first industries started to establish in Västerbro. Earlier industries were situated within the central city and its living quarters. During the first decades of the 20ᵗʰ century planning new industries and working class areas were mainly established on the western side of the railway that separated Lund in two. During the second part of the 20ᵗʰ century Swedish planning doctrines moved for a full separation between housing and industries. While some industries had been established in Västerbro during the earlier 1900s it was first during the 1960's that the industrial activities came to expand. The industrial boom in Västerbro is said in *Kulturportal Lund*, an official site on Lund´s history, to have been a reaction from planners after the second world war when it dawned that it could be a safety risk to have all industries in the

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same place within the city as possible bombing targets. This also resulted in bigger buffer zones between Västerbro and the housing areas in the industries vicinity (Kulturportal Lund, 2024). This is partly true, but it should also be stressed that Swedish planning practice in the second half of the 20th century gave prominence to a division between housing, commerce, industries and other areas of use. The separation between housing and industry is due to both practical transport reasons and security were predominantly enforced in nearly all Swedish cities. Thus Västerbro, as said, was separated from housing, and towards the end of the 20th century it was a big industrial area with different businesses, industries, and establishments (Tekniska förvaltning, Lund municipality, 2019). As of today, like most industrial areas in post-industrial Sweden, there is a mix of industrial operations, mechanics, businesses, a religious organisation, a design school and many more establishments. Most of these will have to relocate because of the redevelopment.

2.2 Swedish legislations in connection to reuse and cultural heritage

There are no Swedish laws that can force reuse practises in urban development. The question of reuse is thus in the hands of the developers and not the municipalities. However, since the EU has started prioritising the issue of climate change new initiatives and goals are being set. Some of the EU-initiatives promotes a circular economy (e.g. Horizon) and therethrough opening up for a wider usage of reuse in redevelopment processes within the EU. As mentioned in the introduction, the discussion on reuse in new developments, and refurbishing and redevelopment projects is now an ongoing discussion in Sweden, resulting in requests from political parties to include reuse strategies in the Swedish Planning and Building act (*Swe: Plan- och bygglagen – PBL, 2010:900)* (Bergenblock & Riksdagsförvaltningen 2024). Recently a Minister of State, in answer to the official request, reasoned that the reuse market might come to change in favour of reuse strategies depending on the outcome of EU's revision of the Construction Products Regulation (CPR). He further his answer to the request by pointing to that *Boverket (the Swedish National Board of Housing, Building and Planning)* have been commissioned to investigate and analyse possible reuses prospects of different building materials and how to implement a circular economy in the building sector (Carlson & Riksdagsförvaltningen, 2024). As of now, the only way to force a reuse is to put a protection order on specific buildings listed as heritage. This is enforced through the Swedish Planning and building act (PBL SFS 2010:900). Depending on what form of protection that is specified in the listing, the building could be completely or partly protected. In these cases, it opens up for adaptive reuse and recycling of building materials in the building. The protection of a building as heritage comes down to its historic,

artistic, or cultural historical values. The decisions come down to local government and are supervised by the regional boards (SFS 2010:900, sect. 8 § 13).

As seen above there exist laws concerning heritage within the building and planning regulations in Sweden. There are also laws regarding heritage. The main law protecting heritage in Sweden is the Historic Environment Act (*Swe: Kulturmiljölagen – KML*, SFS 1988:950) It ensures that Sweden's cultural and historical heritage is being preserved for future generations, which have therefore been declared as an object of national importance. It mainly focuses on heritage such as churches built before 1940 and owned by the Church of Sweden, state-owned buildings, and specially listed buildings by the regional board, as well as ancient monuments and archaeological remains. It also regulates that historical objects stay in Sweden or are brought back to Sweden if necessary (SFS 1988:950). Cultural environments are also regarded by the Swedish Environmental Code (*Swe: Miljöbalken – MKB, SFS 1998:808*). The law focuses mainly on the natural environment but has been expended to include cultural environments to ensure that they are being protected from harm. For instance, if there is a risk of damage from development projects the law holds responsible parties accountable for carrying out protection through the measures that need to be done. The law also states that new detailed plans must include an Environmental Impact Statement, which also looks at how the heritage will be affected by the redevelopment, a requirement that is repeated in the Planning and Building Act. Furthermore, the cultural heritage needs to be acknowledged in all types of planning for redevelopment of an area. The Comprehensive municipality plan should also acknowledge which cultural environments that exist within the municipality (Boverket, 2023c). The Swedish Planning and Building act also include the cultural environment/heritage and looks at it as something that can help create a future sustainable milieu. It furthermore states that even "regular every day" sites can hold a cultural value. The meaning of the law is thus that it is of importance to the local level in planning, to stress and address the high importance of the cultural heritage environment. The law discusses how characteristics of an area with its history, cultural heritage and artisan features should be protected. If it is disregarded the plans need to provide information on why it was de-prioritised. A building which is listed with high heritage values has regulations which demand that if the building is undergoing maintenance or renovation the heritage values must be preserved (Boverket, 2023d; SFS 2010:900). There are also ways to protect buildings with heritage value in the Detailed Plans, such as pointing out where new buildings are allowed to be placed, regulate land usage in the area, building heights and density, or put a protection order, a demolition ban, or a precautionary order on the heritage building (Boverket, 2023e).

These laws and regulations can all in different ways act to protect, preserve or construct heritage. In the case of redeveloping Västerbro it is especially the Planning and building act and the Swedish Environmental Code that can come into action. But the laws and regulation can primarily come into use to protect and construct heritage if there are a network of actors coming together to enhance or realise heritage.

2.3. Previous studies on reuse and heritage

The subchapter on previous studies aims to give the reader a brief background on some of the main topics (emissions, planning processes, circular economy,) regarding reuse and heritage in urban studies. Through the previous studies (2.3) an understanding of why these topics is important is conveyed.

Many of the previous studies regarding building reuse is highly focused on the climate and CO_2 perspectives. It is often discussed from the circular economy strategy of reusing buildings or building materials in a closed construction loop. The studies often start out, a bit like this thesis, by pointing towards the high CO_2, greenhouse gases, and energy numbers that is being produced by the AEC industry (Architecture, Engineering, Construction). Schützenhofer et.al. (2022) discusses sustainability outcomes of reuse in a circular economy in the article *Improvement of Environmental Sustainability and Circular Economy through Construction Waste Management for Material Reuse*. The article continues by showing how the planning process is crucial for a sustainable reuse process. For example, a part of the planning process should be to inventory the materials already at the deconstruction/construction site and to keep stocks of earlier demolition materials that can be reused in new projects. Although, there is one important factor that often stops the reuse processes – and that is the cost effectiveness. Not only is often the price of reuse materials higher than that for new materials, it also the cost of logistics such as transport and processing of the materials. Bertino et al. (2021) seconds the statements on the planning process important part and the pricing problem in the reuse sector, discussing the high cost of structural deconstruction versus the low cost of demolition. However, in the article *Fundamentals of Building Deconstruction as a Circular Economy Strategy for the Reuse of Construction Materials* by Bertino et al. (2021) they theorise that the cost of deconstruction of reuse materials will become a natural part of any planning process in the future, making the questions of the cost of reuse redundant. In the article they contribute future reuse strategies and lowering of cost to the upcoming regulations and frameworks around building reuse and conservation, as well as the drive towards a circular economy in Europe. A circular economy is an economic module which entails a closed material loop. This reuse form is mainly focused on that materials and products are being recycled or reused to diminish

emissions, waste and energy as well as helping nature regain its strength (Schützenhofer et al. 2022). While Schützenhofer et al. (2022) discusses the possible recycling of specific material and the need for a holistic understanding of reuse, Bertino et al. (2021) focuses on buildings life cycle with a special focus on its end life and turning into something new. In the end life of a building the article has identified three different possibilities: demolition, non-structural deconstruction, and structural deconstruction. Demolition has been the norm for a long time in redevelopment projects, resulting in demolition of the full previous building constructions in order to put up new structures with new materials. The non-structural deconstruction on the other hand is seen as a quite effective and non-specialist task which takes non-structural parts of the buildings, such as windows and finishing pieces of the building. These are, as mentioned, usually quite simple to remove and does not require additional work to keep the building standing after (Ibid, 2021). It is suggested in some of the planning strategies for Västerbro to keep some of the heritage buildings' original doors and windows for new houses during the redevelopment, promoting non-structural deconstruction. The structural deconstruction, in contrast to the non-structural deconstruction, is when one deconstructs the structural parts of a buildings such as beams and building frames – the parts that are integral to that the building is standing. This process is on the other hand a bit more expensive, time consuming and demands a higher expertise to carry through (Ibid, 2021). Another possibility could be a full adaptive reuse where instead of deconstructing the building it is renovated and used for new purposes. Disli and Ankarahgil (2023) and Foster (2020), furthers the discussion on circular economy and adaptive reuse to including the heritage conservation sector. The articles discussed above are of importance to my analysis, among others, how they understand planning as an instrument in sustainable redevelopments and to understand how demolition and redevelopment can be understood. It is also of interest to further analyse to see what role heritage can have as part of a broader spatial understanding of sustainable development and redevelopment.

Disli and Ankarahgli (2023) writes in *Circular economy in the heritage conservation sector: An analysis of circularity degree in existing buildings,* on circular economy as one the future economic models that will steer Europe towards a more sustainable future. Here they refer to The European Union's 2020 Action Plan for a Circular Economy, Closing the Loop: New Circular Economy Package, the 2030 Agenda for sustainable developed, C2C (*cradle to cradle*) and many more initiatives. Building on these initiatives they believe that we stand before a future where reuse is inevitable and how the cultural heritage may be a part of it. They go on to discuss the rising depletion of construction materials (especially now when the world is in an unstable place), and with the focus on Turkey they press the heritage buildings old system as old knowledge that need to reappear as sustainable management systems for

new and old buildings (Ibid, 2023). Although these systems may not be relevant for this case study on industrial heritage from the early 20ᵗʰ century, it is an interesting point of view in a broader world view. Foster (2020) discusses some of the same initiatives for circular economy as Disli and Ankarahgli (2023) but goes on to mention the interesting EU initiative EU Horizon 2020 which founded the 'CLIC project' and 'Buildings as Material Banks'. The CLIC project is an initiative which looks toward adaptive reuse of heritage buildings to promote a circular economy, opening up for a more widespread understanding of cultural heritage as not only a symbol of human history, but also a way towards a more sustainable society. In Fosters (2020) article *Circular economy strategies for adaptive reuse of cultural heritage buildings to reduce environmental impacts* she furthers the discussion on adaptive reuse of cultural heritage as a sustainability tool making the argument of cultural heritage as a tourism attractor, and therethrough showing how a heritage site could generate both cultural and economic sustainability. Although Foster do acknowledge that most "*circular strategies and adaptive reuse strategies are perceived as more expensive alternatives to demolition and new construction regardless of environmental and sustainability benefits*" (Foster, 2020 p. 3), which other previous studies also has claimed. Circular economy and the sustainability of heritage are to a small or no extent discussed in the Västerbro plan. Thus, the research and knowledge presented in the articles provides comparative research on possible actions which are not taken. That knowledge will further benefit the present study to understand other possible outcomes.

Heritage is a complex concept but has in research during the last decades primarily been understood as a relational and social process (Smith, 2006; Harrison, 2013). This is evident in Foster, and she makes an important point of how cultural heritage is not only historical buildings but also, for example, new skyscrapers which define the city landscape as a landmark (Foster 2020). The point of heritage not needing to be an ancient building feels highly relevant in the case of Västerbro where the industrial buildings spans from the 1920-1960 and forward which has created the landmarks of today in Västerbro (Lund Municipality, 2018a; Tekniska förvaltningen, Lunds municipality, 2019). It is stated in many of the studies, including all previously mentioned in this text, that there is an overall positive effect upon the environment and energy usage when utilising building reuse. However, there are of course exceptions, e.g. specific buildings were a zero-emissions building instead of the previous standing building will be more environmentally friendly. Moreover, there is times when old buildings do not live up to the rules of the contemporary living standard or regulations (Foster, 2020), in these occasion a heritage evaluation must be done (if the building is marked as a possible heritage) where the standards for different usages of the buildings are compared to see if other usages could be relevant – otherwise a reuse of the building

materials could also be appropriate for a more sustainable development process. Fosters article proposes a circular economy framework for adaptive reuse of heritage buildings which focuses on the micro level and different actors through the *9R approach* (*re-use, repair, recover, reconvert, re-manufacture, recycle, reduce, re-think, renew*) (Ibid. 2020). Gravagnuolo et al. (2021) continues the adaptive reuse discussion on cultural heritage, reuse, and circular economy in the article *Adaptive re-use of urban cultural resources: Contours of circular city planning*. The article (and the EU) has identified a need to look over Europe's cultural heritage buildings for future renovations in order to lower their energy usage and more to ensure more sustainable future. Gravagnuolo et al. continues the discussion Europe's cultural heritage buildings pointing at the fact that many today are abandoned or in decay opening up for new usages of them, creating a useful source for a circular development of cities. Furthermore, in their discussion on drivers of circular economy they place refurbishing and re-use of heritage buildings as well as dismantling of other buildings as a very important part of the economic design. The article furthers the discussion on reuse of heritage and expands the understanding of heritage as more than a sustainable alternative. It points out heritage's cultural capital and how through reuse places can gain a unique identity, help create a community pride and preserve knowledge for the future. The article continues by pressing that the adaptive reuse of heritage buildings should be a part of every circular economy framework/model since it helps recreational values, energy recovery (embedded energy), lessening depletion of natural resources, less exploitation of new land and the importance of maintenance and repair for buildings longevity as part of future models/frameworks (Ibid, 2021). These are all question the redevelopment of Västerbro is faced with.

Moving on from the circular economy framework onto a focus on the heritage value in material reuse Arlotta (2020) takes the heritage reuse discussion from adaptive reuse to focusing on material heritage reuse, a field of research which remains relatively unexplored. In the article *Locating heritage value in building material reuse* during the discussion on the definition of heritage value it becomes clear that that there is no set definition of the concept. Early heritage studies used to have a curatorial approach of heritage value that often came with a monetary, aesthetic, and historical focus, this is not the case of most contemporary studies on cultural heritage value. Instead, it is understood as a social construct which has a more holistic perspective understanding the complex relations and processes which heritage is built upon and that it can be strongly affected by time and space. The article also discusses how categorisation has changed at that categories such as sensory values, associative values, evidentiary values, and functional/instrumental values has become part of the research field, opening up for a broader understanding of heritage and its values. The associative value (the

heritage values relations to place, people, stories etc.) is extra interesting as a value in this thesis, Arlotta explains in the paper how reuse of heritage materials conveys a story changing the associative value and there though giving reuse materials a new worth. Another important point of the paper is that heritage is not only a physical product but rather a process which changes through time and space (Ibid, 2020), which could be interpreted as connecting to the assemblage theory and relational geography of this thesis. Heritage thus can be understood as an assemblage, a network or "a box" of ideas that come together and stabilise for a time and then reorganise or fall apart. But it also shows heritage as being part of what constructs a relational geography. Heritage can be one of many parts that forms a place and will through its relation to other actors construct and reconstruct meaningful places.

Arlotta`s article also proposes the interesting question on the risks of focusing on which economic values that reuse of heritage materials may bring. Although the points of economic benefits resulting from heritage reuse are important, it may result in the loss of heritage that does not seem to produce economic values and that the cost of reuse materials from heritage site risks skyrocketing, resulting in theft of heritage materials, less reuse, and more demolition of "lesser" heritage sites (Ibid, 2020). However, the claim is contested by Ross (2020) in the article *Re-Evaluating Heritage Waste: Sustaining Material Values through Deconstruction and Reuse*. Although, the article (Ross) does acknowledge that there is a risk of losing some heritage materials because of value systems which disregards that all parts of the heritage building can be reformed through reuse processes and that through claiming some buildings to be heritage sites it can be easier for deciding powers to demolish those who are not (Ibid, 2020).

As mentioned above, Arlotta makes the statement that heritage is more than a building or its deconstructed parts. Heritage is an active process which is not only affected by its social construct but is being reconstructed through its reuse. There is a need for further research of heritage values in reused materials and the reuse processes. In the article Arlotta suggest looking towards the waste management and community development designs to gain knowledge on consumption loops and sustainable construction in connection with reused building materials (Arlotta, 2020). Building on Arlotta's call for a both wider and deeper understanding on material heritage reuse, Ross (2020) also claims that there is a need for more research in the field of material heritage reuse since most research only focuses on the materials and disregards the heritage part. Another type of heritage preservation mentioned in the article (*Re-Evaluating Heritage Waste: Sustaining Material Values through Deconstruction and Reuse, Ross 2020*) is a consequential preservation of the natural

heritage through introducing urban mining, resulting in less extraction of natural materials in heritage landscapes. So, through utilising urban mining (deconstruction of buildings or waste from demolitions) a lesser need for new material extraction is needed. The article, building on multiple cases, articulates a need for a new strategy and design frameworks for deconstructed heritage buildings as a new way of understanding conservation and preservation of heritage. While some loss of the history/heritage may occur in the deconstruction, the heritage should be seen as a performative process which can be redefined through new usages of the material. Ross exemplifies this through the process of reusing materials after the second world war and after a natural disaster – when reusing material from one's heritage a story is created in the new buildings creating a new type of heritage than what the original building related (Ibid, 2020). It should be stated that the idea of heritage as a performative process does contradict but rather enhance the idea of heritage as a social process.

Both Ross (2020) and Arlotta (2020) discuss how reuse of heritage buildings could generate new forms of places and storytelling around the heritage materials but misses part of the discussion on the consequences of the spaces being repurposed. Lynch (2022) found this focus on reuse as lacking the geographical point of view. In Lynch's (2022) article *Remaking the obsolete: Critical geographies of contemporary adaptive reuse* he argues adaptive reuse to have complex dynamics of social and cultural implications of the space it inhabits. Just as heritage is a complex social construction (Rodes Pereira, 2019), Lynch makes the case that the building is that as well:

> "a building–really any building–is more than it seems: it is an object of material culture, a structure of purpose, and a physical expression of a way of life. Complicating this further is the fact that buildings have life-histories - they are conceived, develop, grow, transform, 'die' and, in some cases, are reborn" (Lynch, 2022 p 2.)

This quote gives a broad explanation on buildings own complex relation to society and the place which it stands on. All these points on how the building itself connects to societies needs and contemporary requirements can tell us about how society functioned at that time and place (Lynch, 2022). Building on the quote it is evident that buildings are also highly relevant to understand the construction of place creating relations in space, and when buildings transform, are destroyed, or are rebuilt it does not only change the building, but also the place which it inhabits and the space that it relates to and forms. Consequently, a change of the sense of place and in the usage of the place will most likely occur as a result of

new relations being made between the buildings, it functions and the rest of the world. This understanding of place and space can be found in Massey's thoughts on relational geographies. From the understanding of Massey and others, place and space are highly relational, it means that the relations that affect the place are constantly creating and recreating it. She has a topological understanding on it where scale becomes redundant, meaning that actors across the globe will affect the local place and depending on how the relations changes new understandings of the place, and through that space, can be emerge (Massey, 1993). According to Massey is space constantly *becoming,* other researchers has understood Masseys *becoming* as representing that space is constantly recreating itself through new and old relations and that it can be many different things at once – it has a multiplicity (Cresswell, 2013). Lynch (2022) exemplified this constant change of place through the post-industrial heritage example of the abandoned industrial buildings. The industrial legacy that is left in many of the Western cities went from being a global sign of power and advancement to the unstable and dirty quarters of the city. But after a while investors started to turn the industrial landscapes within the city to so called "consumptionscapes" (social areas of consumption such as bars, restaurants, shops etc.). From that a new trend of "loft living" arose recreating the place and allowing for new relations to connect to the area. Loft living was trend were adaptive reuse of earlier warehouses, factories, etc. became first cheap homes for the more artisanal people and then was gentrified as trendy and artsy living for the upper middle class (Ibid, 2022 *first discussed in Sharon Zukin, Loft Living 1982*). What has happened is that new social and material relations have formed in the industrial area changing both the sense of place and the relational space. There are connections forming over time, scale, and space – it is not only a global space in the local place, but it also tells history, the contemporary and social/political/economic dimensions through the adaptive reuse of the industrial buildings. Lastly, buildings, places, spaces, and reuse are inherently geographical and stretches over many dimensions. In the analysis I aim to display the relational geographical dimensions which are at work in my case of Västerbro. I will also use the idea of Heritage as part of the becoming of space.

2.3.1 Commentary

Through this compilation of previous studies on heritage and reuse I hope to have helped the reader get a clearer picture of reuses and heritage's context in today's research, but also understand its positive implications and complex relations. The research is as often focused on the environmental effects of adaptive heritage reuse and its economic implications, but a field has started to grow together with EU initiatives such as Horizon 2020, where material reuse of heritage is seen as a social and cultural phenomenon and that (heritage) building

materials which has more to offer than being put in a landfill. It further discusses adaptive reuse of buildings and its function and complex dimension from a standpoint of relational geography.

3. Theoretical framework

Chapter 3 aims to explain the theoretical framework of the thesis. The chapter will go through the philosophy of science and the main theories of the thesis.

3.1 Assemblage theory

Assemblage theory takes its starting point in Gilles Deleuze's and Félix Guattari's work on non-hierarchy theory. They come from the post-structuralist school and their assemblage theory has been interpreted as a reaction to the popular notion of society functioning as an organism (theory of organic totalities). The theory first came to be famous when Delanda in his works combined and theorised Deleuze's and Guattari's different articles on assemblage theory (Anderson, J., 2021). Assemblage theory is situated in a flat ontology meaning that all actors exist beside each other and interact on a level plane (Ash, 2020). Consequently, assemblages can be created over different scales and levels, between human and non-human actors, include ideas and institutions and can be assembled through different time and space. All the actors in the assemblage are to be seen on equal footing but can hold different amounts of power in the assemblage (Bennett, 2010; Harrison, R. 2013; Volo, S. & Wegerer, K. P., 2023). As mentioned above, assemblage theory does not separate the human and non-human actors, but instead sees how all different heterogeneous parts together creates the social (Harrison, R. 2013). The theory acknowledges the structural in the relations and processes while understanding that it isn't a homogeneous process (Marcus, E. G. & Saka, E 2006). It seeks an understanding of the relations and effects between the material, the social and the human world - everything affects each other and together assembles the whole/the assemblage over both time and space (Anderson, J. 2021). The main focus is not on the actors themselves, but rather the relations and connections can come of the assemblage (Volo, S. & Wegerer, P.K 2023). All these different material and human entities are then together influencing complex interconnected relations that are in spatio-temporal instability of open systems that create a constant flow of assembling and reassembling. It is a highly relational geographical understanding of the world where all things exist within and through different relations (Harrison, R. 2013; Marcus, E.G. & Saka, E 2006). It is the interaction of the components that creates the assemblage (Volo, S. & Wegerer, P.K 2023).

As seen above, assemblages are described with many different words and concepts, but usually coming to the same conclusion: An Assemblage is a group of diverse elements, a living form that can both be dismembered and reassembled. This group of elements which constantly relates and creates relations to each other does not have a central power, but rather all parts of the assemblage hold different amount of power over the assemblage. The unevenness in power and power relations inside the assemblage is known as an uneven topography (Bennett, 2010). These components of the assemblage can all exist on their own with their own identities, creating the possibility for the actors to be part of many different assemblages at the same time. A whole assemblage can even be part of another assemblage (Volo & Wegerer, 2023). Moreover, the effects that results from the assemblage derives from the different relations and parts (not just one part), resulting in the creation of agency within and throughout the assemblage (Bennett, 2010). According to Volo and Wegerer (2023), an assemblage possibility to create value relates heavily to its spatio-temporal dimension. Meaning that space and time influences the outcomes of the assemblage and its' agency (Ibid, 2023).

I have chosen assemblage theory for the research of cultural heritage and building reuse as a way to uncover the different relations that create and re-create heritage values/construction throughout the planning process. Through this theory the physical heritage buildings can be understood as actors that are affecting the planning processes related to them, making it easier to understand the heritage place in Västerbro's redevelopment process. It will work as a framework that encompasses the way I understand and analyse the results of the methodology. Through assemblage theory and ANT, I aim to understand the relations between the physical material world and its human actors. Assemblage allows us to understand the complexities of social and material formations through the understanding that different, sometimes disparate activities and actors, are entangled in a diverse assemblage where internal tensions and agency constantly affect the social and material world around us (Anderson, et al., 2012). To do this I have situated myself in a relational ontology and geography. Both Assemblage theory and ANT is inherently relational and by looking at the research trough a relational ontology and geography I accept that the world is not built upon single actors that singlehandedly change and reshapes it, but rather it is the relationships between actors that build the world (Cresswell, 2013). The actors can be both human and material and exists across time, scale and space which makes way for multiple possible relations at the same time, creating a flat topology. This is highly connected to both Assemblage and Actor Network Theory's outlook on research and the worlds compositions (Pernecky, 2023). The relational ontology/geography, together with these two theories and the flat ontology, also understands space as relational. Consequently, space is active and hold

multiplicity in how its perceived creating a space where interrelations and relations constantly builds across scales, time, and actors. This ontological outlook on space is seen in both ANT and Assemblage theory, the thought that space is relational is partly because of its nature to constantly be open for change and reconstruction (Cresswell, 2013). This connects to the notion of critical and performative heritage which sees the meanings of heritages changing depending on the relations representing the heritage (Smith, 2022). The performative heritage will be discussed further in the next section (3.2). Through this ontological outlook I aim to gain a better understanding of heritages and building reuses complex constructions by unearthing the actors and relations that play a part in its making.

3.2 Critical heritage studies

The concept of heritage has been around for almost as long as there has been a will to preserve the past for future generations, but during the last decades there has been a shift in the definition and interest in cultural heritage. Harrison (2013) describes the shift in heritage as going from an interest of a few specialists and enthusiast to becoming a global trend. There is now a political, economic, and social production of heritage in our contemporary society making heritage an active process above just conserving the past. Consequently, the concept of heritage both has and is going through an evolution of its conceptual meaning resulting in an ever-growing field of critical heritage scholars in a diverse set of disciplines (Ibid, 2013).

Heritage and critical heritage

In this thesis there will be a focus on the *cultural* heritage since the focus lays on building reuse and heritage referring to the material/built world. Therefore, when mentioning heritage I am referring to *cultural heritage* and not the natural heritage. Although natural heritage is not globally seen as a world heritage it is often seen as heritage more locally and should in most cases be seen as equal to cultural heritage in the sphere of critical heritage studies. For broader studies focusing on critical heritage studies, both heritage practices should be considered (Harrison, R. 2013).

Heritage is now a broad concept that includes both material things and non-material things such as traditions, languages, dances and so on. Depending on the discipline that studies heritage, some differences can be seen, but the main condition for national heritage is usually that it can be categorised and conserved/archived (Ibid, 2013) and expresses/represents identity (Smith, 2022). Critical heritage, which will be followed in this thesis, rather sees today's outlook on heritage as a "social, economic and political phenomenon of late-modern societies…" (Harrison, R. 2013 p.3). Critical heritage studies understand heritage as an active

relational process which is being created in the linkages between people, places, materials, and practises. It has even been asked if heritage is not a physical thing, but rather a cultural and social process – that the true heritage lays in the act of remembrance (Smith, 2006). In the least, heritage is understood as a something representing a sense of place, identity, and our history (Smith, L. 2022)

Heritage making/ Political resource/ Performative Heritage

Heritage has become inherently political; it is not possible to separate the public heritage from politics (this does not refer to personal heritage-possessions). As Laurajane Smith (2022) writes in her article *Heritage, the power of the past and the politics of (mis)recognition,* "Heritage is a political resource; no matter how this concept is defined…" (p. 623). The creation and definition of a built heritage not only has to go through the process of definition, categorisation, funding, etc., but once it has been proposed as a heritage, the political power of the region most often has the final decision as to whether it will be preserved or not (when discussing buildings as heritage). Furthermore, there is a political decision on how to showcase it, how the discourse around the building goes. One need to look at political/power relations that is, in this case, seen in heritage studies. These relations sometimes control or manages the way others discourse or think about something, which becomes relevant when discussing critical heritage as a political resource, but also as an assemblage. The heritage as a political resource could be described as an assemblage in itself. It describes a relationship between people, institutions, material, social relations, that together creates an effect of a political message. The political message of the heritage could not have been created without the relations within the assemblage (Ibid, 2013). The political message does not only come from those in seat of power but can also be a political resource for other groups searching for recognition or trying to change their perceived history and therethrough heritage. These different types of relations and wills regarding heritage representation and presentation has come to charter to contemporary needs (Smith, 2022) which indicates that heritage is a social phenomenon (Gentry & Smith, 2019).

4. Methodology

This chapter aims to explain the methods of the thesis. It will address the reasoning behind the choice of methods and their validity, reliability, and delimitations, as well as the process of gathering data.

4.1 Research design

The research in this thesis is based on a case study design where the focus lays on the district of Västerbro in Lund, Sweden. A case study design was chosen on its basis of researching a contemporary contextualised occurrence where the question of "how" is asked. According to Yin (2007), these factors are favourable to a case study design. The methodology is highly qualitative in its focus on document analysis and Actor Network theory where the aim is to uncover the actor networks and relations that constructs the case areas heritage and building reuse. Consequently, through applying the case study research design I aim to create a more in-depth understanding of my research questions by implementing a contextual analysis (case study, document analysis etc). It also opens up for a relational geographical understanding of Västerbro's building heritage and reuse through understanding a places instable and ever-changing structure (Creswell,2103). Furthermore, through the choice of a case study design and the methods, the theoretical framework can be operationalised in order to answer my research questions. Through my relational ontology I as a researcher becomes a part of the assemblage which forms this thesis. My epistemological point of view is therefore one based on reflexivity, meaning that there always is a possibility that my previous experiences and beliefs may come to affect my research.

Research questions:

How is cultural heritage constructed and negotiated in relation to the reuse of buildings in a redevelopment project?

- *What actors are influencing cultural heritage conservation in Västerbro?*
- *How is the industrial heritage considered in the planning documents?*
- *How is reuse understood as a heritage practice?*
- *How is the heritage-reuse discourse negotiated and implemented in the planning process?*

4.1.1 Case study - Västerbro

As mentioned above, the case study of this thesis will examine heritage buildings and reuse practices in the district of Västerbro in Lund, Sweden. The district has been chosen because it is in an active redevelopment phase where I, as a researcher, have the opportunity to study the area as it was before the redevelopment and follow the different plans for the area. This is desirable in a reuse and heritage study as it provides the opportunity to create a first hand source of how the area looked and functioned before the redevelopment. Furthermore, the area was desirable for my research question as there are many different council strategies and research documents relating to the heritage and redevelopment of the area. All these documents are available to the public or can be requested, which is preferable for a study of this size. As an industrial area in Lund, Västerbro is quite unique for the city and has an interesting geography. It has many different types of industries and functions. As such, it is a relational space where both heritage and industrial relations, but also other functions, create an ever-changing space that relates not only to the place itself but also to other parts of Scania and the world, which is now facing a major change in relation to the redevelopment. Although the Västerbro area may be unique to Lund, its redevelopment situation is quite common in Sweden. In many Swedish counties there is a goal to densify urban areas, which makes old and "ugly" industrial areas a strong contender for redevelopment. This makes my case study a "representative or typical case" (Yin, 2007). Another point of interest in Västerbro is that it is linked to heritage and building reuse in urban planning. In many parts of the different planning documents, it is strongly implied that heritage is a very important part of Lund's history and the character of the area, which guides the redevelopers towards building reuse in the redevelopment process. These statements are highly relevant in correlation to my research questions and will help to realise how heritage and reuse practices are constructed in the planning process. These different benefits and factors associated with the area make Västerbro an interesting case to study in relation to my research questions.

For this thesis the design of the case will be a single case study, which means that there is a singular focus on one case (Västerbro), but with many units of analysis. It will be a case with many units of analysis because the ANT method and the relational approach push the research to consider the objects of study as built upon relations that are created and recreated through the interaction of different actors (this will be explained further in 4.1.4). Yin (2007) writes that one risk of this type of single case study is that the case may change during the research period. This is a particularly high risk for the chosen case as it is based on an area that is in a state of constant redevelopment. However, as I have limited the case to an already established part of the redevelopment area, this risk should be reduced - but it does mean that I want to emphasise that heritage and reuse practices can only be considered in those

properties in the area where new detailed plans exist. Another limitation of the case is that there is no triangulation of methods to double-check different findings or statements from other methods in the study, for the next time I would have liked to include interviews with different actors connected to the study. Although it would have been optimal to include interviews as well, I think that for the present study I can still compare statements in the documents with other documents or investigations that the study includes (ibid, 2007).

4.1.3 Document analysis

Search Words:
Reuse (*Swe: Återbruk, Återbruka, Återvinna, Återanvänd*)
Identity (*Swe: Identitet, identitetsbyggande/skapande*),
Heritage (*Swe: Kulturarv, kulturvärde*)
Cultural history (*Swe: Kulturhistoria*)
Conservation (*Swe: bevara/nde/s, bevarandevärde*)

When researching heritage and building reuse through the methods of ANT (see next part), Assemblage theory and a case study there is a need to understand what the aims of the heritage/reuse in the planning process are, as well as identifying the actors and relations constructing and recreating the heritage in the area. It was therefore fitting to implement a document analysis to be able to identify the plans for the heritage/reuse as well as identify the relations, actors and assemblages which have governed the construction and reconstruction of the heritage in Västerbro. A document analysis is a method which utilizes different types of documents (i.e. electronical/online documents, physical documents, maps, pictures, images etc.) to interpret both surface information and connotations of the documents (Hammond & Wellington, 2021). This method is highly compatible with my theoretical framework and other method, aiding in the study of my research questions. Furthermore, the planning document focus of this document analysis works especially well with the theoretical framework since they most often have to include what actors (both human and non-human) that has been a part of the redevelopment plans. Thus, by following the different stages of new plans coming in the researcher can interpret what different focuses and weight that lies behind some decisions.

As mentioned earlier, the document analysis in this thesis focuses on planning documents as a primary source to interpret the hidden relations and assemblages which has led to different decisions on the future of Västerbro's heritage and reuse practices of the redevelopment (Denscombe, 2018). The documents that were chosen for the analysis are those which are

currently up to date for the area or are going to be legally binding in a short space of time. As stated in chapter 1 – delimitations, this means that there are some plans which are not yet created and will be in the span of 10 years forward. Since the planning documents that I utilise in the analysis is either new for the area or in the final phase of being legalised there is not a big risk for vast changes to occur that could affect the results of my analysis, making most of the worry of the information being unactualized redundant. For the document analysis nine of the most important planning documents for the area was chosen. These were the strategic area plans (the Municipal Comprehensive plan, Västerbro programme, Character programme and the FÖP), the Declaration of intent for the redevelopment, and four Detailed plans. As mentioned, these were chosen since they represent, plan, or legally control the redevelopment of Västerbro. Furthermore, antiquarian heritage inventories for the area were also utilised in the analysis of the documents. Some plans that could impact the redevelopment of Västerbro, but was not chosen for the analysis, was a municipal exploitation strategy and a climate strategy for the municipality. These were deemed unnecessary to scrutinise in the analysis since the parts of those plans which are relevant for Västerbro is mentioned in the other plans that were chosen for the document analysis. The main strategy document for the redevelopment of Västerbro (The Västerbro programme) pointed out important documents connected to the redevelopment, making it easier avoid missing strategies and plans which were actors in the heritage and reuse processes. Furthermore, since the project is quite big and stretches over a whole city district, the project had an own official website which also pointed towards actors and other documents that could be utilised in this analysis. The validity of the plans could be confirmed trough checking that all documents has been signed by the city planner chief, has an official control number, and was retrieved from official municipal websites or requested from the municipalities planning office if they were not available online.

The process of analysing the documents, and there through generating the results/data for the big analysis, was quite simple. First all the documents were fully read through two to three times and important words connected to my heritage and reuse were noted for the next phase of the re-reading of the documents. These words were then utilised in a search method to pinpoint heritage and reuse connections and to identify what heritage existed and how it was seen, planed, and employed in the documents. This was also the case when searching for building reuse practices in the documents. There were five different word categories which were searched for to identify the heritage and reuse practices (Reuse, Identity, Heritage, Cultural history, Conservation). Since all the documents were written in Swedish the word search was also conducted in Swedish. This led to a usage of synonyms or different connecting words to the word categories, ending up in twelve different search words (*the*

Swedish and English search words can be seen in the beginning of sub-chapter 4.1.3).
Moreover, to make sure that important heritage and reuse practises were not missed all the
documents were re-read once more but with those two factors in mind and double checked
against the results so that nothing relating to heritage and reuse, or its context was missed.
Lastly, the findings were summarised in chapter 5 and through ANT - actors, agency and
actor networks could be identified and further understood from the theoretical framework.
The reliability of only the document analysis is quite high since all the documents are listed
and open for the public (although some must be specifically requested) and all the search
words have been pointed out in its different conjugations and synonyms making it easier for
others to replicate the document analysis. This has also been done as objectively as possible
to minimise personal interpretations of the texts. Although my epistemological point of view
of reflexivity does recognise the fact that there is always a risk that the researcher's personal
thoughts and understanding of the subject might affect all outcomes since the data is
processed by a human. Yet, I do not see this point affecting the particular usage of this
method in the current case (Denscombe, 2019; Hammond & Wellington, 2021).

4.1.4 ANT – Actor Network Theory as a method

This thesis is based on the theoretical framework of Assemblage Theory (described in
Chapter 3). To complement the theoretical discussion, the theory of actor-networks, which is
closely related to assemblage theory, is used as a method. Since ANT has some
methodological practices, such as identifying actors, emerging networks, and through
identifying agency we can understand how these networks construct heritage.

ANT stands on the foundation that everything around us are effects, meaning that everything
is a reaction to things connected to them or the relations that surround them – they are the
effect of many different happenings, relations, actors, and knowledges (Bosco, F., 2006;
Rydin, Y. & Tate, L., 2016). For example, a book is an effect of a writer's relations with an
idea, a publisher, human relationships, economic decisions, a book binder, maybe it is
requested as a sequel by a hoard of fans and so on. It is an effect of many different factors
that together has shaped and reshaped it. The ANT-method is built upon networks of effects,
relations, agency, and actants/actors that are in a constant state of flow and reinvention
(Bosco 2006). Or as Bosco wrote, *"ANT is about uncovering and tracing the many
connections and relations among a variety of actors (human, non-human, material,
discursive) that allow particular actors, events and processes to become what they are"*
(Bosco 2006, p. 136).

Actor Network theory, as the name suggests, has two main concepts of the theory which is actors (also known as actants) and networks, that later together creates an actor network. Actors is to be seen as anything, whether its human or material, that has or is given the power of distributing agency and therethrough creating an effect (Bosco, 2006). On the other hand, networks, are not as straight forward. The description of networks seems to be a reoccurring problem for scholars to describe, Bruno Latour (2005), one of the foremost researchers in ANT, commented in 'Reassembling the Social: An Introduction to Actor-Network-Theory', that using the word "network" was confusing and created misconceptions on the concept. Subsequently, this forces many who enter the realm of Actor Network theory to go through the concept often focusing on what it isn't rather than what it is. So, to explain what it isn't, it is not the networks based on physical connections such as roads and railways, but rather the network is the relations between the actors that together creates an effect. The different actors' relations are simultaneously creating and recreating networks that are formed through adding and removing actors and connections. With that said, the network is not a physical thing and doesn't exist before the actors meet but is the relations between the actors. Lastly, all the actors create own actor networks through these relations which distributes agency, creating and recreating new networks and effects (Bosco, 2006; Latour, 2005). As can be seen, this ever-changing spiderweb of connections can easily become rather complex and convoluted.

ANT can be seen through different scales at the same time, resulting in a method that isn't bound to only material or human actors at e.g. the local level, but instead involves every aspect of possible effects on the macro, meso, and micro level to better understands the actor networks which forms our object of the study (Bosco, 2006; Rydin, 2017). This understanding is highly connected to both assemblage theory and relational geography. Throughout this thesis there is an aim to understand the construction of cultural heritage and how reuse is understood as a heritage practise. Therefore, through Actor Network Theory I will look at the plans and documents for the cultural heritage in Västerbro to find the actor networks which have been created and recreated throughout the different plans for the heritage in the area. This will be done through working with the main concepts of the method identifying actors, and networks in the different document in the results chapter.

5. Results and analysis

In this Chapter I will first present the results from the case study and my close reading of the planning documents to identify actors and networks within. I will thereafter engage in an analytical discussion on the results through the theoretical framework of assemblage theory, critical heritage, and ANT.

Västerbro - Document analysis and ANT

The redevelopment of Västerbro is turning one of Lunds oldest industrial areas into a new city district (Tekniska förvaltningen, Lunds municipality, 2019). The redevelopment is based on multiple new plans and strategies for the area. The municipality has made Detailed Plans as well as programs explaining the reasoning and goals for the redevelopment. There has also been done building surveys and antiquarian investigations into the heritage values of the area. In this chapter the municipality's different plans, documents and programs for the area will be presented and actors and networks will be identified.

5.1 Västerbro program

Västerbro is a prioritised development area in Lund, meaning that the municipality has set the area as focus for redevelopment in their plans until 2040. Moreover, it is a part of the municipality's goal to increase the number of homes by 1200 per year in Lund up until 2040 according to the comprehensive plan of the city. (Lund municipality, 2018b). Of these homes 3900 is meant to be built in Västerbro (Tekniska förvaltningen, Lunds municipality, 2019). The Västerbro program has been developed by the municipality in cooperation with the land- and property owners of the area. For the municipality to have impact on the outcomes of its planning monopoly a collaboration was needed. The municipality only owns the roads and parks in the area, the rest is owned by 30 different land/cable owners and thus, to get full effect, the plans and strategies in the programme for the area was drawn up in cooperation. The programme will act as general outlines and tool to realise the redevelopment process. It also designates the common goals for the municipality and the land and property owners (Ibid, 2019).

A name change was decided in 2017 in connection to the redevelopment plans of the district. Its earlier name was Öresundsvägen verksamhetsområde (*eng: Öresund's road industrial area*). The name change is a part of the municipality's plans to create a new and distinct own identity for Västerbro. A new identity is one of the three big main goals of the redevelopment.

The two others are that Västerbro becomes a sustainable district and that it becomes an active-, modern- and living district (Ibid. 2019).

The redevelopment of the district will be done in two larger stages, with smaller stages within them, starting in the eastern part of the area, which is nearest the city centre. By starting there, the collaboration hopes to connect the redeveloped area in the east to the city centre more quickly and "naturally" via a new main esplanade. The eastern part is currently an industrial area, and the idea is to transform it into a 'classic neighbourhood' with housing, shopping, parks, workplaces and public services. At the moment, the council sees the area as run-down and a barrier in the urban landscape. At the same time, they see the area as having a unique character, conservation value and the potential to become a future central location (ibid. 2019).

As mentioned above, Västerbro today consists of industrial buildings and other small businesses. There is also a small area of allotments and green spaces. In the Västerbro programme, the industrial history is seen as the basis for the new identity of the area. The identity that the redevelopment cooperation wants to be perceived is one that allows the past, present and future to be seen at the same time - the future and history meeting in the present. There are 5 words of value that lead to Västerbro's new identity - Genuine, Expressive, Artisanal, Eventful and Enthusiastic Västerbro. Genuine Västerbro' aims to preserve the industrial heritage so that it can be seen in the cityscape. The Expressive Västerbro is a changing urban landscape that is reflected in the building heights, unique parks and its walkability and cycle routes. The Genuine or Historic Västerbro is to be seen throughout the area in materials such as red brick and sheet metal. Artisanal Västerbro' is intended to encourage artisanal shops and studios to locate in some parts of the area, as long as they are not intrusive or noisy. The 'Artisanal Västerbro' will also be visible in the urban landscape through street and place names, as well as through architecture and materials in buildings (ibid, 2019). However, the programme is vague about what counts as an 'artisanal business'. As presented in the programme, most of the businesses that exist there now will have to relocate as they tend to be industrial rather than artisanal. Another reason why they will probably not be able to stay is that rents will certainly rise. If the area is redeveloped, it is also likely that the area will not meet their needs for transport and other industrial services. Experience full Västerbro" is meant to be created through meeting places, shopping areas, walkability, recreation and cafés. Finally, the 'Enthusiastic Västerbro' is to be present in the area through innovative architecture, making way for the new and innovative Västerbro, and forming the identity of a place that is grounded in history but racing towards the future, where neither tradition nor convention will limit it. (Ibid, 2019).

Throughout the program there is a focus on the cultural history of the area as one of many starting points for the redevelopment and new identity of Västerbro. In the program, conservation is one of seven themes with outspoken goals. The goal states that "*the area's character of industrial historical environment builds upon that essential parts of the industrial historical environments are preserved and given new functions in the densified city district.*" (*Translated from Swedish by author.* Tekniska förvaltningen, Lunds municipality, 2019 p. 26). One of the main areas where the area's history will be preserved is around the new West Esplanade that is being built. This can be seen, for example, in the illustration of the plans for the esplanade - many of the preserved industrial remains will (?) be displayed along the road. Although there are many proposals for the preservation of the industrial heritage buildings, there are conflicts of interest that may stop some of the preservation plans. Since some of the buildings are on contaminated land, it will be costly to decontaminate them and then to adaptively reuse or reuse the materials, which would most likely need to be decontaminated and restored. The issue of cost-effectiveness seems to be one of the biggest conflicts of interest between the municipality and private actors. This may be the reason why the programme states that there is a great risk of losing the industrial heritage and that there will be negative consequences for the heritage in the area (ibid, 2019).

In this document there are a couple actors which can be identified. First of all, the programme itself will work as an actor when addressing the future redevelopment plans for the area – it is supposed to set the general guidelines for the different actors during the redevelopment, the program was agreed on by both the municipality and their counterparts. Thus, it is coming into action separated from the two counterparts in the cooperation as it specifies not just what is going to materially be built, planned and transformed, but also specifies identity values that are open for negotiation and interpretation. As such the programme holds agency that depends on the specific situations it is consulted or raised of awareness in different networks or assemblages. The municipal planners/plan architects and the owners are of course actors, both regarding the redevelopment and in other assemblages. Other possible actors that have been identified in the program is specific goals and values that hold more power than others in regard to the cultural heritage reuse. There are political goals, such as the accommodation goal for Lund, or the aesthetic and functional development goals for the area ('classical neighbourhood', an active, living, and modern district, five words of value, identity goals). Another actor is the cultural industrial heritage itself which many times over is stated in the document as a strong feature that should affect the future of Västerbro's new look and identity. The heritage actors' networks/relations to the other actors are quite instable since the program talk about the risk of heritage loss and how possible contaminants may affect the preservation goals. Other actors within the heritage sector are

antiquarian officers within the municipality, heritage regulations, historical societies as "Kulturportal Lund" and "Gamla Lund" and antiquarian authorities on the regional level can come into being as actors in the planning process. Also, industrial waste and contamination is an actor that comes into being through the sustainable goals, public fear, and cost effectiveness. Lastly there is further worth mentioning the outspoken strong actor of cost effectiveness where other actors risk becoming less powerful in its presence. Cost effectiveness is an actor in that if, for example, the municipality has a choice of preserving or demolishing, the cost can come to decide the decision. It should be stated that these are the actors present in the area, the programme and connected documents, acts, and laws. There are of course many more actors that stabilise for shorter times or that are not yet detected. Defining all actors in a redevelopment process is not possible but it is important to be aware of the complexity of actor-networks and assemblages. Thus, some actors at work will only come into being in specific settings or assemblages for short moments in time or in specific places.

   As mentioned in the previous chapter, some of the networks will also be identified or reasoned around. One of the most obvious networks is that between the private and public actors (the municipality and the land- and property owners) who together makes the decisions on the grand scheme of the redevelopment. Another network is between the municipal planners/plan architects and the municipal politicians who has the final say in the planning of Lund. It should also be stated that this network between the municipality planners and the politicians can at specific moments also include the owners or developers that will meet politicians and planners and lobby for their ideas of the area's future. These networks, with the exceptions of the owners, are not detectable in the documents. Other networks arise within the actor networks of the private actors and the municipality where the different values and goals start to affect new outcomes/effects of the redevelopment of Västerbro. All these different actor-networks are in an unstable phase in the first strategic document where nothing is set in stone or juridically tested, it is mostly guidelines which opens for new actors to appear in later stages of the redevelopment planning and therethrough restructuring the actor networks.

5.2 Character programme Västerbro Lund

The character programme for Västerbro is a deepened/ more concretized version of the Västerbro programme and further explains what character and identity of the redevelopment that the actors are aiming towards. In the programme they revisit the five words of value, they are described slightly different from the previous described programme which relates to the fact that this programme is a concretization of the ideas on identity and character. There is bigger focus on reuse in the character program, as well as the value word artisanal

Västerbro has a bigger focus on handicraft and smaller artisanal businesses instead of industries as is described in the big Västerbro program (Lund Municipality, 2021).

The program focuses on six goals of characterization. 'The industrial heritage/history as an identity builder', 'The city districts common places/rooms', 'A varied roof landscape', 'Facades and materials', 'The meeting between the neighbourhood and public land', and 'Living ground floors'.

The program stresses the importance of presenting cultural heritage through reuse, and for the new development to be inspired by the industrial heritage through different details and processes. This is a statement present throughout the program and is thus seen in almost all goals. The program describes a changing city landscape where private and public constantly meet, where different dimensions are made after the "human scale" and social meetings can emerge naturally due to the public spaces' appearances (Ibid., 2021).

The Character program is agreed upon by both the land- and property owners and the municipality. They are the main actors in this program as well. Since the program is focused on the future identity and character of Västerbro other actors than in the Västerbro program are present. Some previous and some new actors will also hold more weight in this program. Besides the plan owners, the actors are reuse as a concept, the industrial heritage, and values/goals for the area. The physical (industrial) heritage buildings hold a strong agency in that that they steer the planning around themselves and pushes the thought of reuse of the heritage buildings in front of the process. There is a network between the possible reuse and the preservation of heritage, which could come to create the effect of adaptive or material heritage reuse. The main goals for the characterization also have effect on the future planning processes for the area since it regulates how the structural aesthetic of Västerbro is intended to be. In the overall redevelopment project, the Character program stands as its own actor affecting the development.

5.3 FÖP Öresundsvägen – Västerbro

A FÖP (Fördjupad översiktsplan) - a deepened comprehensive plan is a Swedish planning document that derives from the Comprehensive plan of the municipality and focuses on a specified area or interest within a municipality which is in the progress of being redeveloped and therefore need a more detailed and updated planning strategy. The planning strategy is not legally binding but points out what goals the municipality holds for the new design of the

area (Boverket, 2022). This part will focus on the cultural heritage strategies in the FÖP and shortly introduce the comprehensive municipality plan for Lund.

The FÖP, as all other planning documents in this paper, is connected to the Comprehensive municipality plan of Lund. The comprehensive plan makes sure that Lund's municipality sustainably expand while accommodating the growing demand on residential buildings, public transport, and walkable/bicycle friendly roads. One of the sustainability goals of the municipality is to utilise as little agricultural land as possible, which makes Västerbro an interesting area to redevelop since almost the whole redevelopment area is hardened surface. That is a state of the land that is almost impossible to revive to agricultural land to grow on. Västerbro is pointed out as a prioritised area for redevelopment, and the comprehensive plan points to its heritage features as a resource for future development. It further goes on and emphasizes the need for the cultural heritage in the whole municipality to be cherished, preserved, and used during redevelopment processes – it is seen as a most important aspect of Lund municipality's plans for a good living environment (Lund Municipality, 2018b).

Västerbro has fostered some of today's biggest industrial companies in Lund and according to the FÖP it "holds the keys to understanding Lund's development during the 20th century "(Lund Municipality, 2018a p. 63), as well as Lund's industrial history. The remembering of the industrial past in Lund's identity can only be done if some of the industrial buildings are preserved and protected as heritage. Throughout the plan it is repeated in many different ways that Västerbro should be built upon its industrial history. That its new character needs to be characterised by building diversity, a meeting between old and new, shaped around the existing industrial heritage, to both preserve and display the industrial history of Lund, render the different architectural ages, create a cultural and historical anchoring to the area etc. The plan emphasises the role of the existing buildings in the redevelopment, seeing them as the link between past, present and future. The physical structures can hold new functions and contrast the new modern buildings, creating experiential values and creativity. There are a few heritage sites that has been explicitly pointed out as the most important characteristic and historically important for Västerbro. It is: Bjärreds railway stretch, the industrial milieu in Värmeväxlaren and Separatorn, the Cepa building with its chimney and its preferable orientation facing the Bjärreds railway stretch. Värmeväxlaren does also face the railway stretch which is pointed out as a preferable quality due to its experiential values. The Deepened Comprehensive plan (FÖP) comments on the risk that some heritage buildings probably will be torn down, but that there are pointed out values and guidelines that should be followed when discussing the demolition of heritage buildings. The buildings that should not be torn down ought to have great importance for Lund or Scania, have potent historical

characteristics, connections to important stretches or is preferable situated for sighting, has aesthetical values, or can be restored to its aesthetical values, and/or help the industrial heritage character in the area (Lund Municipality, 2018b).

As the previous documents, both the FÖP and Comprehensive plan stands as their own actors, but they also have a network between each other, the municipal planners and political goals which together helps guide the future development of Västerbro. For example, they both are a part of the actor networks or assemblages that created the Västerbro program and Character program. Within the Comprehensive plan there are three apparent actors that affect the decisions regarding Västerbro - the goal of lessening the exploitation of agricultural land, and the cultural heritage and the idea of identity. All these actors must be taken into account by the planners before any decisions on Västerbro can be made. Thus, their agency depends on how they are associated in networks or becomes part of assemblages. In the FÖP the industrial heritage also holds agency, but more importantly four specific heritage sites are pointed out as future actors (Cepa, Värmeväxlaren, Separatorn, Bjärreds railway) in the planning to come, since they here have been claimed as of special importance. Consequently, they will affect the planning around them – although, this agency is not stable since there are other actors who may hold a stronger agency in the future actor networks, thus changing the outcomes of the agency of the industrial heritage. Since the municipality planners wrote them, they are a part of the assemblage that created the effect/result of the planning document. The FÖP is determined by political decisions, so politicians should also be seen as actors.

5.4 Declaration of intent

For the Västerbro project, a declaration of intent was drawn up between the private actors and the municipality. Its purpose is to declare that all decision-makers in the redevelopment projects agree to cooperate and develop the area according to the same goals (Lund Municipality, n.d.). The aim, as stated in both 5.1.1 and 5.1.2 above, is to redevelop Västerbro "into a vibrant urban district with its own identity" (Lund Municipality, n.d., p. 2). The declaration of intent also states that the various parties will follow the Västerbro Programme (see 5.1.2) when drawing up the detailed plans (ibid. n.d.). The declaration only states the objectives of the actors and is not binding in terms of the actual outcomes of the plan. Consequently, when reading the detailed plans, only some parts of the Västerbro programme have been made legally binding - making the Västerbro programme more of a wish list than a promise. In the next part below, I will go through some of the detailed plans for the area,

focusing on heritage sites and building reuse, and discuss the dissonance between the less legally binding plans and the detailed plans.

5.5 Detailed plans for Västerbro

According to the Swedish Building and Planning Act, a detailed plan is a legally binding document that regulates how the development and redevelopment of an area should be carried out. It regulates land and water, as well as new and old buildings in the geographical area of the plan, and is prepared by the relevant municipality - it is now common for plans to be prepared in cooperation with landowners, although the final decision always lies with the municipality (Boverket, 2022). Thus, the municipality as a political body is always an actor in all the detailed plans discussed below. In this sub-section I will give a brief summary of the plans with a focus on heritage. The parts of the detailed plans that relate to cultural heritage will be complemented with more information from Lund Municipality's inquiries into the area's cultural heritage. A PM on cultural heritage in Öresundsvägen (the case area for this thesis) and an in-depth antiquarian preliminary investigation on Västerbro, where they have catalogued all the heritage buildings in Västerbro (when carried out Öresundsvägen verksamhetsområde).

5.5.1 Smörkärnan 1 & 2

Smörkärnan is at the moment an area of operations. According to the detailed plans it will become a classical neighbourhood with activities such as shops, mobility house, and different types of housing. The heritage site that is recognised in the detailed plan is a wall from 1943, according to the plans, the wall will most likely not be preserved but torn down in favour of new roads, lines and developments. There is no mention of building reuse, but rather that to honour the heritage of the place they aim to let the new development reflect the earlier industrial heritage in its choice of material, road names and form (Stadsbyggnadskontoret, 2023a).

It is more difficult to spot the actors in relation to the heritage in the concise description of the plans for the property. But what can be seen is that the municipal actors and the landowner (also an actor) has chosen the wall to be demolished in favour of new developments. There could be a discussion on the need for new road networks and urban mobility planning to be seen as actors. The heritage site in itself is an actor – although it does seem to be lacking agency in this case. While it is not stated outright, the legality of the

planning documents holds high agency as a new actor in the planning process since its existence has forced other actors to decide the fate of the heritage wall.

5.5.2 Värmeväxlaren 3 et al.

Värmeväxlaren 3 et al. is currently an industrial area and is planned to become a mixed area with apartments, centre activities (e.g. shops, cafes, etc.), town square, park, pre-school and more. The heritage site that has been highlighted in the area is the large industrial building on the site. Its northern facade is of particular importance to the district's cultural heritage (Stadsbyggnadskontoret, 2023b). Following an inspection of the industrial building, the Conservation Committee has proposed that it be classified as a building of cultural-historical value and as part of a group of buildings that create an environment of cultural-historical value. As mentioned above, the most valuable part of the building is the northern façade, as it is still in its original form (red brick with small square windows) and represents Lund's large-scale industrial operations. Other significant parts of the building are the original steel gate, the original yellow brick interior and the classic open plan layout with visible building frame, as well as typical industrial equipment such as a Kone crane (WSP, 2018a). The area (Värmeväxlaren) has been identified by the City of Lund as one of the most interesting properties in terms of Västerbro's industrial history (Kulturen, 2014). Outside the building there used to be a small railway called Bjärredsbanan, which was in use from 1901 to 1970, but is now completely gone. The place where it used to run has been identified as a heritage route by the municipality of Lunds and is proposed to be valued as cultural heritage (Kulturen, 2014; Stadsbyggnadskontoret, 2023b; Tekniska förvaltningen, Lunds municipality, 2019). The municipality has decided to place the new Western esplanade along parts of the former Bjärredsbanan, claiming that this will "make history readable in the future" (Stadsbyggnadskontoret, 2023b, p.21). Arguments against preserving parts or the whole of the building include its location, which interferes with plans for the new section of the Western esplanade, and the need to deal with contamination in the building. The building is also considered too large to be used for anything other than industrial purposes. Now that it has been decided that the building will be demolished, the landowner has started a process to see if materials from the building can be reused for other purposes - if parts can be salvaged for reuse in the area. The municipality notes that this could be a way of preserving the heritage of the site (Stadsbyggnadskontoret, 2023b).

The detailed plan for Värmeväxlaren hold a couple of actors. The municipality, the landowner, the conservation committee, the big industrial heritage building, the plans for the Western Esplanade/Bjärreds Railway, contamination problems and juridical functions of the

document as well as the document itself and the conservation investigation. While there is an actor network or assemblage between the municipality, landowner, conservation committee, earlier strategic documents, goals, values (mentioned earlier in this chapter) which created the document (an effect of the actor network), the document itself has identified and redefined other actors mentioned in the beginning of this paragraph. For example, the Western Esplanade was mentioned in earlier documents, but it was first in this document that it became an actor and gained agency. Through its networks with the heritage of the Bjärred Railway it could affect the outcome of the industrial heritage building, thus recreating the agency and finally making it obsolete. It is of interest to consider the actors of being part of an assemblage. That would show how it changes when different actors becomes part of or leave the assemblage. It could be stressed that the detailed plans becomes a node in a stable network finally when the redevelopment comes into being and thus the changing assemblage ceases to exist.

5.5.3 Kugghjulet 1 & 5 et al.

Kugghjulet 1 & 5 et al is today one of the biggest properties in Västerbro and is an area of operations and industry. Two buildings on the property have been pointed out as important heritage sites, as well as a Kone crane. The buildings that have been pointed out are CEPA house and the old office building (Stadsbyggnadskontoret, 2024). The Kone crane is, in the PM on cultural heritage in Öresundsvägens verksamhetsområde (today called Västerbro), proposed to be understood as an object that strengthens the cultural heritage of the area. In the PM it is proposed to be reused in future developments as a structure for flowers or something similar (Kulturen, 2014), to help create the unique future identity and character of Västerbro (Stadsbyggnadskontoret, 2024). In the in-depth antiquarian preliminary investigation from 2018 the heritage value of the Kone crane were once more established (WSP, 2018b). The crane is not protected as a heritage object in the detailed plan and has therefore been down prioritised in the area in regard to other plans for the property. This means that the crane will be torn down. The office building is made in red brick and has been remodelled several times during its years in use. That has weakened its heritage value, although it still represents the industries from the 1960s (Stadsbyggnadskontoret, 2024). Even though it has changed appearances the offices have an interesting building history, and its architect is one of the pioneering concrete construction architects of the 20th century, Professor Hjalmar Granholm. That further strengthen the interest in the history of the building (WSP, 2018b). Lastly there is the CEPA building. The industrial buildings hold, according to the municipality, high heritage values and is a vital part of the identity of Västerbro and the industrial heritage of Lund. According to the Deepened Comprehensive

plan and the Västerbro program the building with its typical industrial chimney is a historical landmark for the area (Tekniska förvaltningen, Lunds municipality, 2019; Lund Municipality, 2018a). The building has many of its original features left, and even though some is hidden with sheet metal much can be restored to its original classical red brick industrial appearance (WSP, 2018b). Throughout the plans regarding Västerbro it has been pointed out that the Cepa building is one of the more important heritage sites and markers in Västerbro, especially its industrial chimney. In the detailed plan there is a comprehensive discussion on its high identity-and heritage value for the area. The plan states that the building is unique for Lund and has a preferable experiential location. Some sort of adaptive reuse has been discussed in the detailed plans for the building, or to integrate part of the facade into a new building. Although the plans for the building have been many, the detailed plans (therefore the municipality) do not choose to protect the building from being torn down. This has led to that the building will be demolished and that, if the landowners choose, they might rebuild the industrial chimney in a new place. The chimneys destiny is yet to be decided. The reasoning behind the decision not to protect the building is that contamination by the earlier industrial operations of the ground and the structure has been found. Although it can be restored or reused in a more restrictive way, there is a high risk that it will cost more to preserve it than to demolish it and remediate only the contaminated land. In addition, decontaminating the building could potentially damage the structure, forcing the council to save only parts of it - as previously suggested - or to save only one of the facades to become part of a new building. It is also suggested that materials from the various buildings on the site be reused in the new buildings to preserve the industrial character (Stadsbyggnadskontoret, 2024).

Here actors such as the municipality, the landowner, the in-depth antiquarian investigation, the CEPA house, juridical regulations, reuse discussions, heritage buildings, and contamination can be identified. Just as the previous detailed plans they are the effect of networks emerging between the municipality, landowners, conservation committee/ in-depth antiquarian investigation, goals, values, earlier planning documents and perhaps some opinions from other parties affected by the redevelopment. The actors which are in connection to the heritage and reuse constructions of the case are as previous mentioned those in the beginning of this paragraph. In contrast to the other detailed plans, the reuse and industrial heritage actors holds a bit more weight and caused more reflection and investigation regarding the decision on what to do with it. Unlike the previous detailed plans, they still hold agency – probably being stronger since the reuse and heritage relations has created another actor network, albeit instable as of now, it works towards an effect of either preservation, deconstruction, or demolition.

5.5.4 Virket 6 and part of Virket 1

The area in Virket 6 and part of Virket 1 is currently an office and commercial area. According to the detailed plan for the properties, it will be redeveloped into residential buildings with possibilities for centre activities. There is one building in the area that has been pointed out as a possible heritage building (Stadsbyggnadskontoret, 2022). It is a two-storey yellow brick building with a connecting workshop. The lower floor of the building is used for commercial purposes, while the upper floor is built as an apartment. The building is still in use today and is known in Lund as Vespa-Månsson, after the first owner and architect (WSP, 2018b). As a consequence of the plan for a denser residential area, the listed building will be demolished. It is proposed to reuse some of the bricks and tiles from the building to create flower beds or to reuse other ornamental and usable pieces to reflect the earlier heritage and industrial culture of the place (Stadsbyggnadskontoret, 2022).

Like previous detailed plans, the detailed plan of Virket is a result of actor networks between the municipality, the landowner, earlier planning documents correlating to Västerbro, heritage sites, values, goals, etc. But within the document previous actors has both gained and weakened their agency. The accommodation goal has preceded, probably together with municipal actors, landowners, cost effectiveness, and other actors the want of adaptive reuse of the heritage building in the area, making way for deconstruction of the building. However, the heritage building and the plans for reuse are still part of other actor networks and therethrough still holds agency to affect part of the outcome for the building. Since the building valued as heritage and the plans for reuse both hold agency, they force other deciding redevelopment actors through its networks of relations to act accordingly or at least to observe the value. In this case it eventually led to reuse of heritage materials from the site in order to re-purpose the building into something new and therethrough redefine the heritage. This can be connected to Ross' (2020) take on heritage building materials still holding heritage values after the second world war when destroyed houses' materials could be reused, giving new buildings a heritage value and therethrough telling a story. The reuse of heritage material in Västerbro could therefore also be understood as storytelling. It is holding an associative value (Arlotta, 2020) telling the industrial history through its old pieces in new place defining items.

5.6 Analys

When starting my analysis there is one major point which needs to be stated. The negotiation and discourse on cultural heritage in Västerbro changes, reforms, and re-constructs the

further the redevelopment and strategy plans are set into action. Consequently, the notion of building reuse in Västerbro also becomes reformed. When the legally binding documents (the Detailed plans) are being written it seems to change the heritage value and presses a new type of heritage in the document to compensate the heritage loss. From the perspective of critical heritage this is a highly political decision on the "make up" of heritage. Building on Smith (2006, 2022) it is possible to stress the change in the discussions regarding Västerbro's heritage as a highly performative and as a political process concerning the different plans. It is a process where the value of heritage and its form changes depending on the contemporary needs of the municipality and the political will. The strong contemporary needs of the municipality are for instance the will to redevelop areas into residential neighbourhoods, reaching the building goal of homes, avoiding exploitation of agricultural land, the land- and property owners' wills, and the need to take action in a place according to it being pointed out as a prioritised area for redevelopment. All these points work as actors in which their relations to the redevelopment and each other have caused the effect: a reformulated heritage. In this case study the stakeholders – or as they are, the main actors, have gone from a preserving and conserving stance to tearing everything down and discarding the big reuse plans. These actors hold different amounts of influence in the actor networks and in the assemblages. No one can decide the heritage effect on its own, although some of the actors may hold a higher effect on the results. Throughout the plans concerning Västerbro the assemblages and relations are in a constant volatile state where the plan for the industrial heritage is in constant change. The stabilization of the assemblage and the networks happens first in the last detailed plans where the cultural heritage is left out of its earlier forms and a final decision is being made. This strengthens the relations and therethrough the assemblage. This is also true for the understanding of building reuse in the context of heritage practises since the two is highly connected in the context of the Västerbro plans. In the next parts of the analysis, I aim to explain how the cultural heritage is being constructed and negotiated through the development plans and how reuse of buildings is understood in the redevelopment as a heritage practise. This will be done through more detailed examples from the document analysis.

It is also of importance to understand the discussion of heritage in the light of Västerbro as part of a larger relational space. Depending on the outcome of how networks come together or the effects of different assemblages present in Västerbro, different relations will form in the space of Västerbro or the space of Lund for instance. Depending on how strong different actors are, what networks that are stabilised and what the assemblages contains, heritage will be formed or reconsidered in ways giving impact to the relations within space. It is important to acknowledge that the municipality and the land and property owners from the start

stressed the importance of heritage. Thus, how heritage is negotiated and transformed reshapes the material place of Västerbro and its relational spaces to the surrounding world.

In the instances of the detailed plans for Värmeväxlaren and Smörkärnan, the same actor distributes the most agency in the final decisions on the heritage sites. It (meaning the actors) is the goal of a residential neighbourhood and a certain number of accommodations which comes to hold the most weight in the final documents. Housing is an important actor that goes over the want of heritage preservation and reuse in this case. Through applying ANT as a method housing can be identified as an actor based on its ability to distribute agency. This agency is not only seen in the fact that it's relations to the municipals plans and other actors reforms the heritage, but the housing itself will affect what can be planed around it because of residential building regulations (SFS 2010:900). The different planning documents, the cultural heritage, the main goal of the declaration of intent, the deepened antiquarian preliminary investigation, the municipality, the landowners, private actors, political goals, and many others are together creating an assemblage through their relations which then distributes and creates different effects (see results on heritage preservation in chapter 5.5.1, 5.5.2). Furthermore, in the bigger mentioned assemblage of the heritage decisions in the redevelopment plans there are other assemblages which affects the outcome that overlap or exists within the bigger assemblage. Consequently, while the housing goals are part of the mentioned assemblage, the housing is also an effect of another assemblage itself. The "housing assemblage" is built on the networks that has emerged between real estate companies, housing demands, municipal goals/political goals, economic factors such as the fact that it is easier to sell housing rather than business premises, as well as private actors and so on. Through these actors coming together and discarding the heritage and reuse plans the possibility of understanding the area's history and especially the big scale industry that existed becomes highly diminished. In the case heritage is part of the assemblage in the programme but are left out of the "housing assemblage" when actors with stronger agency causes effects that damages or destroys the possibilities for creating and preserving heritage in the area. Although the new plans cater to the contemporary needs of Lund, the choice of rejecting adaptive reuse of the buildings also closes the possibility for industries to ever come back to Västerbro in possible times of need. Since society is everchanging between global, regional, local, and personal relations there will always be an uncertainty of future needs. Thus, if the time comes where premises such as industrial halls are needed, Lund will either be forced to exploit agricultural land or have the developers turn elsewhere. The world is as Anderson (2012), Creswell (2013), Volo & Wegerer (2023) and many more wrote, a complex society built upon the networks and interactions of components/actors in which we evolve, build, and create effects/new actors.

In order to deeper understand the creation of heritage and heritage building reuse practises in redevelopment processes I am going to focus on the property of Kugghjulet 1 & 5 and later on the property for Virket 6 & 1 (see chapter 5.5.3 and 5.5.4). The decision to focus on this specific property in Västerbro was made since its heritage site is highly spoken of throughout most planning documents and antiquarian investigations - making it an interesting object of the study. As mentioned in the results chapter, Kugghjulet and mainly the CEPA house, is today a landmark in Västerbro and a landmark of the area's industrial heritage. Depending on which part of the municipality (the cultural sector or the physical planners) that is discussing CEPA, different outcomes on the importance of the heritage can be seen. This is a result of different actor networks that has created different effects or outcomes on the same subject. While the cultural sectors actor networks forms assemblages, they place a higher value on the idea about a cultural heritage and its function as a knowledge bearer. The other assemblage finds that the cultural heritage is a barrier for the future vision of Västerbro. So when the two assemblages comes together they form an unstable network where the potential heritages future is unclear. However, the physical planning assemblage has in the final plans (the detailed plans) for the properties and heritage been reassembled from the earlier assemblages with three new actors. These actors are the land/building contamination, economical choices, and the Detailed Plans legal implications. Contamination, legal obliging, and economy are not strong parts of the earlier strategical documents. Contamination and economic decisions rather functioned as a volatile part of the first assemblages where they are quickly mentioned in passing as possible future problems for heritage reuse and preservation. Therefore, by heavily leaning on these, together with the housing plans, the municipality can stabilise the uncertainty on the heritage in the assemblage by discarding the earlier statements on preserving CEPA and its surrounding heritage pieces. While the cultural sector pointed out many possible uses and preservation options for CEPAs, as well as its importance for Lunds history, the heritage buildings agency was challenged and not as strong when it met new actors outside its original assemblage. The actor networks that it had built up needed to be remade in face of stronger actors and the talk of protecting the heritage buildings was reformulated. The municipality stated in the Detailed plans that they would make an active choice not to protect the heritage in order to prioritise the new development visions. In doing so, not protecting the heritage buildings, the notion of utilising reuse to preserve the heritage of the place was put in the hands of the builders. The municipality is not legally allowed to force the builders to use reuse methods (SFS 2010:900; Boverket, 2023b). The only way to do so would be to protect the heritage buildings from demolition through the creation of a protection order or by limiting the building rights via detailed regulations concerning placement and design and therethrough create an de facto obligation of adaptive

reuse. Instead by not protecting the heritage buildings the municipality has denounced its responsibility of going through with the earlier strategical reuse visions. It seems as though the idea of building reuse as a redevelopment resource for heritage sites becomes a problem. There is the possibility of the industrial chimney being rebuilt somewhere else in Västerbro instead of demolition, but it is not yet decided. However, if this were to happen the understanding of the chimney and its heritage will most likely be reformed from CEPAs historical chimney to a universal sign for the industries that used to exist in Västerbro. Thus, the agency of the chimney changes from being part of the special place and building of Cepa and acting as its heritage, to a more vague actor as a general notion of the industrial past of the larger area of Västerbro. It should be stated that Cepa in itself is part of the larger space of industrial Västerbro. If the chimney is disengaged from its original site and building it also changes the value of heritage. This also points out how the relations of the space of Västerbro changes according to what happens to the chimney. Depending on what heritage value it upholds different relations will forms in the space of Västerbro.

Virket 1 & Virket 6 have in contrast to the other detailed plans chosen to reuse part of the materials from the heritage building. As mentioned in the sub-chapter 5.5.4, this could be described as a reaction to the other actors having to conform to the building and landowner's agency as actors in the development assemblage. The historic building is as previously mentioned known by name in Lund and has therethrough another layer of connection to the city as it is not only heritage in the instance of its building categorisation but also a heritage constructed in relation to the citizens feelings and understanding of history and thus, sense of place. It is a heritage building with more apparent spatial and social dimensions than what the many other historic buildings in Västerbro have because of its social implications. This does not mean that the other buildings are "one dimensional", but rather that it is easier to recognise it in the Vespa-Månsson building. The space as of now in Virket holds a multiplicity of actors and experiences with dimensions in connection to history, function (e.g. mechanic), individual experiences, global connections (e.g. buying new parts for the mechanic or selling things abroad) etc. But since the space is constantly becoming through new physical and social actors appearing and old actors leaving it can never be fully understood as a fixed space. Thus, when the place is being reconstructed a new set of actors and social, economic, and cultural processes will take place, opening up for new relational space in Virke and therethrough Lund. These new actors will together form new assemblages which then results in new effects that thereafter can become new actors and so on. It is a constant restructuring of the space making it impossible to fully be able to understand it. Reuse and the historic heritage building has become fixed actors through the Detailed Plans and landowner, thus making way for a new process to start. Through their coming together in a new assemblage

the physical and the sense of place will change, but it will also open up for a circular economy that can come to benefit the area. Hence, lessening the cost for aesthetic ornaments making the place more appealing for new actors or inhabitants, as well as support a sustainable development through reuse. If the new ornaments/flowerbeds built on heritage materials will be telling the story of Västerbro's history is usure, but through a strategic info plaque or similar strategies the reused materials can help to anchor the history of the place.

In the broader redevelopment of Västerbro it seems going through with plans concerning reuse is perceived as expensive and complicated. Thus, the cultural heritage in its original form is being ignored and demolished and most of the reuse strategies are being thrown out. Consequently, a new form of heritage is being formed in the plan when the physical buildings are being torn down in favour of other heritage strategies. A, in many aspects, weaker heritage is being discussed where new similar building materials to those that were previously used in the area are being claimed to represent the cultural heritage and history of Västerbro. And while this might help represent the heritage, it does not visualise the practices and structures of the industrial life that used to characterise the place. This will also affect the possible understanding of place that could have emerged, where the heritage of Västerbro further anchors the renewed area's place in Lund through historic values, but also new and modern features. Furthermore, by losing most of the historical buildings and discarding the physical reuse of either the whole buildings or its materials one also loses the possibility of a circular economy. This can give implications for the area's sustainability. It also loses the possibility of starting a storage and inventory of reuse materials for future developments in the area or Lund. This could have been beneficial in the case that EU or the Swedish government come to change the building laws in favour of reuse. Moreover, the strategic plans earlier idea of a unique blend of industrial buildings and new buildings to establish a creative new identity for Västerbro disappears. Through changing the construction of what heritage values looks like in a redevelopment, a risk of demolishing all the "unwanted heritage buildings/environments" in favour of new resembling materials emerges. Although it is not only the construction of heritage that has changed through the plans reassembling. The understanding of reuse has in sort also come to change its appearance. Via new actors and the restructuring of assemblages the heritage reuse has went from reusing materials from historic buildings to "reusing" resembling materials and names to honour the heritage. These constructions of heritage and reuse needs to be acknowledged in face of possible new laws and redevelopment projects if the sustainable urban city shall be able to flourish in an environmentally sustainable way as well as a culturally sustainable way.

6. Discussion and Conclusion

In the results and analysis of the texts, many different actors were found to influence the preservation of the cultural heritage in Västerbro. ANT has been used to understand how the different actors have influenced each other, and giving me the possibility to understand material things as actors and how these historic buildings distribute agency through networks. The main actors that have emerged were the conservation committee, the municipality, private actors (landowners, building sector), legal implications, costs, contamination, development goals, and the heritage buildings themselves. In the various programs, plans, and strategies the actors have come together negotiating the cultural heritage and lastly in the Detailed Plans stabilised the outcome of it resulting in a reconstructed heritage. Thus, most of the industrial heritage is being torn down with some small exceptions that are being deconstructed for material reuse representing the history/heritage of Västerbro. There are many possible reasons for reconstructing what industrial heritage can resemble in the redevelopment. There are proposed costs of reusing materials and decontaminating it, the current historic buildings doesn't fit the aesthetic profile of the "new Västerbro", or that it's simply easier to just demolish and start again on a blank canvas instead of having to fit in the industrial buildings with the planned new constructions. Through the text I have tried to show that both heritage and space are social constructs that are constantly changing according to contemporary needs, goals, politics, and new relationships that can emerge across time and space. This is evident in Västerbro's redevelopment where the industrial heritage is considered in many different ways depending on which assemblages are reflecting on it. Ultimately it was decided that reuse of some heritage materials and some new materials could represent Västerbro's industrial history and complex heritage. The heritage is not only the buildings themselves, but the story of Lunds industrial development through the years and the relations that they represent. There is no discussion in the Detailed Plans around reuse of non-heritage[1] buildings in the area, instead the question of reuse is highly connected to heritage buildings as a conservation and storytelling practice.

The implications of this changed construction of heritage will have implications beyond the buildings being torn down, it will restructure the whole space in Västerbro. In most aspects it is becoming a new modern neighbourhood district that has little to do with the industrial district that once was. Instead, new relations, actors and assemblages will form, collapse, and reconstruct continuing the everlasting march of "becoming". People will form a sense of place

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[1] While this is true, there have been instances of non-heritage reuse in Västerbro that aren't in any plans.

connecting memories and perceptions of the redeveloped place, maybe the industrial chimney will be the new landmark that give people a sense of belonging, history and recognising. The possibilities are endless, but it is sure that the redevelopment of Västerbro and the reconstruction of its heritage will affect people and happenings in a way that defies scale and creates new effects in the world.

To conclude, heritage is being constantly reconstructed and renegotiated throughout the planning process as a result of new actors, networks and assemblages emerging and restructuring as the planning goes on. Reuse is a crucial part of the future of Västerbro's heritage, whether it is reuse of its likeness or reuse of heritage materials, it has a central function in the heritage processes. I believe this is a common process of the reconstruction and negotiations of our industrial heritage in planning processes. Through identifying the assemblages and actors that shape its future it becomes easier to understand why industrial heritage is being targeted for urban renewal and what factors in. For future studies it would be of interest research an area which has been fully redeveloped, preferably Västerbro, to further understand the cultural geographical implications of deconstructing and reusing heritage materials and what it does to the space and place.

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Figures:

Figure 1: Map of Lund with Västerbro pointed out. Made by author 2024. Data from © Lantmäteriet.

Figure 2: Tekniska förvaltningen, Lund municipality (2019) *Västerbro programmet, Västerbro från industriområde till levande, hållbar stadsdel.* P.5. https://lund.se/download/18.4b5b55ee1812607e5eb54ca/1654692704513/Lunds%20komm un%20V%C3%A4sterbroprogrammet.pdf (Accessed 2024-04-29).