Finding Common Grounds

Adapting Heritage Meaning in the Renewal of Socially Diverse Couperusbuurt

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COLOPHON

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Hartelijk bedankt! Terima kasih banyak!

ABSTRACT

Finding Common Grounds: Adapting Heritage meaning in Socially Diverse Couperusbuurt is a renewal project of Amsterdam's Western Garden Cities neighbourhood. Western Garden Cities Amsterdam or Westelijke Tuinsteden is a post-war neighbourhood considered heritage by the Municipality of Amsterdam. Currently, Westelijke Tuinsteden of Couperusbuurt fails to provide a liveable built environment for its residents. Its heritage status causes the neighbourhood to be alienated from development which led the neighbourhood to be outdated to the current needs. In contrast, the neighbourhood's heritage form is also vulnerable due to the municipality's densification agenda. Simultaneously, some residents in Couperusbuurt are vulnerable socio-economic groups, contributing to social segregation issues in Amsterdam. This situation has pushed them out of social comfort and spatial comfort due to their dissatisfaction with their neighbourhoods. This research aims to identify the heritage importance of Westelijke Tuinsteden, integrate it with the spatial planning & development of Couperusbuurt and translate it into possible design elements to achieve socio-spatial cohesion and a liveable Couperusbuurt.

The methods used in identifying heritage are built upon theoretical studies that indicate the dynamic approach to heritage, which means that heritage value is not limited to its form. Thus, heritage has a flexible layer that could be integrated into the future redevelopment as long as it could transfer the initial value or meaning. The investigation found that the heritage value in Couperusbuurt is collectivity through community. Then, in integrating it with planning, the collectivity value is translated into spatial and social planning strategy which are community-driven spatial strategy and participatory planning. Later, these strategies are elaborated into design exploration process.

The design exploration in this research is done through scenario design. Design by scenario is beneficial to visualise extreme possibilities, accommodating different needs from different stakeholders, and as a tool of participatory planning. In doing so, there are two design scenarios which are centralised collectivity and distributed collectivity. Each scenario shares the common ground value that is collectivity as the heritage importance for the neighbourhood's renewal.

The output of this project will be used as a material for the ongoing Couperusbuurt's renewal project which is conducted by the Municipality of Amsterdam and Housing Corporation, Stadgenoot.

Keyword: adapting heritage, neighbourhood renewal, design by scenario, participatory planning, Westelijke Tuinsteden Amsterdam

PREFACE

MOTIVATION

In doing this research project, I am trying to ask myself and find what I want to learn and explore more in terms of urban design challenges.

Then, I remember the time back when I was studying architecture in my bachelor study. One time, the studio assignment is to study the heritage area of Old Town Jakarta and later conduct a design intervention in one of the colonial buildings of Kota Tua (Old Town Jakarta). I somehow remember that I enjoy observing this heritage area.

Two years later, I ended up doing a final project of urban waterfront development in the historical harbour that is part of Kota Tua Jakarta. Through this project, I learned to study the historical and cultural background of the area and implemented it into an urban design. As an architect student, I was proud to do a more comprehensive scale design solution. However, looking back today as a master's student, that final project looks like a beginners' play in researching by design.

After doing some short reminiscences of the past, I realised that in the previous year of my urbanism study at TU Delft, I learned essential and tremendous new things in urban design practice, such as designing environmental sustainability challenges and strategic planning. However, I never stumbled upon heritage context in urban design.

Therefore, in this research project, I want to explore heritage management and its application and integration to spatial design. Fortunately, one of the design studios covers the heritage context. Hearing about the possibility to research heritage made me more certain and confident to explore this topic.

In addition to that, I enjoyed the urban design approach in the Dutch context, which is highly considerate to the environment and sustainability, whereas where I come from is neglected. This reason becomes another driving motivation for me to do a research project in Amsterdam.

In the picture on the right, I put an image of one of the areas in Kota Tua Jakarta, which portrays the canal used to distribute goods and spices during colonialism periods. However, today, due to the recklessness of urban designers in underestimating heritage and environmental issues, those design solutions happened...

Therefore, I wish for this research project to be a suitable solution that carefuly considers heritage values in spatial planning and design.

Figure 1. Picture of Historical Old Town Jakarta
(taken by author)

1 INTRODUCTION

This introductory chapter explains the context of the overall project. Three primary contexts are necessary to be understood:
the project's location, the meaning of heritage in The Netherlands, and the story of Amsterdam's Expansion Plan.

1.1 SITE CONTEXT

1.1.1 City of Amsterdam

The location of the project is in the capital city of The Netherlands, Amsterdam. Until early 2021, Amsterdam is the home to 872,524 inhabitants (CBS, 2021). The city is multiplying annually with additional 11,000 inhabitants and 5,000 homes (Gemeente Amsterdam, 2021). Along with the urban growth, job opportunities, workers, students, and visitors are proliferating. This phenomenon puts development pressure on Amsterdam to keep densifying within its district.

Looking back to Amsterdam's development, the city has been through several expansions plan that made the Amsterdam that we know today. In Figure 2, we could see that the city's growth substantially through the decades with several plans such as the 19de-eeuwse Ring (19th century Ring), Berlage Plan Zuid (Berlage Plan South) and Algemeen Uitbreiding Plan (Expansion Plan of Amsterdam), the Zuid-Oost (South-East) development in late 20th century. After these expansions plan, the city's districts were set in 1981, dividing Amsterdam into seven administrative districts and one non-administrative district of Westerpoort (industrial and business-oriented.

This project focuses on the Amsterdam Nieuw-West (New-West) district, which dominantly developed by the Algemeen Uitbreiding Plan (AUP or translated as General Expansion Plan of Amsterdam) during Post World War II. Although AUP also took place in Amsterdam South & North, the Amsterdam Nieuw-West has its unique characteristics as a Western Garden Cities neighbourhoods of Amsterdam (Westelijke Tuinsteden).

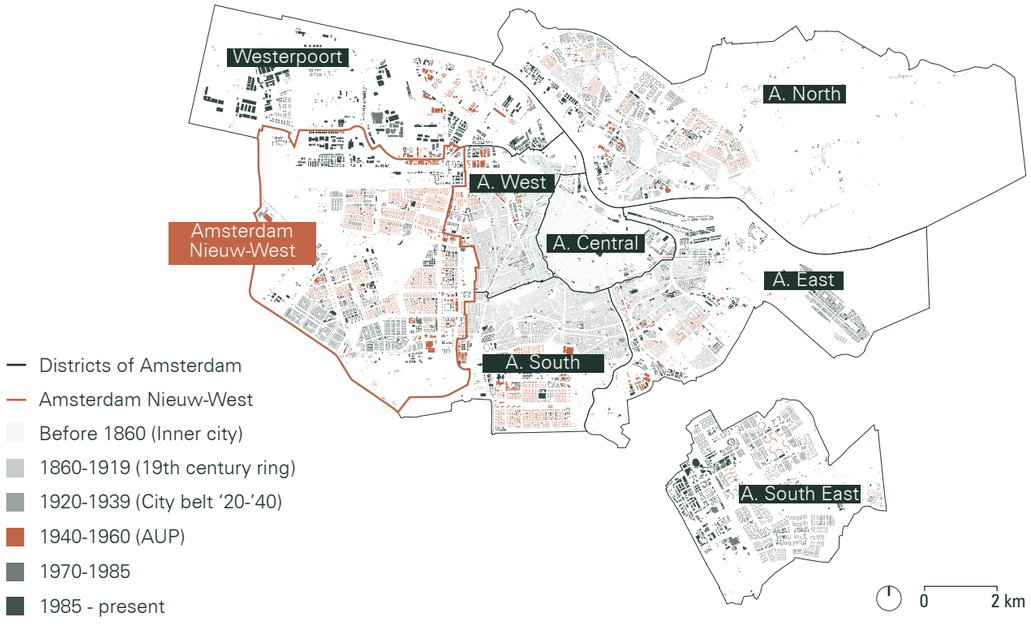


Figure 2. Urban growth of Amsterdam
(illustrated by author, based on Gemeente Amsterdam (2020))

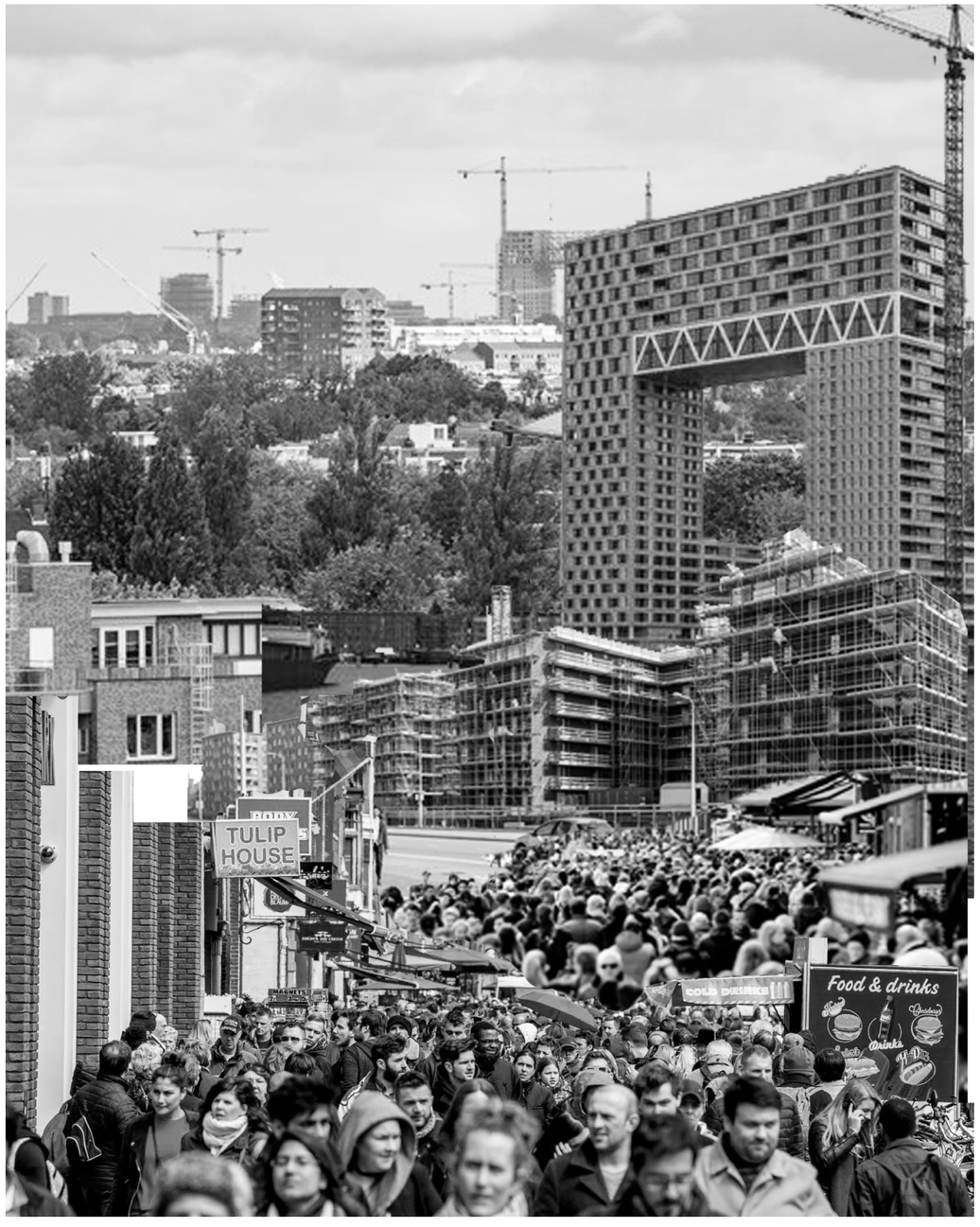


Figure 3. Collage photos of urban development in Amsterdam
(illustrated by author, based on Google pictures)

1.1.2 Amsterdam Nieuw-West

Today, Amsterdam Nieuw-West's district is home to 160,124 inhabitants, covering 18.35% of Amsterdam's population.

Slotermeer Southwest

Slotermeer or Tuinstad (Garden City) Slotermeer is the second oldest Westelijke Tuinsteden neighbourhood built on 1965 (Van Eesteren Museum, 2021). At the moment, Slotermeer and the district of Geuzenveld (west of Slotermeer) are parts of the Municipality of Amsterdam's urban renewal agenda to provide a better living quality for the residents. There are three neighbourhoods in the Geuzenveld-Slotermeer renewal agenda as the main focus of residential neighbourhood renewal: Lodewijk van Dysselbuurt, Dichtersbuurt, and Couperusbuurt. The latter, Couperusbuurt, is the main focus of this project.

Couperusbuurt

The main focuses of this project are in Couperusbuurt. This neighbourhood is part of six neighbourhoods (buurten) in Slotermeer Southwest. As the project progress, the Municipality of Amsterdam and Housing Corporation and other professionals team discuss and explore the neighbourhood's potential at the same time. Thus, there has been an active discussion with people from the Municipality, Housing Corporation of Stadgenoot, and other professionals (individual or team) in this project.

As mentioned before, the neighbourhood is part of Westelijke Tuinsteden neighbourhood. The neighbourhoods are considered a protected heritage area of Amsterdam. Therefore, it is important to understand the heritage context in The Netherlands, which will be discussed in the following chapter.

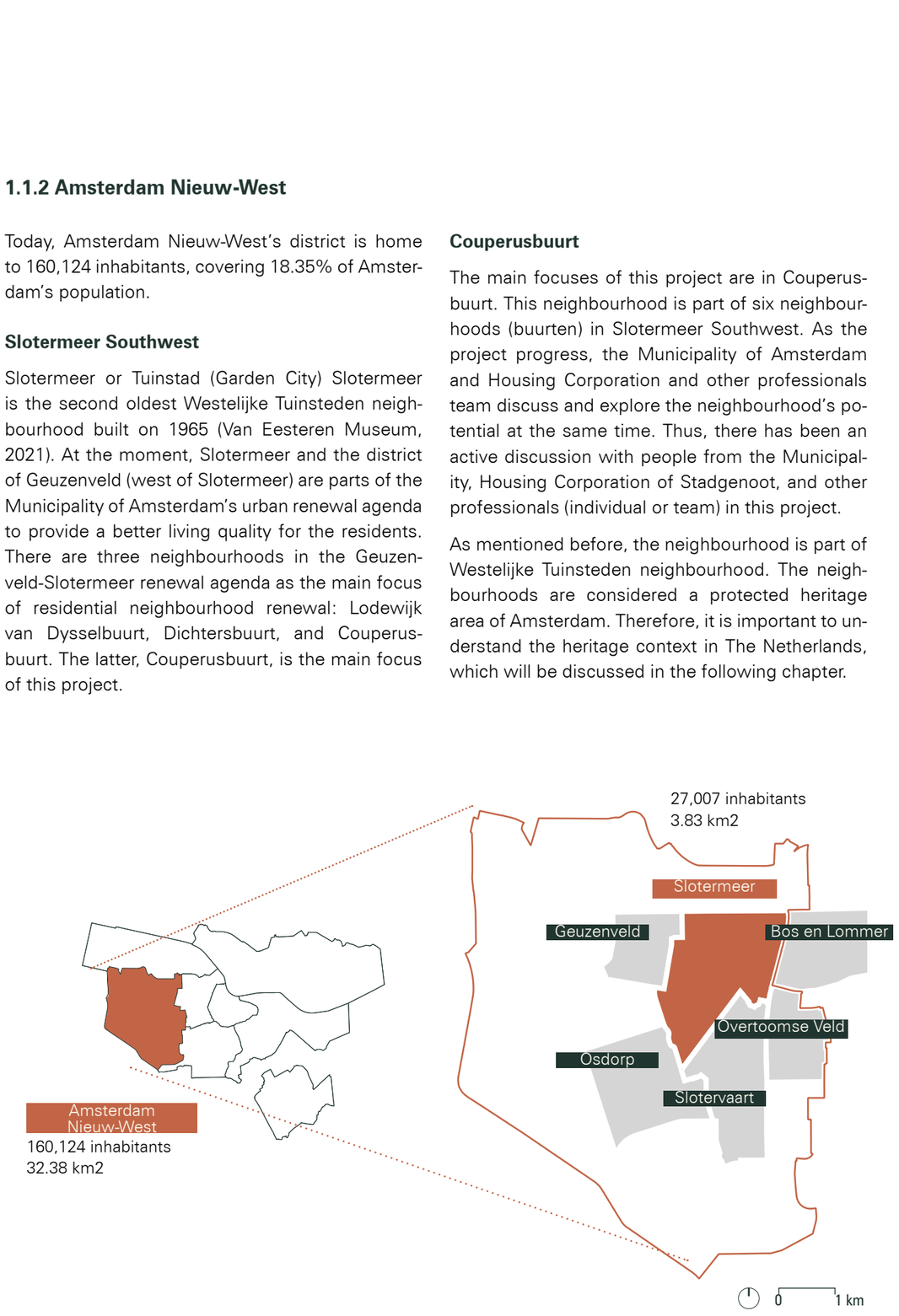


Figure 4. Districts of Amsterdam Nieuw-West and its neighbourhoods
(illustrated by author, based on Gemeente Amsterdam (2020))

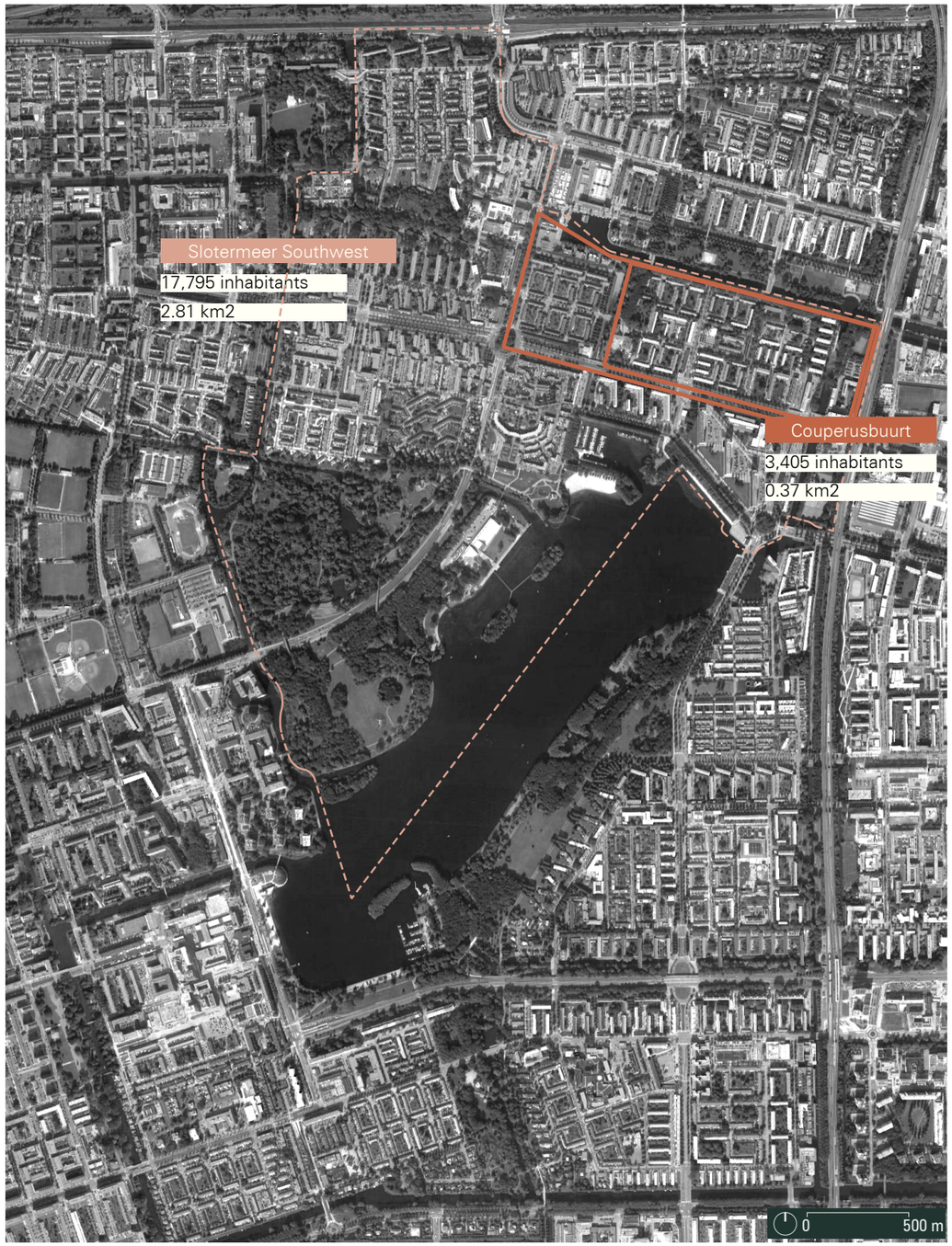


Figure 5. Aerial photo of Slotermeer Southwest
(derived from Google Earth (2020))

1.2 HERITAGE CONTEXT

1.2.1 Heritage in The Netherlands

The Cultural Heritage Agency of the Netherlands (Rijksdienst voor het Cultuurerfgoed or RCE) is the organisation that is responsible for heritage management in The Netherlands. Since the early 20th century, RCE has been actively making policy and research to manage heritage under the Ministry of Education, Culture, and Science.

In 1999, Nota Belvedere's establishment changed the perspective toward heritage objects and their relation with spatial planning. The definition of heritage lies not only in a single object or building but also in landscape areas (Feddes et al., 1999).

At the moment, heritage in The Netherlands covers several categories such as 1) listed monuments (national monument, provincial monument and municipal monument), 2) protected town or village sight, 3) reconstruction period area and 4) mobile or transportation heritage (MonumentenNL, 2020) (Figure 6).

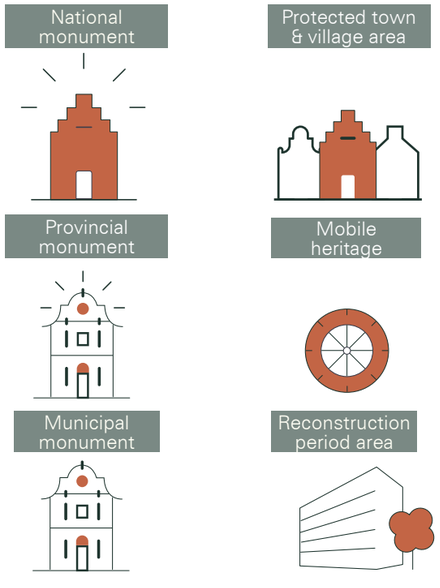


Figure 6. Categories of monuments
(derived from MonumentenNL (2020))

Figure 7. Collage photos of heritage in The Netherlands
(made by author, based on personal photos & Google pictures)

Figure 8. Collage photos of heritage in Amsterdam
(made by author, based on Google pictures)

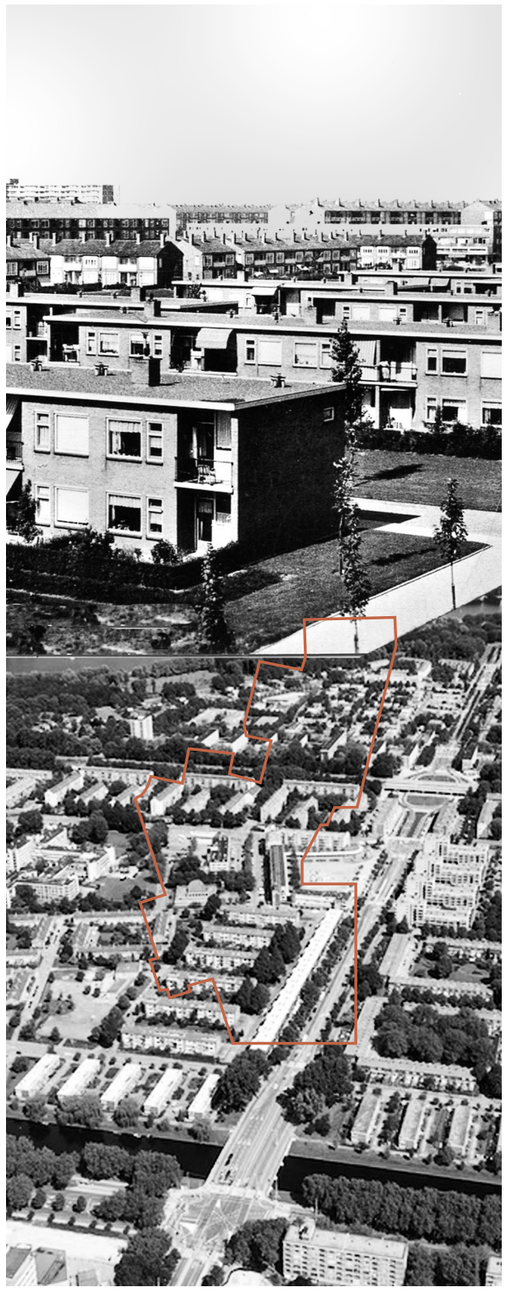


Figure 9. Collage photos of heritage in Westelijke Tuinsteden
(made by author, based on Google pictures)

1.2.2 Heritage in Amsterdam

In the early 17th century of the Golden Age of The Netherlands, Amsterdam was one of the most important port cities as it was the centre of finance and trading. During this era, Amsterdam's canals have become highly essential for the people and today these iconic and beautiful infrastructures are considered the World UNESCO Heritage (UNESCO, 2010).

Although Amsterdam is not the oldest city in The Netherlands, it has a tremendous amount of heritage importances scattered through every district of the city, with the most monuments located in the city centre's historic canal belt (Figure 10). Within the inner canal belt area alone, Amsterdam has 6.642 national monuments and 1.437 municipal monuments. Within the Municipality of Amsterdam, there are 7.257 national monuments and 1.860 municipal monuments (Gemeente Amsterdam-Monumenten and Archeologie, 2020). Amsterdam has few protected town and village areas aside from the monuments and only one reconstruction period heritage area. This project focuses on the only reconstruction period heritage of Amsterdam, the Western Garden Cities or Westelijke Tuinsteden.

The reconstruction period heritage area has a totally different characteristics than the majority of Amsterdam heritage, which is the monument. In handling heritage monuments, the approach is relatively more restricted and stiff, while the reconstruction period heritage area has more rooms for improvement and design explorations. However, it is vital to keep the area's critical value, which this project will investigate further.

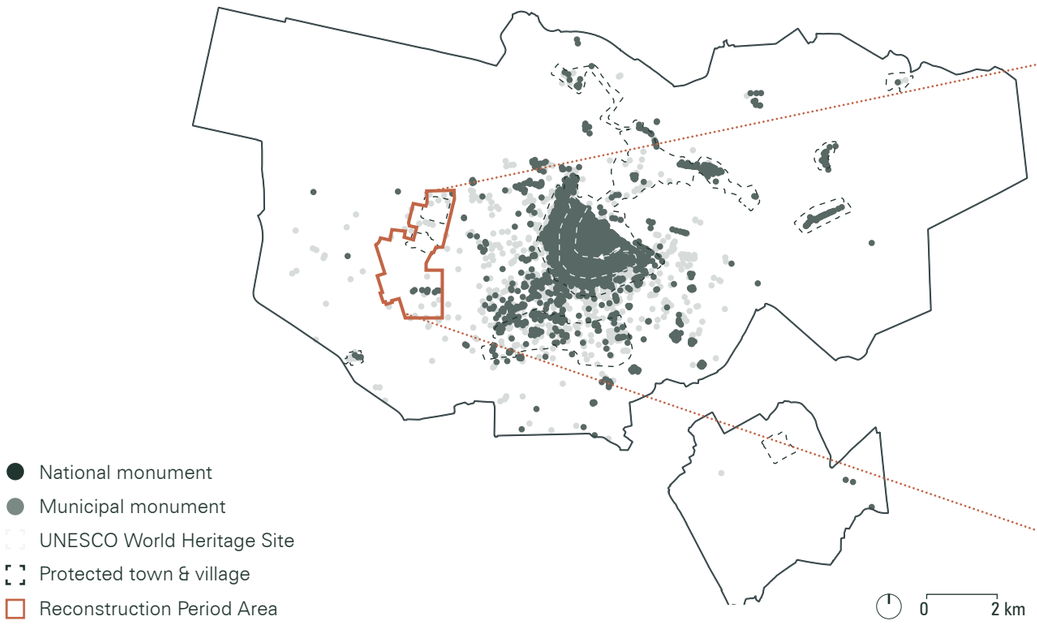


Figure 10. Heritage location in Amsterdam
(illustrated by author, based on Gemeente Amsterdam (2020))

1.2.3 Heritage in Westelijke Tuinsteden

As mentioned before, Westelijke Tuinsteden of Amsterdam is one of the reconstruction period heritage areas in The Netherlands. In this category, The Cultural Heritage Agency of The Netherlands also divided different reconstruction heritage areas based on their urban location characteristics. The categories are 1) reconstruction cores, 2) post-war neighbourhood, and 3) rural areas (Ministrie van Onderwijs, Cultuur en Wetenschap, 2021)

Between the period of 1930s and 1960s, the urban development in The Netherlands was drastically changed. World War II has ruined infrastructure and buildings in the country, which forced them to reconstruct significantly to provide for the citizens. These reconstruction areas brought a new face to The Netherlands with different material, architectural styles, and concept. It makes the reconstruction period area unique and needs appreciaton, thus making it a heritage.

Westelijke Tuinsteden is put into the "post-war neighbourhood" category in the reconstruction period heritage. The Cultural Heritage Agency of the Netherlands chose Westelijke Tuinsteden among thirty others because its innovative urban development and architectural ideas (Ministerie van Onderwijs, Cultuur en Wetenschap, 2021). The neighbourhood in Westelijke Tuinsteden was created with an open building blocks concept instead of closed building blocks, creating more light, air, and space. Also, the infrastructure has a hierarchical system that is advance of its time. By labelling it as the reconstruction heritage area, the government prioritises the importance of the appreciation of these qualities to be preserved for the future urban development of the neighbourhood.

Figure 11. Aerial photos of Westelijke Tuinsteden
(derived from Van Eesteren Museum (2020))

Figure 12. 30 reconstruction period area in Th Netherlands
(illustrated by author, derived from Ministerie van Onderwijs, Cultuur en Wetenschap (2021))

1.3 ALGEMEEN UITBREIDING PLAN (AUP)

1.3.1 Background

Pre Algemeen Uitbreiding Plan (AUP)

In the past, the area of Sloten (today is part of the Amsterdam Nieuw-West district) was primarily covered in peats. Several attempts were made, such as reclamation, polder construction, and drain system to prevent flooding and make the area livable. It led to Sloten (then it expanded to Sloten and Osdorp) become a fertile agricultural land. These products of Sloten and Osdorp's farmers were part of Amsterdamers' daily supplies (Nota Cultuurhistorie Amsterdam, 2016).

Later, the rural agricultural characteristics of Sloten-Osdorp was slowly disappearing as it became more of an outskirt village that attracts companies or visitors from abroad who are interested in visiting the Slotenmill. In terms of urbanisation, building residential buildings was highly discussed as the demand rose post-World War I. After several discussions, Amsterdam's idea of expansion slowly became more of a concrete plan as the Urban Development and Urban Expansion department was established in 1928 (Heijdra, 2010). This department then asked for Cornelis van Eesteren to be the chief designer of AUP.

Algemeen Uitbreiding Plan (AUP)

Cornelis van Eesteren was the head of the Urban Development Department from 1929 to 1959 (Gemeente Amsterdam, 2018). In 1935, van Eesteren presented the first expansion plan. Later, this plan was adjusted because of the World War II crisis and other development considerations. AUP has brought a significant change to Amsterdam's neighbourhood concept and has contributed to creating the Amsterdam Nieuw-West today. The following subchapter will explain the historical timeline and the impact of AUP in terms of urban growth, infrastructure, and city characteristics.

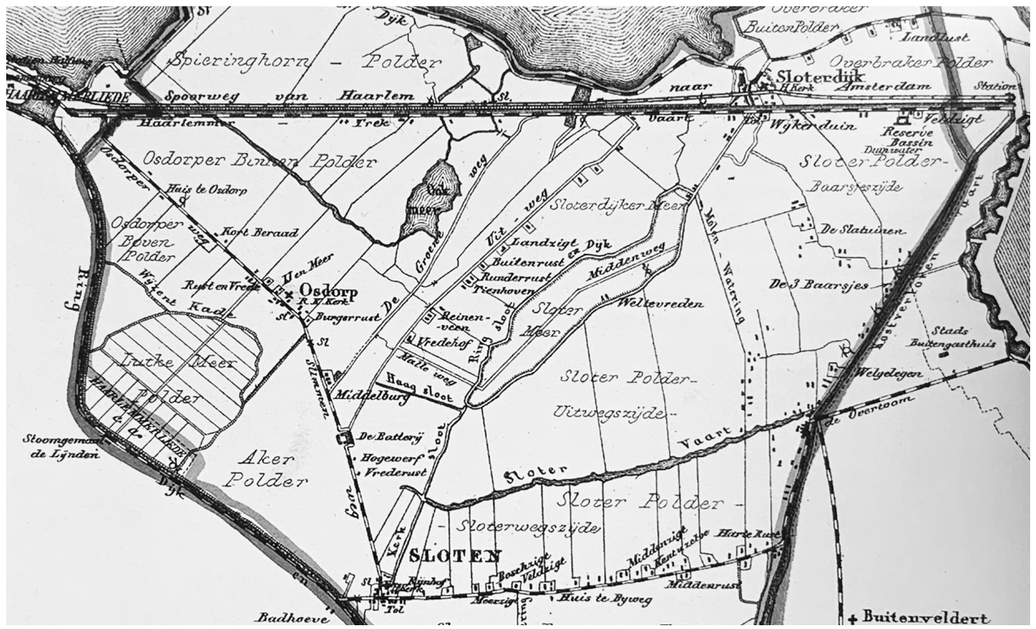


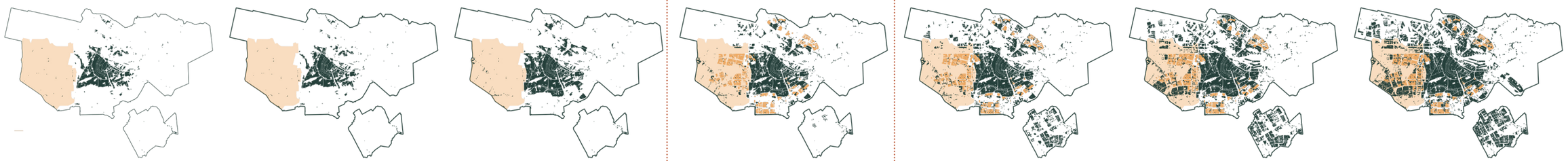
Figure 13. Map of Sloten
(derived from Heijdra (2010))

Figure 14. Algemeen Uitbreiding Plan
(derived from Van Eesteren Museum (2020))

1.3.2 Historical Timeline

Pre AUP | AUP | Post AUP

Urban growth — Building · Amsterdam Nieuw-West · AUP building



before 1860

The urbanisation took place only in Amsterdam center.

Polders and peat landscape in Amsterdam West with farm houses.

1860-1919

Expanded urbanisation to outskirt of Amsterdam.

Agricultural sector growth in Amsterdam West.

1920-1939

Growth of the urbanisation to the north side of IJ river.

More housing started to emerge in Amsterdam West.

1940-1969

The realisation of AUP in the outskirt area,

Western Garden Cities being one of the explansion plan area.

1970-1985

Demand of housing led for densification to south of Amsterdam.

1986-2000

Densification in Western Garden Cities area and more development in the West and South of Amsterdam

2001-2019

Densification of housing demand to Amsterdam led to a new agenda of urban industrial area (Sloterdijk) which is right on the north side of the Western Garden Cities neighbourhoods.

Infrastructure — Streets · Amsterdam Nieuw-West

The connection from the city of Amsterdam to today's Amsterdam Nieuw-West were limited to one primary road & railroad, which also connects Amsterdam to Haarlem.

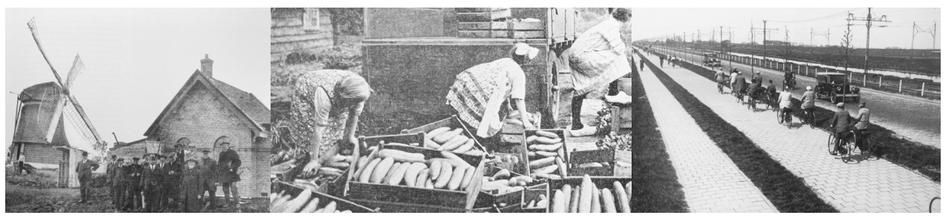
The concentration of infrastructure was mainly on the center of Amsterdam while the infrastructure on the outskirt served as the connecting transportation for agricultural, mining, and recreational purposes.

The expansion plan took place not only in Western Garden Cities neighbourhood, but also on all of the outskirts of Amsterdam. This plan led to the more connecting and coherent built infrastructure to the whole municipality.

In the present situation, the present of A10 highway ring is one of the distinct features of Amsterdam transportation infrastructure.
As mentioned before in the introduction part, this A10 infrastructure also creates a social division in Amsterdam which leads into social segregation issues in the city.

Characteristics

Countryside area of Amsterdam



The area was mostly dominated by agricultural and farm houses. The present agricultural sector were arable, livestock, and horticulture.

Then the area started to become the recreational area from Amsterdam and attract tourists which led to the new and better infrastructure to connect to Amsterdam

New living area for Amsterdam's worker & their family

The concept of light, air, and space for the new development of neighbourhoods which was built for Amsterdam's workers during the time.

Greenest neighbourhoods of Amsterdam with its urban beach (Sloterplas)

The neighbourhoods of Western Garden cities is well known as the greenest neighbourhoods of Amsterdam with the famous Sloterplas in the heart of the area which serves as the 'urban beach' for the residents.

Today, the characteristics of the Western Garden Cities are divided, some areas are considered as an underdeveloped post-war neighbourhoods while the renewed neighbourhoods are considered as a decent place to stay for Amsterdammers.

1800s — 1900s — 2000s

Figure 15. Urban growth of Amsterdam
(illustrated by author, based on Gemeente Amsterdam (2020))

Figure 16. Infrastructure development of Amsterdam
(illustrated by author, based on Gemeente Amsterdam (2013))

Figure 17. Photos of Westelijke Tuinsteden through time
(derived from De Geschiedenis van de Westelijke Tuinsteden (2010))

1.3.3 Concepts of AUP

As mentioned before, the General Expansion Plan of Amsterdam (AUP) was led by Cornelis van Eesteren as the chief designer. During this period, the Congres International d'Architecture Moderne (CIAM) took place between 1928-1959. As one of the congress's chairmen (1930-1947), Cornelis van Eesteren was influenced by its ideology, especially the Nieuwe Bouwen movement (Gemeente Amsterdam, 2013). However, the main idea of AUP was based on Ebenezer Howard's concept of the garden city, which was published in 1902 with the title Garden Cities of Tomorrow. Howard (1902) proposed the idea to accentuate the importance of having a greenbelt around the city inspired van Eesteren in planning Amsterdam's green neighbourhood.

Lucht, licht, ruimte

Before AUP, the closed building blocks is the general system of designing building blocks in the city. Believing in the importance of quality of "air, light, and space", van Eesteren brought an innovative concept to the city (Stadsarchief Amsterdam, 2019). The conventional closed building blocks were replaced by open building blocks that allow space for green activities inside and next to the building. Instead of having less quality in closed building blocks' inner courtyard, the open building blocks offer equal qualities both in the buildings' inner and outer side (Figure 19) .

The concept of providing green not only exists on the neighbourhood scale but also the district scale. The neighbourhoods of Westelijke Tuinsteden surround one central function, which is Sloterplas. The Sloterplas serves as the heart of Westelijke Tuinsteden that connects surrounding neighbourhoods and has become a place for recreational activities in the neighbourhoods.

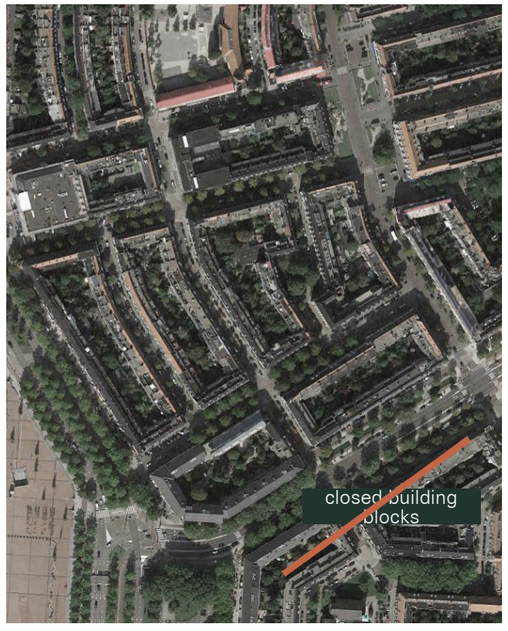


Figure 18. Closed building blocks in Amsterdam Zuid
(derived from Google Earth (2020))

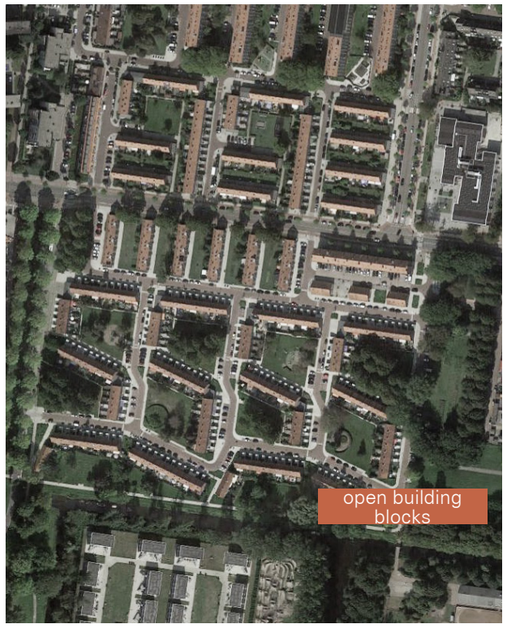


Figure 19. Open building blocks in Westelijke Tuinsteden
(derived from Google Earth (2020))

Wijkgedachte

Ebenezer Howard's Garden City concept as a tool to built communities in rural setting was adapted in the Westelijke Tuinsteden in wijkgedachte (Blom et al., 2017). Wijkgedachte or translated as "the neighbourhood unit", was the concept implemented in the neighbourhood. As seen in figure...., the concept of wijkgedachte focuses on the family as the centre of the activities. As the circle grows, the community also grows along with the facility that the people need.

The segregated function system in the Westelijke Tuinsteden makes sure that each neighbourhood has its own school, shops, working area, and more extensive services and facilities are provided in the district scale. This concept makes sure that people always have something in the neighbourhood where people could meet and have activities together.

Through several inspirations and influences in creating the concept values of Westeljke Tuinsteden, these are the distinct features of the Western Garden Cities are:

1. segregation of functions within neighbourhoods
2. well-connected green structure from city-scale greenery to neighbourhoods and individual home scale
3. open block buildings with rhythmic division and repetition
4. opportunity for recreational activities for different age group
5. optimise space for natural daylight and air flows.

In conclusion, these qualities were the ambition to provide a better quality of living considering the poor condition of Amsterdam due to overpopulation during the early 20th century.

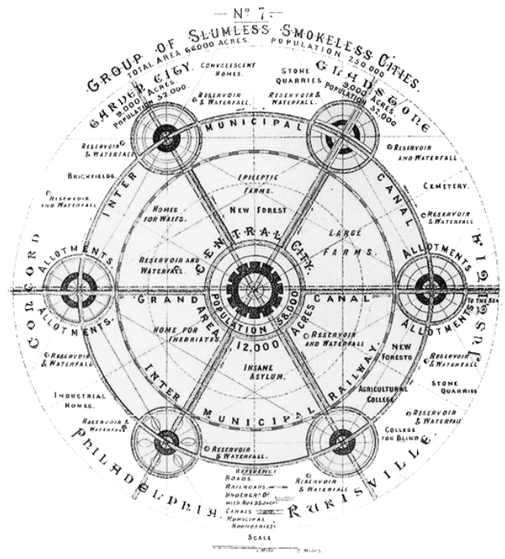


Figure 20. Garden City of To-morrow concept diagram
(derived from Howard (1902))

Figure 21. Wijkgedachte concept diagram
(derived from Gemeente Amsterdam (2017))

1.3.4 Development of Westelijke Tuinsteden

During the AUP process, a significant event happened that impacted the Western Garden Cities' initial plan, which is World War II. The initial goal was for Western Garden Cities to be constructed to the city scale importance (Gemeente Amsterdam, 2013). It was later discovered that the goal was impossible to achieve during the realisation due to financial problems. One of the reasons was the crisis and post-World War II and its delay because the number one priority of reconstruction was directed toward Rotterdam (after Rotterdam's bombardment) (Gemeente Amsterdam, 2013). However, despite the struggle the expansion plan has faced, Western Garden Cities has always been considered as one of the most significant urban development in Amsterdam and The Netherlands until today (Sabate & Galindo, 2000).

Richting Parkstad 2015 (Toward Citypark 2015)

The concept of AUP was never meant to be a fixed plan from the start. It was expected that each neighbourhood in Western Garden Cities will always have to develop in facing future urbanisation (Archined, 2012). In 2001, the Urban Development division established an agenda of urban renewal in the Western Garden Cities. This initiative's reasons were insufficient spaces for living, outdated houses and facilities, an influential group of ethnic minorities who suffer discrimination, lack of integration between each neighbourhood to Western Garden Cities as a whole, and many more. Therefore, Richting Parkstad 2015 (translated as Toward Garden City) was established with a three-dimensional: physical, social, and economical approach (Van Der Velden, 2010).

Later, this renewal also faced many problems. In 2008, a crisis happened in The Netherlands, which highly affected the urban renewal agenda. Also, internal conflict between housing associations, Bureau Parkstad (the division in charge of the urban renewal) and Amsterdam's Municipality caused a delay in the urban renewal plan's realisation (Nio, 2016). A few years before 2015, only 5 out of 23 plan was conducted and realised, leaving some districts untouched.

After 2014 more urban renewal attempts were made and led to a more significant result with improved quality of life in several neighbourhoods (an increase of score in liveability) except for Slotermeer, Geuzeunveld, and Osdorp (Nio, 2016). Today, these neighbourhoods face some problems and need urban renewal more than ever.

Urban Renewal of Geuzenveld-Slotermeer (Principenota Geuzenveld-Slotermeer 2019)

The Municipality of Amsterdam & housing associations established an urban renewal plan for the neighbourhood Geuzeunveld and Slotermeer. Aside from the reasons that these neighbourhoods are the ones that were 'neglected' during Richting Parkstad 2015 agenda, the other reason is the low liveability score in these neighbourhoods. In this plan, three neighbourhoods are selected for the urban renewal plan; Couperusbuurt, Lodewijk van Dysselbuurt, and Dichtersbuurt.

The current urban renewal plan served as a given context and input for this research. Therefore, to align with the Municipality of Amsterdam's current plan, this research will be conducted and focus more on these neighbourhoods, specifically in the Couperusbuurt. Further explanation about the neighbourhoods is discussed in chapter 2 (Problem Focus).

Figure 22. Richting Parkstad 2015
(derived from Gemeente Amsterdam (2001))

Figure 23. Sketch of Geuzenveld-Slotermeer avenue
(derived from Gemeente Amsterdam (2019))

2 OBJECTIVES

WHAT... + WHY...

Problematisation

Problem field

Problem analysis

Problem statement

Research aim statement

In this chapter current problematisation in the area is structured in the problem field. Later, the analysis of the present problem creates a clear goal that is translated into research aim. In the last part of this chapter , the research questions are defined.

These thinking processes create clear research aim. Below is the roadmap in building the main objectives of this research.

2.1 PROBLEM ANALYSIS

2.1.1 Urgent Need for Transformation

In the 1960s, the neighbourhood of Westelijke Tuinsteden might seem innovative, appealing, and groundbreaking to the residents. Today, almost 50 years later, the idea and amusement towards Westelijke Tuinsteden have been long gone. Buildings are outdated with homes that do not have sufficient area for individuals, and several functions have shifted (Gemeente Amsterdam, 2019).

Figure 24 the side shows the steps of development of Wesetlijke Tuinsteden. Among others, Tuinstad Slotermeer is the second oldest. As mentioned before, there were attempts to renew and transform the Westelijke Tuinsteden to keep up with the residents' needs. However, none of them succeeded in Slotermeer. In the renewal plan of Richting Parkstad 2015, a densification and renewal plan of Slotermeer has been set but rejected by the people, leaving Slotermeer untouched. Figure 25 explains the Municipality agenda's timeline in Tuinstad Slotermeer and how it happened (struggles and difficulties). In conclusion, Slotermeer is the second oldest Westelijke Tuinsteden neighbourhood established but has never been renewed or transformed since 60 years ago.

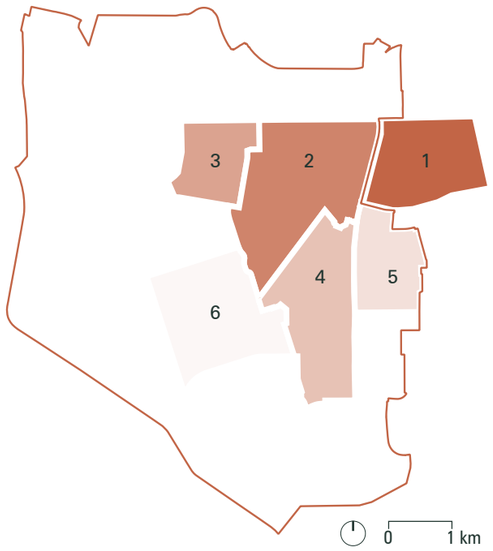


Figure 24. Chronological Development
(illustrated by author, based on Van Eesteren Museum (2021))

In Coupersbuurt, time seems to stand still, and the outdated buildings and facilities are visible. If one compares the old pictures of Couperusbuurt and the current condition, not many have changed. Though the inhabitants have changed, no transformation was made to accommodate their shifting needs. Thus, the renewal plan and transformation of Couperusbuurt has been needed than ever.

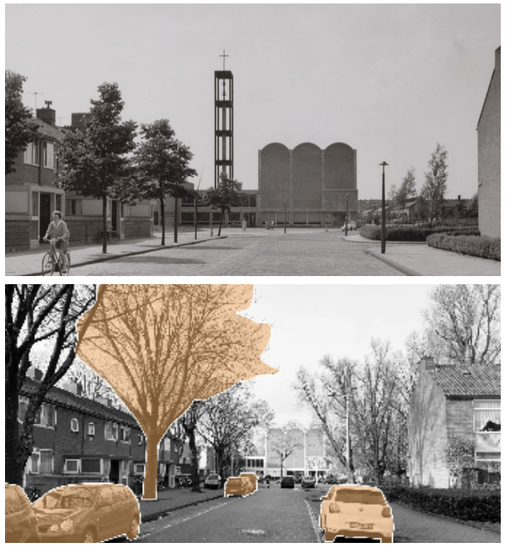


Figure 26. Couperusbuurt in 1960 & 2020
(derived from Stadsarchief Amsterdam (2020) & taken by author)

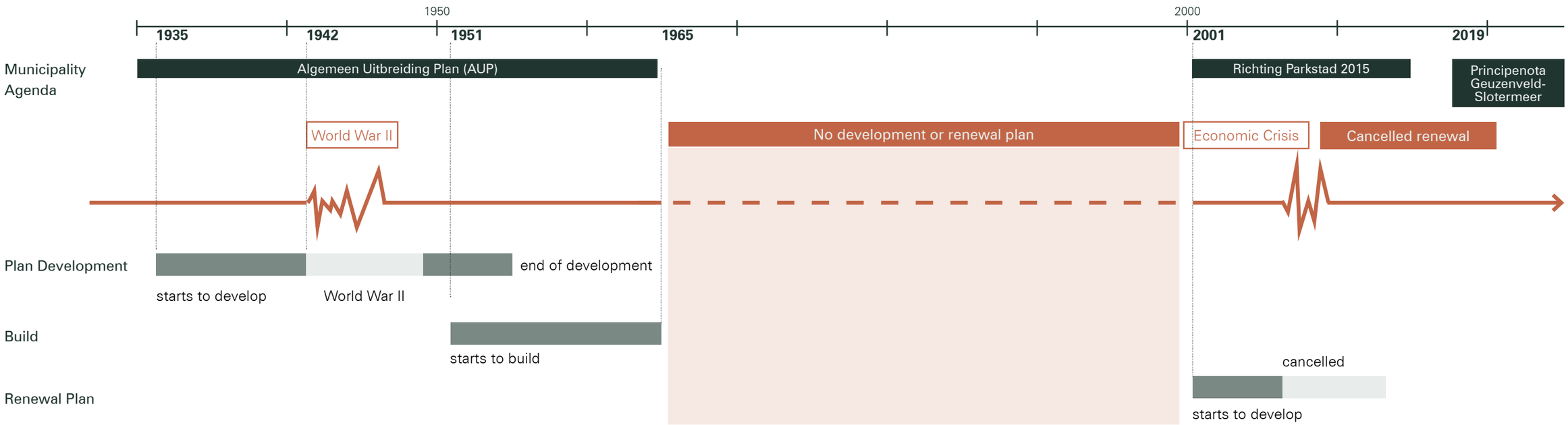


Figure 25. Urban development timeline of Tuinstad Slotermeer
(illustrated by author)

2.1.2 Densification Pressure

Densification has been on the Municipality Amsterdam's agenda for the past decade, especially considering the housing crisis that the country is facing. Amsterdam has a target of 80,000 homes to be built in 2025 (Gemeente Amsterdam, 2016). Figure 27 shows the Koers densification plan, which proposes to densify within the A10 highway ring of Amsterdam, the border of Westelijke Tuinsteden.

In Koers 2025, this is the densification plan for Westelijke Tuinsteden (Gemeente Amsterdam, 2016):

1. Ring West
1,275 homes targeted with several more to be determined in Lelylaan-Noord, Surinameplein, Jacob Geelbuurt, Sloterplas. Densification will be renovation & redesign of the neighbourhood

2. Amsterdam Nieuw-West
400 homes + non living program in Osdorpplein and densification of homes (number have not been determined) in Geuzenveld – Slotermeer, Osdorperweg, & Wildemanbuurt. Densification aims for green-blue residential areas.

Based on the previous statement, Slotermeer will face densification pressure.

Densification puts pressure on greenery

Since 2003, densification has claimed three square kilometres of green space within the A10 highway ring, which equals 550 to 600 football fields (Zoelen, 2018). An urban planner from the University of Amsterdam adds that the loss of green does not mainly consist of parks and public gardens, but more about strips of green in between (EenVaandag, 2019).

These two facts are worrying for Westelijke Tuinsteden. The greenery in Westelijke Tuinsteden indeed is one of the essential features appreciated by the residents and considered the heritage area by Amsterdam's Municipality. Along with Koers 2025 plan, there is a good chance that the abundance of green in Westelijke Tuinsteden will be lost, and the initial concept of lucht, licht, and ruimte will not remain in the neighbourhood.

In conclusion, if the densification plan is not being handled with care, the heritage urban fabric of Westelijke Tuinsteden is threatened.

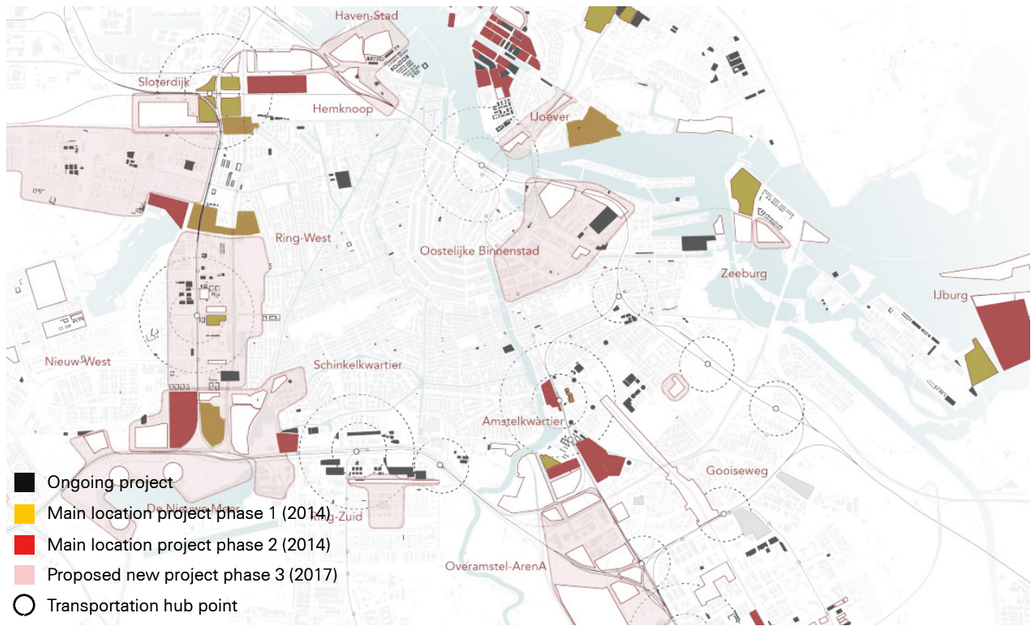


Figure 27. Koers 2025 densification plan
(derived from Gemeente Amsterdam (2016))

Figure 29. Aerial photos of Westelijke Tuinsteden
(derived from Van Eesteren Museum (2020))


Greenery under pressure due to rapid growth in Amsterdam

Due to the rapid growth of the city, greenery is under pressure. Between 2003 and 2016, the amount of green space within the A10 ring road has decreased by 11 percent.

Bart van Zoelen 11 October 2018 , 12:10

In Amsterdam verdwenen 600 voetbalvelden aan groen EN DAT DREIGT IN ANDERE GEMEENTEN OOK TE GEBEUREN

pag. 38

Figure 28. News headline of threatened greenery in the city
(derived from Het Parool (2018) & Eigenhuis (2018))

Figure 30. Maps of most & least green city in The Netherlands
(derived from Eigenhuis (2018))

2.1.3 Social Segregation

Research by Musterd (2015) shows that Amsterdam is the 8th most segregated cities in Europe. He also adds that economic segregation in Amsterdam has been rising since 2008. Several headlines news below share the same worries of economic segregation in Amsterdam. Though some parts of Amsterdam are continuing to become super-rich areas, some are left behind. Almost everything inside the city centre is very tourist-oriented, making it very expensive compared to the surrounding neighbourhoods.

Rich & White vs. Poor & Black

Aside from the economic segregation, Amsterdam is also ethnically segregated by 40%. Nio (2016) argues that A10 highway ring of Amsterdam is the divider of "rich and white" versus "poor and black". The A10 ring, transportation infrastructure has become a social divider between the city's inner and outer ring. This situation is very intriguing and affects Slotermeer, which is located precisely next to the A10 ring.

Considering the residents' ethnic background, the figure below also shows striking facts that residents with an immigrant background primarily reside in the city's outer ring. The map shows a high concentrated neighbourhood with immigrants in Amsterdam Nieuw-West and Amsterdam Zuid-Oost. Among those, these are the neighbourhoods with the highest immigrant background in Amsterdam Nieuw-West (Allecijfers, 2020):

1. Geuzenveld (79%)
2. Middle Osdorp (76%)
3. Slotermeer Northeast (76%)
4. Slotermeer Southwest (74%)
5. De Punt (71%)
6. Osdorp East (66%)

The gap between rich and poor is also widening in Amsterdam

The dichotomy between rich and poor is increasing rapidly in European capitals, according to international scientific research. Amsterdam is also growing into a shared city.

Michiel Couzy 21 August 2015 , 6:50 PM

Geography professor: Amsterdam is threatening to become a place for the super rich

The gap between the city's rich and poor is widening, according to Sako Musterd, who is retiring from the University of Amsterdam after decades of research into the subject.

Michiel Couzy en **translation: Het Vertaalcollectief** 11 december 2019, 15:25

Figure 31. News headline of social segregation
(derived from Het Parool (2015) & Het Parool (2019))

Segregated Cities in Europe

1. Madrid
2. Milan
3. Tallinn
4. London
5. Stockholm
6. Vienna
7. Athens
8. Amsterdam
9. Budapest
10. Riga
11. Vilnius
12. Prague
13. Oslo

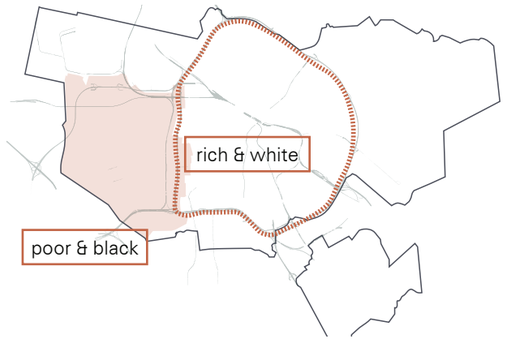


Figure 32. Impression of segregated city of Amsterdam.
(illustrated by author, based on Nio (2016))

The presence of immigrant background in Slotermeer is prominent. Residents with immigrant background usually have a lower education background and low economic income (Gemeente Amsterdam, 2019). This cause a problem with poor quality of neighbourhood and criminality. Figure 33 shows a satellite bowl's strong presence that does not always bring a good impression to the residents (Geenstijl, 2020).

In conclusion, the impression of Amsterdam NIeuw-West, including Westelijke Tuinsteden neighbourhood, is not appealing. If it is not handled, the social segregation between inner and outer will continue rising, and soon they will become "avoided" neighbourhood more than ever.

Figure 33. Sprawl of Satellite Dish
(derived from Geenstijl, 2020)

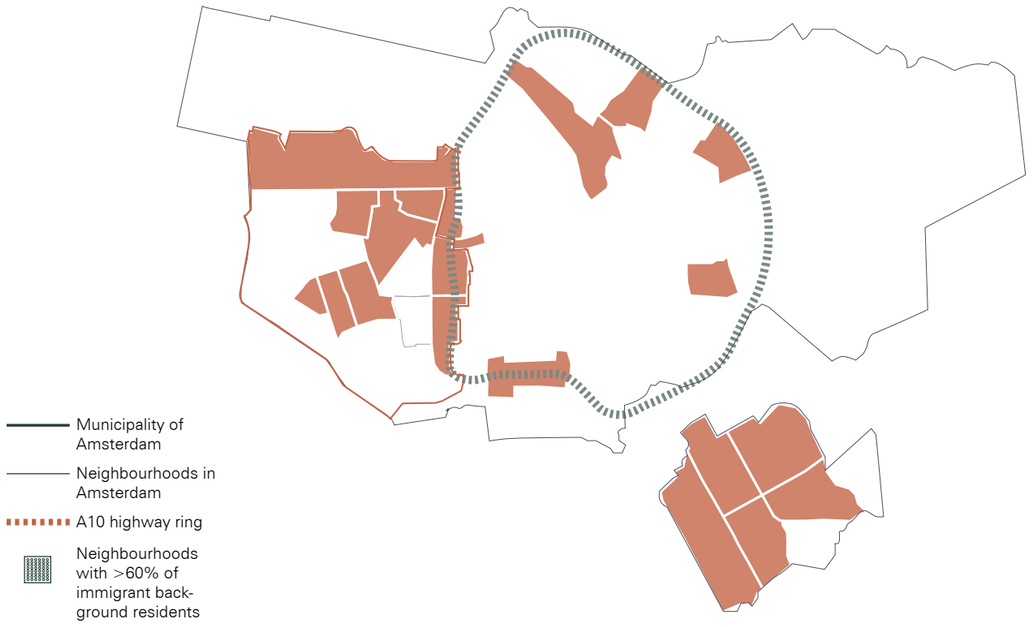


Figure 34. Map of Amsterdam
(illustrated by author)

2.1.4 Dissatisfaction to the Quality of Living

Among Amsterdam's neighbourhoods, Westelijke Tuinsteden neighbourhoods show low satisfactory scores from its residents. Every neighbourhood is below average score, with most of them has the lowest scores (Figure 35). This is striking and worrying for the Westelijke Tuinsteden neighbourhoods.

In AUP, the Westelijke Tuinsteden was meant to be a neighbourhood that promotes quality of urban-rural living with sufficient working and recreational facilities for the residents. However, based on the scores, it shows that AUP's aim has failed. It is because lack of renewal and transformation in the neighbourhood that was discussed previously.

In Slotermeer Southwest, the residents are not impressed with the neighbourhood's development and their neighbourhood's quality (Figure 36). To add, small facilities such as sidewalks, playground, and parking are also not adequate to their needs. The picture on the right shows residents' impression of Couperusbuurt. They share the same struggles and dissatisfaction with their neighbourhoods. Therefore, an urban development for this neighbourhood is vital for the residents' livalibilty.

In conclusion, the quality of the living in Westelijke Tuinsteden should be improved. Future urban development should also focus on the built environment and the residents as the primary users.

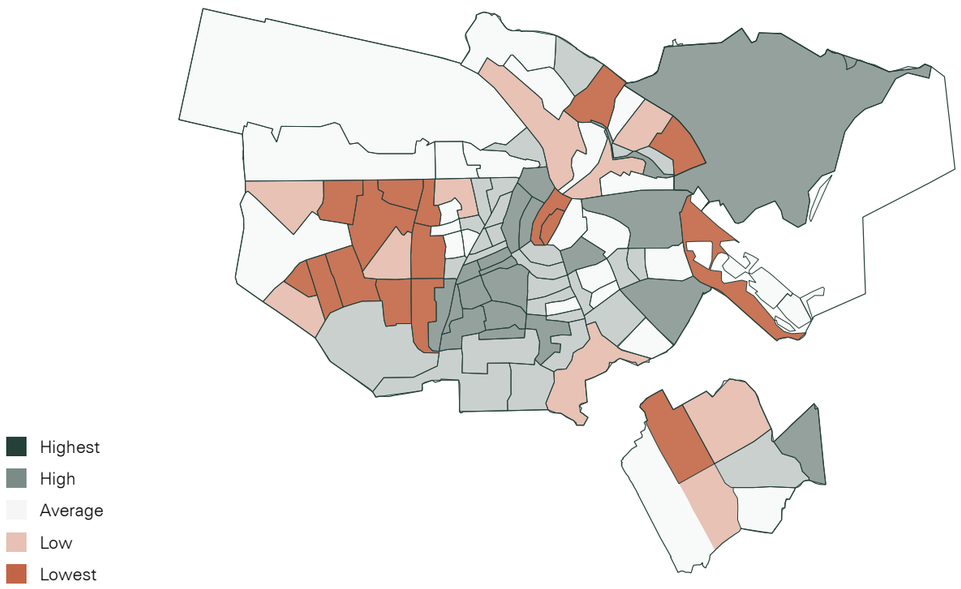
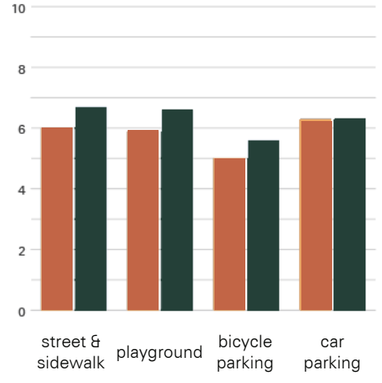


Figure 35. Satisfaction with current neighbourhood score in Amsterdam
(Illustration by author, based on Gemeente Amsterdam, 2020)



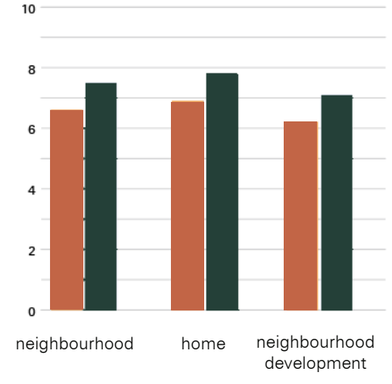


Figure 36. Satisfaction with current neighbourhood score in Western Garden Cities
(Illustration by author, based on Gemeente Amsterdam (2020))

Figure 37. Thoughts from the residents
(derived from Gemeente Amsterdam, 2019)

2.2 PROBLEM STATEMENT

In this chapter, the interrelation between the problems mentioned will be discussed. Previously these are the four main problems that are present in Westelijke Tuinsteden:

1) Urgent need for transformation

2) Densification pressure to heritage urban form

3) Social segregation

4) Dissatisfaction with the quality of living.

Based on the listed problem, the first and second problems mentioned regarding solid spatial pressure that the heritage urban form is facing. The third problem is related to the socio aspect, while the last is related to both socio & spatial aspects. In conclusion, it is possible to say that there are socio-spatial problems present in the Westelijke Tuinsteden neighbourhood, specifically Couperusbuurt.

Van Dorst (2012) argues that a matched quality between people and their living environment is defined as liveability. Though the types of relationships between the subject (people) and the environment are varied, their relationship should fit with each other. This is the quality that is missing in Westelijke Tuinsteden. Therefore, the problem statement of this project is:

Westelijke Tuinsteden of Couperusbuurt, with its status as municipal heritage, fails to provide a liveable built environment for its residents. Its heritage status causes the neighbourhood to be alienated to development which led the neighbourhood to be outdated to the current needs. In contrast, the neighbourhood's heritage form is also vulnerable due to the municipality's densification agenda.

Simultaneously, some residents in Couperusbuurt are vulnerable socio-economic groups, contributing to social segregation issues in Amsterdam. This situation has pushed them out of social comfort and spatial comfort due to their dissatisfaction with their neighbourhoods.

Thus, the urban renewal of Couperusbuurt is urgent. However, the renewal plan should not neglect the heritage importance of Westelijke Tuinsteden. Therefore, it is vital to integrate heritage management with spatial planning for future Couperusbuurt.

RESEARCH AIM 2.3

As mentioned, an urban renewal plan of Couperusbuurt in Westelijke Tuinsteden, which embodies its heritage value in its spatial planning and design, is urgent.

Urban renewal is vital for a liveable Couperusbuurt. As mentioned previously, to achieve liveability, there should be a collaborative relationship between the people and the built environment (Van Dorst, 2011).

In this project, the context of the built environment lies in the heritage context. It is essential to embrace the core heritage of Westelijke Tuinsteden and embodies it in urban renewal planning and design. However, there is no solid framework in translating heritage value into spatial planning and design element. It is not a textbook process as heritage value is not a constant value but rather a dynamic component with its uniqueness to each context (Meurs, 2020). Then, what is the heritage of Westelijke Tuinsteden, and how should it be embodied in the renewal plan of Couperusbuurt?

This graduation project is a research and design project. Therefore, detailed research of the heritage context is vital in understanding the heritage importance of Westelijke Tuinsteden, which then be translated into design process and element.

This research aims to identify the heritage importance of Westelijke Tuinsteden, integrate it with the spatial planning & development of Couperusbuurt and translate it into possible design elements to achieve a liveable Couperusbuurt.

The aimed product in the graduation project is an explorative design product of Couperusbuurt. It could also be considered a recommendation for the current urban renewal plan of the Municipality of Amsterdam. To achieve the objectives, the structure and foundation of this research will be discussed next, including the research questions of the project.

3 THEORY

This chapter will explain pieces of literature that are essential as theoretical foundations of the projects.
First, each literature will be reviewed in the first subchapter and concluded with the proposition on how it will be applied to the project.
Finally, the interrelationship between literature will be explained, and the lines between them will be drawn. Later, it will be the theoretical framework and foundation for this research

3.1 LITERATURE REVIEW

3.1.1 Paradigm shift toward heritage

The perspective of understanding heritage has been changing in the past decades. In the 1970s, the European's approach to heritage is to treat it as an object of protection but later, it was used as a tool for urban regeneration and to improve socio-economic development (Ashworth in Janssen et al., 2012). Later in the 1990s, European countries realised that a dynamic approach to heritage planning should be the way instead of a control-based approach (Fairclough & Roppin in Janssen et al., 2012).

In The Netherlands, Nota Belvedere's realisation in 1999 set the base to relate heritage management with spatial planning. It has the main objective to value cultural-historical and integrate it with spatial planning, thus creating a balance between conservation and development. Therefore, the paradigm towards heritage management does not lie in a monument itself but in the surrounding landscape and its cultural-historical value (Feddes et al., 1999).

This notion is supported by the term of the historic urban landscape (HUL). This approach is based on the realisation of heritage caused by interrelationship of natural and cultural, intangible, and tangible, and international and local values present in the city (UNESCO, 2011). Thus, the approach of seeing heritage as an object is shifted toward a broader geographical context.

Janssen et al. (2012) argue that the paradigm shift toward heritage requires a new way of dealing with heritage. Previously, logical positivism, which leads to object assessment and rational approach, is favoured. However, it should move toward social constructivism, emphasising cultural perspective, emotional engagement, and appropriation.

3.1.2 Relationship between heritage management & spatial planning

The relationship between spatial planning and heritage value in the Dutch context was described as heritage as a sector, as a factor, and as a vector (Janssen et al., 2017). Previously, spatial planning and heritage were separated, and the treatment towards heritage was approached individually (heritage as a sector). Later, the approach to investigate heritage leaning towards the urban landscape's holistic context (heritage as a sector). Lastly, it investigates further and deeper in looking towards the story and the meaning behind heritage as a historic urban landscape (heritage as a vector). Even though these different approaches did happen progressively, it does not mean that it replaces the previous approach (heritage as a factor). These three relations between spatial planning and heritage are still happening and it shows how strong heritage value is in urban development and the relation with spatial planning (Figure 38).

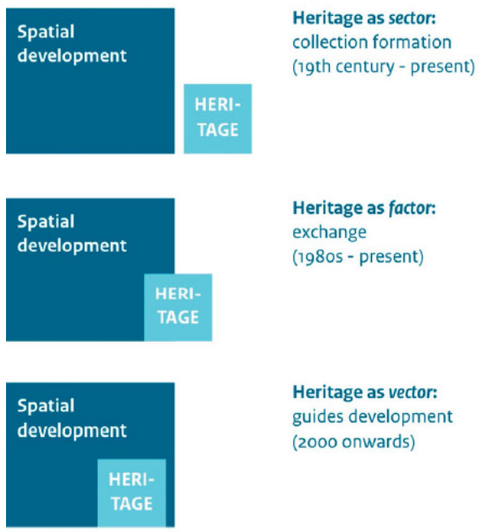


Figure 38. The evolution of Dutch heritage planning nexus (source: Janssen et al., 2017)

3.1.3 Identifying heritage value

To achieve sustainable heritage development by integrating heritage value with spatial planning, it is vital to understand the heritage value in the first place.

Understanding its biography

Heritage is often linked with the word historical, meaning that to understand heritage, we need to know its origin. Landscape biographies introduce the approach to investigate the genesis of heritage landscape through multiple disciplines and approach. Concerning landscape biographies with spatial practice, Kolen et al. (2015) argue that landscape is dynamic and constantly and gradually transformed due to changing spatial practices. First, the history and transformation of the landscape caused by living creatures (human and nature relationships). Second, the memories, experiences, and the meaning of the places themselves to the user involved.

The relevance of landscape biographies with urban practices is essential to understand the actors, events, and effects shaping the urban fabric. It is not a product of accidental events or a highly elaborate development plan (Kolen et al., 2015). However, shaping it has always been an organic process by several actors in a dynamic framework of norms, cultures, attitudes, and values shared by them. Thus, understanding the built environment is about understanding its spatial form and spaces and scaling down to analyse day-to-day social lives.

Understanding its complexities

The traditional way of looking into heritage is the two dimensions of tangible and intangible heritage. However, in practice, the latter is not always a definite and solid values as it is rather a subjective than an objective value. Meurs (2015) argues that the definition of heritage value is not an absolute valuation, but it is more flexible because it is on one's position and perception towards the heritage value itself. Therefore, to understand heritage, Meurs define the heritage value layer as seen in Figure 39.

There are three defining dimensions layer of heritage: age-design value, expert-community value, and object-context value. The first dimension (age-design value) explains the criteria to assess heritage. Some are considered heritage because of its old existence. Some are because of the design value that has a socio-architectural impact. Second, expert-community value explains the users who are involved in heritage. While some heritage could only be investigated by experts, others could be enjoyed by and investigated in a group of people (community). Lastly, the object-context value explains the scale of heritage. A single object could be considered as heritage, in contrast, an area, and its landscape could also hold a heritage value. However, to be considered heritage, one does not need to have every layer mentioned.

Therefore, understanding its heritage value is to understand 1) its form, 2) its users, and 3) the context, which is created by the cause & effect relationship between the first and the second.

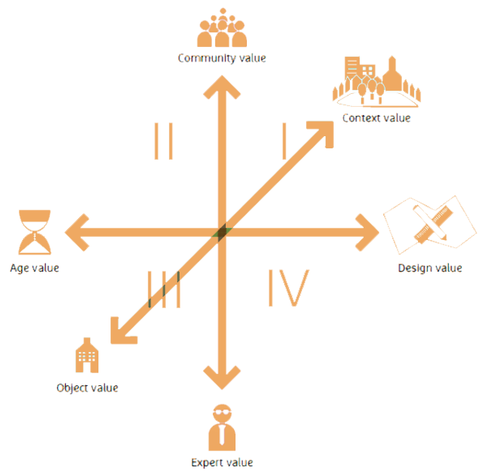


Figure 39. The evolution of Dutch heritage planning nexus (source: Janssen et al., 2017)

3.1.4 Integrating heritage value to spatial planning

After understanding the heritage importance and its value, it is possible to integrate it as a catalyst for urban development (UNESCO, 2011).

Janssen et al. (2012) argue that there are two main reasons why the integration of heritage value and spatial planning is vital (heritage as factor). First, it will provide a foundation of cultural heritage value and act as a designs principle to address the spatial changes. Also, contemporary culture is essential to give heritage a new meaning (Janssen et al., 2012). Second, to see heritage through a future-oriented vision rather than preserving the past vision. There should be room for heritage in the future of the built environment. Therefore, an active intervention should be the answer instead of passive protection of heritage. The term of behoud door ontwikelling (preservation through development) fits this approach (Janssen et al., 2012). This approach for sure will create a sustainable heritage development

Secondly, the bottom-up approach in spatial development is vital in the heritage context (Kolen et al., 2015). As mentioned, he emphasises understanding heritage through the people's daily use. To add, Meurs agrees that the core of heritage value could lie in its community. Thus, it is vital to highlight the bottom-up approach by considering the users as 'ordinary practitioners' when reconfiguring or transforming spatial aspects (Kolen et al., 2015).

Thirdly, Meurs (2015) argues that integrating heritage identity in urban planning means utilising it as a placemaking tool for urban life. Placemaking means strengthening the socio-spatial cohesion between the place and the people, thus creating a people place identity. Van Dorst (2011) argues that liveability is a condition when people appreciate their living place or a perfect match between the people and place. Therefore, promoting people place identity is to achieve liveability in the built environment.

3.1.5 Conclusion

The practice of integrating heritage management in spatial planning is vital in urban development. Utilising heritage value should not be considered a constraint but more as a dynamic exploration of giving a new meaning to the built environment's future. However, the interpretation of heritage value should be a careful process so that translation will not falsify the original meaning.

Based on previous pieces of literature (3.1.3 Identifying heritage), there are three aspects of heritage value that are vital to ensure the correct interpretation of heritage, there are 1) urban form, 2) urban residents, and 3) urban life.

First, urban form represents the physical built environment. identifying urban form means to understand:

- actors design the built environment (Kolen et al., 2015)
- the design value of the heritage urban form (Meurs, 2015)
- spatial system of the built environment

Second, urban residents represent the user of the built environment. Thus, identifying urban residents means to understand:

- community (users) in the built environment (Meurs, 2015)
- user's daily activities (Kolen et al., 2015)

Third, urban life represents the relationship between the built environment and the user. Therefore, identifying urban life means to understand:

- dynamic social events or changes that cause an adjustment in the use of the built environment (Kolen et al., 2015)
- interpretation and memories of the user to the built environment (Kolen et al., 2015)

As mentioned previously, this research aims to integrate heritage value into spatial planning and translate it into spatial design elements. Based on previous literature (3.1.4 Integrating heritage with spatial planning), these are the methods or approaches that should be taken:

1) Preservation through development, means developing the built environment without losing its heritage importance (Janssen et al., 2012). This means that changing of the urban fabric or modification is not restrictied as long as its still carried the heritage value.

2) Bottom up approach, means considering a participation process that involves the user as "ordinary practitioners" in the planning and design process (Kolen et al., 2015)

3) Promoting people place attachment to achieve liveable neighbourhood (Meurs, 2015) (Van Dorst, 2011)

These interrelationships between the literature are described next in the theoretical framework. These pieces of pieces of literature are essential in building the research foundation of this graduation project.

Figure 1. Map of Amsterdam
(illustrated by author)

3.2 THEORETICAL FRAMEWORK

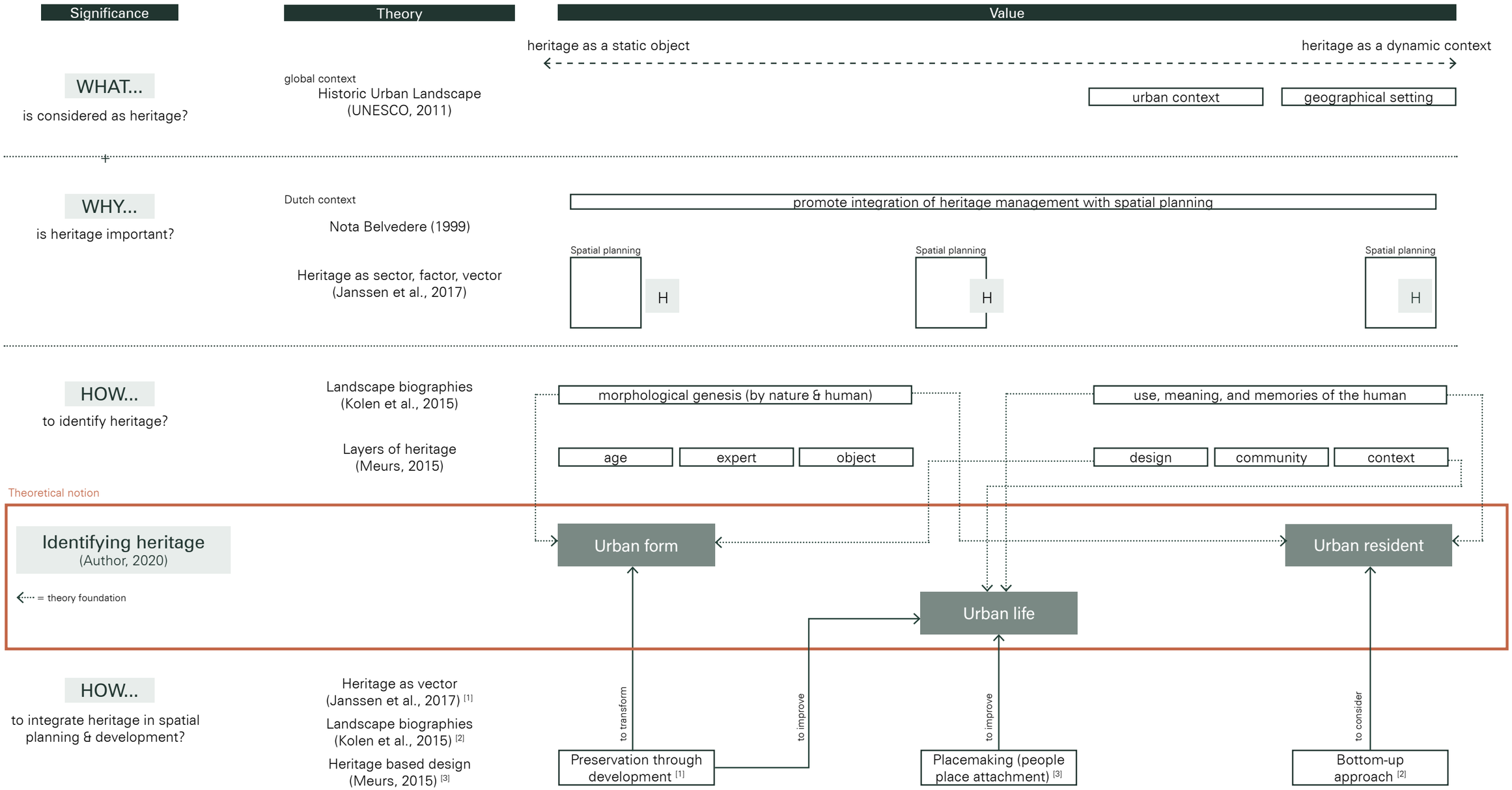
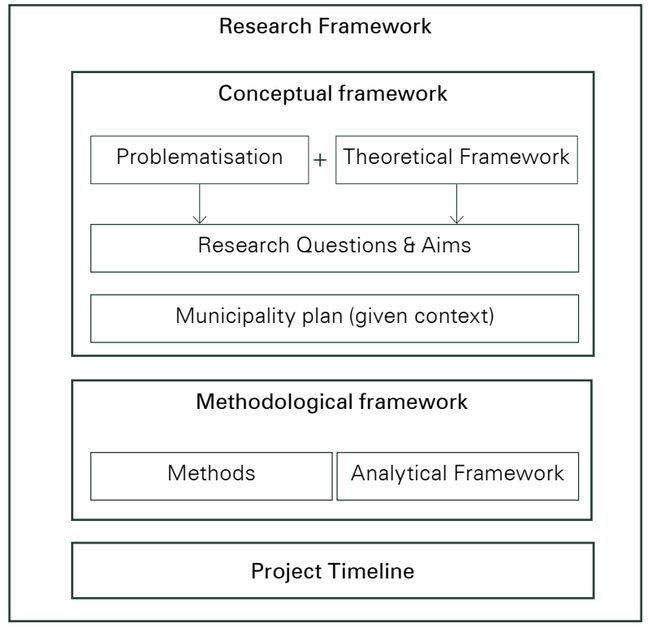


Figure 40. Theoretical Framework
(illustrated by author)

4 STRUCTURES

In this chapter current problematisation in the area is structured in the problem field. Later, the analysis of the present problem creates a clear goal that is translated into research aim. In the last part of this chapter , the research questions are defined.

These thinking processes create clear research aim.
Below is the roadmap in building structure of this research.



4.1 CONCEPTUAL FRAMEWORK

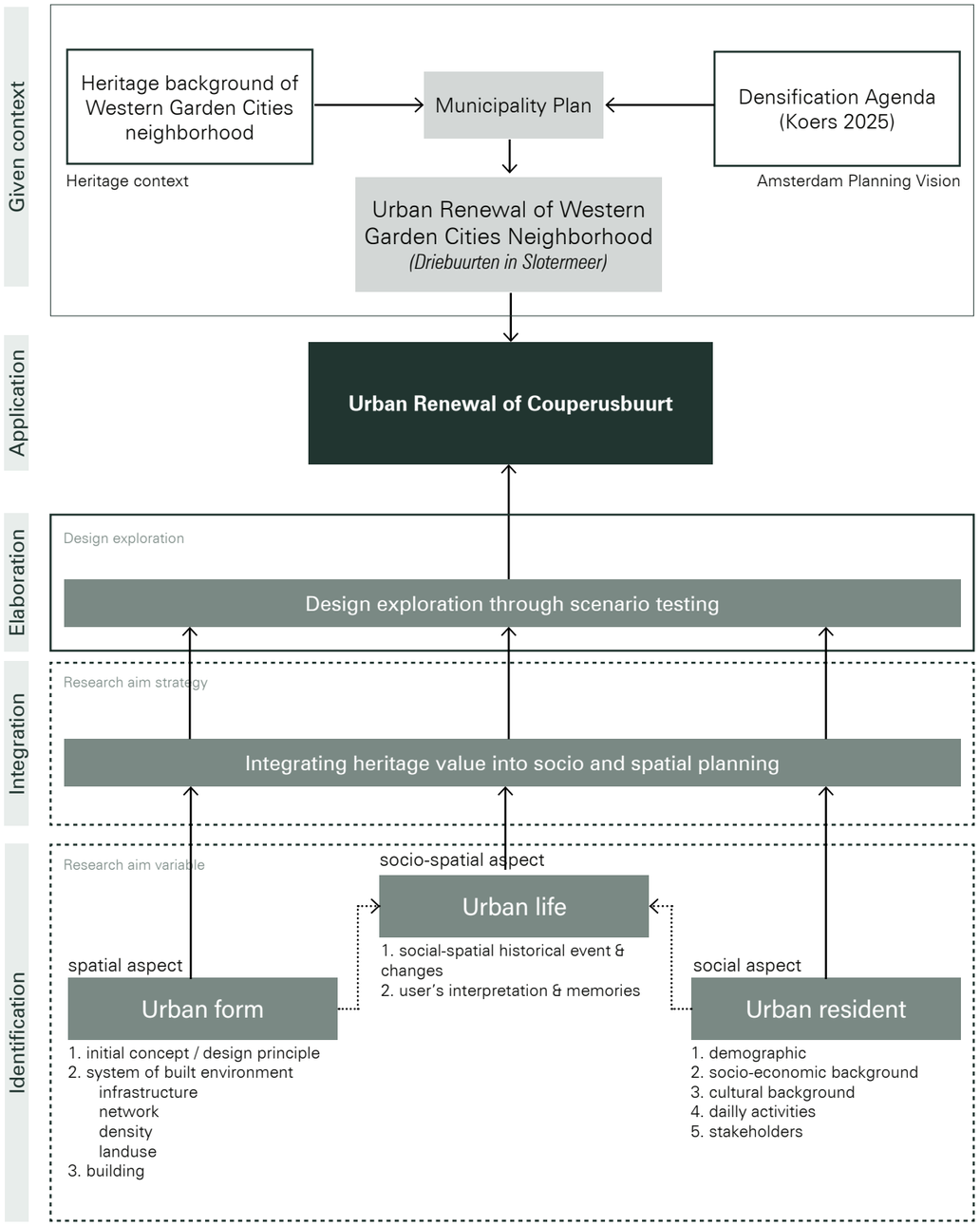


Figure 41. Conceptual Framework
(illustrated by author)

In this chapter, the conceptual framework is built based on the research aim variable (problem & aim) and the theoretical proposition in the previous chapter.

The framework aims to have a clear map and understanding of the researcher's point of view of the strategy to achieve the main research aim.

First, in the top part of the conceptual framework (given context), this research's driving and deciding factors are defined. As mentioned before, there is an ongoing proposal from the municipality of Amsterdam to conduct urban renewal in three neighbourhoods in Slotermeer (Municipality of Amsterdam, 2019). Currently, the plan from the municipality is still very preliminary; thus, this research serves as the suggestion and supporting value to the current municipality plan on the neighbourhood. Therefore, on the lower part of the conceptual framework (research strategy) is the framework that is derived from the relation between the research aim variable, strategy, and the theoretical proposition. The meeting point between the municipal plan and this research is through a "Community-led approach in the preservation & renewal of Western Garden Cities neighbourhood with the case study of Couperusbuurt).

Given Context

The research context is concentrated on the heritage background of Western Garden Cities and Amsterdam's vision planning to densify and provide more housing to the people. Several neighbourhoods in Western Garden Cities have never been renewed since it was first built in the mid-1900s. Therefore, the Municipality of Amsterdam draws a plan to conduct an urban renewal of the Western Garden Cities neighbourhood.

Strategy & core value of research

The research strategy is first built upon the theoretical proposition of identifying the heritage essence of the historic urban landscape, which investigated through the urban form, urban residents, and urban life. The relationship between these three values is inevitable to achieve holistic and coherent heritage management in urban development. Therefore, the relationship between them are analyzed and later integrated into socio and spatial planning for the renewal of Couperusbuurt. The research aim variable and research aim will be elaborated through design exploration by scenario testing.

4.2 RESEARCH QUESTIONS

MAIN QUESTION

How can the renewal plan of Couperusbuurt, which focuses on its heritage importance, provide the design solution to the neighbourhood's demand?

SUB RESEARCH QUESTIONS

(Identification of heritage importance)

SQ1 What is the heritage importance in Couperusbuurt based on its urban form[a], resident[b] & life[c]?

METHODS

Descriptive Research

Analytical Research

EXPECTED OUTCOME

listed values of the heritage importance in Westelijke Tuinsteden (spatial & social)

---

a. What is considered heritage urban form in Couperusbuurt?

- L Literature review
- S Site observation
- D Documentary analysis
- C Cartographic analysis

- L Literature review
- G Spatial mapping GIS
- S Site observation

listed spatial qualities whether the urban form should be preserved or transformed

---

b. Who are the residents of Couperusbuurt and how do they use their living environment?

- SE Socio-economic study
- I Interview
- G Spatial mapping GIS

- G Spatial mapping GIS
- S Site observation

residents needs and their activities in the neighbourhoods

---

c. How does the social changes implicated the spatial elements in Couperusbuurt?

- S Site observation
- D Documentary analysis

- G Spatial mapping GIS
- S Site observation

listed qualities of socio-spatial changes in the neighbourhood and what value should be restored or enhance in the future development

---

(Integration with planning)

SQ2 How can the heritage importance be integrated to the renewal strategy of Couperusbuurt?

- L Literature review
- CS Case study analysis

- ST Stakeholder analysis
- DE Design experiment

concrete spatial design suggestions for the neighbourhood, framework of strategy, toolbox of spatial design elements

---

(Elaboration of design explorations)

SQ3 How does the strategy respond to the various demands of Couperusbuurt stakeholder?

- L Literature review

- SB Scenario building
- DE Design experiment

scenario by design to provide multiple design exploration and as recommendations

---

(Reflection)

SQ4 How relevant is the heritage development strategy of Couperusbuurt be implemented to other urban renewal of Westelijke Tuinsteden neighborhoods?

- L Literature review

- G Spatial mapping GIS

discussion & reflection paragraph & future recommendation for other renewal of Westeljike Tuinsteden

4.3 METHODS

4.3.1 Descriptive Research

The main objective of descriptive research is to collect factual from different field and describe it as it exists in the present condition. In addition, the information's that are collected through descriptive research covers comparative and correlative between existing data and variable. However, it does not go further than the actual phenomenon that is happening, thus the researcher could not manipulate the variable nor the relationship between variables.

In this research project which covers the heritage value of Western Garden Cities, descriptive research will have a major role in defining the heritage importance that lies in Western Garden Cities. Considering structured documentation and rich information that is offered in The Netherlands, the descriptive research (for example) will be conducted through literature and data from the Ministry of Cultural Heritage and also the observation of the current built environment of Western Garden Cities. In addition, the descriptive research also covers the collection of data of the existing situation of Western Garden Cities aside from its historical value, such as spatial mapping, inhabitants data, functions, building condition, and others. To explain further, here are the list of methods and the aim of each method in the descriptive research in this research:

1. Literature Review L

In the literature review, the historical development of Western Garden Cities will be analyzed through the collection of data from books, governmental documents, and public documents. In addition, it also covers the theoretical aspects that built the research aims and questions considering the heritage importance in Western Garden Cities.

2.Site observation S

This analysis will look at the existing built environment of the Western Garden Cities neighborhood and its spatial connection. Also, it covers the current socio-spatial relationship in the neighborhood by observing the people.

3.Socio-economic study SE

Considering the user aspect, a socio-economic study will be conducted to understand the background of the residents in Couperusbuurt also their cultural background which could shape the different needs and requirements of use of the built environment.

4. Documentary analysis D

Considering the heritage and historical value, this documentary analysis will cover historical photographs and if possible historical videos of Western Garden Cities neighborhood as it helps to describe the previous condition of Western Garden Cities and how people used it in the past.

5. Cartographic analysis C

The cartographic analysis will look at the historical mapping of Western Garden Cities whether it is the planning map or the built map.

6. Spatial mapping GIS G

Through GIS mapping, the current urban form of Western Garden Cities along with the function of buildings, density, and the public facilities will be mapped.

7. Interview I

The interview will be conducted with the residents in the Couperusbuurt to understand the need of the people and their perception of the place they are living in today.

4.3.2 Analytical Research

In this research, analytical research is conducted as the follow-up steps from the descriptive research. However, the process does not happen one way, instead, it is more like a back-and-forth process between descriptive and analytical research in order to achieve a concise and thorough analysis for the research. Further explanations about the method and its relation with descriptive analysis will be discussed as listed below:

1. Literature review L

The relationship between theories are analyzed and later formed into the theoretical framework which provides the significance of this research project and helps as the design framework for further steps.

2. Site observation S

Site observation is also included in analytical research as an analysis of the public life will be conducted to understand how people use the spaces. Previously, the data will be collected through descriptive research but the relationship between different variables and the conclusion will be derived in the analytical process.

3. Spatial mapping GIS G

This analysis covers the analysis of calculation which could be conducted through GIS analysis such as the density of the neighborhood, connectivity to public spaces, the ratio of green or open spaces.

4. Stakeholder analysis ST

Considering the aim to achieve socio-spatial cohesion, the stakeholders play an important role that needs to be discussed. Their power and interest relationship should be analyzed and later utilize to build an equal role and contribution in designing the future built environment.

5. Scenario building SB

This analysis is conducted to explore the possibility of the integration between preserving heritage importance value in urban development and the densification agenda and the public life that could be created.

6. Design Experiment DE

Lastly, the integration of all the finding and analysis will be translated into spatial design element through multiscalar design intervention.

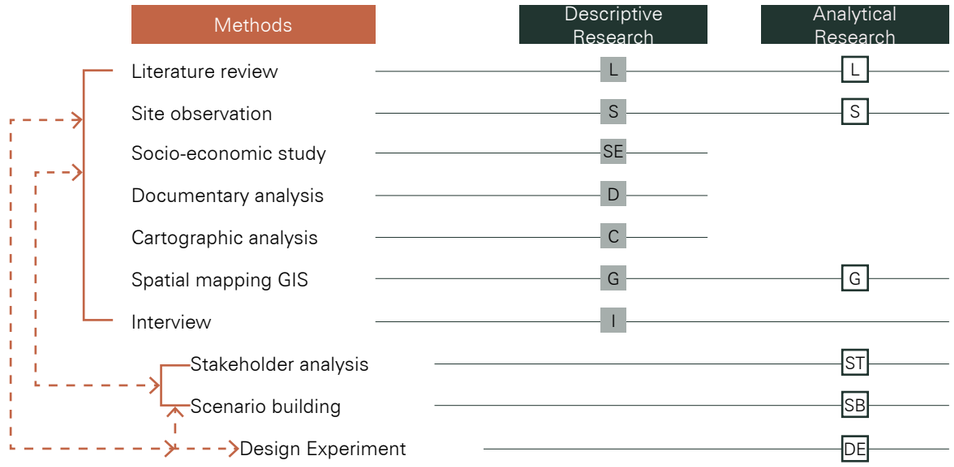


Figure 42. Methods
(illustrated by author)

4.4 METHODOLOGICAL FRAMEWORK

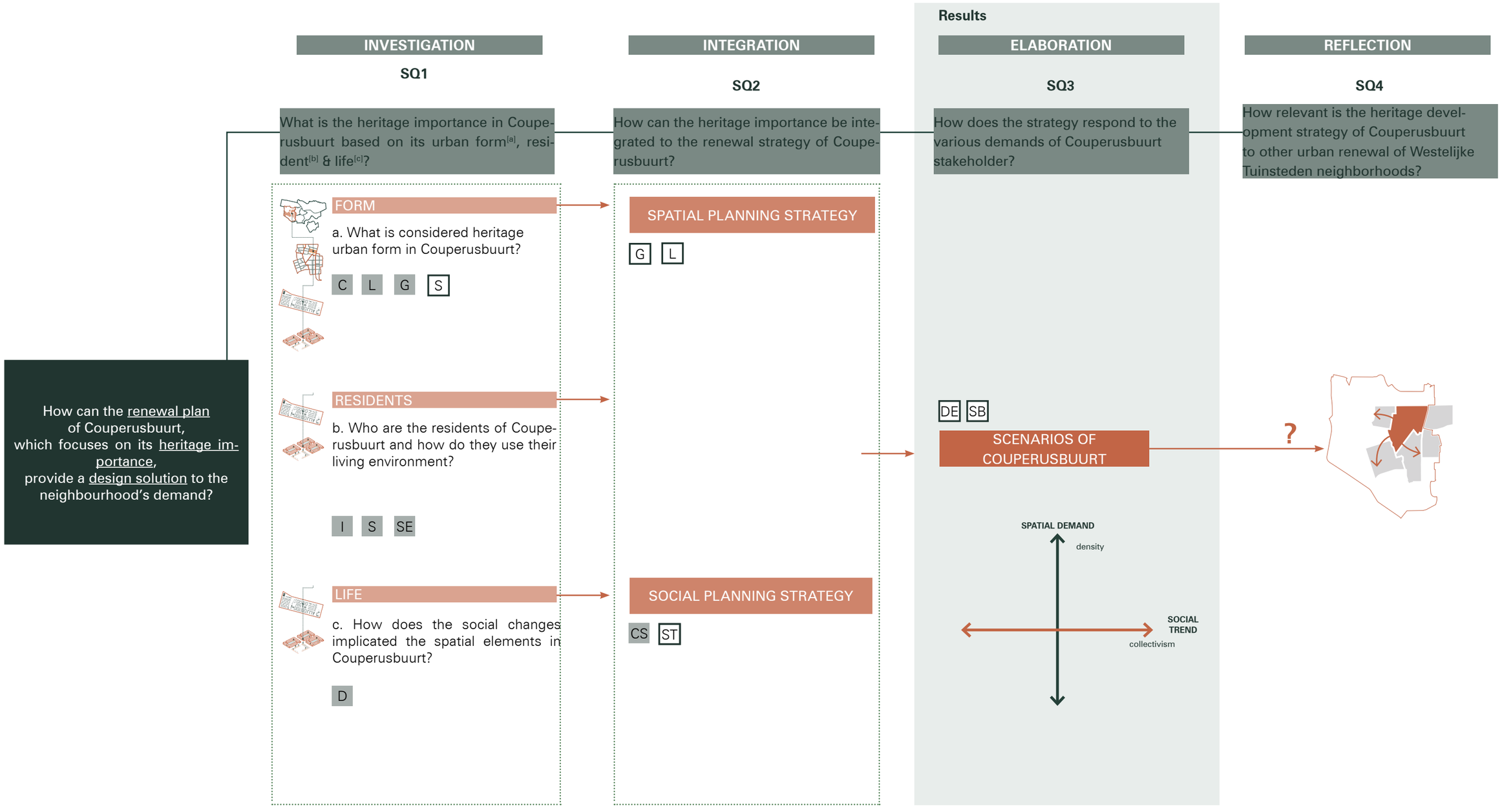


Figure 43. Methodological Framework
(illustrated by author)

4.5 PROJECT TIMELINE

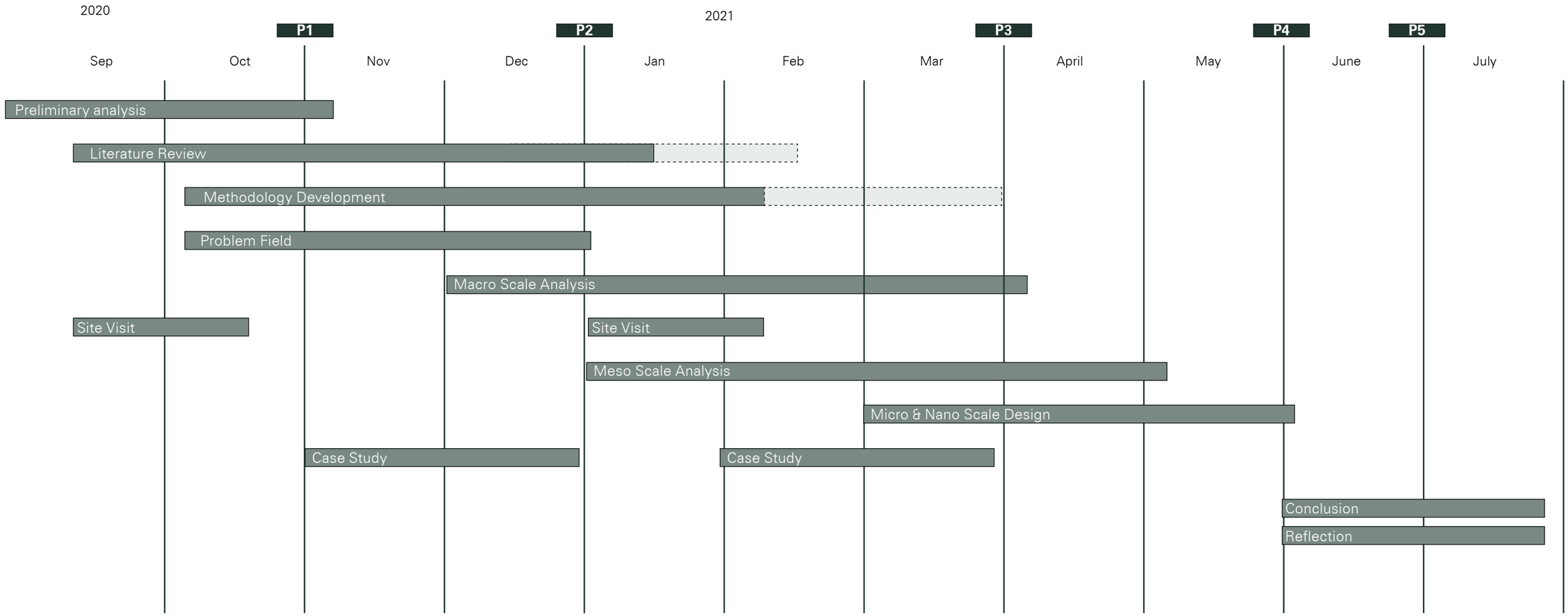
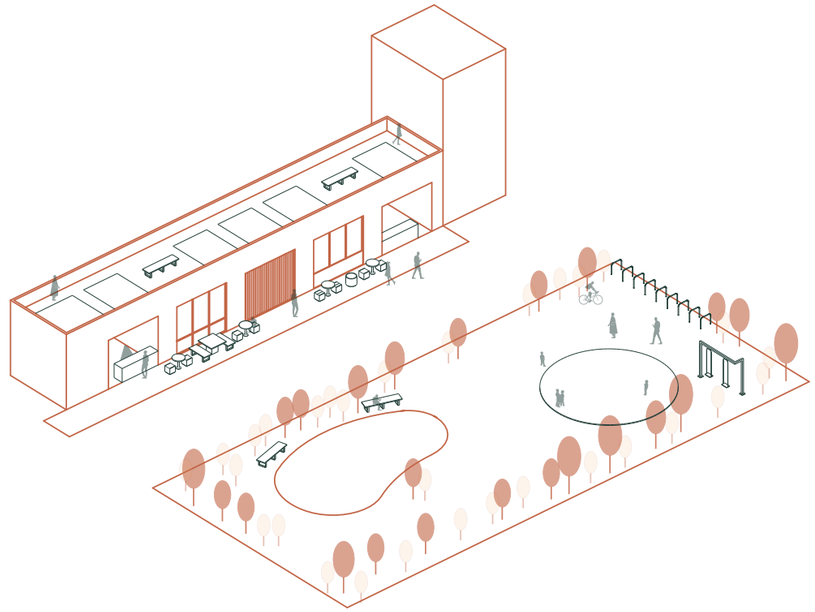


Figure 44. Project plan
(illustrated by author)

5 INVESTIGATION: URBAN FORM

Figure 45. Sloterplas as heart of Westelijke Tuinsteden
(illustrated by author)



The analysis of urban form aims to investigate the urban morphology of the area by looking through its historical development and the current built environment. This investigation aims to assess the value that the urban form holds and its heritage value. Also, this analysis will answer part of sub research question one (SR1a), which is:

"What is considered heritage urban form in Couperusbuurt?"

5.1 CORE STRUCTURE OF WESTELIJKE TUINSTEDEN

In investigating the heritage value of Westelijke Tuinsteden's urban morphology, there have been enormous findings and research done and published. In addition, the Municipality of Amsterdam has also done a heritage valuation of the area (such as building blocks, infrastructure, and building valuation). This investigation will not focus on that; instead, it will focus on the initial concept of Westelijke Tuinsteden and how it has created the built environment today. This step is valuable for this urban renewal project because it is vital to understand how the initial concept could still have room in the future redevelopment of an area without compromising it to fit the future demands.

Westelijke Tuinsteden was built on the concept of lucht, licht, ruimte and the wijkgedachte. These two core values are translated into the state-of-the-art spatial organisation that integrates residential and public function while also promoting the environmental quality of Westelijke Tuinsteden through its abundance of greenery. Figure 47 shows the bird eye view photo of the Westelijke Tuinsteden, which shows a very organised and well-planned built environment. The organisation of this built environment is drawn into a more clear diagram that explains the segregation of function in Westelijke Tuinsteden (Figure 47). Feddes et al. (2011) argue that the green infrastructure holds a vital role in Westelijke Tuinsteden as green has always been substantial through the division of different scales. Figure 47 illustrates clearly how the greenery always penetrates each scale and integrates into other functions (e.g. courtyard in residential building blocks, green strips in neighbourhood).

This research found that the segregation of function (Figure 47) illustrates Westelijke Tuinsteden's core value the best and will use it as the starting point of the urban form analysis. There are two striking values from the diagram that will be analysed, which is the connection of Couperusbuurt to the bigger scale (Sloterplas) and the prominent open building blocks in Couperusbuurt.

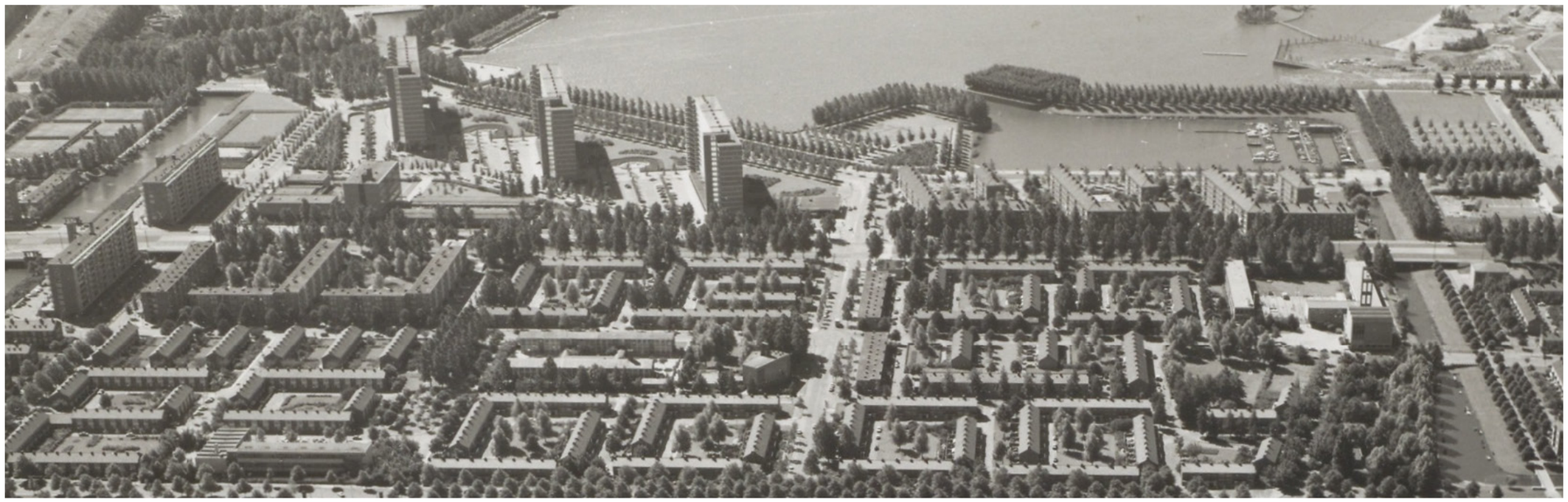


Figure 46. Aerial photo of Sloterplas & Couperusbuurt (derived from Stadsarchief Amsterdam (2021))

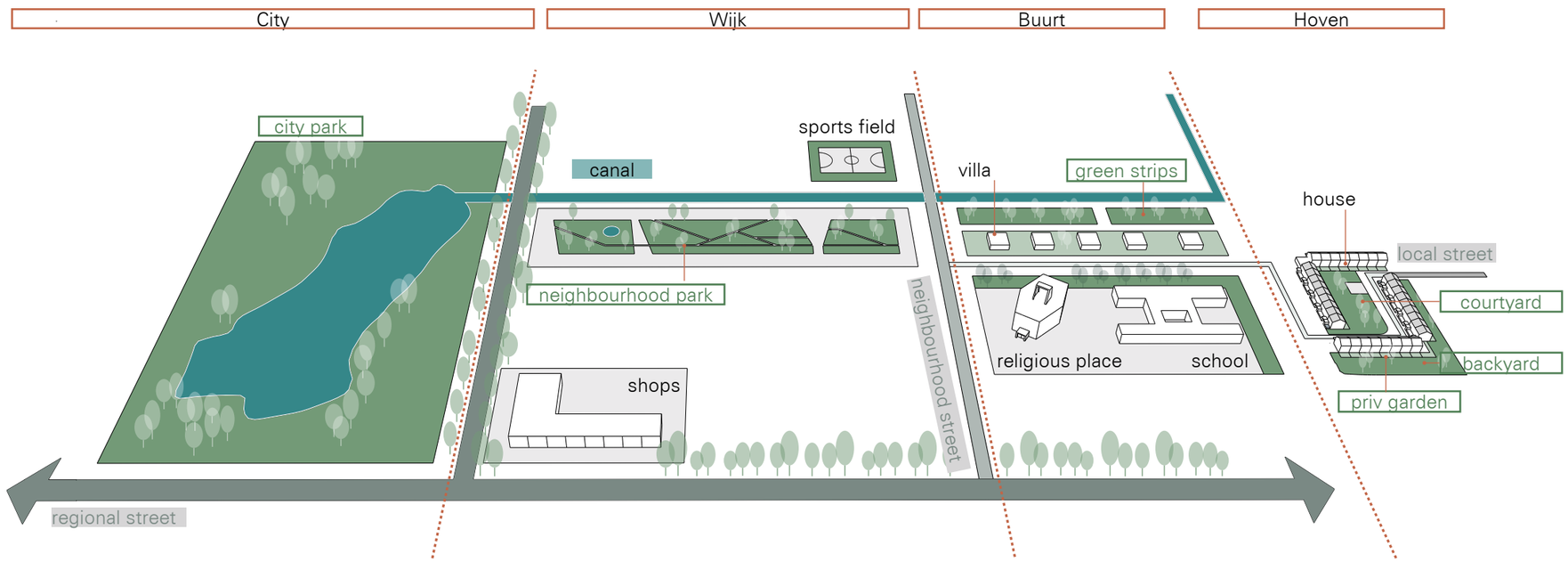


Figure 47. Infrastructure system of Couperusbuurt with green as its main connector. (based on Feddes et al (2011))

5.2 VITAL AXIS TO SLOTERPLAS

Role of Sloterplas

Figure 50 shows the initial plan of AUP with Sloterplas as the centre of the neighbourhoods. This innovative concept is highly appealing. Compared to the old fashioned way of urban planning, which puts a square with the church as its centre, putting a city-scale park is an exciting concept to obtain public function and providing environmental value at the same time. Since it was first built until today, Slosterplas is a very active city-scale park used by many people (Figure 48).

Through Figure 50, it is visible that Sloterplas serves as the heart of Westelijke Tuinsteden which connects to all of the neighbourhoods. The connection from Sloterplas to Couperusbuurt is straightforward, with one straight axis that bridges the park to the centre of Couperusbuurt (Figure 49). In addition, due to the close proximity to the Sloterplas, the axis also has a visual quality for Couperusbuurt itself. Thus, this is a highly significant connection that should be preserved.

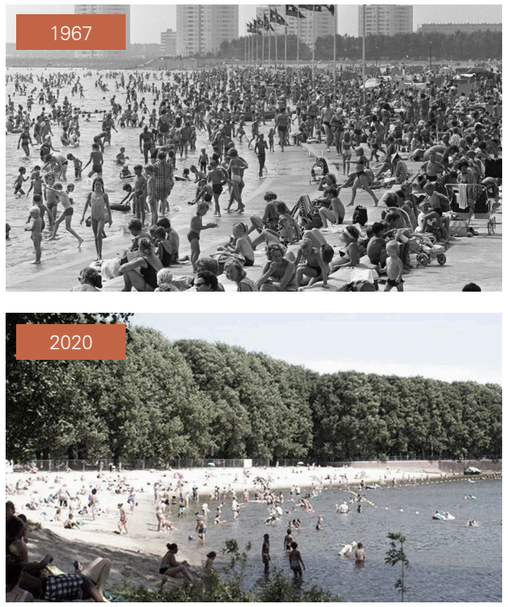


Figure 48. City-scale park of Sloterplas on 1967 and 2020
(derived from Stadsarchief Amsterdam (2021) & taken by Vente (2019))

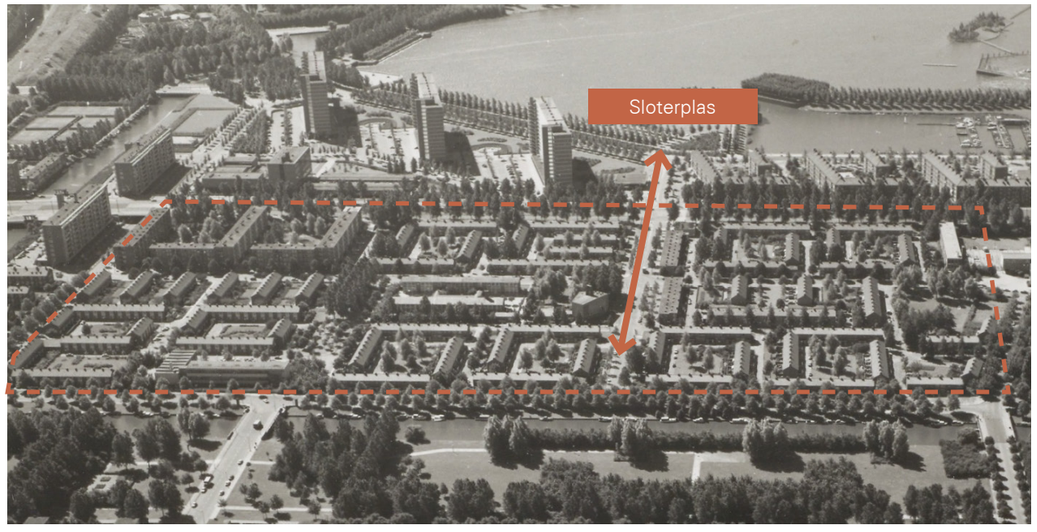


Figure 49. Sloterplas as heart of Westelijke Tuinsteden
(illustrated by author)

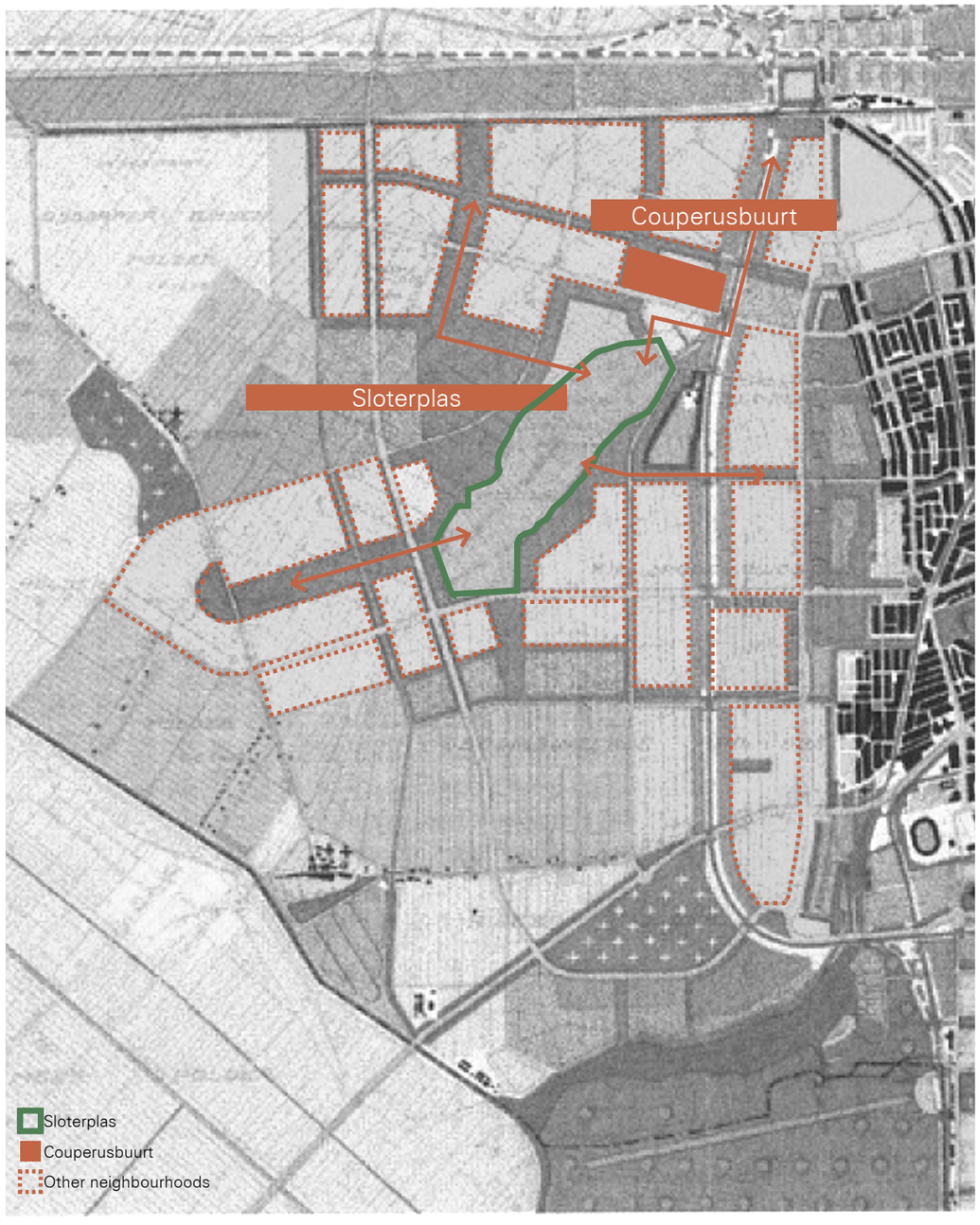


Figure 50. Algemeen Uitbreiding Plan 1934
(derived from Steenhuis et al., 2017)

Sloterplas to Slotermeer

Figure 52 shows the landuse plan of Tuinstad Slotermeer in 1939. In this drawing, a connection between Sloterplas to Couperusbuurt is present with the strips of shops. It continues to connect to a more extensive structure of public function in the north., as seen in the more detailed plan in Figure 51. However, the strip of public function has been adjusted in the realisation of Couperusbuurt. Instead of a strip of shops, the public functions are put into the east-west side of the axis. Despite that, it still has a connection to the more prominent public function building in the north.

In conclusion, this axis also holds a significant social value by having an active street for people to meet and promote social activities. This is the quality that should be preserved in the future renewal of the neighbourhood.

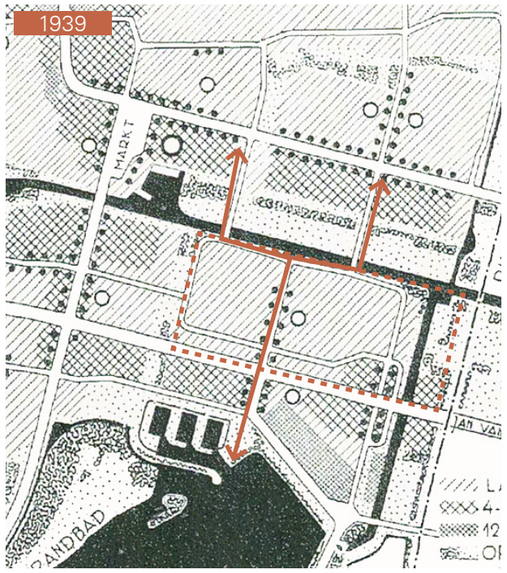


Figure 52. Tuinstad Slotermeer Landuse & Network Plan 1939
(derived from Steenhuis, et al., 2017)

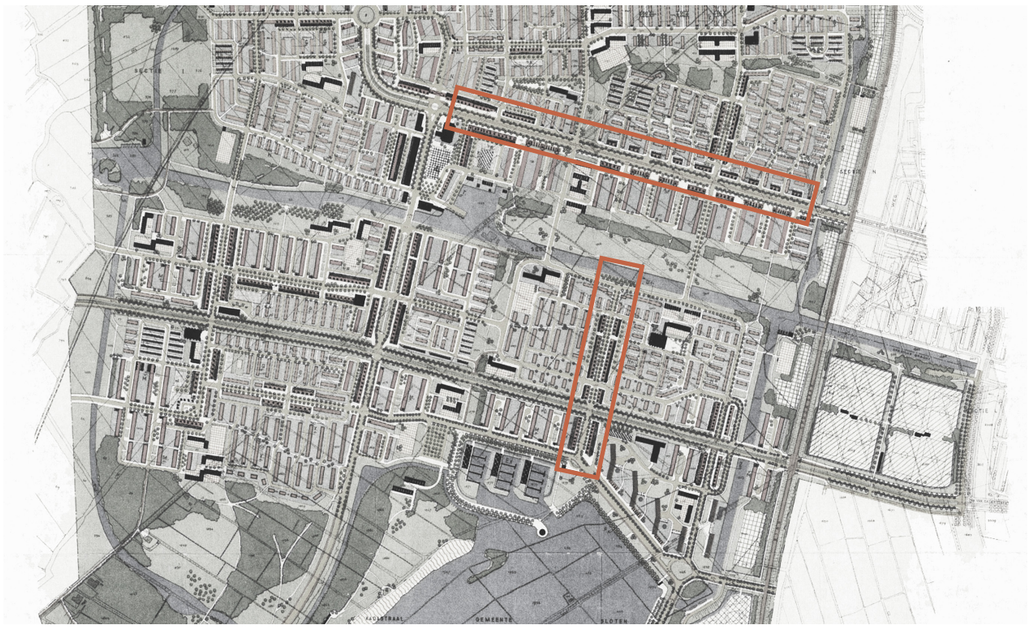


Figure 51. Tuinstad Slotermeer Landuse & Network Plan 1939
(derived from Steenhuis, et al., 2017)

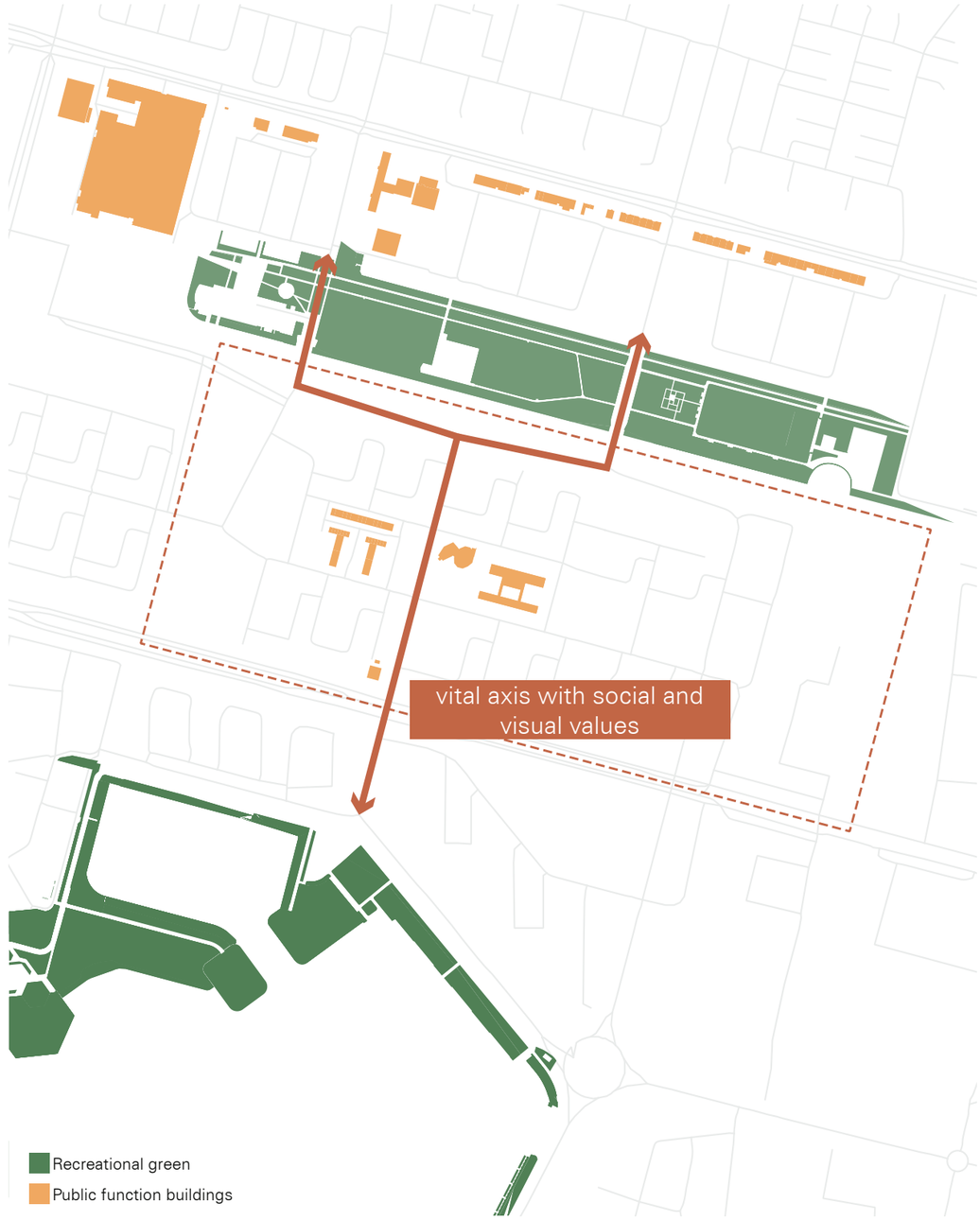


Figure 53. Vital axis to Sloterplas
(illustrated by author)

5.3 OPEN BUILDING BLOCKS

5.3.1 Connectivity to green infrastructure

Another distinct feature of Westelijke Tuinsteden is the state-of-the-art open building blocks. Figure 56 shows the building typology in Couperusbuurt and its surrounding neighbourhoods. The substantial value that could be gained through this morphology is the penetration of green infrastructure to all of the building blocks. The connection between the green creates a distinct hierarchical function that ensures green through the different scales (Figure 54).

In Couperusbuurt, several typologies of open building blocks present, with some are valued more than others (based on Gemeente Amsterdam valuation) (Figure 55). Although they have several typologies, all of them are always connected to the more prominent green infrastructure. Thus, this transparent connection to the greenery is the quality that should be preserved in the renewal of Couperusbuurt.

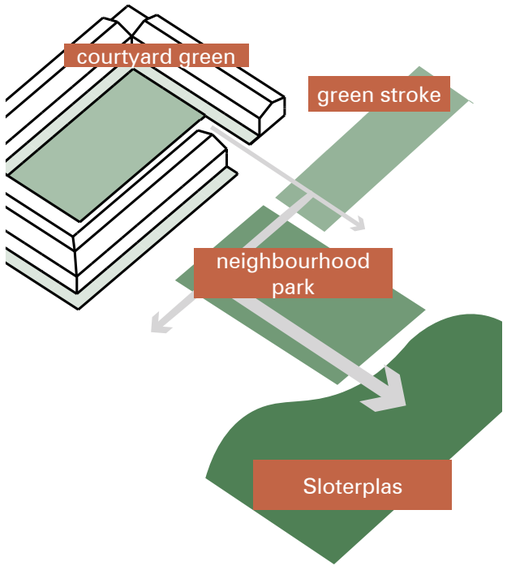


Figure 54. Connectiveness of open building blocks to greenery (illustrated by author)

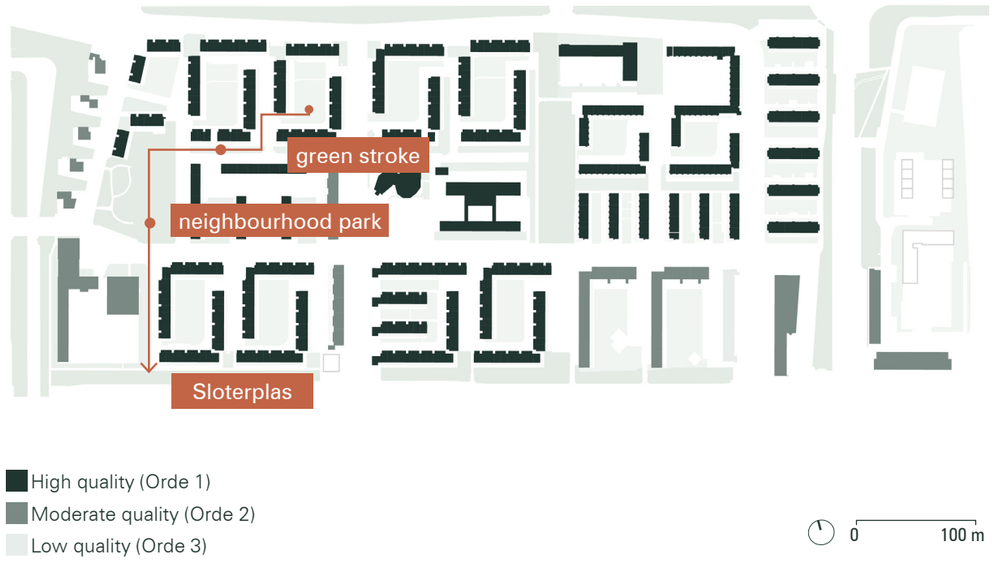


Figure 55. Building blocks valuation in Couperusbuurt
(illustrated by author, based on Gemeente Amsterdam (2020))

Figure 56. Building blocks typology in Couperusbuurt & surrondings
(illustrated by author)

5.3.2 Transparency of activities

Post-war neighbourhoods in the Netherlands always have distinctive characteristics of repetition and rhythmical organisation. In Westelijke Tuinsteden, especially Couperusbuurt, the beautiful repetition and organisation of the open building blocks is prominent. This organisation has created a unique visual value not only for the building itself but also the landscape of the neighbourhood. The arrangement of the building blocks creates a hierarchical visual value of the present greenery in the courtyard to other greenery (as could be seen in Figure 57). Therefore, the segregation of function and the connectivity of its green infrastructure is very apparent, as mentioned by Feddes et al. (2011).

In the problem chapter, it is mentioned that greenery in Amsterdam is threatened due to densification. Thus, the densification plan in Couperusbuurt should consider the quality over quantity of the greenery and its visual value. In conclusion, this is the quality that should be preserved.

Figure 57. Continuity of Visual Greenery
(taken and illustrated by author)

5.3.3 Continuity of visual greenery

Previously, the regular morphology of urban blocks in city planning is the closed building blocks typology. In closed building blocks, the outer and inner side have different characteristics—entrance to houses located in the outer, while activities are happening inside. AUP tried to eliminate the differentiation and aims to create equal opportunities for activities through openness and transparency of the open building blocks (Figure 58) . This typology creates more social engagement possibilities that could happen within the inside and outside of the building blocks.

In designing the building blocks of Westelijke Tuinsteden, Van Eesteren and his team did a substantial study of other garden city neighbourhoods in Europe (particularly in Denmark) which later become the main inspiration for the open building blocks concept (Steenhuis, 2017). Figure 59 shows a part of the notebook from their excursion, showing how the courtyard in the middle of the building blocks has a social function in the courtyard rather than just an open green courtyard.

Through this analysis, it is apparent that promoting outdoor activities and social engagement has always been there since the beginning process of the AUP. Therefore, it could be concluded that the heritage value that the open building blocks has is not limited to their physical form but also their social value.

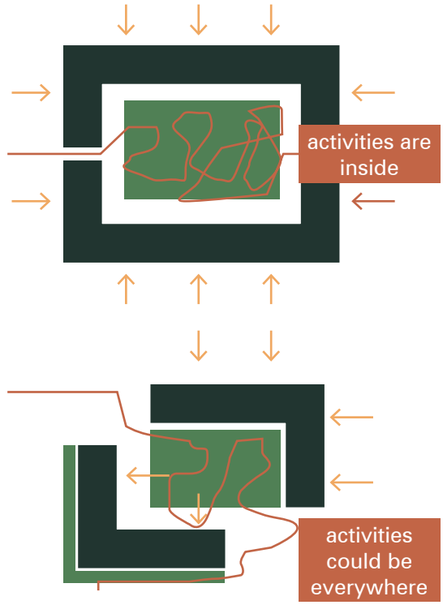


Figure 58. Closed & open building blocks
(illustrated by author)

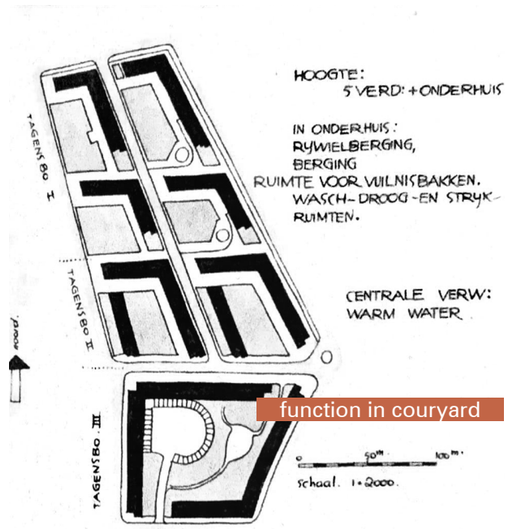


Figure 59. Function in courtyard in Garden Cities Denmark
(derived from Steenhuis et al. (2017)

5.3.4 Typology of Open Building Blocks

In providing lucht, licht, and ruimte, exploring the morphology of open building blocks is limitless. Therefore, several building blocks typologies are evident in the neighbourhood, as mentioned previously. Feddes et al. (2011) categorise the typology into four types which are open building allotment (havenverkaveling), hooked allotment, strip allotment (stroke allotment), and combination of hooked & strip allotment.

Figure 60 shows the different spatial arrangement and connection between the building and the green infrastructure. The distinct differences between these typologies are the public-private green arrangement. However, all of the typologies contain the shared value of having green infrastructure directly to the houses so that every building has direct access to the greenery. This is an important quality that is considered heritage and should be preserved.

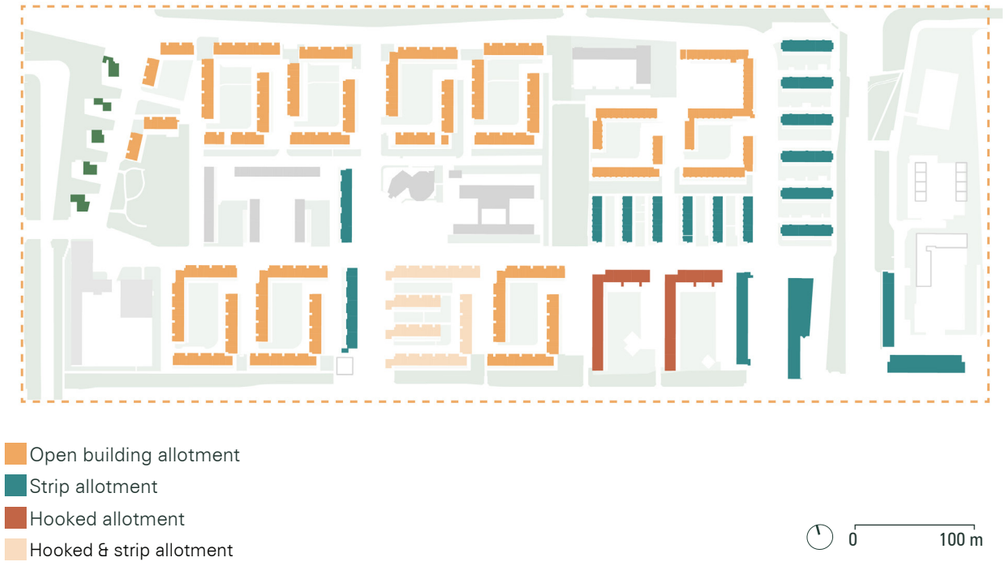


Figure 60. Building blocks typology in Couperusbuurt
(illustrated by author, based on Gemeente Amsterdam (2020))

Characteristicts	Spatial form
Open building allotment This typology dominates in Couperusbuurt. The outer of the blocks is used as the private green as well as public green. The inner courtyard provides a public garden for the residents as the extension of their backyard and front yard.	Public green / Private green
Hooked allotment The morphology of these blocks is similar to the open building blocks. Compare to the previous one, the private green space in this typology is not directly connected to the streets; thus, it makes the area more private than the open building blocks.	Public green / Private green
Strip allotment The allotment is the most simple of all the building blocks, with only a long building next to green private and public spaces. Like the hooked allotment, the private green is also exclusive for the residents only.	Public green / Private green
Hooked & strip allotment This typology is the combination of hooked and strip allotment, which creates an interlocking building system. Similar to the open building blocks, one of the entrance building is facing the private green area of the building on the right side.	Public green / Private green

Figure 61. Quality of building blocks typology
(illustrated by author)

5.4 BUILDINGS

5.4.1 Buildings Function

The concept of segregation of function in Westelijke Tuinsteden ensures public space through the city to neighbourhood scale. Therefore, in Couperusbuurt, there are prominent public function building such as school, church, mosque, shops (Figure 62).

As mentioned previously, there was an important axis that connects Couperusbuurt to surroundings (Figure 63). However, the public function now in Couperusbuurt are scattered, which creates a less apparent north-south axis as intended. Therefore, in the renewal plan, the organisation of public function should highly consider this axis to create a more apparent division of highly public and private area in the neighbourhood, as the AUP intended.

Figure 63. Intended public axis in the neighbourhood
(edited by author, derived from Steenhuis (2017))

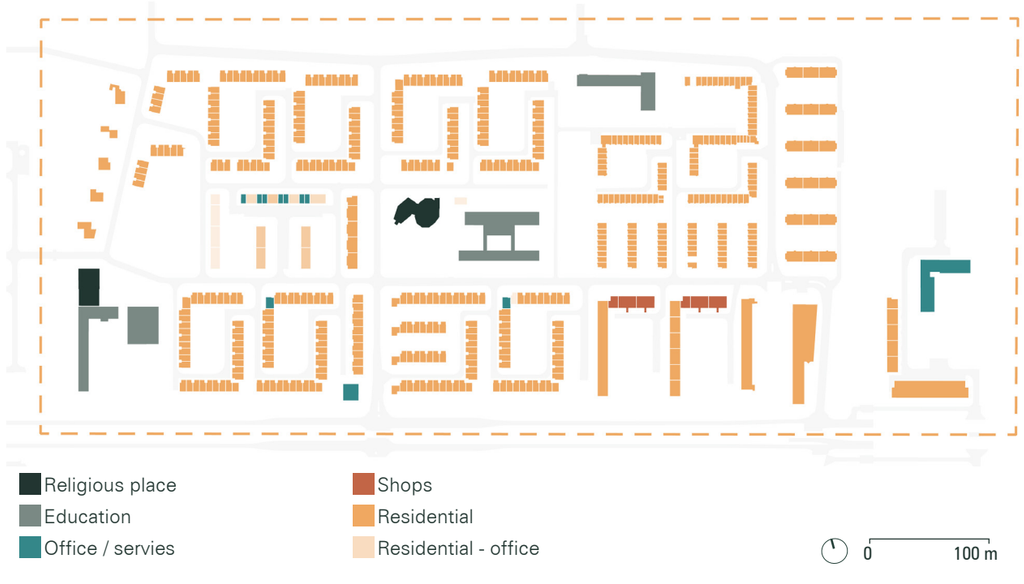


Figure 62. Map of public functions in Couperusbuurt
(illustrated by author, based on Gemeente Amsterdam (2020))

5.4.2 House Typology

The physical houses in Couperusbuurt are not the centre value of its heritage form, but the spatial organisation of the blocks is. However, it is vital to analyse the typology of the house to understand the current living condition. The goal of this renewal is to provide a better built environment and add more houses.

Several housing typologies include duplex houses, apartments, townhouses (rijtsjeshuis), and detached houses (Figure 64). However, among all, the presence of duplexhouses are prominent compare to the others. Most of the social housing rental in the neighbourhood (owned by Stadgenoot) are duplexhouses.

Based on Gemeente Amsterdam (2019), the residents of Couperusbuurt are not satisfied with the current living area provided for the household's capacity, which is mostly happening in the duplex houses. Therefore, the renewal plan itself is targeted toward refurbishing these duplexhouses, which will be investigated next.

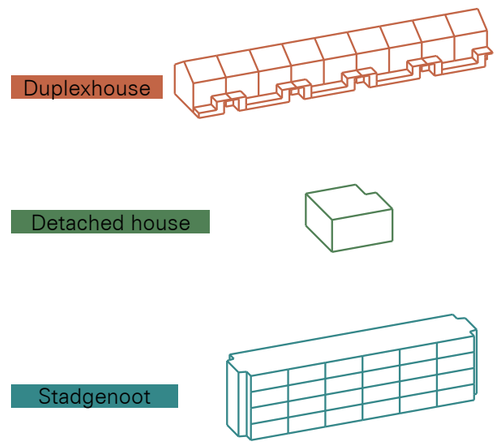


Figure 64. House typology
(edited by author)

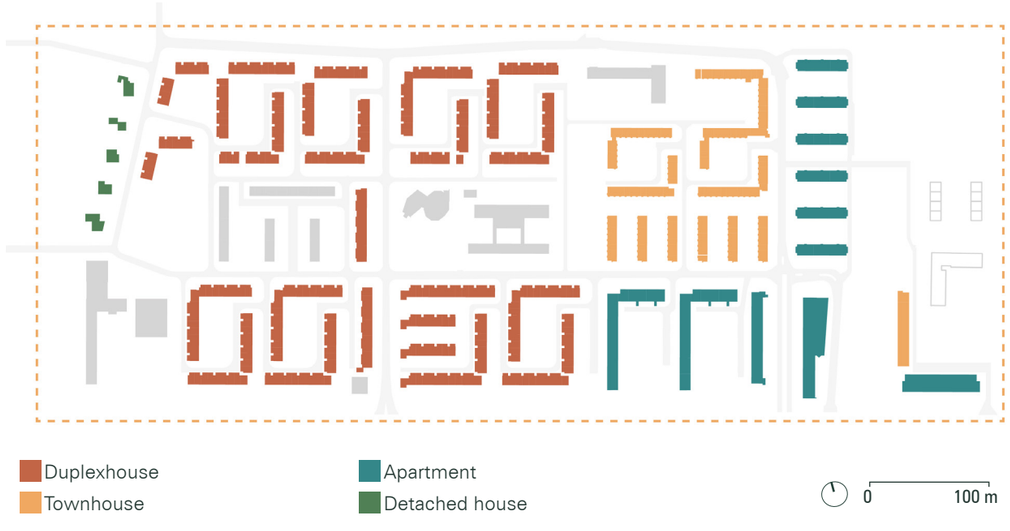


Figure 65. House typology in Couperusbuurt
(edited by author)

5.4.3 Duplexhouses

Initially, the duplexhouses were created to answer the rapid urbanisation in Amsterdam in the early 20th century. The main concept of duplexhouses is to provide a practical solution for expanding family who needs more space while providing individual privacy at the same time (Figure 66). The house has two stories, and the intention was to have the flexibility to adjust the room layout to fit more bedrooms. However, due to the pressure of housing needs post World War II, these houses were never used as it was intended.

Currently, the duplex houses have two different household on each floor (Figure 67). Each duplex house is mirrored to each other, with joined entrances. Thus, one entrance is shared with four different households (Figure 68). This situation has created some issues regarding the lack of space and nuisance due to the shared main entrances (Figure 67) (further analysis will be explained in the urban life chapter) (Gemeente Amsterdam, 2019). Therefore, the renewal should focus on the problematic condition of these duplexhouses.

Figure 67. Shared households in one house
(taken by author)

Figure 68. Shared entrance with other households
(taken by author)

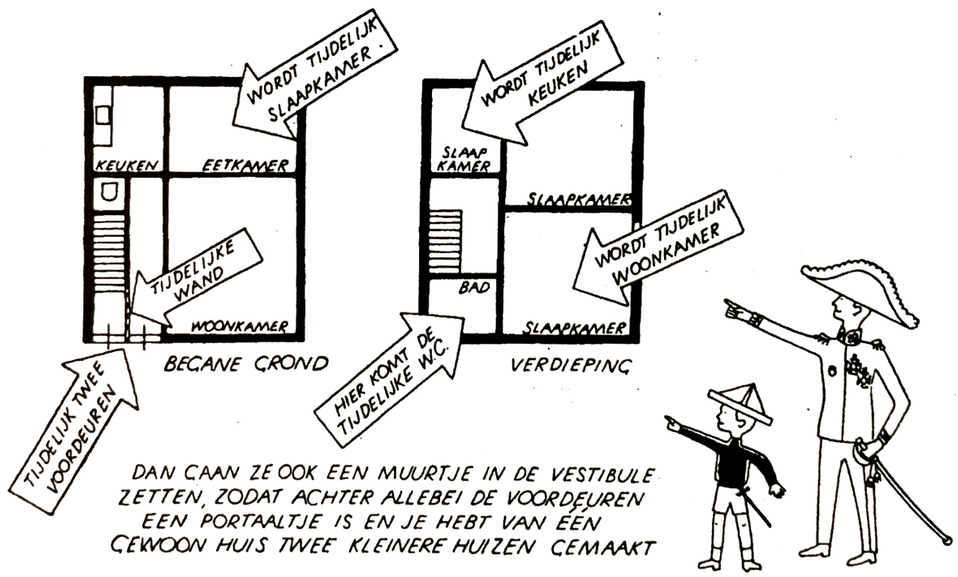


Figure 66. Initial concept of duplexhouse
(derived from Nio et al. (2017))

Figure 69. Initial plan of duplexhouse
(illustrated by author)

Figure 70. Current plan of duplexhouse
(illustrated by author)

5.6 CONCLUSION

The investigation of urban form was made to answer the research question 1a, which is:

"What is considered heritage urban form in Couperusbuurt?"

The investigation of urban form shows a distinct characteristic of Westelijke Tuinsteden form is highlighted through the concept of segregation of function. In Couperusbuurt, the concept is translated into two essential values, which are 1) the vital axis to Sloterplas and 2) open building blocks. These are the heritage urban form that is substantial in Couperusbuurt. However, the investigation shows that the heritage's significant meaning was not entirely focused on the spatial form itself but also on how these two values promote social engagement, activities, and environmental value in the neighbourhood. Thus, this research wants to highlight that the heritage importance does not lie in its solid urban form but more for the meaning and the intention of the spatial organisation. In conclusion, it is vital to understand that the renewal should not be restricted to its form but rather for the opportunity of social engagement that could be created.

In addition, the buildings in Couperusbuurt were also investigated. The buildings do not specifically hold a vital heritage value. However, the investigation found that the renewal should pay close attention to the current quality of the outdated houses, specifically the duplexhouses. Therefore, the duplexhouses are part of the urban form in Couperusbuurt that should be transformed or renovated.

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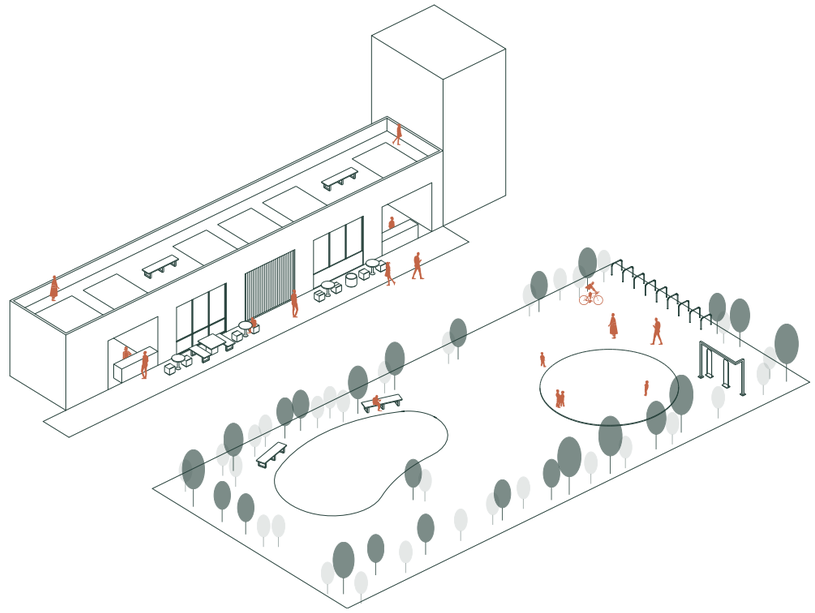
6 INVESTIGATION: URBAN RESIDENTS



This chapter will investigate the residents in Couperusbuurt in order to answer sub research question 1b (SR1b), which is

"Who are the residents of Couperubuusrt, and how do they use their living environment?"

The findings are built based on observation, literature review, and interview with the residents. However, the interview was not done by the author. The circumstances with Covid-19 and limitation with language hinder the intention to discuss with the residents. Luckily, a group of researcher from Vrije Universiteit Amsterdam led by Ivan Nio was also researching the neighbourhood. Therefore, the result of the interviews is used in this research.

6.1 GENERAL BACKGROUND

6.1.1 Introduction

Amsterdam Nieuw-West is the home to 18.35% of Amsterdammers and the most populous district in Amsterdam (CBS, 2021). In general, Westelijke Tuinsteden is denser compare to most districts, especially in Slotermeer (Figure 71). The Westelijke Tuinsteden was built for Amsterdam's workers and their family in the 1960s (Gemeente Amsterdam, 2013). However, who are the people that live in Westelijke Tuinsteden today?

Nio et al. (2016) mentioned that there are six groups of urban residents in Westelijke Tuinsteden. They are 1) local residents, 2) Western immigrant, 3) non-Western immigrant, 4) new residents, 5) hybrid residents, and 6) students. Among these groups, three groups are evident in Couperusbuurt; they are 1) local residents, 2) immigrant background residents, and 3) students (Nio et al., 2021). Local residents are the first people who moved to the neighbourhood during the 1960s and stayed until now. Second, immigrant background residents are the most prominent in the neighbourhood. These residents are prominently Moroccan and Turkish—lastly, students or starters at the age of 28.

In Couperusbuurt, there are three distinct groups which are residents, immigrant background residents, and students. The diversity has created several conflicts in achieving social cohesion in the neighbourhood. Most of the immigrant background residents are families who live in duplex-houses. It is one reason why Couperusbuurt has a high density by population number compared to other neighbourhoods and Amsterdam (Figure 72).). Some households have two children but with only little space to move (Gemeente Amsterdam, 2019). Therefore, some residents have complaints regarding the nuisances of the children on the upper floors (Nio et al., 2021). In addition, there are some other conflicts between these groups, as it could be seen in Figure 73. Therefore, the following steps will discuss the residents' backgrounds, needs, and how they use their space to understand what binds them and divides them.

Amsterdam Nieuw West

160124 inhabitants
18.35% of population in Amsterdam

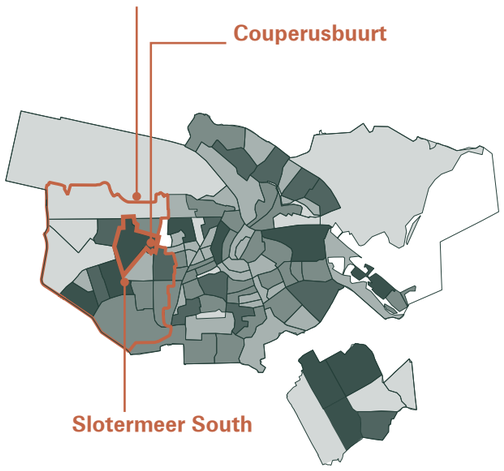


Figure 71. Population spread in Amsterdam by neighbourhoods (illustrated by author, based on Gemeente Amsterdam (2020b))

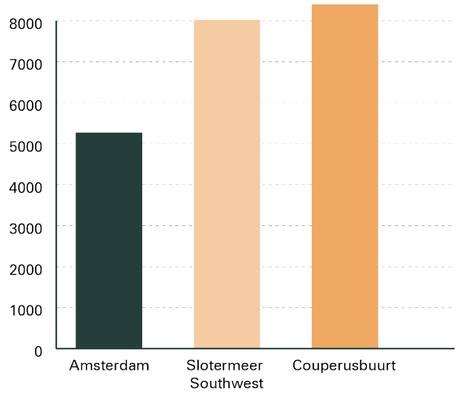


Figure 72. Density by population (illustrated by author, based on Allecijfers (2021))

6.1.2 Social growth in Couperusbuurt

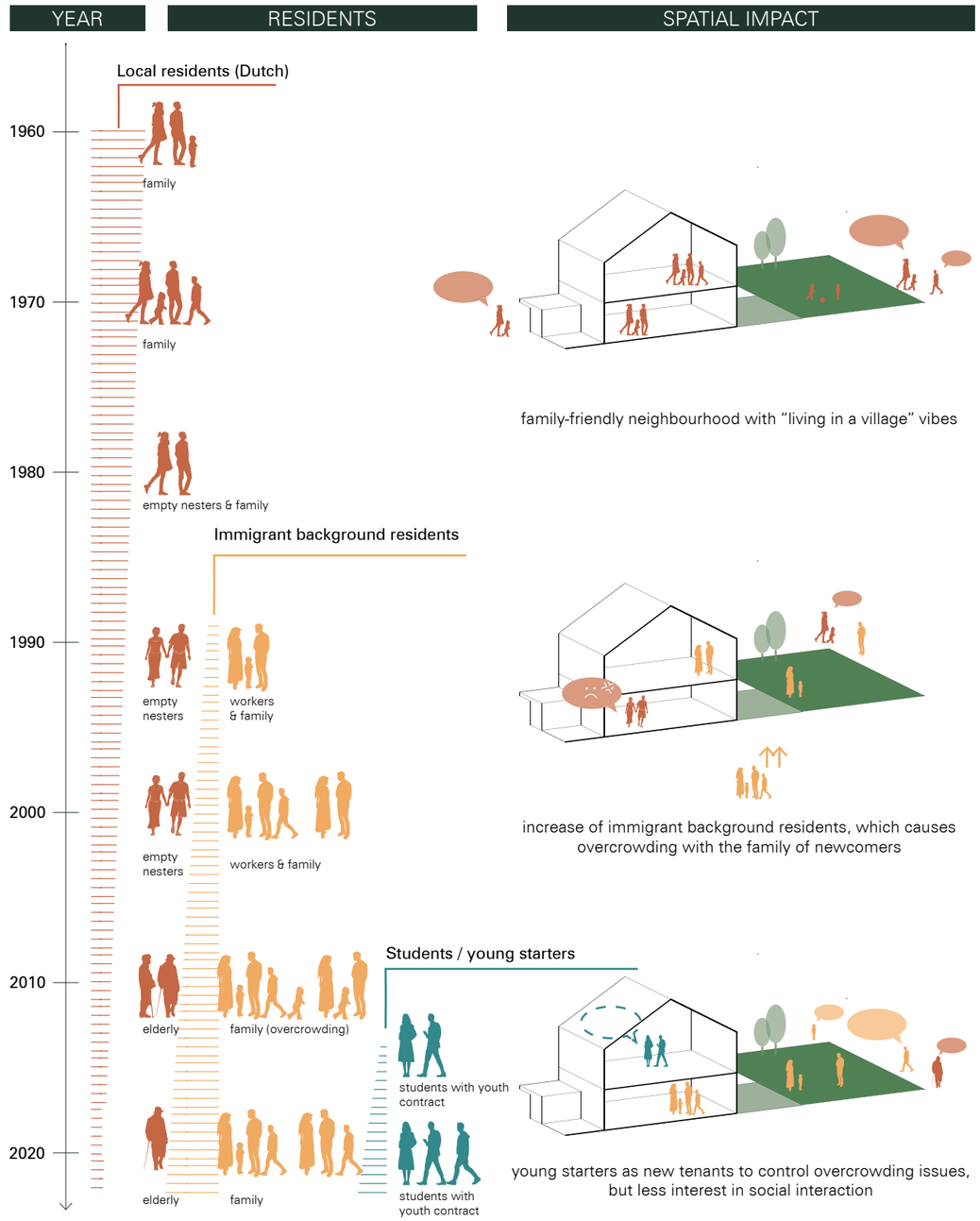


Figure 73. Social dynamic in Couperusbuurt (illustrated by author, based on Nio et al. (2021))

Dominant of family household

As expected, the most present group of residents are the family either with or without children. The neighbourhood has always been built to accommodate these audiences. However, the absence of renewal has left them unsatisfied with the facilities in the neighbourhood—for instance, lack of playground or child-friendly area, which cause them to create an impromptu outdoor playing area (Figure 76).

An increasing number of young adults

As mentioned previously, there are a prominent amount of young starters and students in Couperusbuurt. Figure 74 shows the age of the population in Couperusbuurt, and it shows a significant number of people between 25-45 years old. One of the main reasons is the housing corporation's attempt to rent the houses to minimise the overcrowding with family in Couperusbuurt. Offering opportunities to rent houses to students or young starters will reduce the neighbourhood's spatial pressure and increase the diversity in the neighbourhood. Most of these resident groups are in the youth contract term, which means that their rental only could be effective for five years. Therefore, in the renewal plan, the needs of these residents have to be highly considered because the presence of these groups is vital for the neighbourhood's diversity.

An increasing single household

There has been an increase of single household in Couperusbuurt because of the students and starters (Figure 75). It is another aspect that is essential to be considered in the renewal plan. Westelijke Tuinsteden was built on the concept of the neighbourhood for family. However, now the target audiences have been shifted. Thus, it is vital to understand their lifestyle and daily needs to create a suitable living environment for this group without compromising others' need. In general, Couperusbuurt should offer more diversity of facilities and opportunities for activities.

A considerable group of elderly

The presence of the elderly is not high as others; however, this is another vital resident group to be considered. Most of the elderly are the local Dutch who have lived in Couperusbuurt since the beginning. Their attachment to the neighbourhood is the strongest, and in some cases, they are the main actor which binds the residents. The interview by Nio et al. (2021) explains that 79-year-old residents act as the 'father' of the neighbourhood in one apartment. While other residents do not really have a conversation or even know their neighbour, they sure know the 79-year-old man. He has lived in Couperusbuurt for four decades, and he takes charge of controlling the living environment by reminding people to put garbage correctly.

In conclusion, this group of residents is generally caring about their living environment and actively involved to ensure the quality of their living environment by having a social interaction with others. Thus, the renewal must also accommodate the needs of this specific resident group so that Couperusbuurt is the neighbourhood that they want to live in.

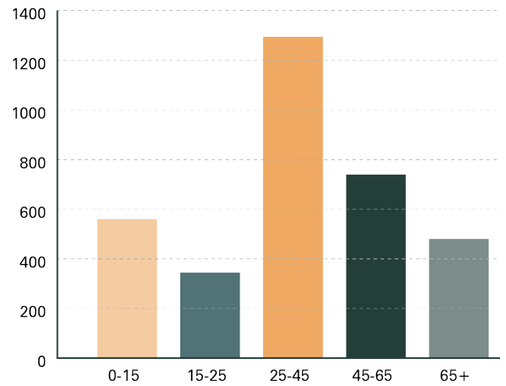


Figure 74. Population by age in Couperusbuurt
(illustrated by author, based on Allecijfers (2021))

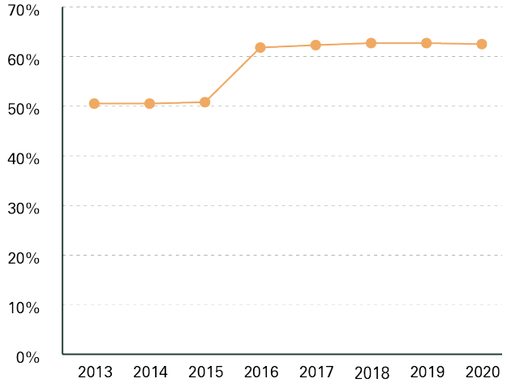


Figure 75. Single household growth in Couperusbuurt
(illustrated by author, based on Allecijfers (2021))

Figure 76. Single household growth in Couperusbuurt
Illustration by author.(data source: allecijfers.nl)

A NORMAL DAY IN COUPERUSBUURT

Through the eye of Sanne
Summer, August 2020

Sanne lives in Couperusbuurt with her two children.

Today the weather is nice. Sanne thinks that it is a good day to go outside and she also want to get his weekly needs. Thus, she decides to walk to Plein '40-'45 for groceries and get some fish.

On the way to Plein '40-'45, she notices the trees' green leaves and could smell the summer. She enjoys it very much. After finishing her errands, she decided to take her dog for a walk to Gerbrandypark. Along the way, she want to sit a bit but could not find a bench, so she just decided to go back.

Back at home, her children would like to play outside. However, it is a pity that there is no playground in Couperusbuurt and Sanne was too tired to go to Sloterplas. "Not now at least..," she thought.

Therefore, the children decide to go outside and play in the courtyard. Actually, she has more chores to do at home, but she has to look after her kids. It is a bit pitty that they do not have a backyard. It is also difficult for her to work and watch the children play due to the lack of an opening and views from the duplex house to the courtyard. Thus she has to leave all of her chores. She always takes her dog for another walk in the evening, but she rarely meets her neighbours.

Figure 78. Activity of Sanne
(illustrated by author, story based on Nio et al., (2021) and own observation)

Figure 77. Activity of Sanne
(illustrated by author, story based on Nio et al., (2021) and own observation)

Through the eye of Peter
Winter, January 2021

Peter is a 30-year-old man who lives in Couperusbuurt with her mother.

Peter was born and raised in Amsterdam and had been living in Couperusbuurt all his life. He has fond memories of his childhood in the neighbourhood. He was running around the area, playing outside in the courtyard with his friends. However, his childhood friends have moved out from Couperusbuurt; thus, Peter does not know many people anymore.

In his daily routine, Peter always goes to the city centre of Amsterdam for his works. He often hangs around in the centrum with his colleagues. He prefers to go outside Couperusbuurt if he wants to hang out because he thinks there are no facilities in the neighbourhood that fits his needs. "It is too monotonous in here, and I do not go around in the neighbourhood as there are nowhere to go."

In addition to his concern about the lack of facilities, he also worries about the safety in Couperusbuurt for her mother.

Overall, Peter likes Couperusbuurt because of his childhood memory. Somehow, he still sees Couperusbuurt as "the village that I grew up in". He appreciates the greenery in the area; thus, he looks forward to the renewal who fits this green neighbourhood.

Figure 79. Activity of Peter
(illustrated by author, story based on Nio et al., (2021) and own observation)

6.2 MIGRATION BACKGROUND

6.2.1 Overall Changes

As mentioned, Couperusbuurt has significant non-western immigrant background residents. Figure 83 shows that the non-western immigrant population is more than half the residents and is very prominent compared to the average ratio in Amsterdam (Figure 82).

Figure 80 shows that the number of immigrants has been rising for the past years, and in contrast, the number of local residents is decreasing. Among the non-western immigrants, the most prominent group is Moroccan and Turkish background (Figure 81). Due to this condition, some residents share their opinion, which they feel the neighbourhood has gone through 'discolouration' (Nio et al., 2021).

Although there seems to be divided opinion on whether this condition has resulted in a negative or positive impact, there is an apparent noise disturbance and overcrowding in houses due to the increase of the family members (Nio et al., 2021). It is mainly because of the duplex house typology where stranger lives with each other in one house.

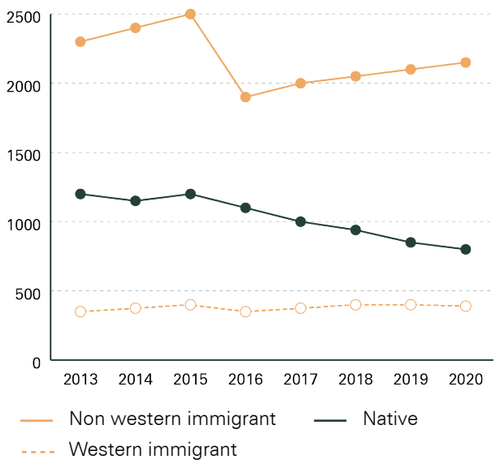


Figure 80. Growth of immigrant background residents (illustrated by author, based on Allecijfers (2021))

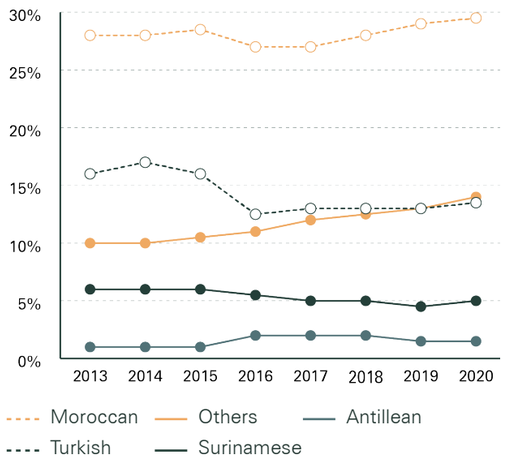


Figure 81. Growth of Moroccan and Turkish background residents (illustrated by author, based on Allecijfers (2021))

Couperusbuurt

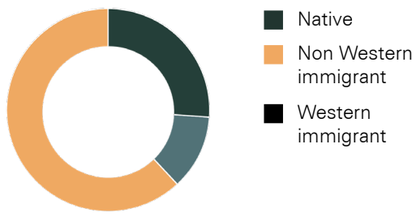


Figure 83. Migration background of residents in Couperusbuurt (illustrated by author, based on Allecijfers (2021))

Amsterdam

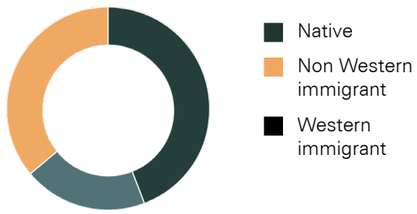


Figure 82. Migration background of residents in Amsterdam (illustrated by author, based on Allecijfers (2021))

6.2.2 Spatial Implication

The increasing number of immigration background residents have also impacted the image and spatial aspect of the neighbourhood. First, the church in the centre of Couperusbuurt was changed into a mosque (Figure 86). This mosque serves as a municipal mosque, meaning that visitors who came are not limited to Couperusbuurt residence. There are some mixed feelings regarding this situation in Couperusbuurt.

While some residents do not find it disturbing, others find that the occupancy is too high, which impacts the neighbourhood's parking availability. This is the dynamic of social life that should be highly considered in the renewal plan. Further analysis regarding this situation is discussed in the chapter on urban life.

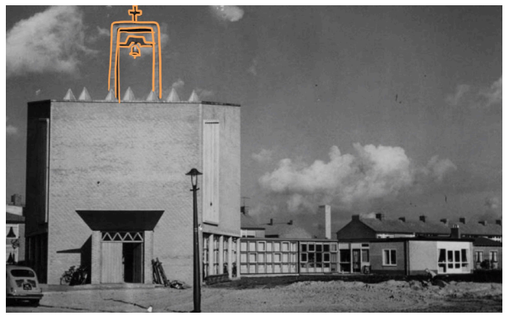


Figure 84. A church in Couperusbuurt (ca 1950) (illustrated by author, based on Stadsarchief Amsterdam (2021))

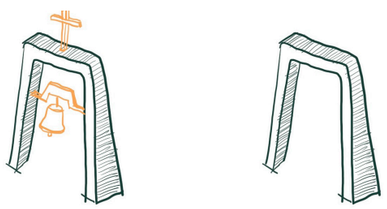


Figure 85. Change of ornament from church to mosque (illustrated by author)

Figure 86. Mosque in Couperusbuurt (illustrated by author, based on Stadsarchief Amsterdam (2021))

6.3 SOCIO ECONOMIC BACKGROUND

6.3.1 Overall Views

In Couperusbuurt, there are prominent residents with low-income household. Figure 87 shows a significant gap between the present low-income household in Amsterdam and Slotermeer (Figure 88), including Couperusbuurt. In the problematisation chapter, it was mentioned that Amsterdam has segregation issues where people who live outside the A10 ring are perceived as black and poor. The assumption is evident in Couperusbuurt.

Another statement by Gemeente Amsterdam (2019) also addresses the same problems in Couperusbuurt, a vulnerable group with low economic status. Municipality stated that the presence of vulnerable socio-economic groups in Couperusburt is mainly because of the low unemployment, low income, low education level, and low literacy among residents. These issues have significantly impacted the neighbourhood's living environment and the safety that needs to be tackled in the urban renewal plan.

6.3.2 Spatial Implication

Two significant spatial impacts are caused by the socio-economic issues, which are 1) safety issues and cleanliness issues.

First, the safety issue. According to Gemeente Amsterdam (2019), some safety issues regarding theft and some drugs nuisance. This issue is evident by looking at the presence of DNA-spray warning in some areas of Couperusbuurt (Figure 91). Safety is vital to create liveability in a living environment; it is a basic need that must be provided in Couperusbuurt. As an urban designer, this issue could be suppressed by adding more eyes on the street by stimulating more activities in the neighbourhood.

Second, the cleanliness issues. Couperusbuurt has a score of 5.6 out of 10 for its cleanliness (Gemeente Amsterdam, 2020b). Based on observation, this is one of the most evident issues in the neighbourhood. Though there is an adequate amount of garbage bin, there is still garbage outside this bin and sometimes randomly on the neighbourhood's sidewalk (Figure 89 & Figure 90). Many residents also complain about this issue. Some complain about the trash on the sidewalks, while others complain about trash caused by students during lunch (in the bakery and school area) (Nio et al., 2021). Some people try to do so by actively picking up trash near their home or the courtyard, but many others do not care, which brings the neighbourhood to nowhere. This issue has negatively affected public areas in the neighbourhood, making residents avoid specific areas.

To add, the cleanliness issue does not stop until the garbage problems. In addition, some greenery in the private greenery is also not maintained, which creates an unpleasant and messy ambience, primarily if they are located next to the sidewalk (Figure 92).

Figure 89. Messy garbage next to the garbage bin
(illustrated by author, based on Stadsarchief Amsterdam (2021))

Figure 90. Messy sidewalk because of the garbage
(illustrated & taken by author)

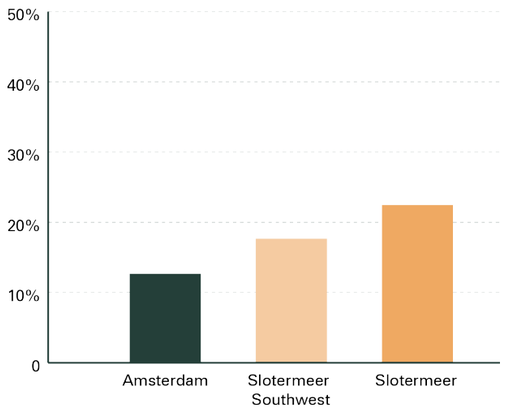


Figure 87. Percentage of low income household
(illustrated by author, based on Allecijfers (2021))

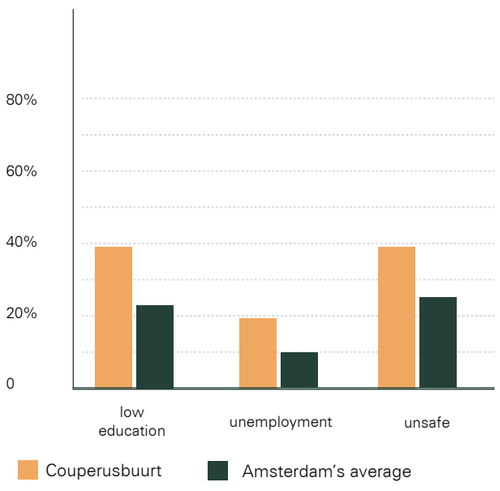


Figure 88. Percentage of socio-economic & safety issues
(illustrated by author, based on Allecijfers (2021))

Figure 91. Change of ornament from church to mosque
(illustrated & taken by author)

Figure 92. Unmaintained greenery in private green
(illustrated & taken by author)

6.4 CONCLUSION

The investigation of urban residents was made to answer research question 1b, which is:

"Who are the residents of Couperusbuurt, and how do they use their living environment?"

First, the investigation shows three distinct groups of residents in Couperusbuurt, which are 1) elderly, 2) family and 3) young starters or students. A striking fact found is that there is a lack of social cohesion between these different groups due to the lack of social activities in their daily lives. The main reason for this phenomenon is the poor quality of the facilities and the built environment in the neighbourhood.

First, there is a lack of shared facilities that could use by everyone (e.g. picnic area, playground), and there is evidence of specific target public facilities such as mosque, church, offices, and school.

Second, there is an apparent nuisance with garbage and several safety issues, which negatively affects several spots in Couperusbuurt to the residents. This phenomenon leads residents to avoid several areas in the neighbourhood, thus reducing social contacts.

In conclusion, the renewal plan should highly consider these diverse residents. Thus, the new Couperusbuurt should promote social engagement through its good built environment and public function without compromising their individual needs.

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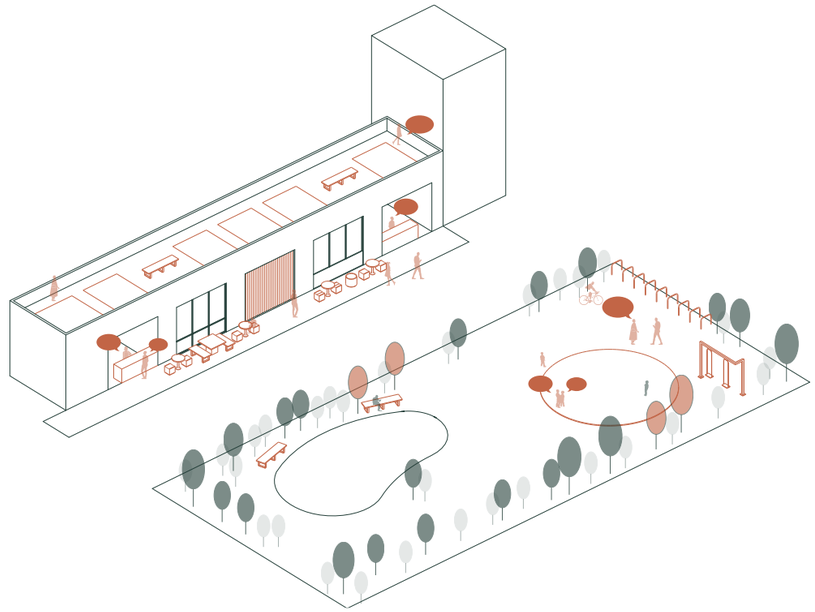
7 INVESTIGATION: URBAN LIFE



This chapter will investigate urban life in Couperusbuurt in order to answer sub research question two (SR1c), which is:

"How do the social changes implicated
the spatial elements in Couperusbuurt?"

The analysis is conducted by looking at the urban biography of Couperusbuurt. Also, the previous research of Neighbourhood Bearer (Nio et al., 2021) will be integrated into this part of the analysis.

7.1 NEIGHBOURHOOD BEARERS

Introduction

After investigating the urban form of Couperusbuurt, it shows that the concept of wijkgedachte is evident. There are some facilities, areas, and functions in Couperusbuurt which are made to promote a sense of community. However, the analysis of urban residents shows that there have been significant changes in the social dynamic which have a tremendous impact on the spatial aspect. This investigation of urban life will analyse the relationship of the urban heritage form and how the residents' social changes impact social activities (urban life).

Triangulation of social interaction

The social life and interaction between people could happen because there is a shared common knowledge or interest. Whyte (1980) argues that social interaction is a process that happens through external stimulus, which creates a connection between one person to strangers in order for them to have a conversation (Figure 93). This is also called the triangulation of social interaction. In Couperusbuurt, the urban tissues of open building blocks with segregation of functions were built as a stimulus of social interaction. However, that marvellous idea is not projected into the daily life of the people. What went wrong and why?

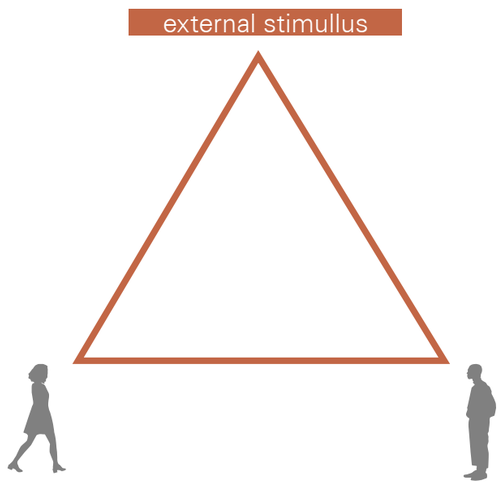


Figure 93. Triangulation of social interaction
(illustrated by author)

Neighbourhood bearer

Nio et al. (2020) studied the socio-spatial connection in the structure of Westelijke Tuinsteden and propose a theory of neighbourhood bearer (buurtdragers) (Figure 94). It develops from a similar concept that there is always a carrier or an agent between people's social interaction. Therefore, Buurtdragers is vital to strengthen the socio-spatial dimension in a neighbourhood. Thus, the analysis of urban life will use the theory of buurtdragers and investigate it further.

Recently, exclusive research of buurtdragers was conducted for Couperusbuurt. Nio et al. (2021) argue that four aspects could be considered as buurtdragers which are 1) courtyard, 2) services function, 3) network and routes, 4) places to stay in the public spaces. However, the analysis of urban life will not investigate the four aspects specifically. Instead, three aspects of the neighbourhood will be analysed. This is because they have significantly changed through the decades and affected the social dynamics in the neighbourhood. These three aspects are 1) the centre of the neighbourhood, 2) the public functions (strip of shops), and 3) the courtyard inside the building blocks (Figure 95).

The investigation will use the urban biography method of comparing old and current pictures to understand how space usage is changing through the decades.

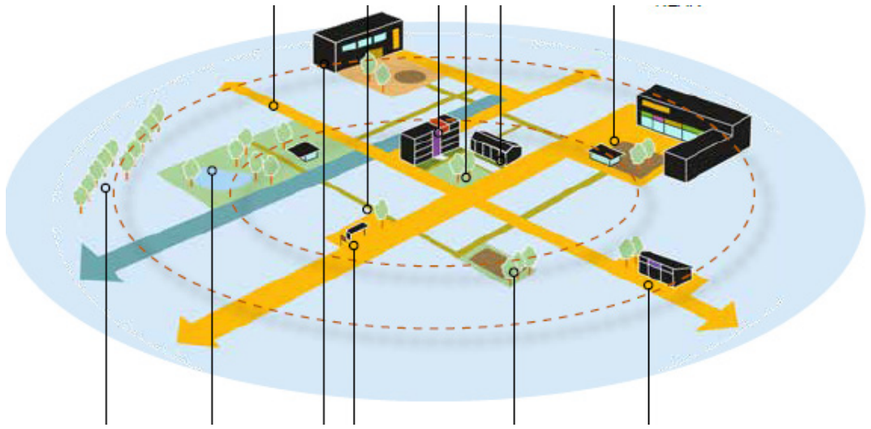


Figure 94. Neighbourhood bearer in Westelijke Tuinsteden
(derived from Nio et al. (2020))

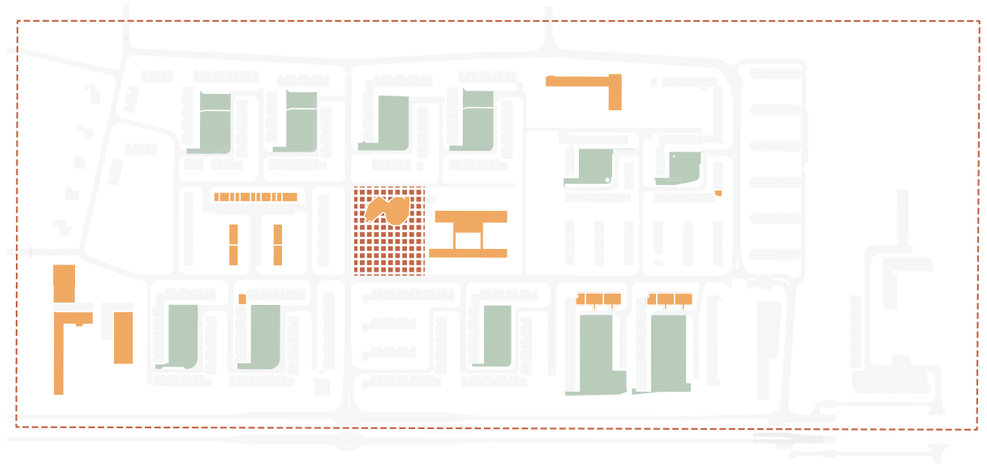


Figure 95. Three investigated area in Couperusbuurt
(illustrated by author)

7.2 CENTRE OF NEIGHBOURHOOD

7.2.1 Urban Biography Study

Figure 96 shows the aerial photo of Couperusbuurt in 1980. In the centre of the neighbourhood, there were two public function buildings: the school and a church. The striking thing that could be derived from this picture is that the centre was very green compared to Figure 97. Green has always been the most appreciated feature in the neighbourhood. However, the plaza at the moment is pretty much empty compare to how it was planned. Some residents share their opinion that they feel too big and too empty (Nio et al., 2021).

Also, there is some physical barrier around the school because which makes the centre of the neighbourhood have a very closed and secluded feeling (Figure 99). It is unclear whether this barrier has been there since the beginning or not. Also, the row of parking on the side of the plaza creates a barrier and does not make a plaza very permeable for pedestrians

Figure 98. No facilities for social interaction
(taken by author)

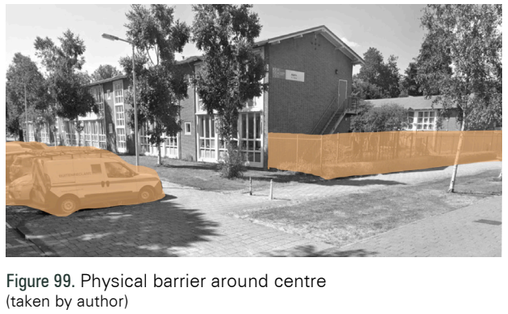


Figure 99. Physical barrier around centre
(taken by author)

Figure 96. Aerial photo of Coperusbuurt in 1980
(derived from Stadsarchief Amsterdam (2021))

Figure 97. Aerial photo of Coperusbuurt in 2021
(derived from Google Earth (2021))

7.2.2 Socio-spatial Implication

Views of the residents toward this place are varied. Some consider that the nuisance caused by the mosque is an exaggeration. While the others strongly disagree with the statement. They feel that the parking issue that highly occupied the centre area of the neighbourhood is significant. Figure 101 shows the number of people during the peak hour of the prayer within the weak. It is unclear whether it only happens on Friday prayer or special occasion, e.g. Ramadan.

The impact of the change in the area's usage is that the residents feel like the centre does not belong to everyone. Also, due to some physical barriers like cars or fences, it makes the plaza an avoided place instead of a welcoming area (Figure 100).

Figure 101. Aerial photo of the plaza during praying time
(derived from Moskee El Hijra (2021))

Figure 102. People praying on the plaza
(derived from Nio et al. (2021))

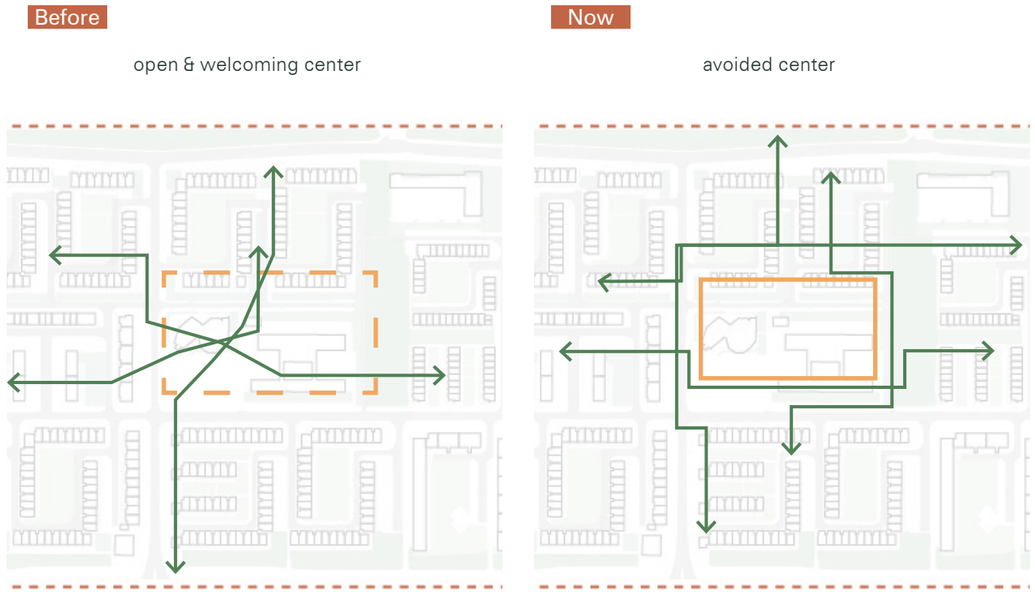


Figure 100. Spatial impression of the neighbourhood centre
(illustrated by author)

7.3 PUBLIC FUNCTIONS IN NEIGHBOURHOODS

7.3.1 Urban Biography Study

As mention on page 76, there are a significant amount of shops and services function in the neighbourhood. Figure 103 shows that in 1960, the shops in the neighbourhood has an open and inviting ambience with wide sidewalks. Although the sidewalks are occupied mainly by vehicle and not every unit are shops, some have become a less functional space such as the office.

This phenomenon also happens on the other side of the neighbourhood. For example, in the open building blocks (havenverkaveling), a public function is often in the corner (will be explained more thoroughly later), as shown in Figure 106.

For the daily needs, residents share that they often go to Plein '40-'45, located on the northwest of Couperusbuurt, for daily amenities. Therefore, even though some bakery and local shops, residents prefer to go to a more extensive area that offers more diversity.

7.3.2 Socio-spatial Implication

The decreasing number of shops and less active function in the area where it is supposed to offer public functions significantly impact the neighbourhood. Residents who live on the west side of Couperusbuurt give them no reason to go to the east side if there is nothing they need. If there are more public activities put there, more people will come.

The previous statement was evident by the mental maps drawn by the residents as part of Nio et al. (2021) research. When being asked how big the feeling of the neighbourhood is, some people only drew the area where they live (Figure 105). It seems like the feeling of the neighbourhood is divided. Therefore, it is vital to bring back the feeling of the neighbourhood as a whole.

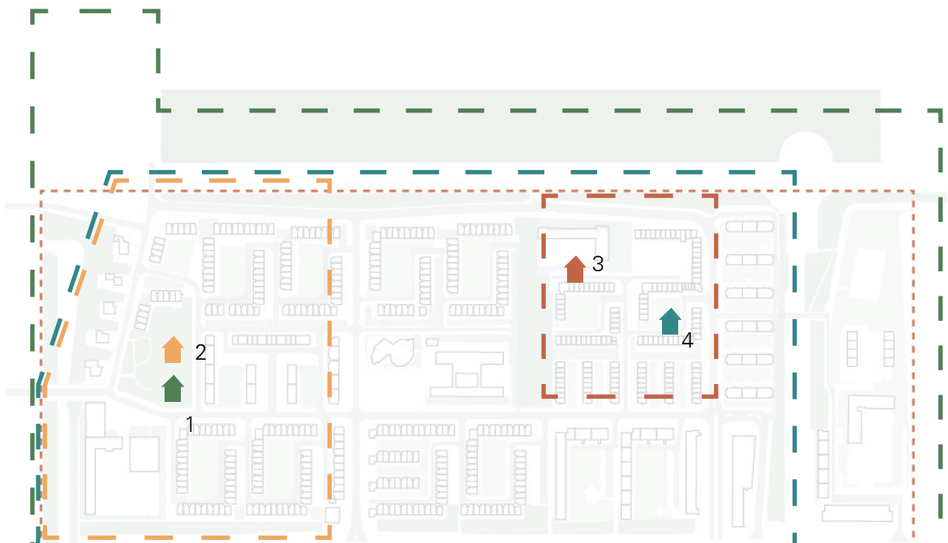


Figure 105. Feeling of neighbourhood based on residents' mental maps
(illustrated by author, based on Nio et al. (2021))

Figure 103. Shops in Couperusbuurt in 1960
(derived from Stadsarchief Amsterdam (2021))

Figure 104. Shops in Couperusbuurt now
(illustrated & taken by author)

Figure 106. Shops in Burg. van de Pollstart in 1957
(derived from Stadsarchief Amsterdam (2021))

Figure 107. Office / service function in Louis Couperustraat
(illustrated & taken by author)

7.4 NEIGHBOURHOOD'S COURTYARD

7.4.1 Urban Biography Study

The advantage of having open building blocks typology with shared greenery in the courtyard is the opportunity to put other shared function and utilise the courtyard for social interaction. Figure 108 shows aerial picture of Couperusbuurt in 1960 and it is visible that all of the courtyard have a square-paved area in the middle of the neighbourhood. At the moment, these courtyards are only covered with green. Although one of them still have some areas of it left (Figure 109). However, how could this happen and how does it affect the social interaction?

Figure 110 shows the picture of the courtyard in Dichtersbuurt (neighbourhood next to Couperusbuurt). The picture shows a very lively ambience where children were playing with some parents watching them. The courtyard in Couperusbuurt used to have the same character as this. However, there is only one courtyard left in Couperusbuurt that still has the function of the playground (Figure 113). However, when the observation was made, the courtyard does not have the lively ambience as the old picture shows. In addition, other courtyards that used to have a playground do not have them anymore, making them a very passive use of the area. The neighbourhood built with the ideology to spend more time outside has lost its initial intention. This is a very striking finddin and a more detailed investigation will be discussed in the following chapters.

Figure 108. Aerial photo of Coperusbuurt in 1969
(derived from Stadsarchief Amsterdam (2021))

Figure 109. Aerial photo of Coperusbuurt in 2020
(Google Earth (2021)))

Figure 110. Activities in Courtyard (in Dichtersbuurt)
(derived from Stadsarchief Amsterdam (2021))

Figure 111. Keyplan of courtyard's location
(illustrated by author)

Figure 112. Keyplan of courtyard's location
(illustrated by author)

Figure 113. Courtyard in Couperusbuurt
(taken by author)

7.4.2 Public Function in Havenverkaveling System

How it was built

The courtyard was built connected to the private green space on one side and to the house's entrance on the other side. There used to be a soft barrier of bushes between the spaces, and the private space was used as outdoor sitting or hanging clothes (Figure 116). Also, there was a playground in the courtyard (Figure 115), ensuring the residents' social connection in one block. In addition, the havenverkaveling has one building in the corner, which was often used as a public function (based on observation in Couperusbuurt and Dichtersbuurt. On the neighbourhood scale, the public function in building blocks works with the coupling system, stimulating people to move around in their neighbourhood to get their daily amenities (Figure 118).

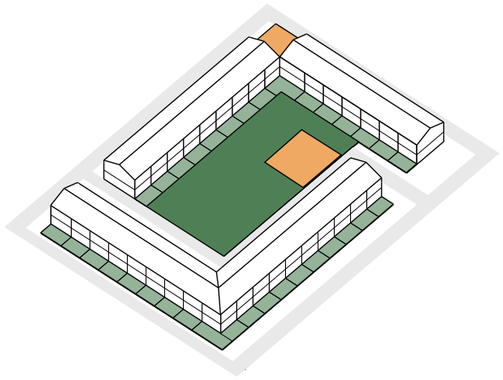


Figure 114. Public function in havenverkaveling system (illustrated by author)

Figure 115. Built playground on courtyard in Dichtersbuurt (derived from Stadsarchief Amsterdam (2021))

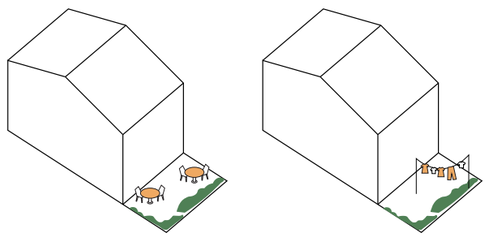


Figure 116. The use of private backyard (illustrated by author)

Figure 117. Public function with inviting shop windows (derived from Stadsarchief Amsterdam (2021))

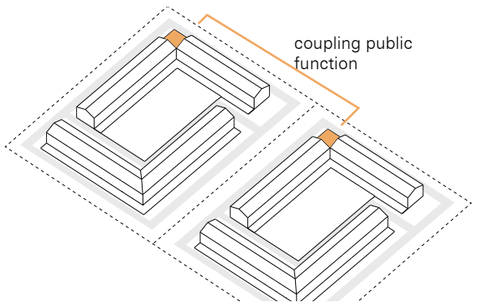


Figure 118. Coupling system of public functions between blocks (illustrated by author)

How it is used

Today, the courtyard has a passive and uninviting ambience. The public function in the courtyard was not there anymore. Instead, big trees cover the courtyard, and it often blocks the view of the area (Figure 119), bringing fewer eyes to the street. Also, the private backyard is often blocked with fences or messy shrubs, reducing visible activities in the area (Figure 120). In addition, the public function in the corner of the building blocks was shifted into a less public function, e.g. office (Figure 121). Thus, the coupling function in between building blocks is gone. These changes have played a significant role in reducing the quality of the active courtyard. The following analysis will discuss several factors that highly influences the changes of the courtyard, which is dominantly caused by the duplexhouses.

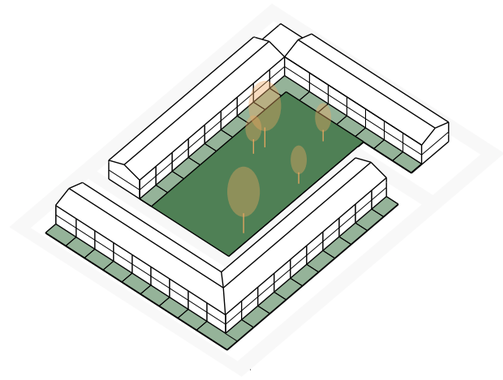


Figure 119. Unorganised trees cover the courtyard (illustrated by author)

Figure 121. Lost of vivid function in courtyard (taken by author)

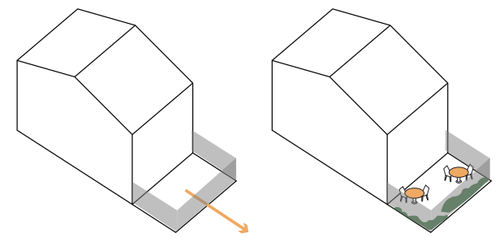


Figure 120. Private backyard is blocked by fences (illustrated by author)

Figure 122. Office with uninviting facade (taken by author)

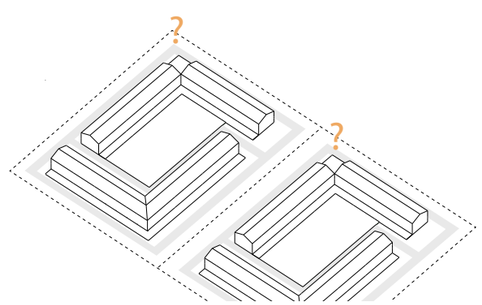


Figure 123. Unclear system of public functions between blocks (illustrated by author)

7.4.3 Shifting function of duplexhouses

The changes of use and household in duplexhouses affects the courtyard significantly.

Previously the function on the ground floor is always an active function on the day. This is important in promoting social activities in the neighbourhood. Active functions on the ground floor are essential to create openness and delimit physical barrier (Figure 124).

However, this plan was never realised, and it was changed to the current situation.

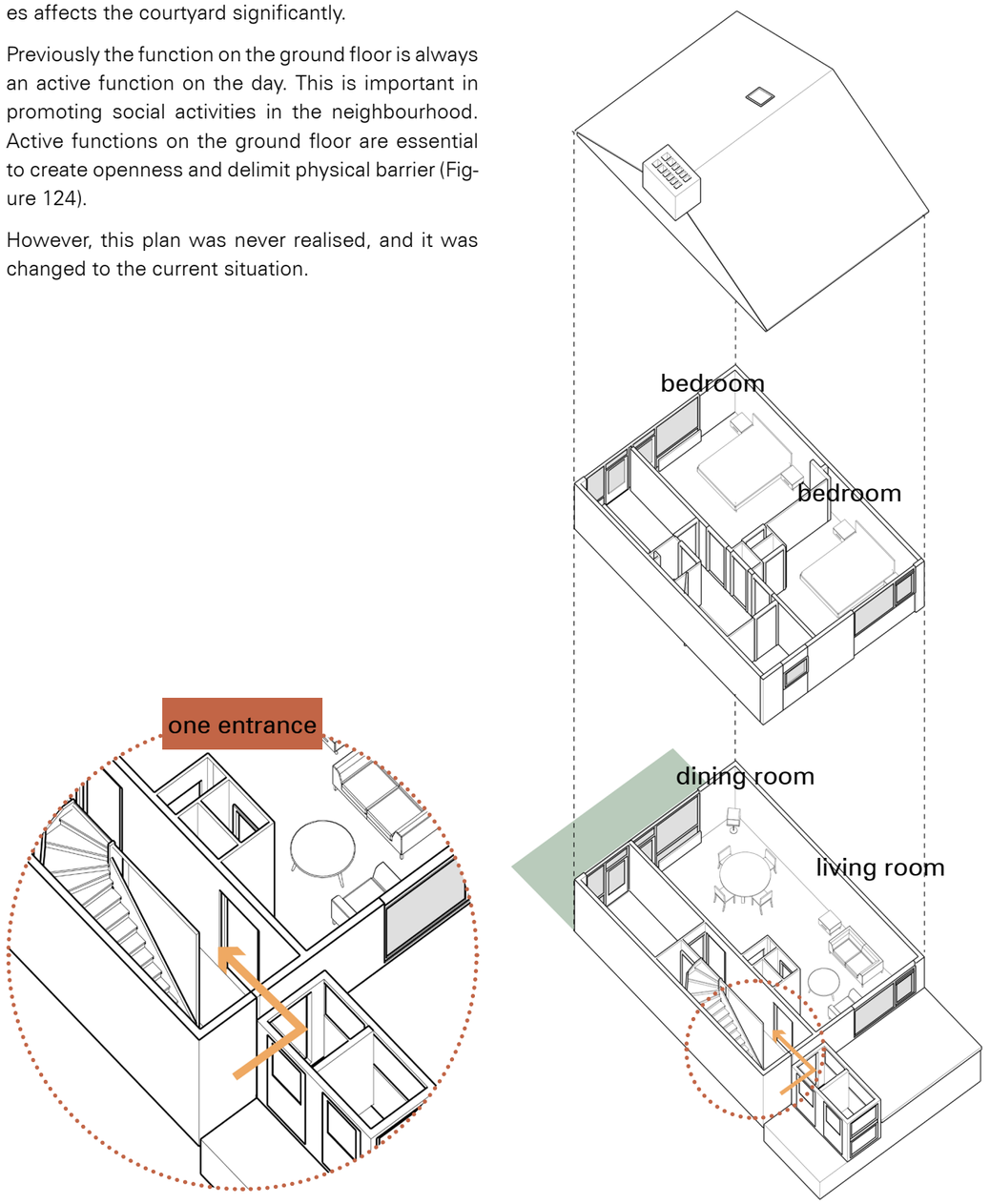


Figure 124. Active function on ground floor
(illustrated by author)

Passive ground floor

At the moment, the position of the bedroom is facing the front street or the shared courtyard (Figure 125). This situation leads people always to close their curtain to create more privacy. In addition, because there are two households in one house, it leads to inadequate living space for residents. This situation makes the residents try to extend their living area to an outdoor private garden, thus enclosing the open private garden to be transparent (see following analysis on the next page).

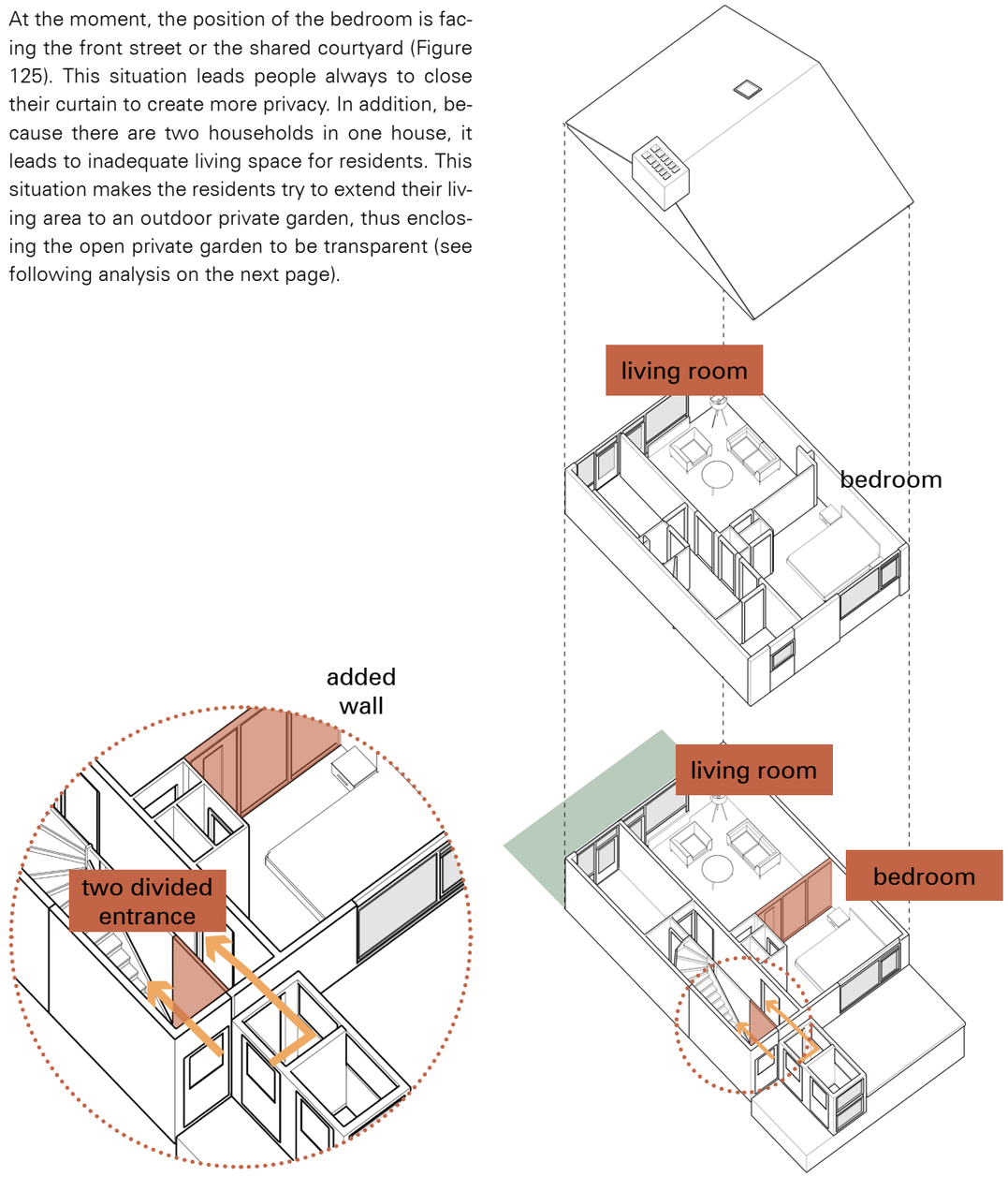


Figure 125. Bedroom as barrier to create active plinth / groundfloor
(illustrated by author)

7.4.4 Ownership of Duplexhouses

How it was built

As mentioned, the duplexhouse have been used differently than it was intended too. Each house belongs to one household in the initial plan, with all bedrooms located on the first floor (Figure 126).

Having a living room and dining room kitchen means having active day functions on ground level, thus creating more eyes on the street both to the front side and backside of the house (Figure 127).

This indoor arrangement is vital to create a lively courtyard and street. However, this duplex house typology is one physical barrier, which is the storage on the front. The height and width of the storage limit a person's eyesight from inside to the outside. This form reduces the eyes on the street, which is vital to improving the safety and liveliness of an area.

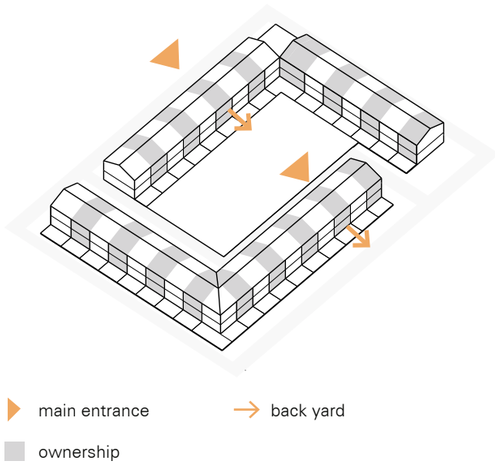


Figure 127. Initial ownership in duplexhouses
(illustrated by author)

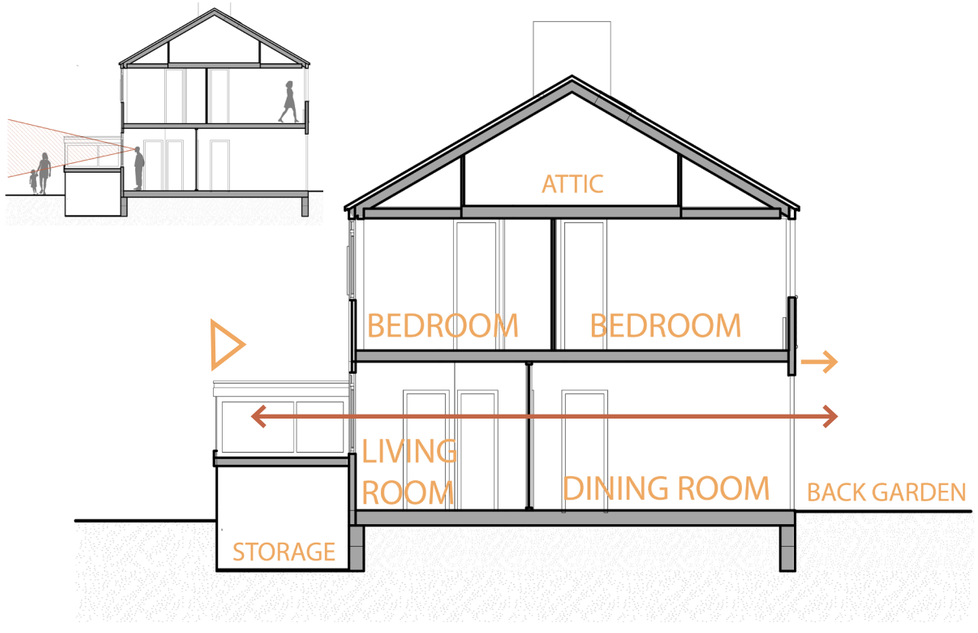


Figure 126. Section of duplex houses' initial plan
(illustrated by author)

How it was built

However, the use of duplexhouses were never as it is intended to. The ownershipis was divided in one house, so two different households live on different floors (Figure 128). This arrangement requires the necessity of having a bedroom on each floor. Thus, the living room and dining-room kitchen's active functions on the ground floor were replaced by the passive function of the bedroom on the front side of the house. It limits the view to the front side even more (considering the storage which blocks the view)

This has a tremendous effect on the livelihood of the courtyard and the streets. It gives less eye on the street, and also having a bedroom on the ground floor means having less privacy for the residents. During the observation, it was visible that most curtains in the bedroom area were shut door in order for the residents to have more privacy. Therefore, it is vital to have active functions on the ground floor.

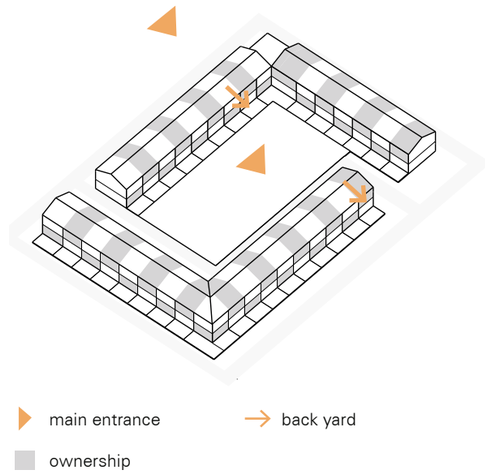


Figure 128. Current ownership in duplexhouses
(illustrated by author)

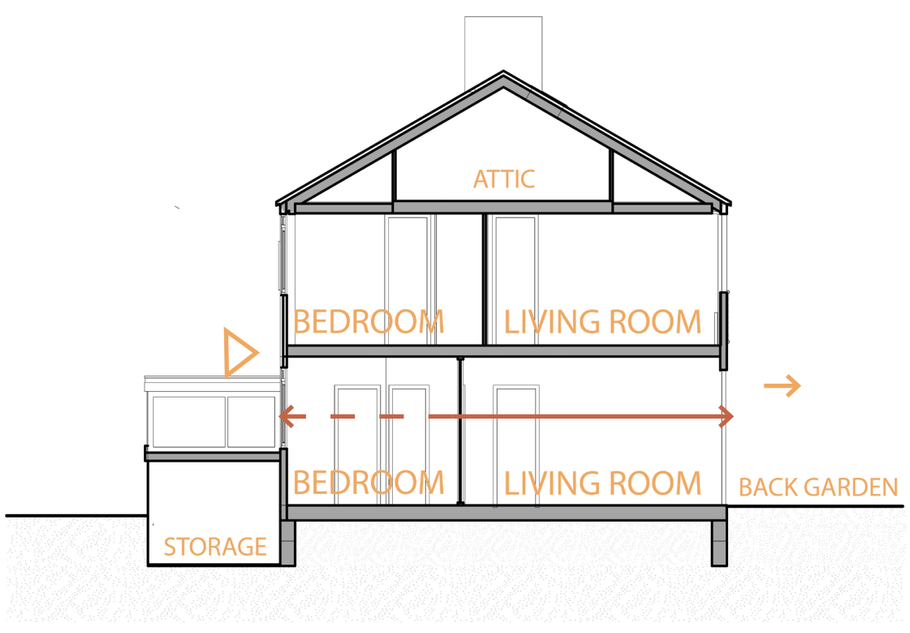


Figure 129. Section of duplex houses' current situation
(illustrated by author)

7.4.5 Public-private Distribution in Havenverkaveling

How it was built

The division between public and private was very clear. Each house has one private garden which connects to either the neighbourhood street or courtyard. It has three levels of publicness which is private, semi-public, and public.

There were soft barriers in the transition areas, which are shrubs or hedges in the private garden. In addition, the private garden was used as an outdoor sitting area, or sometimes people hang their clothes to dry outside.

Back then, these soft barriers are vital in creating a lively courtyard.

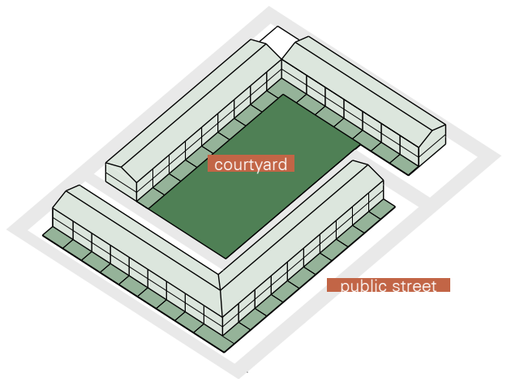


Figure 130. Green quality of courtyard in the past
(illustrated by author)

Figure 131. The use of backyard
(derived from Stadsarchief Amsterdam (2021))

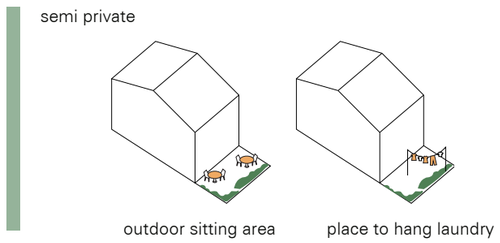


Figure 132. Usage of backyard in the past
(illustrated by author)

How it is used

The soft barriers have been altered by the house owners or tenant based on their needs. Some of the shrubs are left out without maintenance, making them messy and creating an unpleasant view.

Other residents build a fence to create more privacy from the courtyard. The strong reason behind this was the lack of space inside the house, which causes them to expand their living area outside.

At the moment, there is a regulation from Stadgenoot on how high the fence could be. However, these rigid barriers are cutting the strong connection between private and public. Therefore, in the renewal plan, it is vital to give more attention to the transitional place.

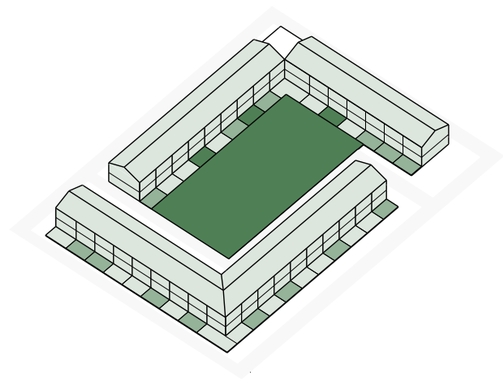


Figure 133. Green quality of courtyard now
(illustrated by author)

Figure 134. Barrier in backyard
(taken by author)

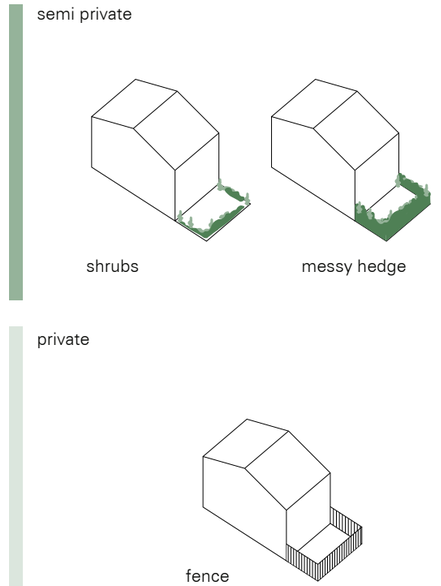


Figure 135. Usage of backyard now
(illustrated by author)

7.5 CONCLUSION

The investigation of urban life was made to answer the research question 1b which is:

"How does the social changes implicated the spatial elements and in Couperusbuurt?"

The theory of neighbourhood bearer (Nio et al, 2020) and triangulation (Whyte, 1980) was used as a based research to understand the relation between socio-spatial aspects in Couperusbuurt. The investigation shows three vital neighbourhood bearers in Couperusbuurt, which are 1) neighbourhood centre, 2) public function, and 3) courtyard. However, there has been a significant decrease in the quality of the neighbourhood bearer in Couperusbuurt.

Figure 136 shows the previous quality of neighbourhood bearer through several public functions. Figure 137 shows the present condition, which highlights several neighbourhood bearers that have been decreasing in quality.

Considering this research aims to achieve socio-spatial cohesion, the neighbourhood bearer is a vital aspect that should be prioritised in the renewal plan.

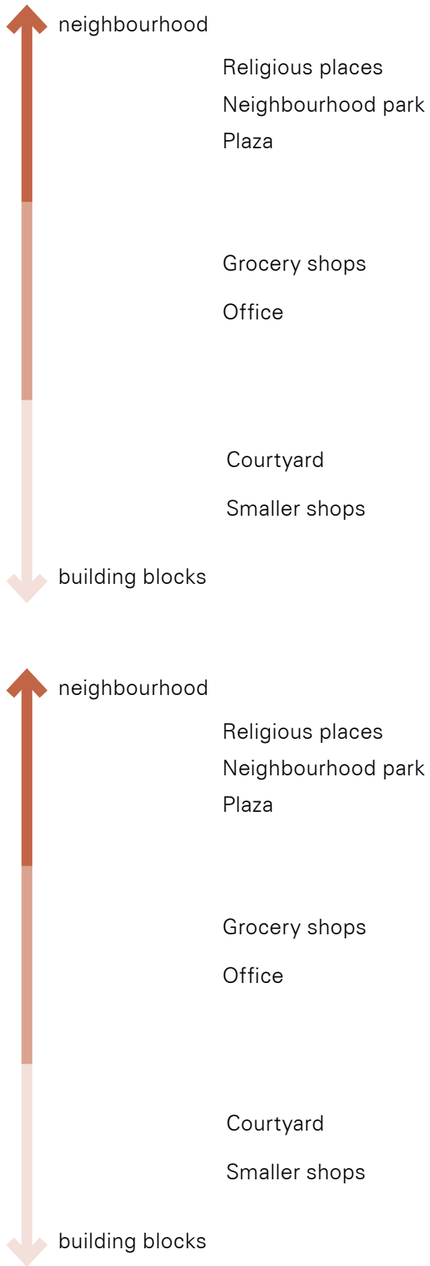


Figure 136. Neighbourhood bearer in the past
(illustrated by author)

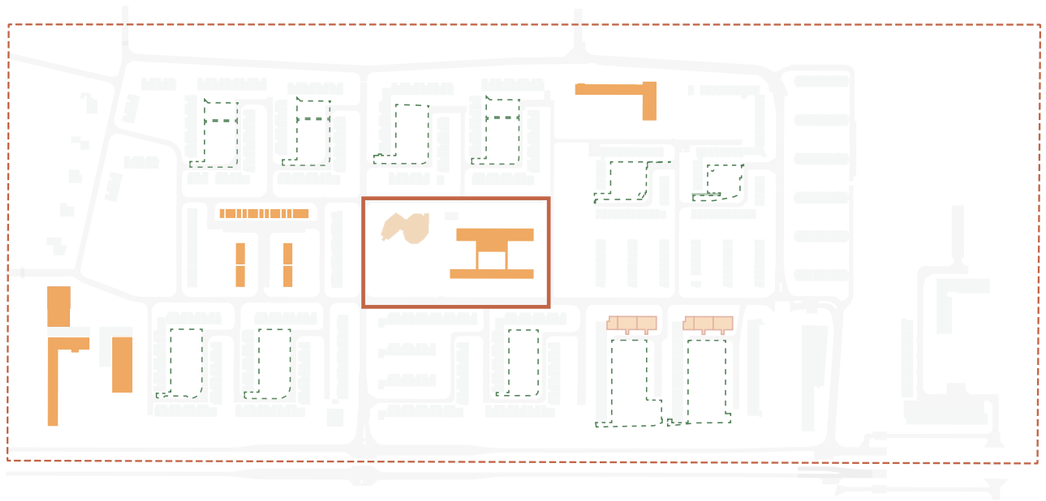


Figure 137. Neighbourhood bearer now
(illustrated by author)

HERITAGE IMPORTANCE IN COUPERUSBUURT

Previously, the investigation of heritage value in Couperusbuurt has been done by analysing its urban form, urban residents, and urban life to answer sub research questions 1a, 1b, and 1c. The conclusion of these investigations will answer the sub research question one which is

"What is the heritage importance in Couperusbuurt based on its urban form[a], resident[b] & life[c]?

Through the previous investigations, it is apparent that these three aspects always highly related to social engagement, or at least it is the main thing that this project focuses on.

First, the urban form has a different spatial organisation which promotes social engagement, thus creating community and collectivity value.

Second, the urban resident's investigation found a lack of facilities for social activities in Couperusbuurt, which the residents demand. Thus, diversity of public functions, social engagement, and activities are necessary.

Third, urban life investigation found that neighbourhood bearer is a vital component in Westelijke Tuinsteden neighbourhoods (Nio et al., 2020) which is vital in creating attachment, social cohesion, and community. Considering the decreasing quality of neighbourhood bearer in Couperusbuurt, there is a high urgency to improve this quality to promote the neighbourhood community.

In conclusion, the heritage importance of Westelijke Tuinsteden in Couperusbuurt is the unique organisation of the urban form, which promotes outdoor activity to stimulate social activities and collectiveness between the residents. Considering the initial concept of wijkgedachte, thus this finding is not unforeseen. This project will emphasise and focus on its collectivity as the heritage of Westelijke Tuinsteden, specifically Couperusbuurt and promote this value for its renewal to create socio-spatial cohesion and liveable Couperusbuurt.

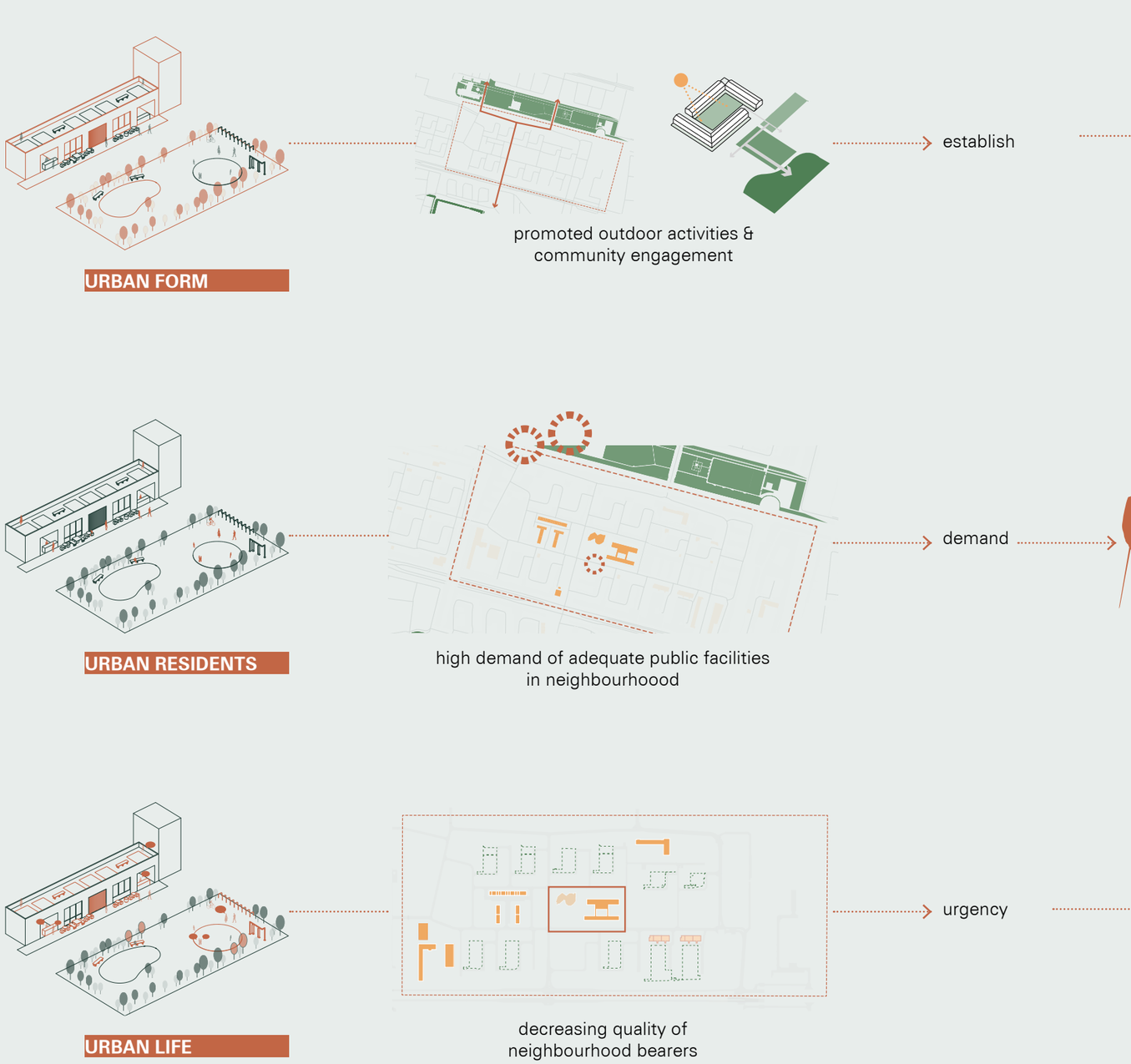
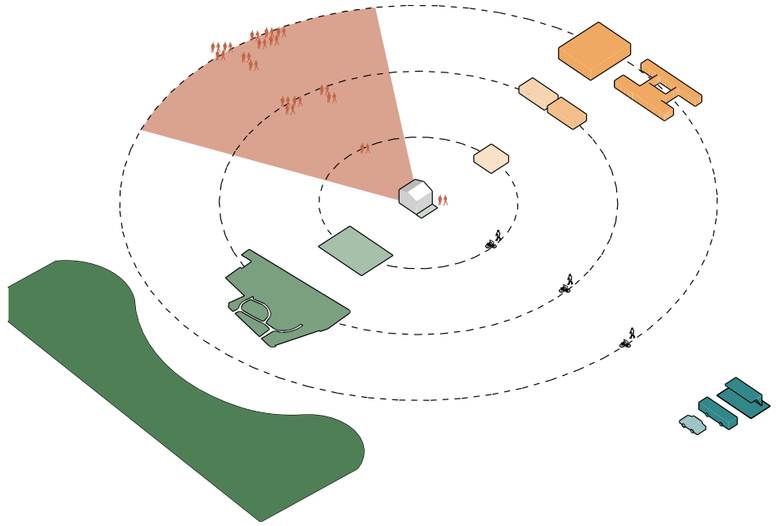


Figure 139. Conclusion of heritage importance
(illustrated by author)

8 STRATEGY



This chapter will integrate the heritage importance into an explicit strategy for the renewal. Also this chapter will answer sub research question two of steps integration which is:

“How can the heritage importance be integrated to the renewal strategy of Couperusbuurt?”

8.1 TOWARD STRATEGY

This chapter will discuss the chosen strategy in integrating the heritage importance with renewal strategy for the future of Couperusbuurt.

The previous investigation concludes that the heritage value lies in the collectivity and community that is formed through the spatial organisation of the Westelijke Tuinsteden. However, the collectiveness value of Couperusbuurt has been significantly disappearing because of the user changes which shapes the built environment.

Verschuure-Stuip (2019) stated that authorship in landscape and built environment creates a reciprocal influence between humans and the environment. Thus, human intervenes with the built environment and being shaped by it at the same time. However, the built environment in Couperusbuurt is outdated and does not fit their needs anymore, which is the reason for the renewal project.

This project aims to revitalise that heritage value and propose to priorites the collectiveness in the community as the main catalyst of renewal instead of focusing on the form. Thus, the project focuses on doing intervention with emphasises on human intervention to the built environment, in contrast to the current condition (built environment shapes residents). Therefore, this research will highlight the proposition of heritage as a dynamic value and give a new interpretation of meaning to the heritage itself (Verschuure-Stuip, 2019).

Figure 140 shows the thinking process of the interpretation of heritage meaning. Initially, collectivity as heritage value was formed through the spatial organisation because of the tabula rasa concept of Westelijke Tuinsteden and its top-down planning. However, this research proposes to utilise collectivity as driving factors for the renewal of the urban form with the focus of transforming instead of creating (spatial strategy) and will highlight the importance of bottom-up planning (social strategy).

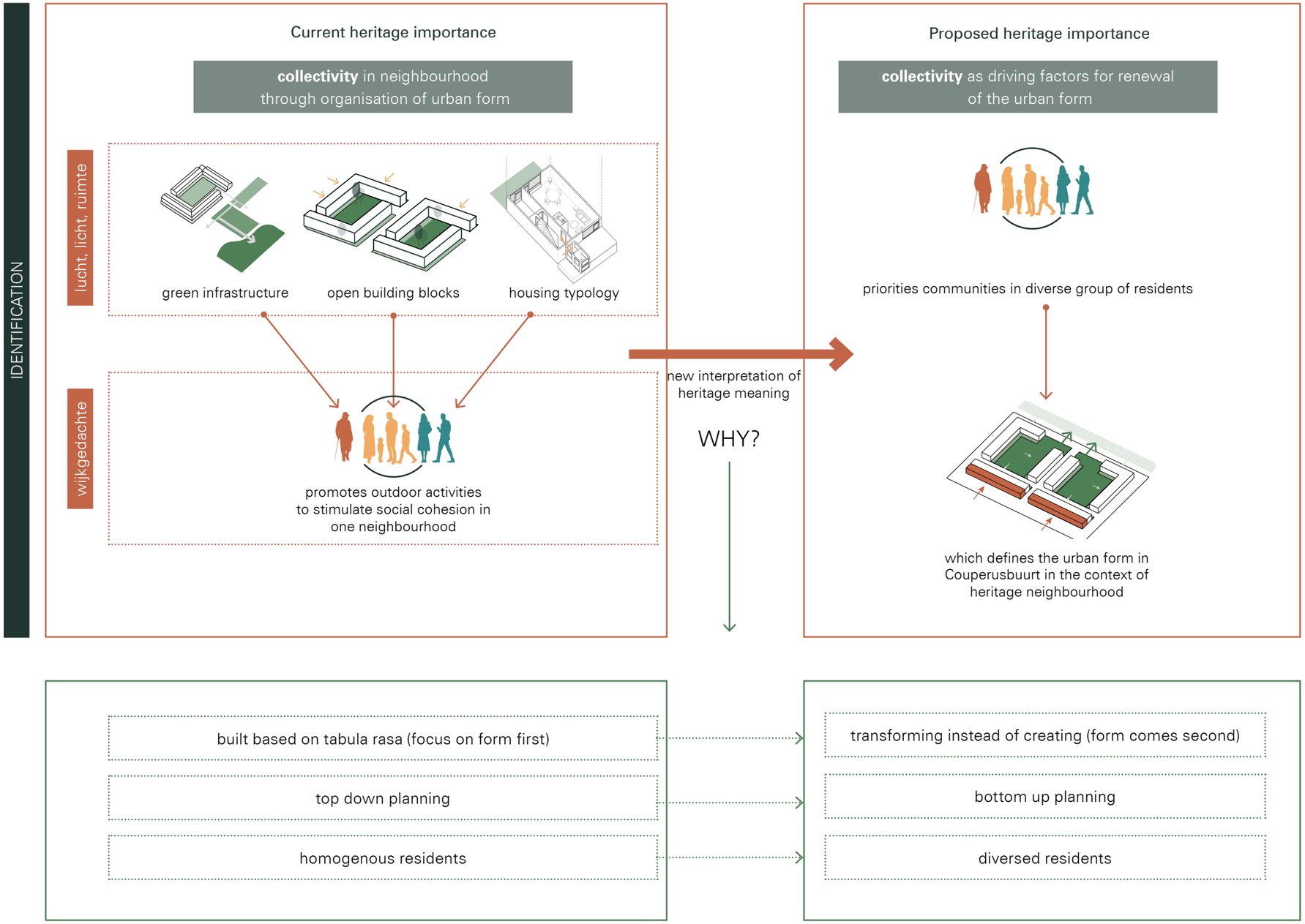


Figure 140. Translation of heritage importance to strategy
(illustrated by author)

8.2 SPATIAL STRATEGY

8.2.1 Community-driven Strategy

Integrating collectivity value to spatial strategy

As mentioned previously, the concept of collectivity as driving factors is the heritage importance for the renewal of Couperusbuurt. Thus, in transforming Couperusbuurt spatial form, the community will be the core value of the development.

The spatial strategy for this project is built based on the initial concept of wijkgedachte, which considers decentralisation of public space and putting family at its core value. This concept is aligned to highlight community as the strategy. However, due to the changing of residents that are focusing on family anymore, this concept will also be strengthened and enhanced by integrating it with the neighbourhood bearer concept. In neighbourhood bearer theory, the intention is to find the factor that binds diverse residents. Therefore, combining these two concepts will create the spatial strategy for this project which is the community-driven spatial strategy.

Community-driven spatial strategy

This project found that the segregation of function and the hierarchical distribution of public spaces as part of the heritage value. Figure 141 shows how the strategy adapts that concept into the spatial strategy in Couperusbuurt.

The aim is to ensure that community and collectivity could always be found through the different scales. Figure 142 illustrate the different scale that collectivity could happen, from neighbourhood until individual house. In addition, three factors are considered as the driving factors in ensuring community: green infrastructure, route or network, and the public function. These driving factors were built based on the typologies of neighbourhood bearer by Nio (2021), and the initial investigation found earlier in this project.

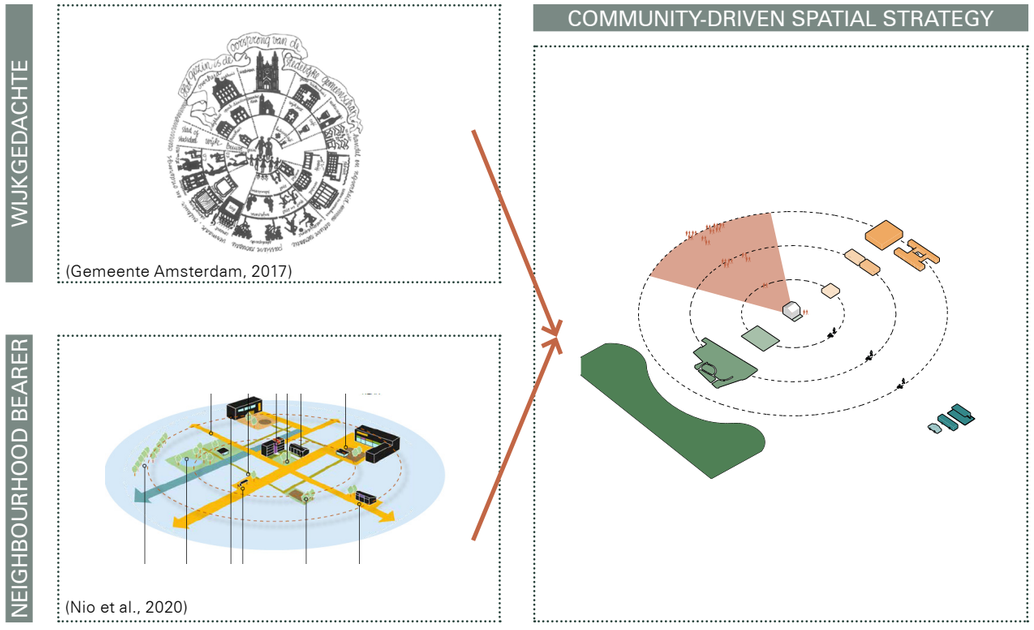


Figure 141. Building the spatial strategy
(illustrated by author, inspired by Nio et al. (2020) and Nio et al. (2021)

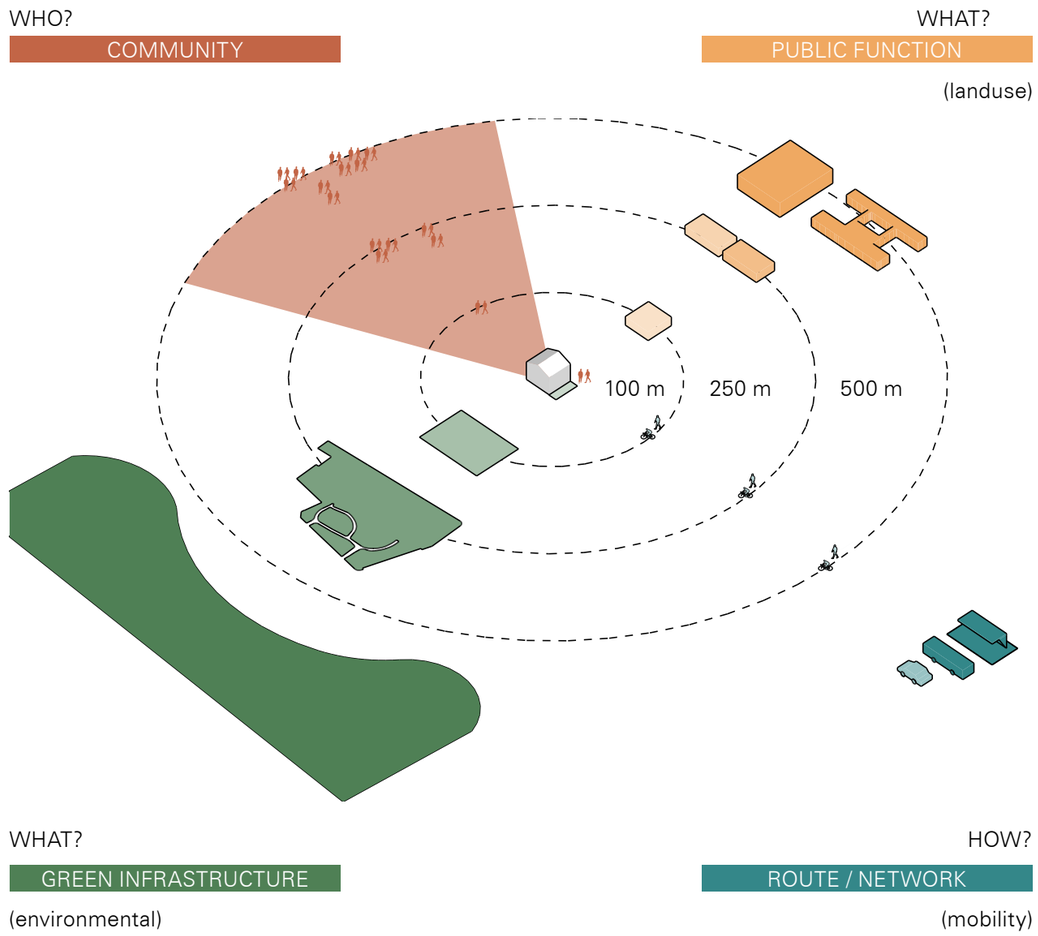


Figure 142. Community-driven spatial structures
(illustrated by author, inspired by Nio et al. (2020) and Nio et al. (2021)

8.2.2 Green Infrastructure

Improving Quality of Green

It is now obvious that Couperusbuurt has a lot of potential in its green infrastructure. Currently, the courtyard and most green infrastructure lack function (Figure 143) and differentiation even though they have a different role for the neighbourhood (e,g courtyard and neighbourhood park) (Figure 144).

Considering the agenda from Gemeente Amsterdam to improve the sustainability value of Couperusbuurt, green infrastructure has much potential for it. To improve sustainability in a neighbourhood, it is not about the quantity; instead, it is about the quality of the green itself. Therefore, these greeneries has much potential to be integrated with sustainable function aims.

Figure 143. Lack of facilities with unclear function in courtyard (taken by author)

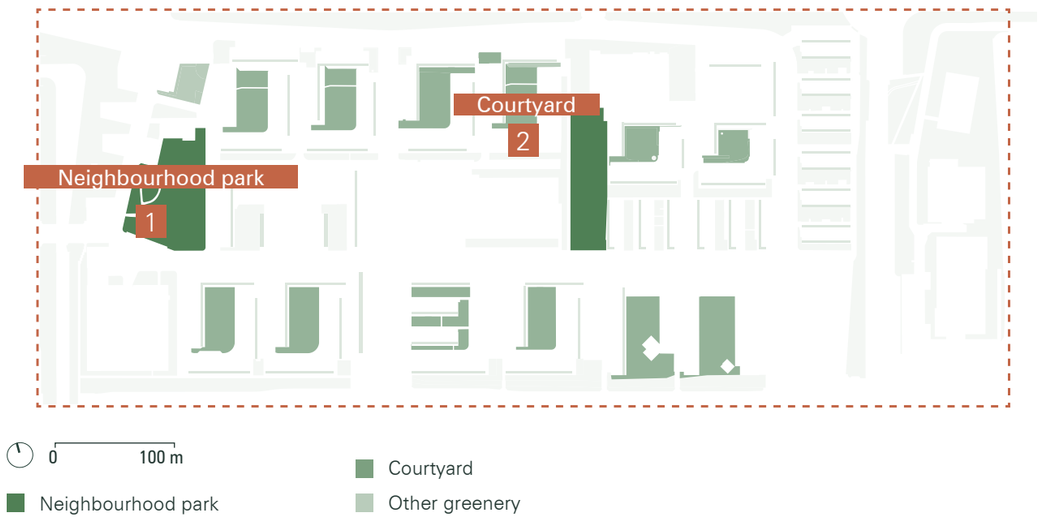


Figure 144. Hierarchy of greenery in Couperusbuurt (taken by author)

Adding Sustainability Values

There are two possible functions that could be integrated with the green infrastructure. First, bioswales. Aside from infiltration function, Potz & Bleuze (2012) stated that bioswales could improve biodiversity and reduce the heat level. Figure 145 shows how bioswales could be integrated with the neighbourhood park and have a visual value for people who pass to enjoy the greenery.

Second, urban agriculture through a community garden. Figure 145 shows how a community garden could be implemented in the courtyard. Potz & Bleuze (2012) argues that having a community garden is not only beneficial for the adults who take care of the garden itself, but it could also be an educational garden and acts as a play area for the children in the neighbourhood itself.

In conclusion, these two functions are beneficial for sustainability aim and ensure social engagement between residents (Figure 146).

Figure 145. Examples of bioswales & community garden (derived from Potz & Bleuze, 2012)

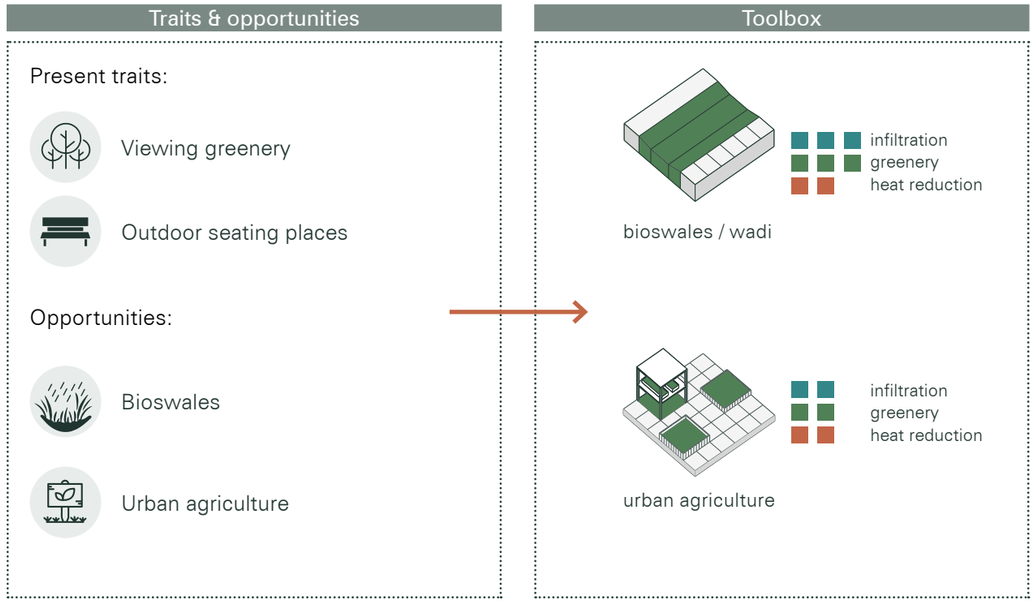


Figure 146. Traits & opportunities to build strategic toolbox (illustrated by author)

8.2.3 Route

Streets as place of social interaction

The existing street in Couperusbuurt has an unclear distinction between their different hierarchical function. As Figure 147 shows, each picture represents a different street hierarchy. However, most of them are always packed with parking on the street, reducing the connectivity from houses to the public function (e.g. plaza) or the public courtyard. Also, picture one shows a lack of connection to the primary street of Burgermeester Roelstraat. This is the quality that should be improved.

In order to do that, Figure 149 lists the potential new functions on the streets to ensure social engagement. For example, putting urban furnitre and allocating parking into one collective parking is vital to create an impromptu social interaction between people. Also, adding an active plinth that connects to the main street is another possible improvement. In conclusion, the street in Couperusbuurt has much potential to be improved as a place of social interaction (Figure 150).

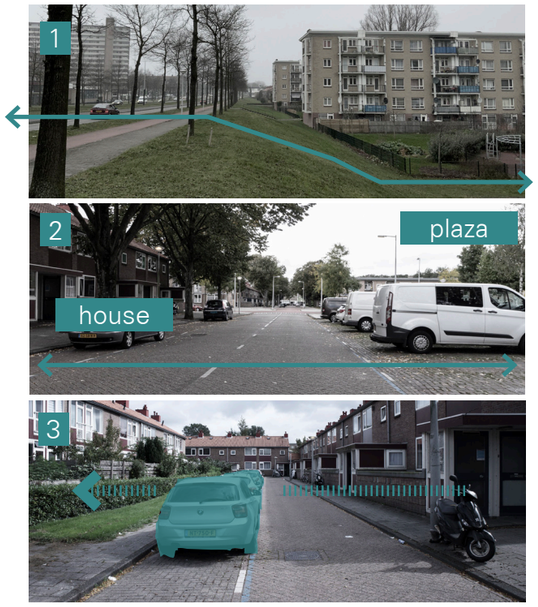


Figure 147. Existing situation of streets in Couperusbuurt
(taken by author)

Figure 148. Hierarchy of streets in Couperusbuurt
(illustrated by author)

Figure 149. Improvement to activate passive street
(illustrated by author)

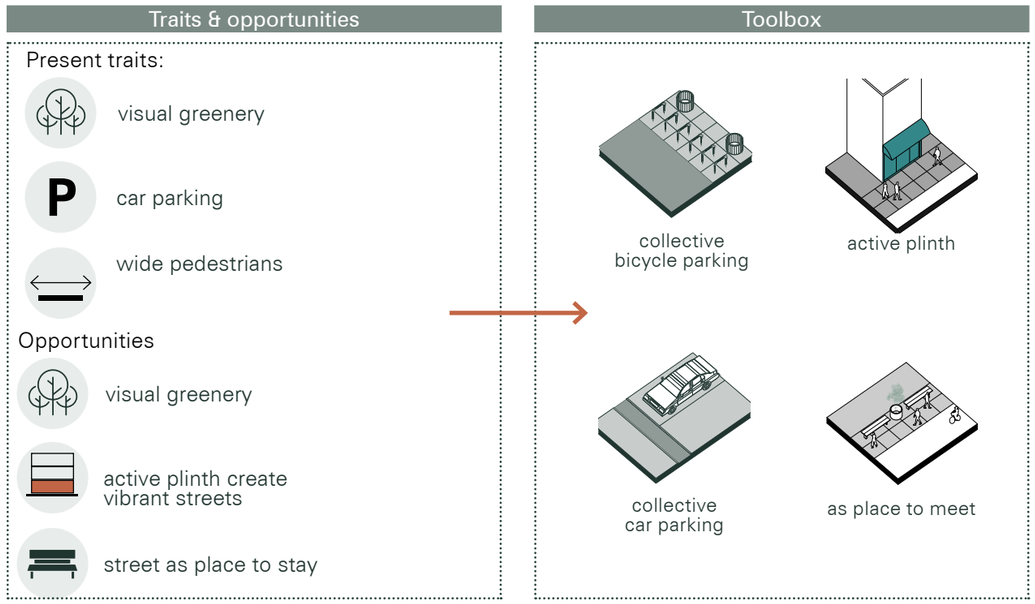


Figure 150. Traits & opportunities to build strategic toolbox
(illustrated by author)

8.2.4 Public Function

Improving existing neighbourhood bearer

In achieving community through public function, the strategy is to improve the existing neighbourhood bearer in Couperusbuurt: public function, courtyard, and centre of the neighbourhood (Figure 151).

In his research, Nio et al. (2020) mentioned four bonding places that could promote attachment among users and the place itself. The four categories are (Figure 152):

1) Functional place, which is based on needs to provide the users daily activities

2) Emotional place, which involves identification, familiarity, feeling at home, and aesthetic bond with the place. For example, one's appreciation toward the green environment.

3) Social place, which stimulates interaction between residents.

4) Political place, which could be created because of involvement, control and commitment. For example, volunteer activity, community garden.

Based on the categories and by considering the neighbourhood needs, the toolbox of public functions is drawn (Figure 153). This toolbox translates the four categories into has specific roles of living, work, play, meet, and services function.

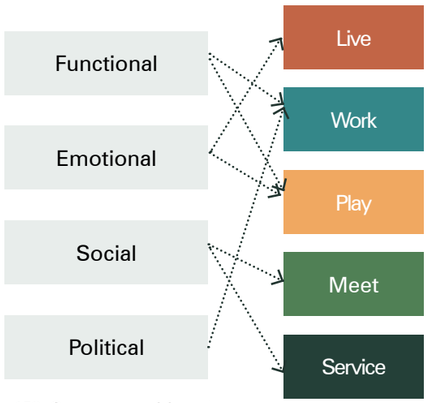


Figure 152. Categories of function
(illustrated by author)

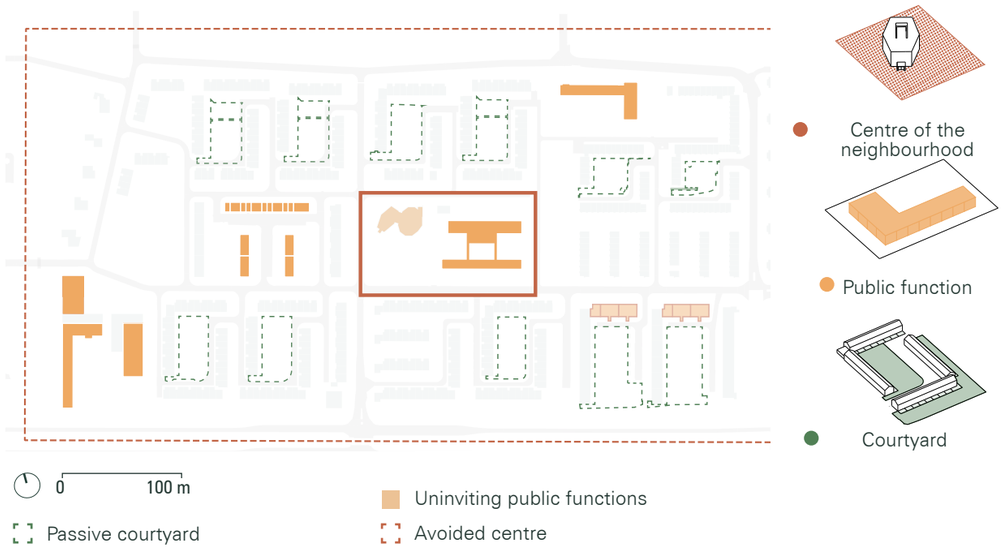


Figure 151. Current neighbourhood bearer
(illustrated by author)

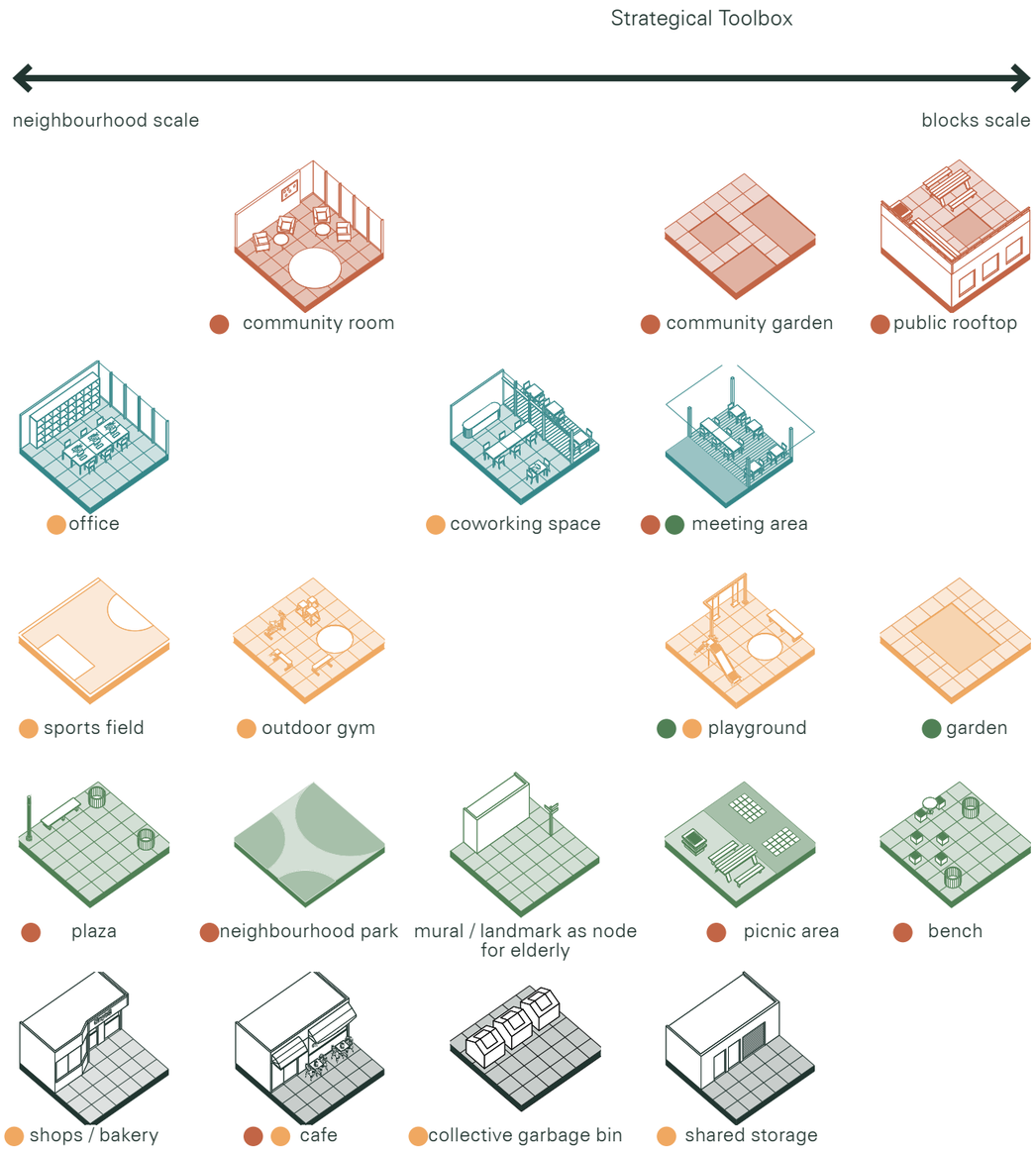


Figure 153. Toolbox of public function
(illustrated by author)

8.2.5 Toolbox Inventarisation

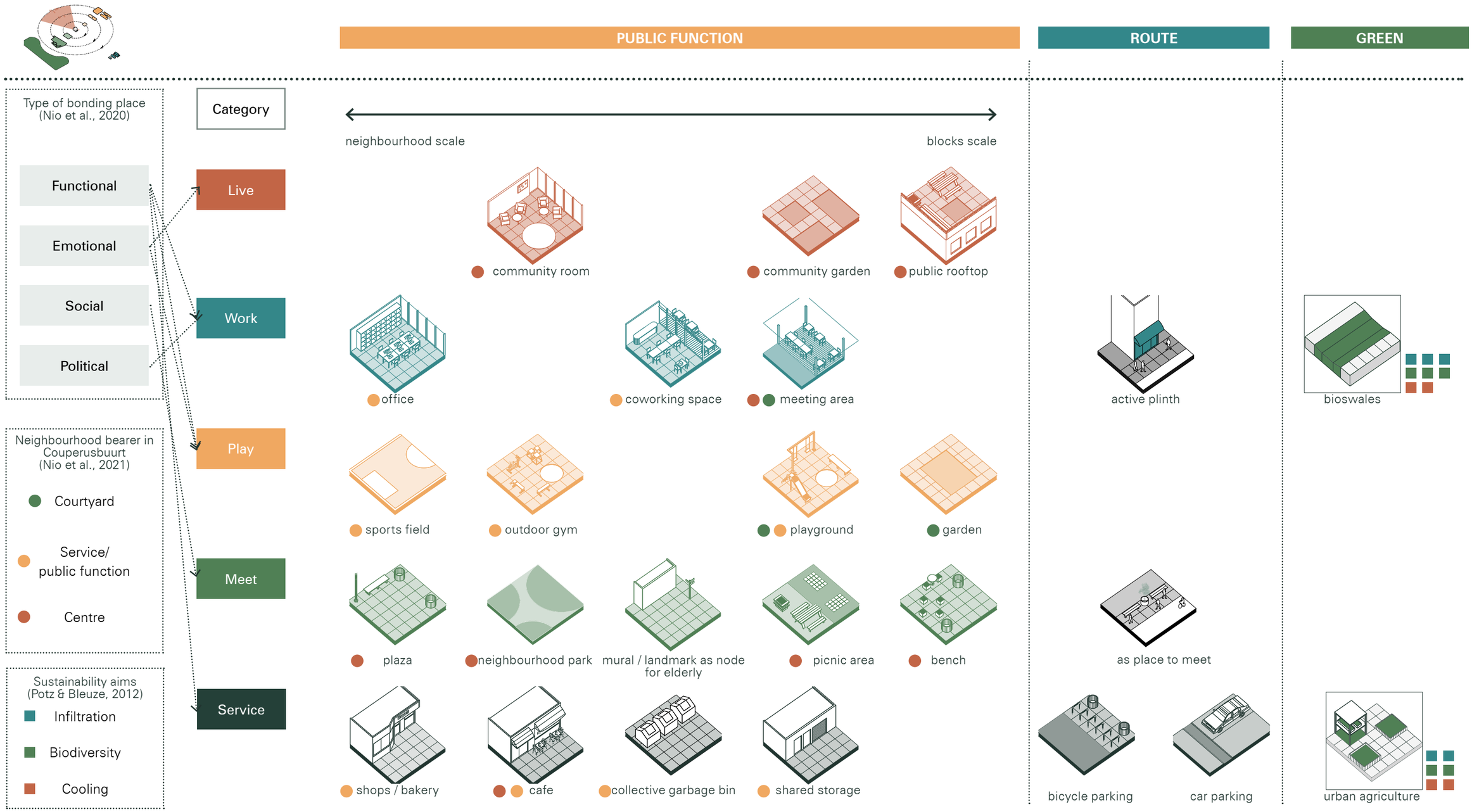


Figure 154. Overall toolbox of neighbourhood bearer (illustrated by author)

8.3 PARTICIPATORY PLANNING

8.3.1 Stakeholder analysis

In addition to the spatial strategy, the integration of heritage value in renewal project in Couperusbuurt will also be implemented to the social process of the renewal itself. To promote collectivity through community, it is vital to have the involvement from the residents in the project. Therefore, the participatory planning process in this project is vital.

The approach in the planning is bottom-up instead of top-down planning. Previously, the planning of Westelijke Tuinsteden was a complete top-down process where planners, designers, and researchers were the main stakeholders of the process without much consideration of the residents. Therefore, in this project, stakeholder analysis is vital to understand what are their interest and needs.

Figure 156 llists all of the stakeholders who are present in Couperusbuurt. The diverse group of residents are divided into three categories which are evident (as investigated in the analysis of urban residents). Currently, some groups of residents are more dominant than the others, as Figure 155 shows. Therefore, this project aims to move the resident's group to the player quadrant in this planning process.

In addition, there are current and potential stakeholders that should be considered, such as the Muslim community and the business owner in Couperusbuurt. This research will emphasise these groups, but it is important to understand their interests and power in the neighbourhood and actively involve them in the planning process.

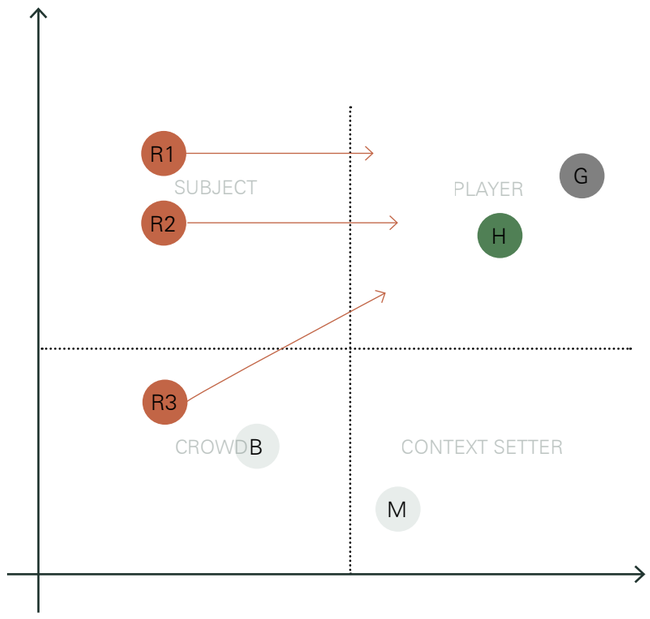


Figure 155. Role of stakeholder in the planning process
(illustrated by author)

	Actor	Interest	Interest Category	Problem perception	Goals
1	Gemeente Amsterdam G	providing teh general spatial zoning and regulation for future development, while supervising the current development to maintain the quality of life of the resident	social environmental	concentration of one type of residents in the neighbourhood makes other group of residents avoid the neighbourhood.	achieve social cohesion and more diversity in the neighbourhood
2	Stadgenoot H	provide affordable housing and distributes it to diverse group of people to achieve equality, while aiming for sustainability at the same time	social environmental economical	affordability for the future social housing (considering after renewal probably the price will be higher)	sustainability of rental process to the people
3	Residents (1) - Local residents R1	sense of community in the neighborhood, social activities between neighbours, safety, green neighbourhood	social environmental	too many nuisance in the neighbourhood such as littering, nuisance in the plaza of the square with the strangers	calm neighbourhood where people could spend time outside and appreciate the greenery
4	Residents (2) - Immigrant background residents R2	facilities for family, green neighbourhood	social environmental	lack of child friendly facilities, littering	cleaner neighbourhood, appreciation toward greenery
5	Residents (3) - New comer, students R3	more functions and facilities (more diversity to the public function)	social	there are no interesting place in the neighbourhood to go, so most people spend time outside or even go to Amsterdam centrum	more diversity of function in the neighbourhood
6	Muslim community M	religious gathering and events	social	lack of space for praying in some special occasion	more capacity, better facilities for religious purposes
7	Business owner (shops, bakery, services shops) B	profit, costumer engagement	economical	unclear zoning of commercial facilities which make attract less people to their shops	invite more people for economic purposes

Figure 156. Types of stakeholder and stakehodler's interest
(illustrated by author)

8.3.2 Planning Process

Step of planning process

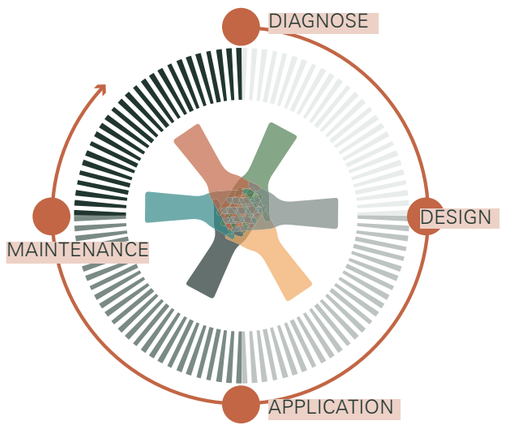
There are four planning process that is proposed as Figure 157 shows. In the first step the residents are not actively involved as they act as the subject of the research. Therefore, the role of designer and researcher are vital.

In the following steps, the role of the residents should be active through the involvement as participants in a workshop. The aim of the workshop is to openly discuss the possibilities, alternatives, and options for the renewal of the neighbourhood.

The process of planning and designing never happens in a straight line. Therefore, the last step of the planning which is the maintenance is as vital as the previous steps.

Role of project to the planning process

This project aims to accommodate different diversed residents needs while considering other stakeholders' demands (municipality, housing association). Therefore, this project aims to explore the possible and probable future by designing with scenarios. At the same time, the end product of the design by scenario could be used as a material for discussion between them. Also, the toolbox provided through this research could serve as a planning tool and future maintenance process.



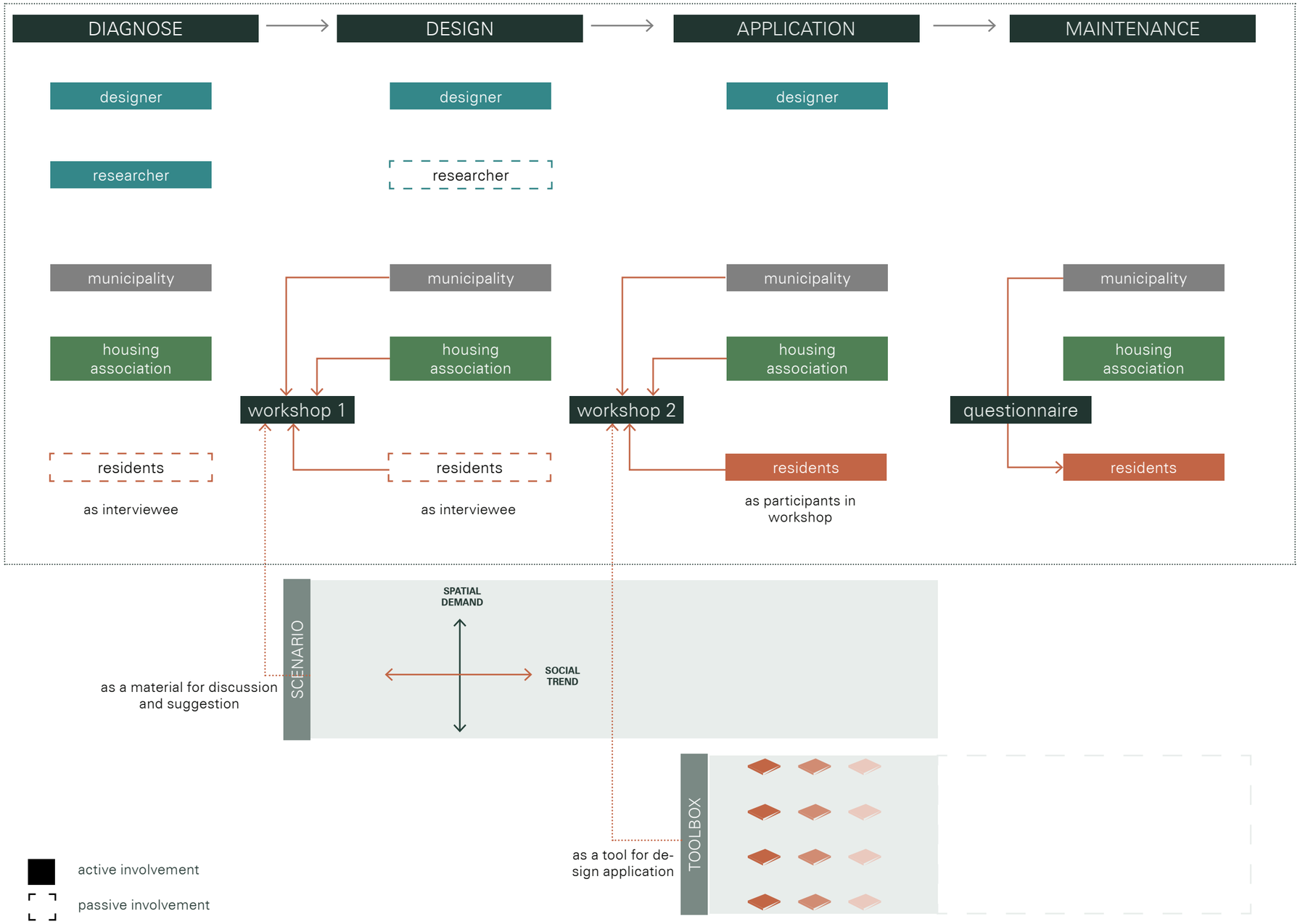
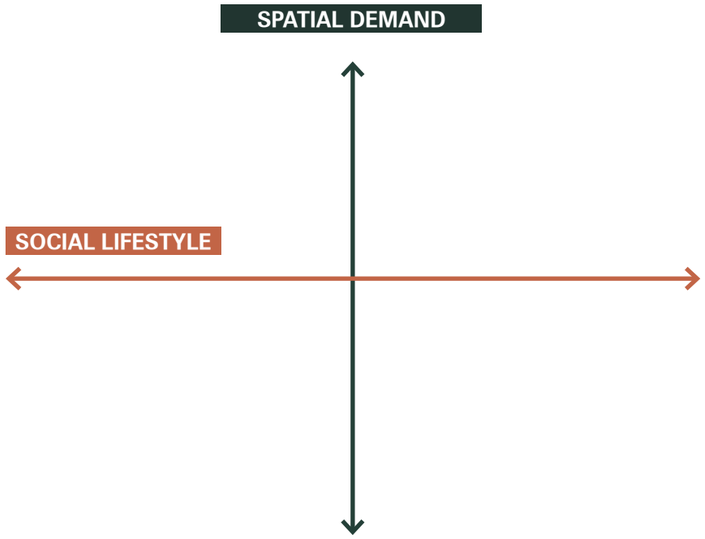


Figure 157. Planning process
(illustrated by author)

9 SCENARIO BUILDING



This chapter will elaborate the strategy into design process. However, this project will utilise design exploration by scenario. Therefore, it is vital to build a thorough understanding of the scenario indicator. Thus, this chapter will discuss the indicator of the scenario for Couperusbuurt

9.1 SCENARIO GUIDELINES

Importance of designing with scenario

Contribution of scenario in spatial planning in the Dutch context is evident. Salewski (2012) argues that the planning with scenarios has a benefit to predict uncertain future while combining scientific and intuitive thougths altogether.In practice, there are four type of scenario planning with two of them acts to forecast the future while the other two back-cast the future.

In this project, the scenario will forecast the future with the aim of limiting possible futures. The path-way in this type of scenario is to make extreme variations which is supported by the trend or de-mand (as indicators). The process of designing with scenarios is part of the design elaboration process which is based on the strategy (Figure 158).

The end product of the scenario is beneficial in the participatory planning process because it will shows what are the probable future for Couperus-buurt.

In conclusion there are two evident role of design by scenarios in this research which are:

1) To visualise extreme design variations regarding the changing trends

2) As a tool in participatory process by publishing the materials as a mean for discussions, work-shops, questionaire.

Socio-spatial indicators in scenarios

The indicator of the scenario is built upon the the changing trends of socio lifestyle and spatial de-mands.

The former focus on the residents' needs while the latter focus on the densification agenda from the municipality and housing association. Following subchapters will discuss the indicators thoroughly.

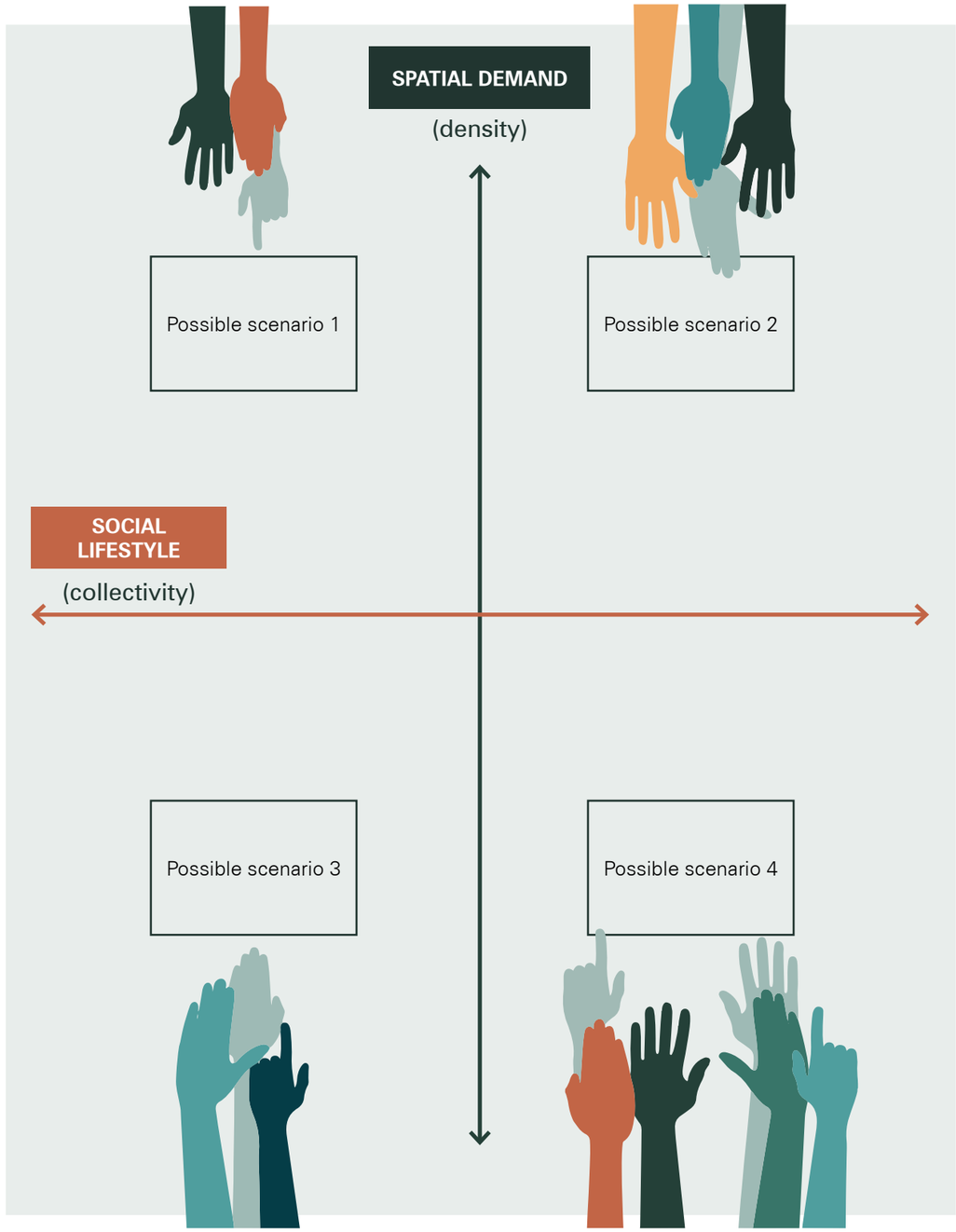


Figure 158. Process thingking of scenario
(illustrated by author)

9.2 SPATIAL DEMAND

9.2.1 Densification Agenda of Amsterdam

As mentioned in the problem analysis chapter, there is a densification pressure in Westelijke Tuinteden. Therefore, the indicators will define the amount of densifcation that could happen in the neighbourhood.

Currently, the FSI in Couperusbuurt is 0.65 which is considered as very low, especially in the city of Amsterdam due to the high amount of greenery present. Thus, the densification should consider this. Therefore, it is impossible to densify the whole neighbourhood, thus the densification should be done in a strategical approach.

Strategic densification

The agenda from the municipality is to demolish and densify in several building blocks throughout Couperusbuurt (Figure 159). However, this project will investigate the possibility of densification will by investigating several aspects such as ownership of the houses, quality of the existing houses, and other external factors.

These investigations are useful to have a careful consideration in densifying instead of densifying anywhere in Couperusbuurt.

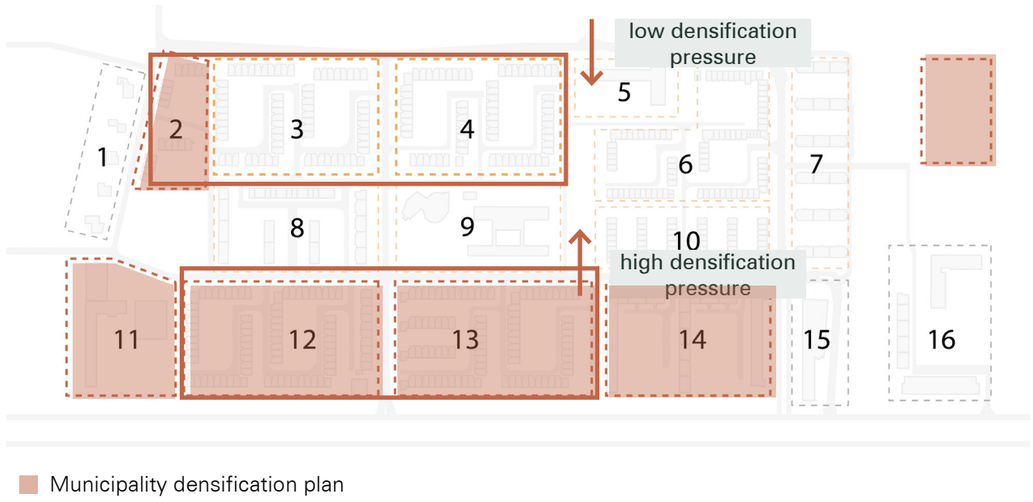


Figure 159. Strategic densification suggestion for Couperusbuurt
(illustrated by author)

9.2.2 Ownership

In Couperusbuurt, most of the building function is residential. Housing makes up more than 80% of the function in the neighbourhoods, with the dominant presence of social housing rental. In the neighbourhood, two housing corporations owned the houses: Stadgenoot and Ymere. Stadgenoot owns most of the social housing property and almost 700 households in Couperusbuurt (1200 households in total).

Figure 160 shows the property that owns by Stadgenoot, which is dominantly present in the south and west area of Couperusbuurt. At the moment, the actual renewal project of Couperusbuurt is conducted with Stadgenoot and there has been an active discussion with them as well. Therefore, to make this project factual, the maximum intervention is possible to be done in social housing by Stadgenoot while the others have limitation and will be addressed differently in the design proposal.

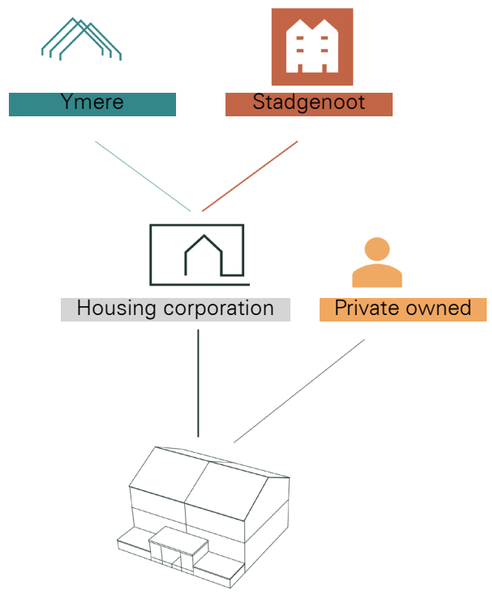


Figure 161. House owners in Couperusbuurt
(illustrated by author)

Figure 160. Ownership in Couperusbuurt
(illustrated by author)

9.2.3 Development consideration

In Couperusbuurt, there are several building which are considered high value heritage buildings. Thus, these buildings is limited to a major renovation and demolishment. In contrast, there are a presence ofoutdated houses which are the duplexhouses (as mentioned in urban form analysis). Thus, the duplexhouses will be the attention of this project.

Aside from this, there is a current plan of transforming the city street on the south side of Couperusbuurt (Burgermeester Roelstraat) into a city scale avenue. (figure 162). This project will affect the form of the building blocks in the south an active plinth is required.

These aspects are vital to be considered in deciding which intervention should be applied to which building blocks. Figure 163 shows the thinking process and the analysis in deciding the strategy approach on the spatial transformation and densification of Couperusbuurt.

Figure 162 shows which building should be transformed and preserved based on the analysis of the urban form. In addition, there is an external factor of the development of Geuzenveld-Slotermeer avenue which affects the face of Couperusbuurt. This project will affect the form of the building blocks in the south an active plinth is required. Also, the ownerships of the residential buildings should be considered as it will explains limitation of the design intervention (see Figure 161 on page 141). These considerations conclude different approach that will be applied to the building blocks in Figure 162.

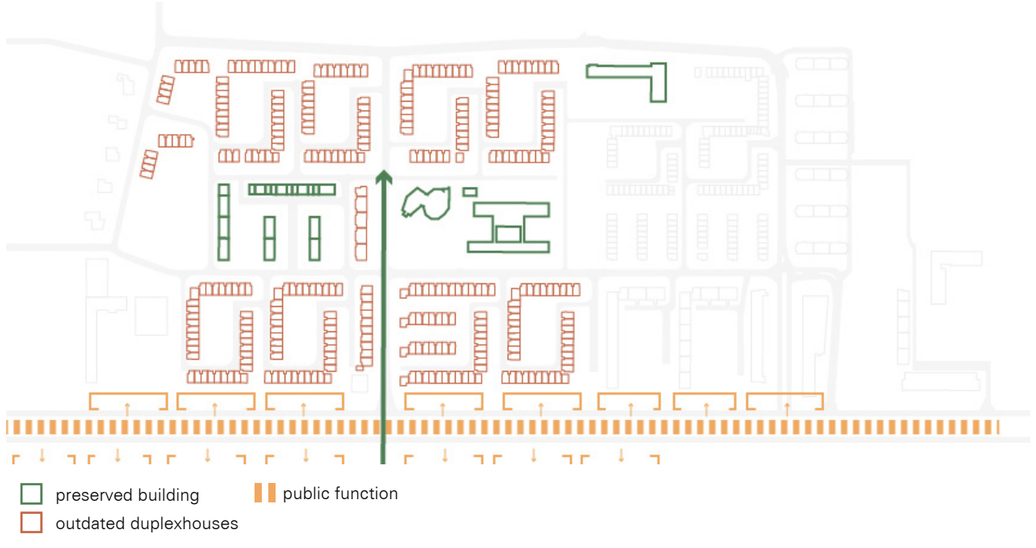


Figure 162. Considerations for spatial transformation
(illustrated by author)

9.2.4 Proposed strategy

Block	Internal factor				External factor	Strategy approach
	Function	Building with high value	Outdated duplex house	Ownership	Project	
1	Residential			Private		-
2	Residential		●	Stadgenoot	Demolishment agenda	R
3	Residential		●	Stadgenoot		R
4	Residential		●	Stadgenoot		R
5	Public function					PSI
6	Residential			Private & Stadgenoot		PSI
7	Residential			Ymere		PSI
8	Office/Residential	●		Stadgenoot		PSI
9	Public function	●				PSI
10	Residential			Private & Stadgenot		PSI
11	Public function				Geuzenveld - Slotermeer avenue	UFM
12	Residential		●	Stadgenoot	Geuzenveld - Slotermeer avenue	UFM
13	Residential		●	Stadgenoot	Geuzenveld - Slotermeer avenue	UFM
14	Residential			Stadgenoot	Geuzenveld - Slotermeer avenue	UFM
15	Residential			Stadgenoot	Geuzenveld - Slotermeer avenue	PSI
16	Office/Residential					
17	Park				Densification agenda	PSI

UFM Urban Fabric Modification
R Renovation
PSI Public Space Intervention

Figure 163. Process of thinking and approached strategy for building blocks
(illustrated by author)

Figure 164. Active ground floor function
(illustrated by author)

There are three strategies of spatial transformation to the project which are: 1)urban fabric modification in the south, 2) renovation on the north, 3) public space intervention in the neighbourhood. The main reason is to densify the neighbourhood strategically and focus on the south because of few reasons. First, consideration of the new avenue, the area acts as the face of Couperusbuuurt and needs a more welcoming neighbourhood facade, and lastly the possible view to Sloterplas from the higher building in south. Also, there is a basketball field on blocks 17. During observation, the field is actively used by the people. Therefore, it is considered as one of the neighbourhood bearer. In addition, the connection to west and east of Couperusbuurt is reather weak due to lack of function in east. Therefore, the basketball field is necessary to have there as an anchor for people to visit.

The conclusion of this analysis will draw the indicator of spatial demand for the design by scenaro which is shown in Figure 166.

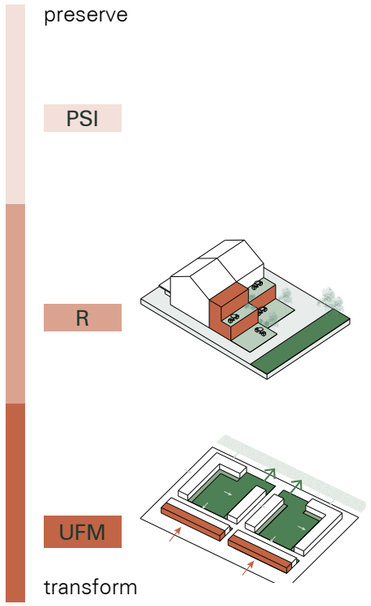


Figure 165. Three strategies of preservation through transformation. (illustrated by author)

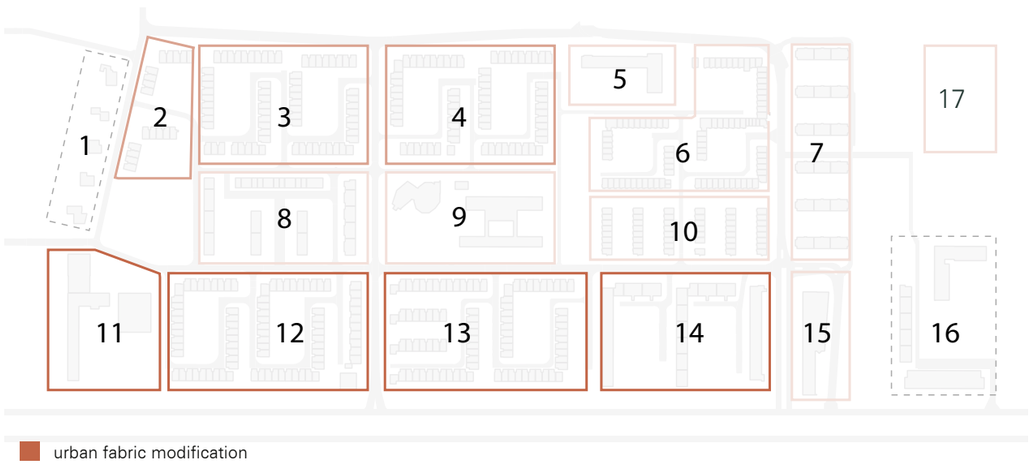


Figure 166. Applied strategy on building blocks (illustrated by author)

9.2.5 Quantitative Indicator

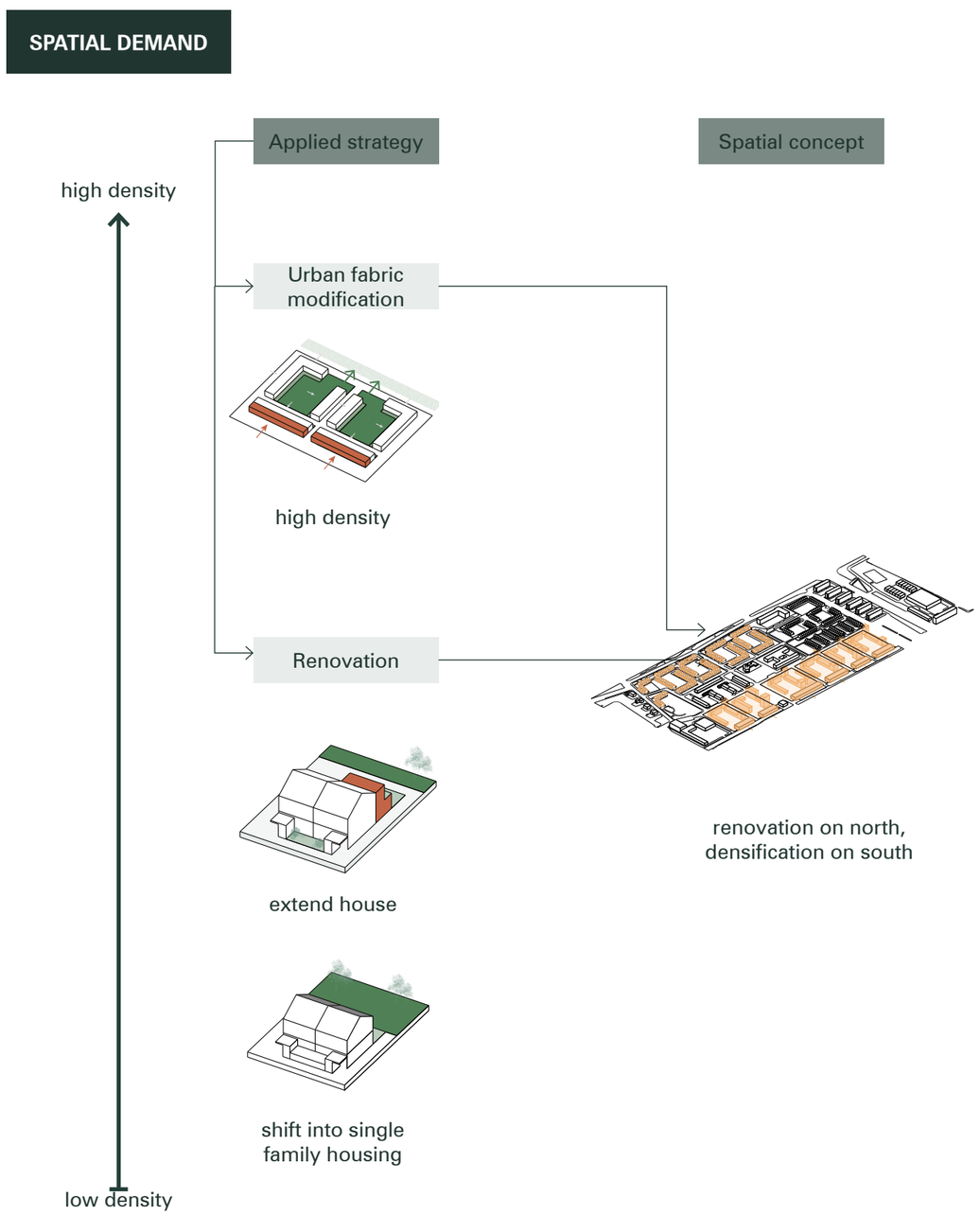


Figure 167. Quantitave scenario indicator (illustrated by author)

9.3 SOCIAL TREND

9.3.1 Lifestyle of the residents

The supporting research for the social indicator is the lifestyle study that is done by Springco. Springco (2021) argues that there are three different groups of people that could be a potential and also an existing group of residents in Couperusbuurt. They are categories by colour which define their preferences characteristics (see Appendix 1 on page 214). However, these characteristics were found too personal to be implemented to a diversed group of residents. For example, specifying some groups to be friendly, expressive, respect value and norms. In addition, Springco also mentioned the desired living environment that these people value with the desired privateness and publicness (see Appendix 1 on page 214). Therefore, this research will focus on that.

Figure 168 translate the three different groups of residents into current and possible target groups of Couperusbuurt which are young professionals student, elderly, and family. Based on their needs, young professionals strongly match the blue target residences who value privacy and their own space. In contrast, family who needs outdoor spaces for children's activities strongly belong to the yellow target residences. In between them, is green target residences who value both sharing and privacy at the same time.

These finding is used to form the scenario's qualitative indicator and translated into spatial concept (Figure 169). Considering the uncertainty of specific residents in Couperusbuurt, the scenario will be built upon contrast probability. First, the probability of influx of young professionals & students who value more privacy. Thus, the distribution of neighbourhood bearer toolbox (collectivity value) will be concentrised in the centre of Couperusbuurt to ensure privacy in the residential blocks. Second, Couperusbuurt will still be a dominated family neighbourhood, which aims to promote collectivity and social engagement through all the scales in Couperusbuurt. Therefore, the toolbox will be distributed sporadically in Couperusbuurt.

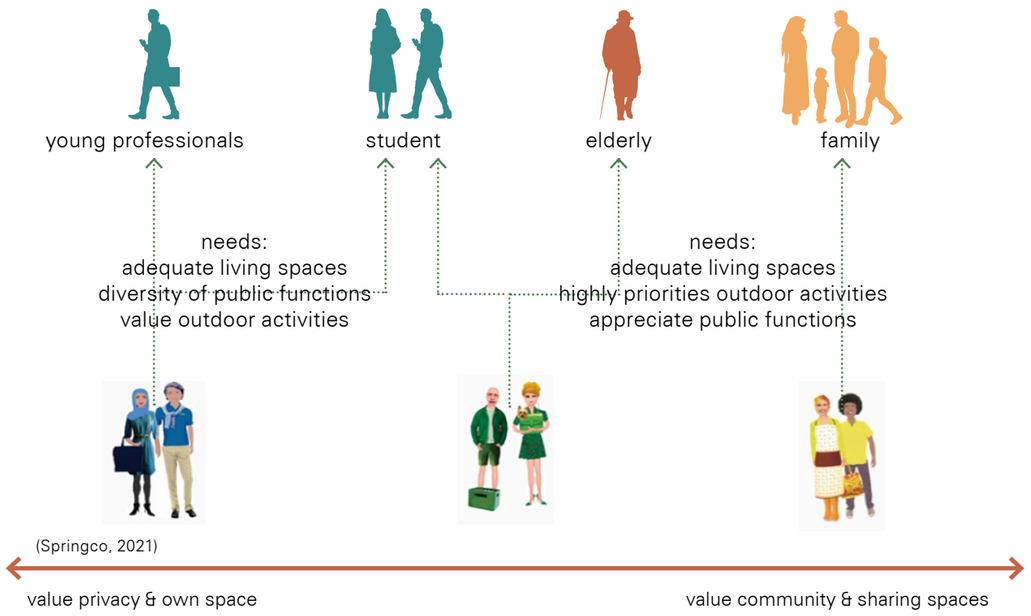


Figure 168. Target groups of resident in Couperusbuurt
(derived from Springco (2021))

9.3.2 Qualitative Indicator

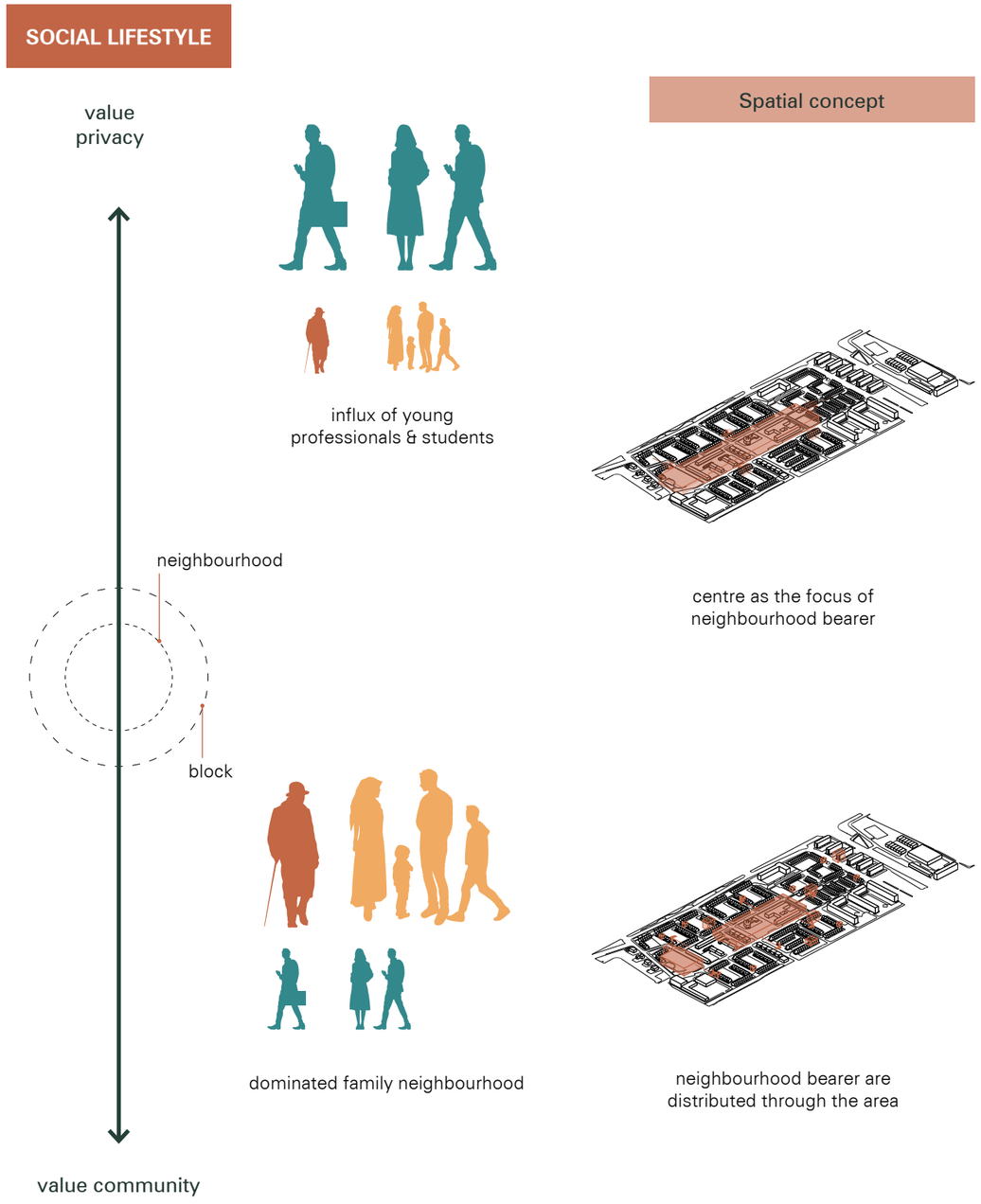


Figure 169. Qualitative indicator for scenario
(illustrated by author)

9.4 PROBABLE SCENARIOS

The combination of the qualitative and quantitave indicators are the result of the probable scenarios. The first scenario will be “Centralised Collectivity” scenario and the second scenario will be “Distributed Collectivity” scenario.

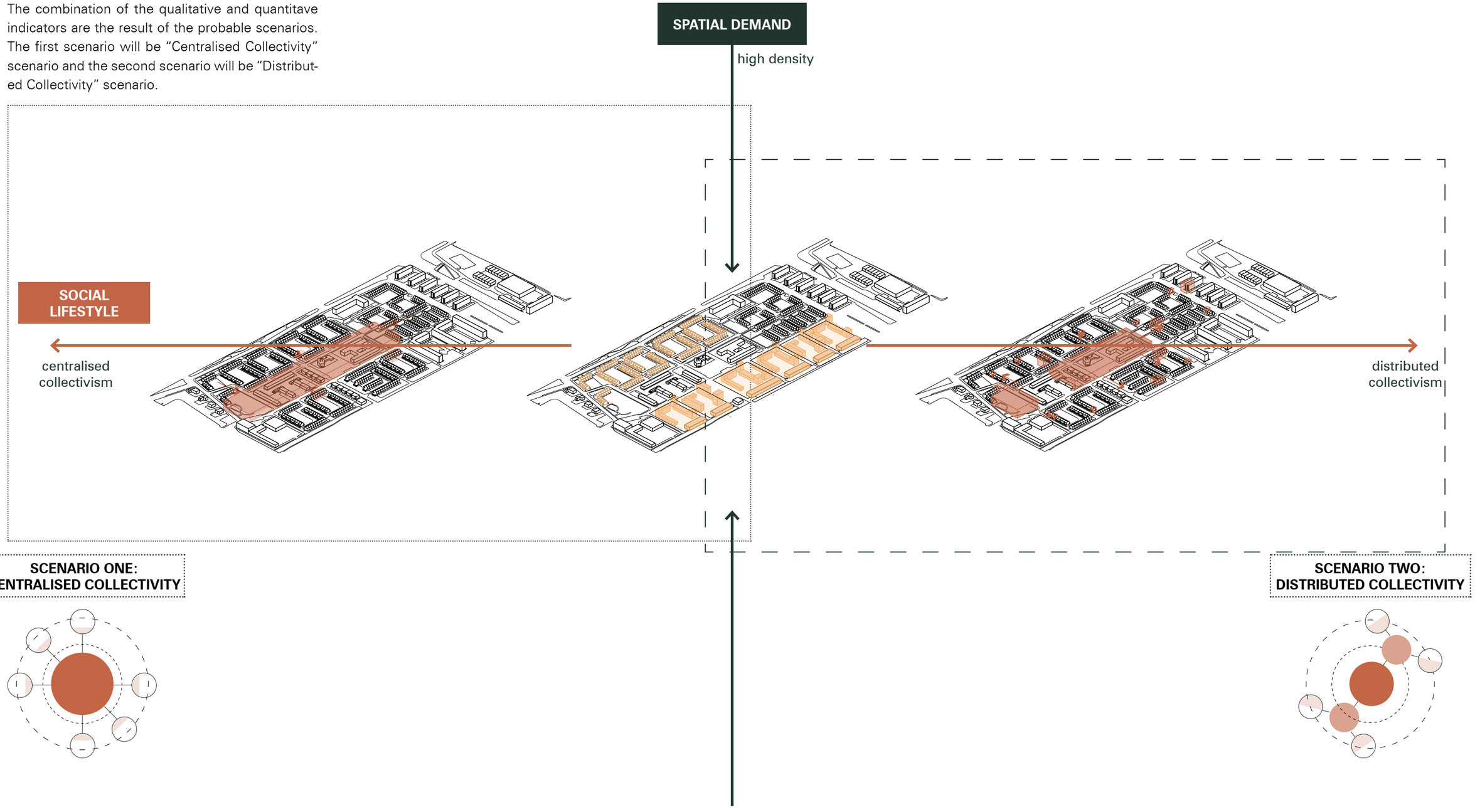
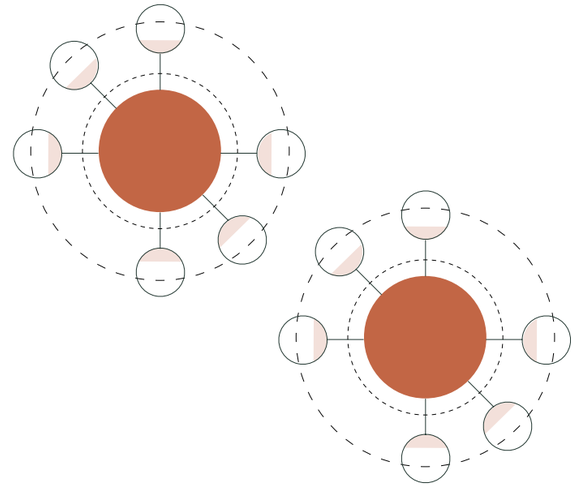


Figure 172. Concept of two scenarios (illustrated by author)

10 EXPLORATION OF SCENARIOS



This chapter is the elaboration part of the project which is design exploration through scenario. In this chapter, sub research question three will be answered, which is:

"How does the design respond to various demands of Couperusbuurt stakeholder?

10.1 SHARED STRATEGY

Common ground value for each scenarios

Using scenario by design is beneficial to visualise various probable future. However, in this project, using the design by scenario illustrates the dynamic component of heritage value, meaning heritage value could be translated into different forms while still sharing the same meaning. Therefore, even though these two scenarios will have a different spatial quality, they will share a common ground of heritage value in Couperusbuurt.

To be more explicit, the common ground values are translated into three specific shared strategy (Figure 173), which are:

1) Centre of Couperusbuurt should act as the core of neighbourhood bearer in Couperusbuurt. Doing so will also strengthen the heritage axis and the connectivity to other Westelijke Tuinsteden neighbourhoods.

2) Densification of urban fabric modification in the south and renovation in the north of Couperusbuurt. This project acts as preliminary research and showing the first step of renewal that could be done in Couperusbuurt. The actual densification plan should and will take more place along the south of Couperusbuurt, which is not covered in this project.

3) Public space intervention throughout the neighbourhood. The toolbox of the neighbourhood bearer will be applied in Couperusbuurt based on the residents' need (through participatory design). Thus, this research will not focus on the design of the public space, considering it will be on the next steps in this research.

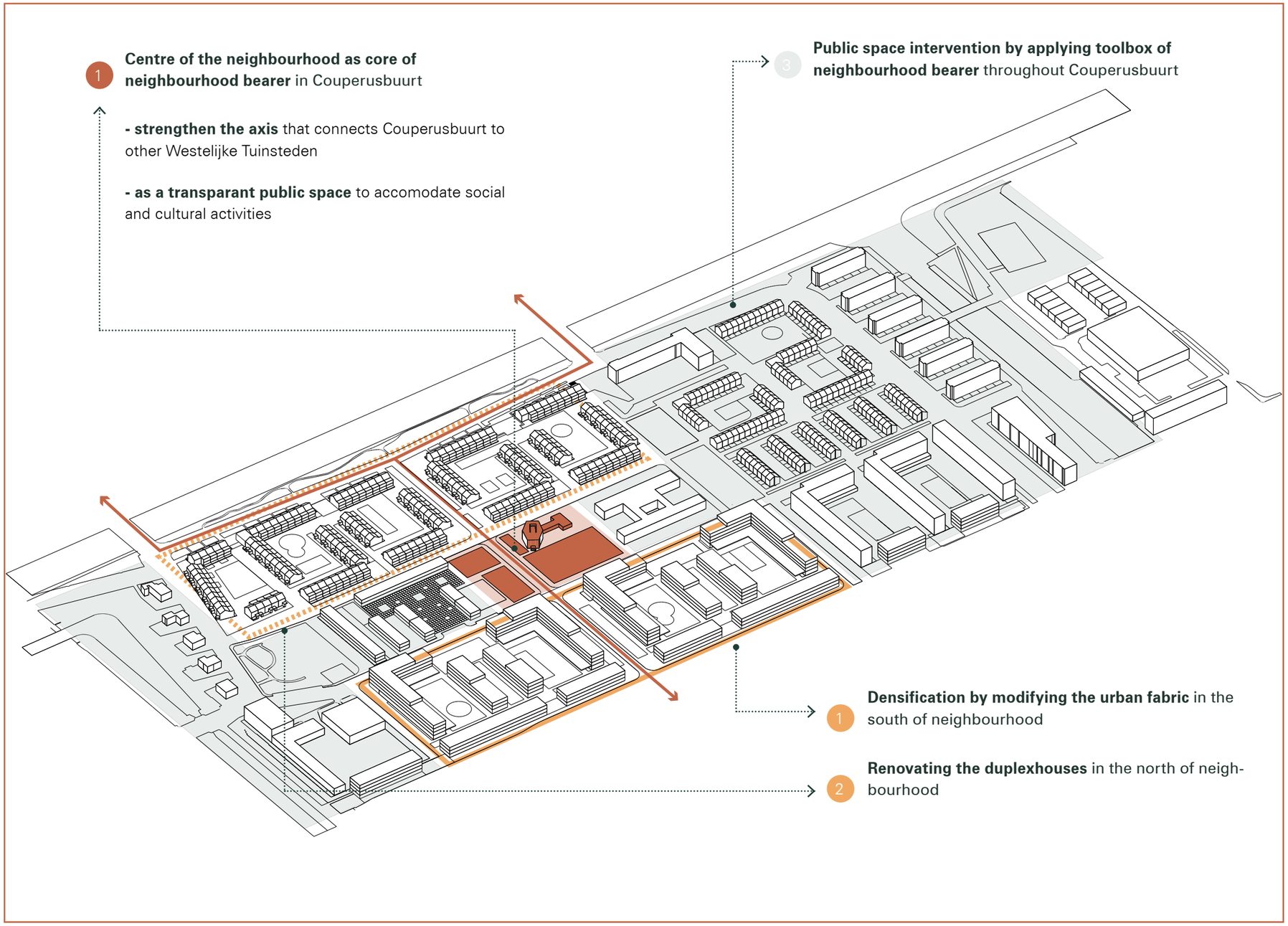


Figure 173. Shared Strategy Diagram
(illustrated by author)

10.2 SCENARIO ONE: CENTRALISED COLLECTIVISM

10.2.1 Vision for Couperusbuurt

In 2030, the residents of Couperusbuurt are mostly young starters, students, and young family. Several factors urge these specific groups to want to live in Couperusbuurt. One of the reasons is the emerging development of the Sloterdijk busisness area, which boosts rapid urban growth and invites young starters to come. Considering the proximity of Couperusbuurt to Sloterdijk, this neighbourhood is in favour of them.

These residents enjoy living nearby the busy city but still could enjoy greenery through their private garden. People are busy with their daily lives, but they also like to spend the weekend with outdoor activities such as sports, sitting on the terrace, or having a picnic. For them, the new Couperusbuurt fits their needs.

However, there are also a significant number of family who is living in Couperusbuurt. They often create a lively ambience in the neighbourhood due to the high frequency of using outdoor facilities. The young starters and workers have mixed feelings regarding this; while some appreciate the diversity, others prefer to live in a quieter environment.

Despite all that, they like living here, one of the reasons is the lively centre in the middle of Couperusbuurt. Bakery, shops, cafe, coworking spaces are there in the centre to accommodate their needs. In conclusion, the new Couperusbuurt fits their needs.

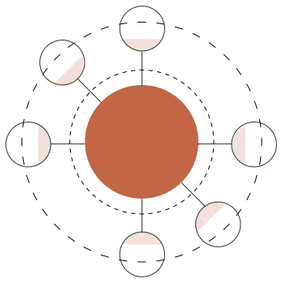


Figure 174. Vision of Couperusbuurt 2030 - Scenario one
(illustrated by author)

10.2.2 Distribution of neighbourhood bearer

In centralised collectivity scenario, the neighbourhood bearers are mainly located in the centre of neighbourhood. Neighbourhood bearer with service functions is also are spread through the block scale to answer necessity needs.

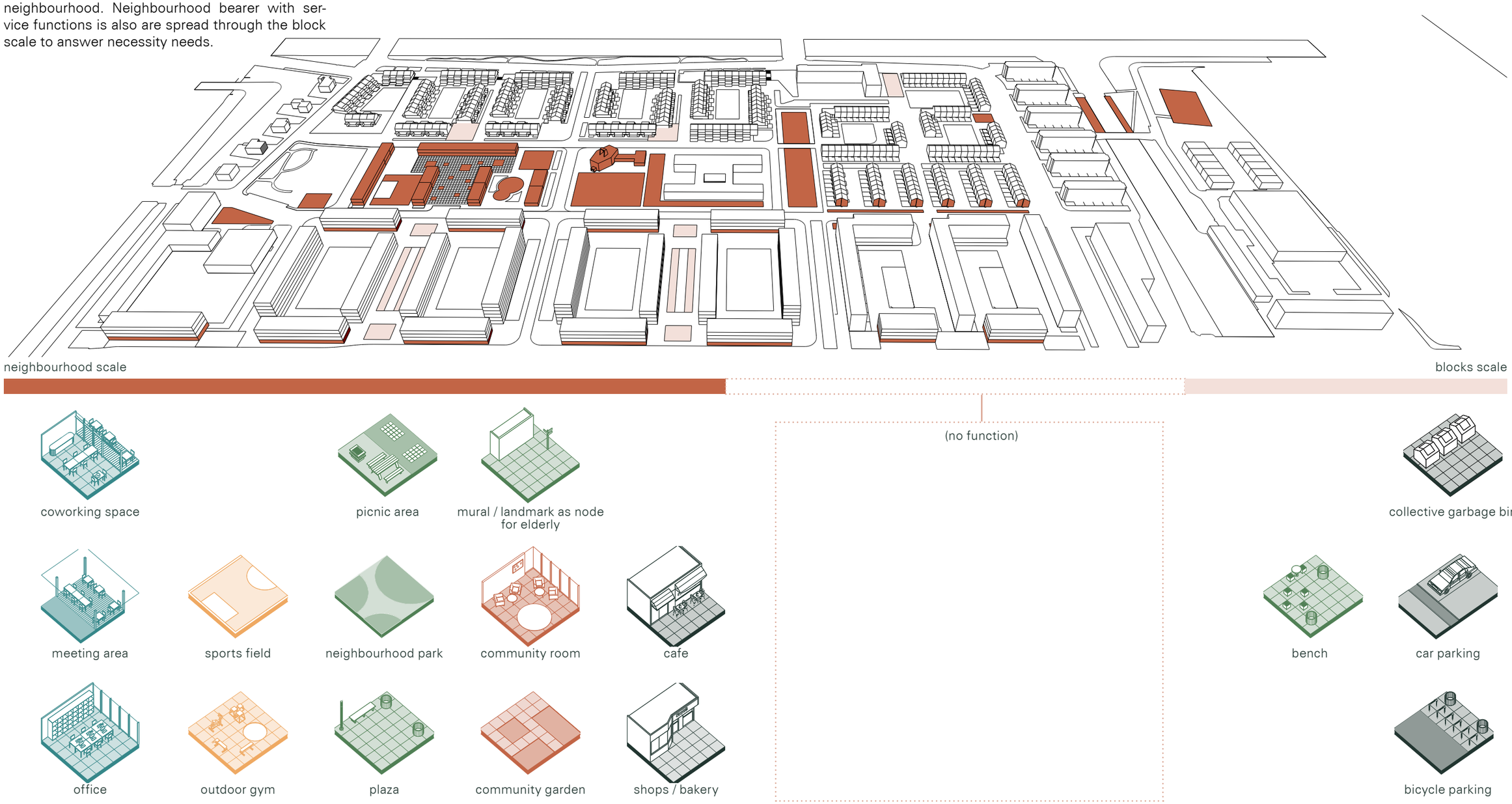


Figure 176. Distribution of neighbourhood bearer
(illustrated by author)

10.2.3 Renovation Principle

Concept of Renovation

Springco (2021) suggests that the north housing typology fits the yellow group of residents. However, this project suggests having a mixed residents group instead of one specific group. Thus, the renovation principle will demonstrate how the duplexhouses could be adapted to different groups with different needs.

There are two types of possible renovation in this scenario, which are:

1) Re-duplex the duplexhouses

Returning the duplexhouses into its initial purposes could answer the problem of lack of living area in these houses.

2) Extending indoor living area and private garden area.

To maximise privacy, the action is to extend the indoor living area and the private garden area.

Below are the more detailed renovation with its design principle and specific target groups.

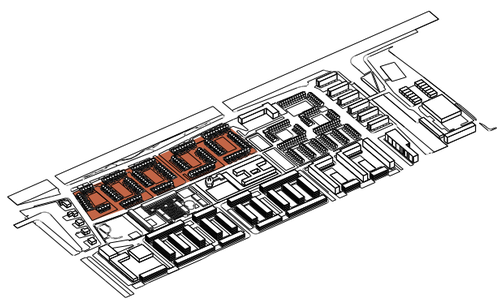


Figure 178. Area of renovation
(illustrated by author)

Current situation

Residents group: elderly, family, starters

Household/house: 2 households
Living area: 48.6 m2 per household excl. attic
Private garden: 17.5-20 m2

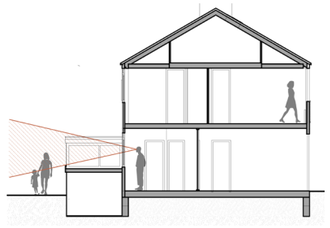


Figure 177. Current condition of duplexhouses
(illustrated by author)

Design principle

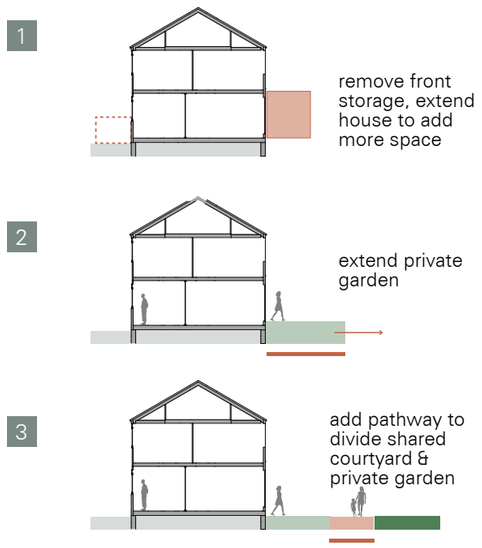


Figure 179. Renovation principle
(illustrated by author)

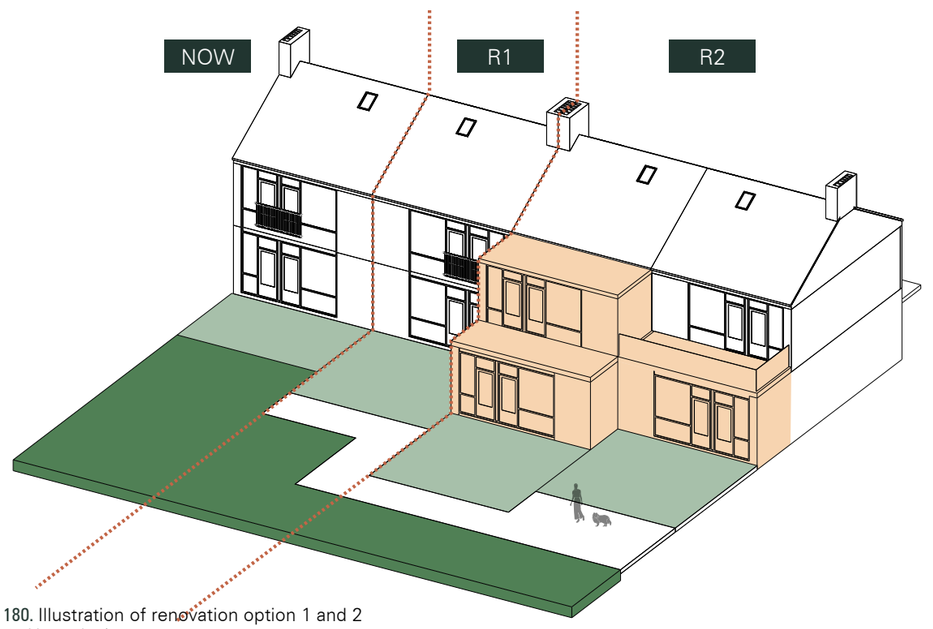


Figure 180. Illustration of renovation option 1 and 2
(illustrated by author)

Renovation option 1

Residents group: family

Household per house: 1 household
Living area: 97.6 m2 per household excl. attic
Private garden: 26-30 m2

Renovation:

Return the duplexhouses to their initial intention, which is for single-family housing. Therefore, the divided entrance at the front will be demolished. In addition, the ground floor of the house will have an active function again.

Renovation option 2

Residents group: starter, student, elderly

Household/house: 2 households
Living area: 60-70 m2 per household excl. attic
Private garden: 26-30 m2

Renovation:

Keep the different household in each floor. To answer lack of spatial area, the house could be extended to the private garden area. This action will have an impact on the shared courtyard, which will be smaller. However, in this scenario, people value their personal space rather than sharing space; thus, the courtyard will only be viewed as viewing green with less social activity. Thus, it is not the priority to have a big courtyard.

Visualisation and Quality of Renovation

Figure 181 shows the visualisation of the renovation of the duplexhouses.

In the picture, Peter (based on urban residents analysis) is seen and he found the neighbourhood is much safetier now due to more activities outside and higher transparency of indoor outdoor life.

In addition, these are several qualities that is vital in the renovation in this scenario:

1. Living room function on different sides of houses (duplexhouses with 2 household) to **increase eye on the streets.**

2. Additional small private garden and private balcony **to promote privacy and equal rights of greenery.**

3. Backyard are designed diagonally to avoid adjacent coonection to neighbour so that **privacy could be achieved without having to build a physical barrier (e.g. fence).**

4. Height differences and low wall from private backyard to shared courtyard to create a **clear division of private-public area** without having high walls (the fences are up to 1.5m in Couperusbuurt now).

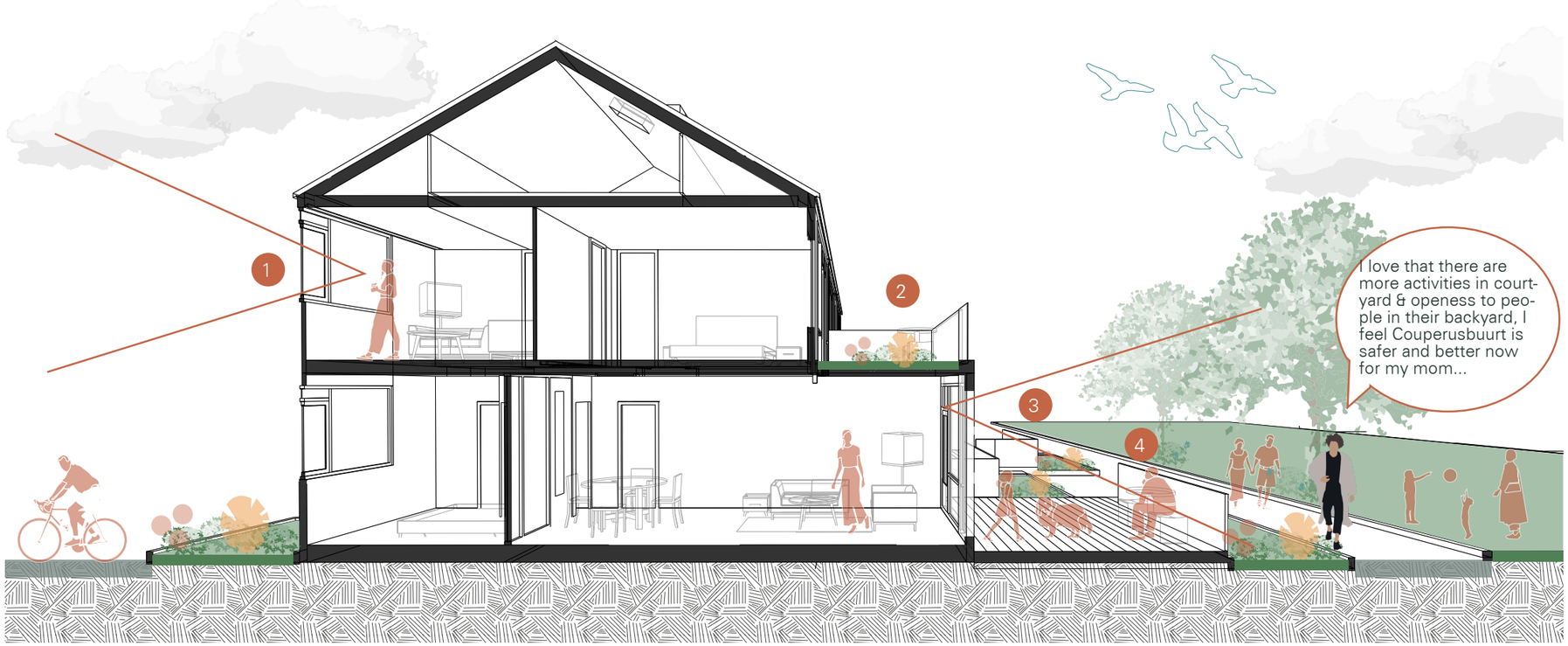
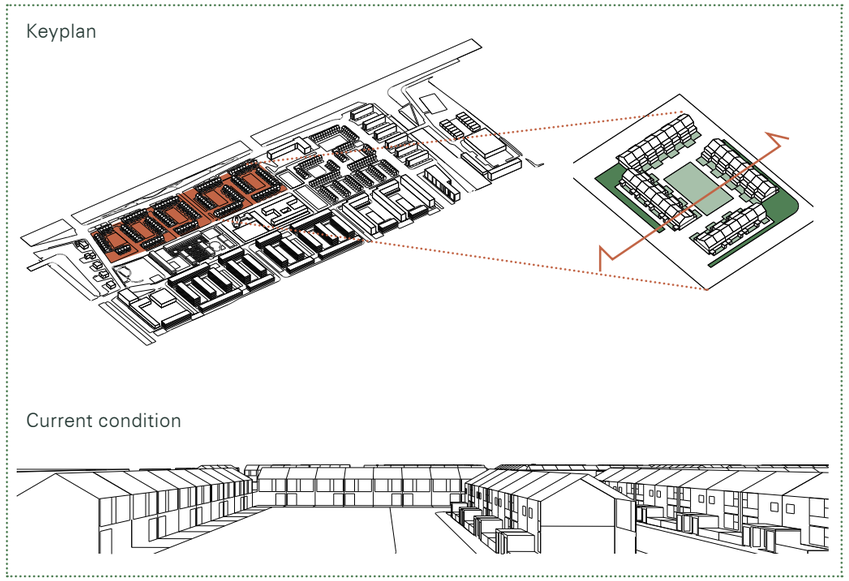
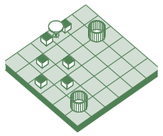


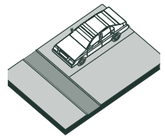
Figure 181. Visualisation and quality of the duplexhouoses
(illustrated by author)

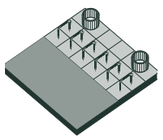


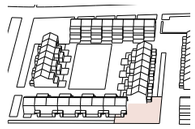
1 **Providing seating** area to promote social engagement


bench

2 **Relocate parking spaces** on the street into one collective parking area **to create direct access to greenery.**


car parking


bicycle parking



neighbourhood zoning

Figure 182. Building blocks system and toolbox implementation
(illustrated by author)

Building blocks system

Figure 182 shows how the renovation of the duplexhouses have an impact to the building blocks.

The houses create private zoning in the building blocks system, while the courtyard is a semi-public area. Although the courtyard is easily accessible to everyone who visits Couperusbuurt, the intention is to keep it a semi-public space to increase privacy for the residents.

Some public functions could be integrated into the courtyard to promote social engagement in these blocks. However, by not putting vibrant and various public functions on this scale, the privacy feeling can still be maintained.

Figure 182 also shows how the toolbox could be integrated with the limitation of services functions and some basic facilities.

Improving green quality and achieving sustainability

As mentioned previously, to improve sustainability by greenery does not depends on the quantity but on the quality of the green itself.

Figure 181 shows the design intervention that could be done to improve the quality of greenery.

First, landscape management is vital to create an organised tree with different heights. This is vital to keep eyes on the street by ensuring the right tree with the proper heights is put in the desired location.

Second, integrating bioswales to the courtyard s and improve the water catchment and biodiversity through the management of plants in bioswales.

In conclusion, the greenery in Couperusbuurt has a role in increasing biodiversity, water catchment, and heat reduction.

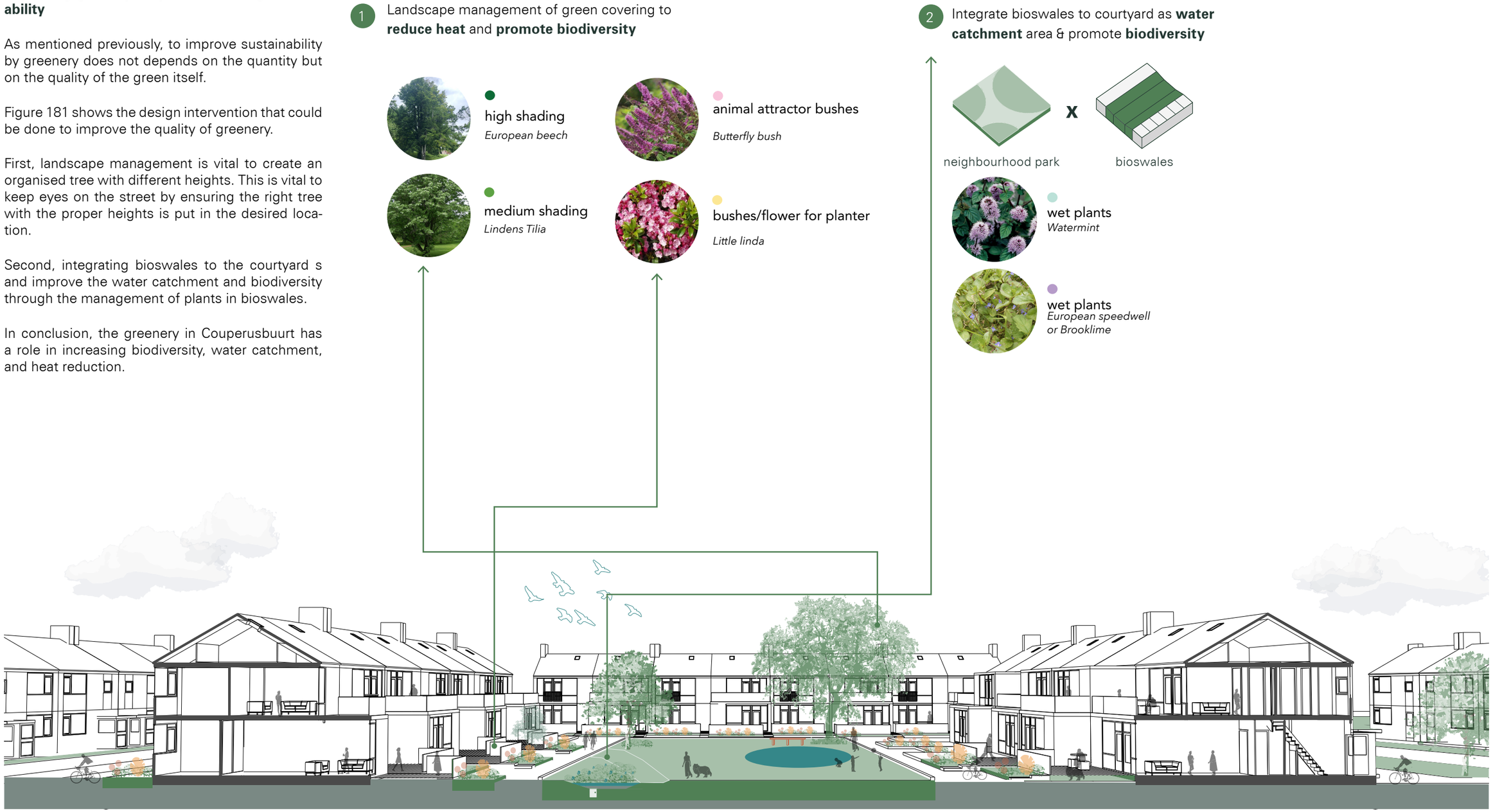


Figure 183. Green quality in the building blocks
(illustrated by author)

10.2.4 Densification Principle

The south area of Couperusbuurt will be densified. The current building will be demolished and build into totally new area (Gemeente Amsterdam, 2020). As mentioned in the strategy part, the south of Couperusbuurt will be transformed into Geuzenveld-Slotermeer avenue. The transformation principle could be seen in Figure 185.

In this project, the densification will only cover four blocks in the south. In the actual renewal, more densification will take places in neighbouring blocks in the south. However, this project will only focus on these four blocks considering these are the area that will be demolished and have a total transformation. Also, this could be the kick-start of the densification area. Later, the output of this design could be implemented into the other blocks, which will be densified.

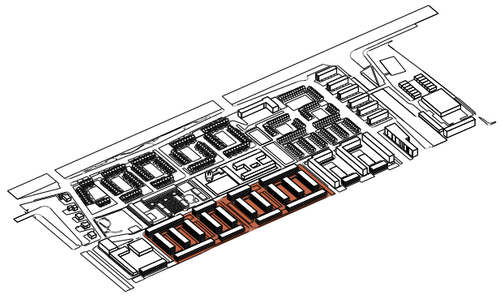


Figure 186. Area of densification
(illustrated by author)

Current situation

Housing typology: duplexhousex
Total houses in one block: 35-40 houses
Household per house: 2 households
Total household: 75-80 houses
Living area: 48.6 m2 per household excl. attic
Private garden: 17.5-20 m2

New houses

Housing typology: portiekflat
Total houses in one block: 160 houses
Household per house: 2 households
Living area: +/- 70 m2 per household incl. private balcony and small private garden
Private garden: 7 m2

Figure 184. Densification principle
(illustrated by author)

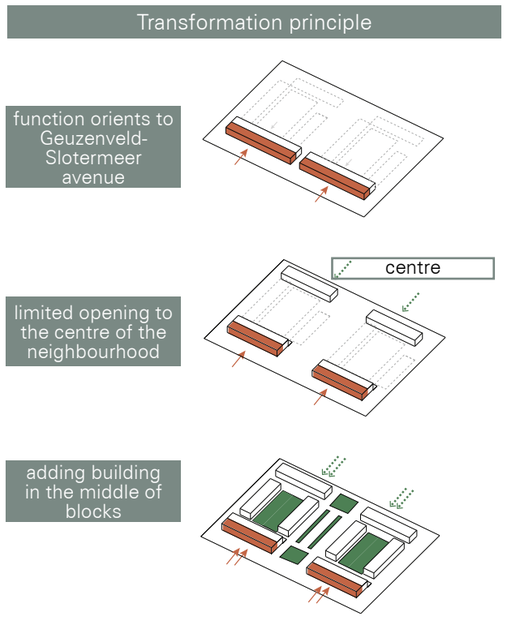


Figure 185. Steps for densification area
(illustrated by author)

Figure 189 shows how the new building blocks look like. There are several vital design principles that are implemented in this design to ensure lucht, licht and ruimte concept.

First, ensuring a wide enough courtyard to create an opening for light to penetrate. Second, the transition area between two blocks will be used as a sharing area for collective parking so that courtyard will be a free-car area. Third, arranging building height is necessary by considering the width between buildings. In this case, the building in the middle will be lower to create a more dynamic form and ensure that light will still penetrate the houses.

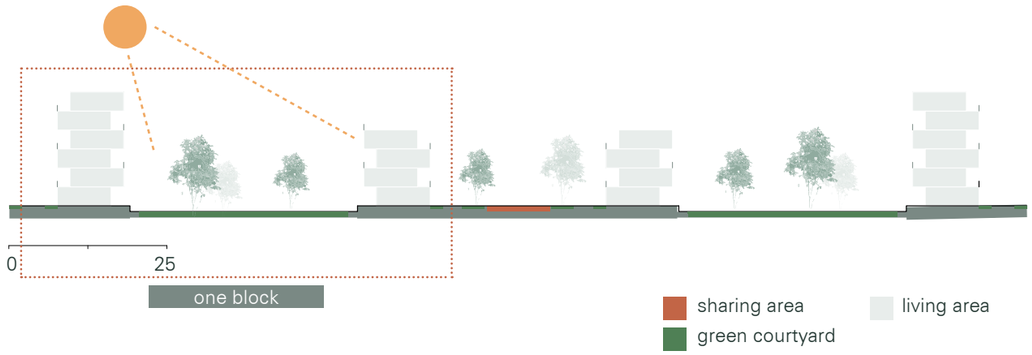


Figure 187. Building blocks system
(illustrated by author)

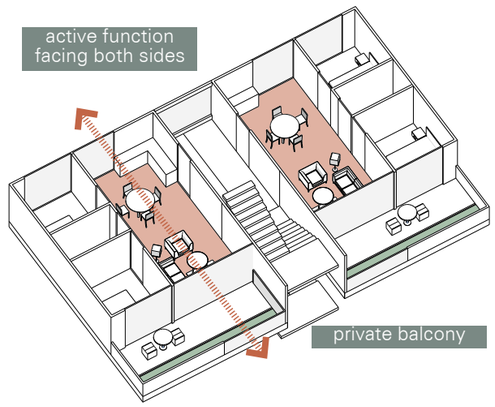


Figure 188. House typology
(illustrated by author)

To embrace the privacy in the residential function, each unit shall have their own private balcony which directly connected to the living room area. Also, it is vital to have a function on both sides of houses to increase eye on the street, thus increasing safety in the neighbourhood.

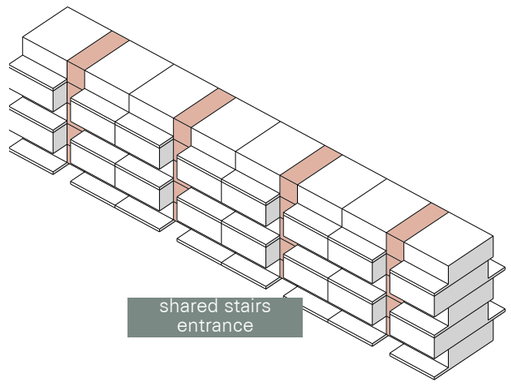


Figure 189. Building system
(illustrated by author)

The proposed building typology is a portiekflat typology.Thus, the sharing area in the building typology is only the corridor and the shared entrance, giving the residents total privacy.

Visualisation and design quality of Portiekflat

Figure 190 shows the visualisation of the renovation of the duplexhouses.

In the picture, Peter (based on urban residents analysis) lives in one of the houses here. Although he does not live on the ground floor, he is happy that he has a small private garden on the balcony while having a charming greenery view of the courtyard.

In addition, several qualities are vital in the renovation in this scenario:

1. Balcony on different sides of houses to **increase eye on the streets and create dynamic facades**

2. Additional small private garden and private balcony **to promote privacy and equal rights of greenery**

3. Height differences private backyard to shared courtyard to create a **clear division of private-public area** without having high walls.

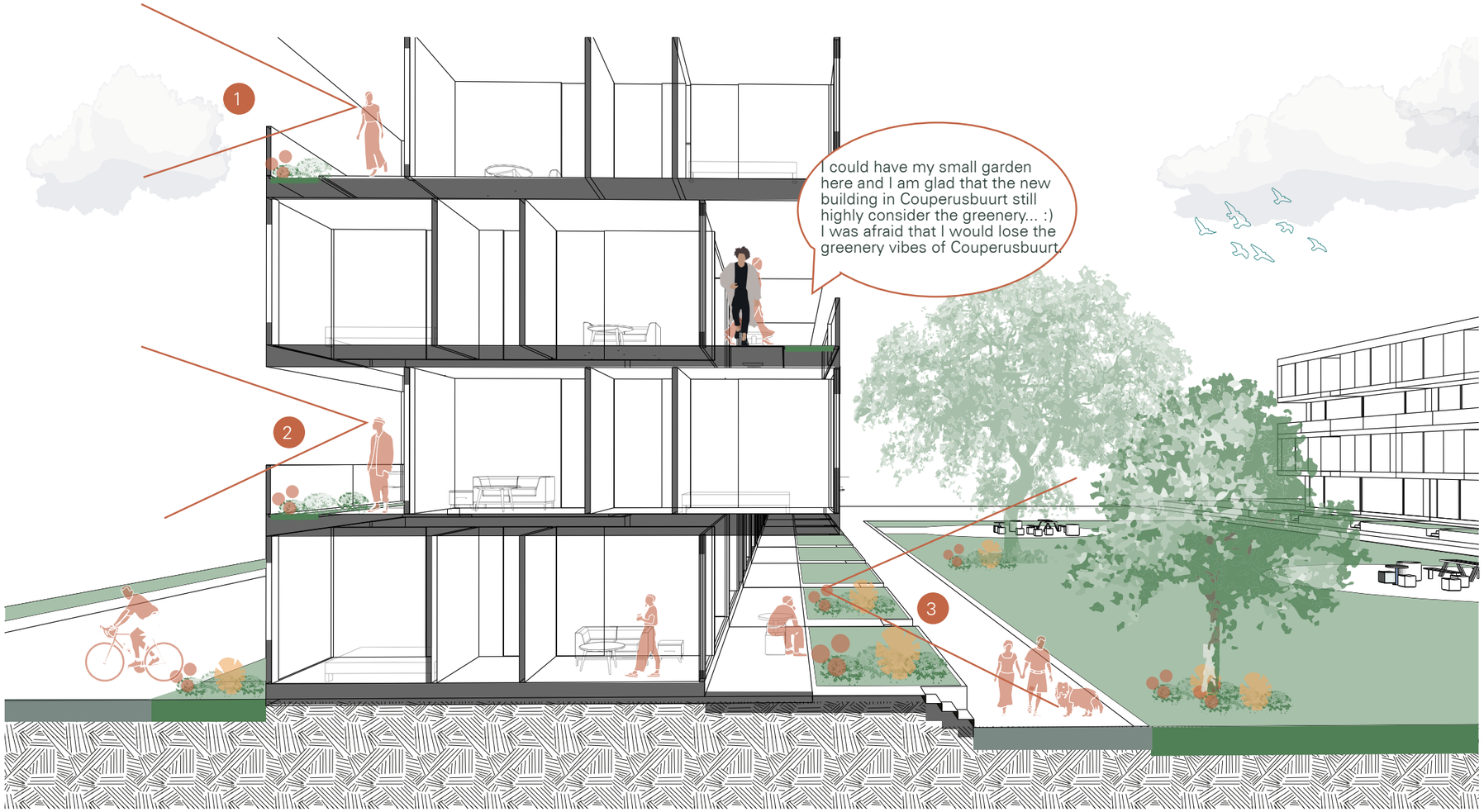
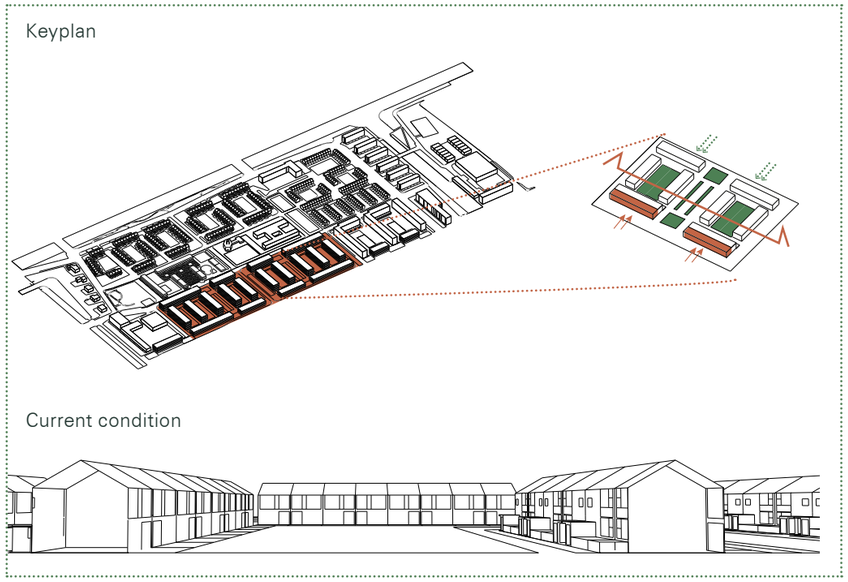
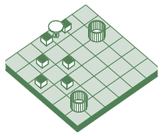


Figure 190. Visualisation and design quality of portiekflat
(illustrated by author)

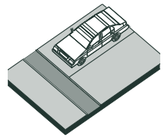


1 **Providing seating** area to promote social engagement

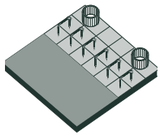


bench

2 **Relocate parking spaces** on the street into one collective parking area **to create direct access to greenery.**

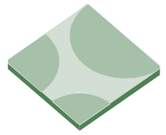


car parking



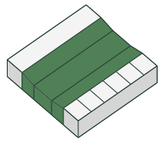
bicycle parking

3 Integrate bioswales to courtyard as **water catchment** area & promote **biodiversity**



neighbourhood park

x



bioswales

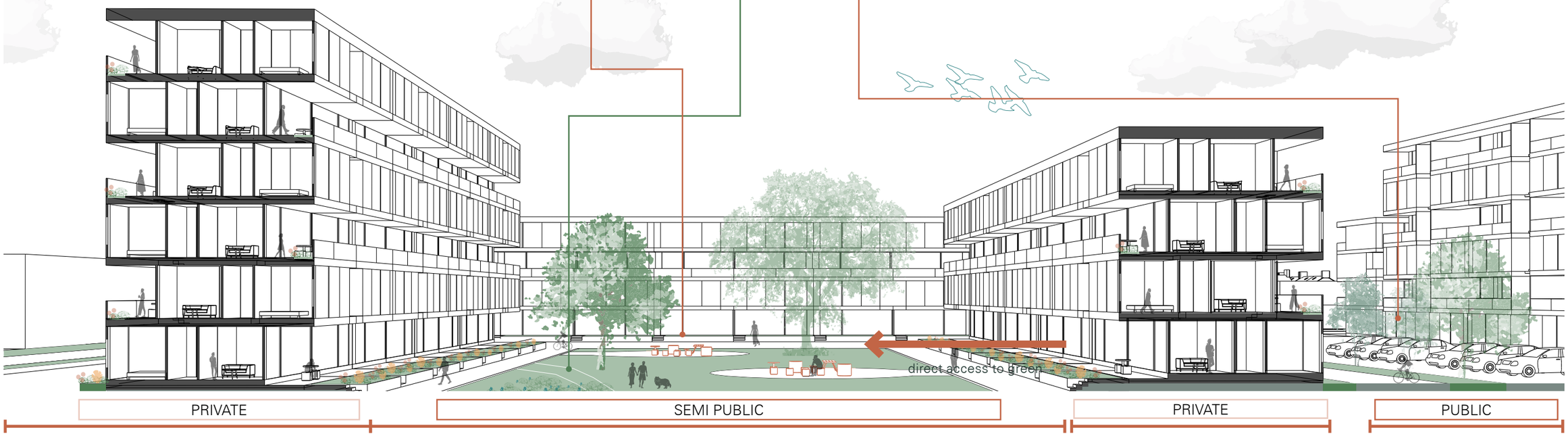


Figure 191. Building blocks system and toolbox implementation
(illustrated by author)

Building blocks system

Figure 190 shows the densified building blocks in Couperusbuurt.

Same as previously, the intention is to keep the courtyard a semi-public area instead of an openly public courtyard for all visitors. The streets on the right are a neighbourhood street used as a communal parking area, while the street inside the building blocks is a more narrow residential street meant for pedestrians with direct access to greenery. The toolbox implemented in this building block has a similar function and characteristics as the renovation building block.

Improving green quality and achieving sustainability

A similar strategy is applied to these building blocks: landscape management and bioswales function to increase biodiversity, water catchment, and heat reduction.

10.3 SCENARIO TWO: DISTRIBUTED COLLECTIVISM

10.3.1 Vision for Couperusbuurt

In 2030, Couperusbuurt is mostly occupied with family. Just like the initial plan of Westelijke Tuinsteden neighbourhood, Couperusbuurt is fulfilling its aim as a family neighbourhood. In addition, there are also some young starters and students living here.

Most of the residents often spend time outdoors, especially for the family with small children. Having an adequate facility for their children is a priority, and Couperusbuurt has managed to fulfil that. Playground, park, and garden are important to them, and all of them are easily accessible a few steps from their homes.

In addition, having social contacts with other residents is equally important. Most of the family residents have adequate social contact by often meeting each other in the playground or park. However, the contacts with young starters and students are least likely. They often meet in the centre of the neighbourhood to buy some bread from the bakery, sometimes in the picnic area in the courtyard. In general, social contacts is improved due to the presence of more facilities throughout Couperusbuurt.

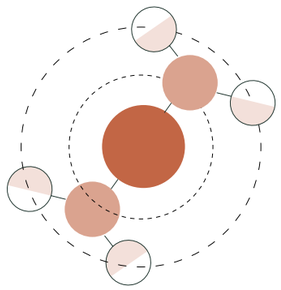


Figure 192. Vision of Couperusbuurt 2030 - Scenario two
(illustrated by author)

10.3.2 Distribution of neighbourhood bearer

In distributed collectivity scenario, the neighbourhood bearers are scattered through Couperusbuurt. Figure below illustrates the function that is put within the scales.

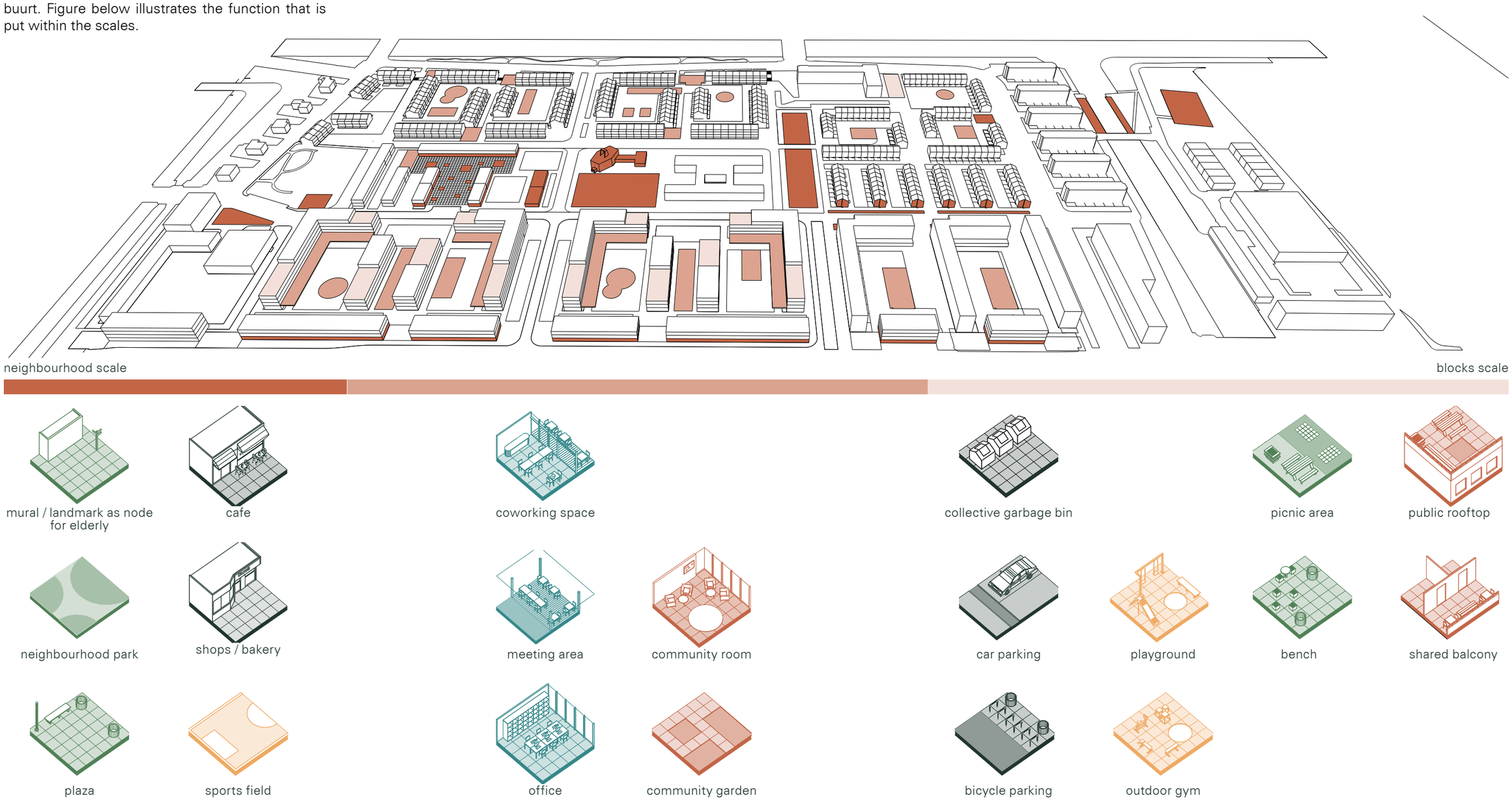


Figure 193. Zoning section in Couperusbuurt
(illustrated by author)

10.3.3 Renovation principle

Concept of Renovation

Similar like the previous strategy, this project will address the renovation to different target groups instead of focusing on one. The renovation options illustrate how could the renovation fits the needs of different residents.

There are also two types of possible renovation in this scenario, which are:

1) Re-duplex (some of them) duplexhouses

Returning the duplexhouses into its initial purposes could answer the problem of lack of living area in these houses (based on their needs).

2) Reducing private garden to increase courtyard

To maximise collectivity value, the action is to reduce the private garden area to maximise the courtyard as a shared living area.

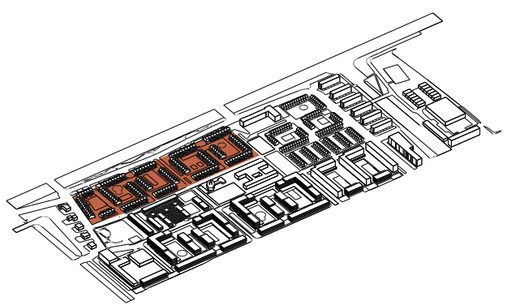


Figure 194. Renovation area
(illustrated by author)

Current situation

Residents group: elderly, family, starters

Household/house: 2 households
Living area: 48.6 m2 per household excl. attic
Private garden: 17.5-20 m2

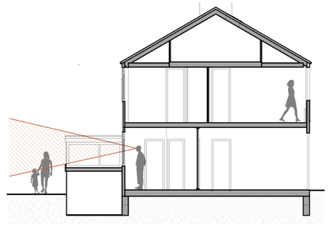
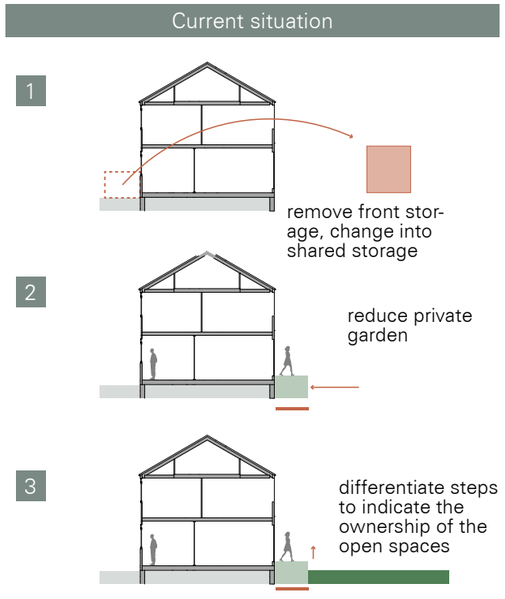


Figure 195. Current condition of duplexhouses
(illustrated by author)

Current situation



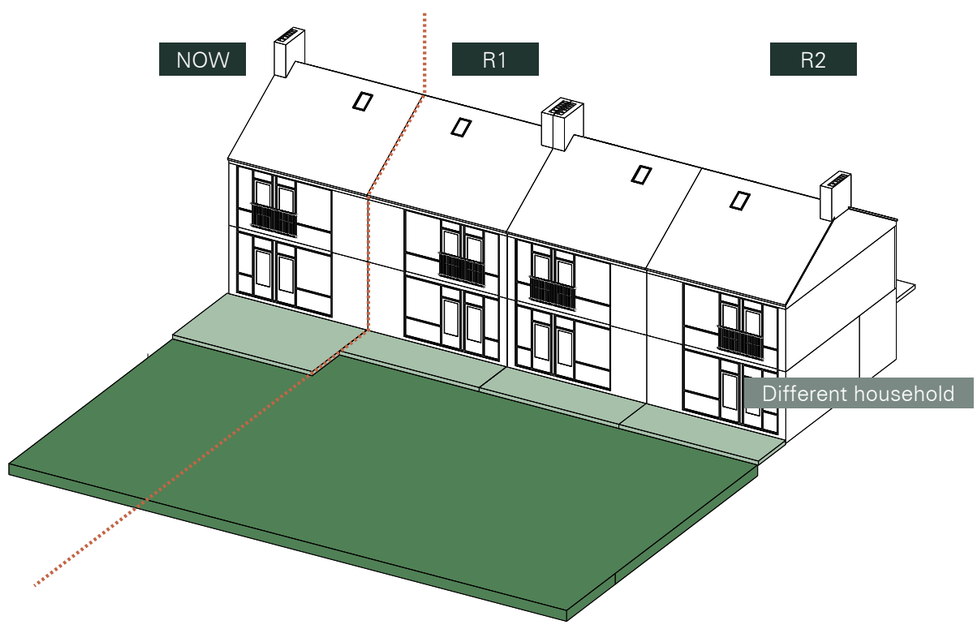


Figure 196. Illustration of renovation option 1 and 2
(illustrated by author)

Renovation option 1

Residents group: family

Household/house: 2 households
Living area: 97.6 m2 per household excl. attic
Private garden: 10 m2

Renovation:

Same as the previous renovation option, the duplexhouses will be returned to a single family housing Therefore, the divided entrance at the front will be demolished. In addition, the ground floor of the house will have an active function again.

Renovation option 2

Residents group: starter, student, elderly

Household/house: 2 households
Living area: 48.6 m2 per household excl. attic
Private garden: 10 m2

Renovation:

Keep the different household in each floor. To answer lack of spatial area. The lack of space in the houses are accommodated through a shared living area that is put in the inner courtyard.

Visualisation and Quality of Renovation

Figure 196 shows the visualisation of the renovation of the duplexhouses.

In the picture, Sanne (based on urban residents analysis) is seen. She enjoys walking the dog around Couperusbuurt now as she could walk through the different courtyard that offers different public facilities.

In addition, several qualities are vital in the renovation in this scenario:

1. Living room function on different sides of houses (duplexhouses with 2 household) to **increase eye on the streets**

2. Adding another small greenery **to create more transparancy** in front to replace the storage which blocks views. In consequences, there is collective storage on the corner of each block.

3. Small height differences **distinction between private backyard to public courtyard**.

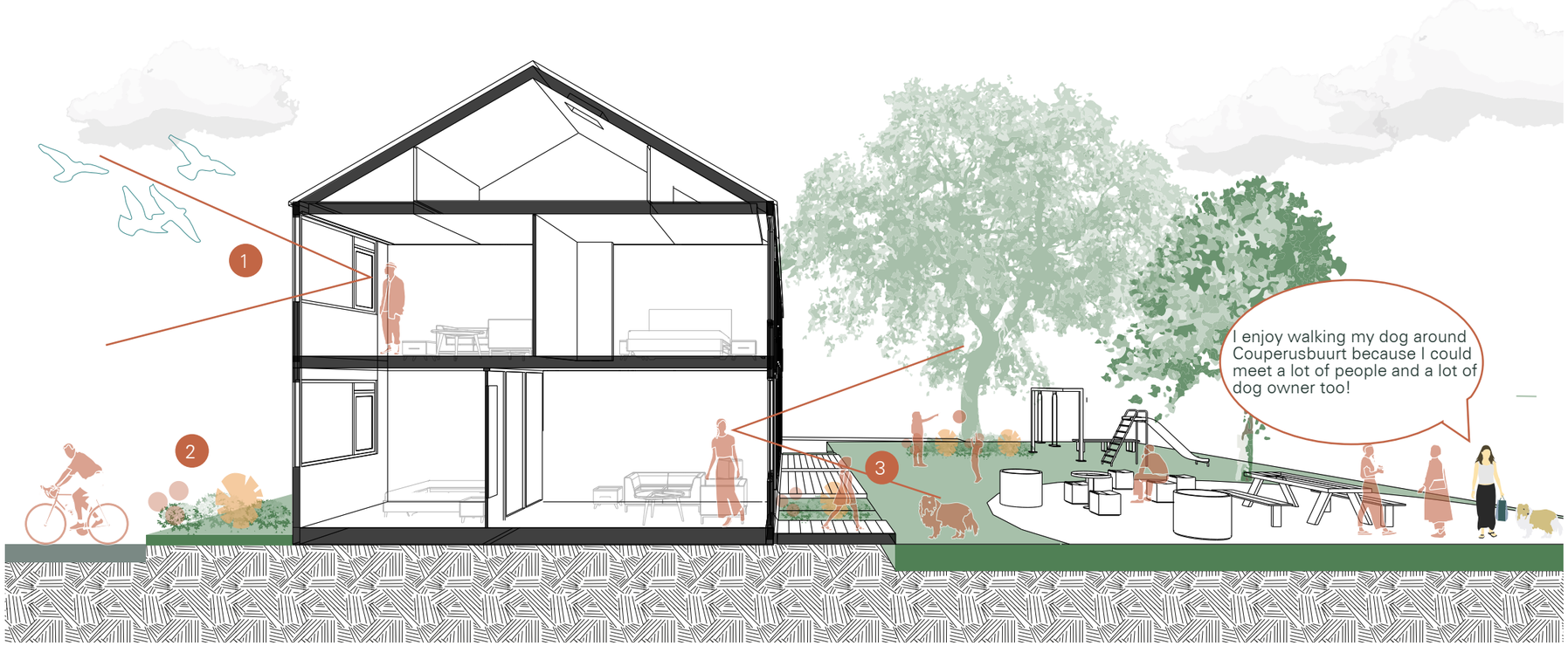
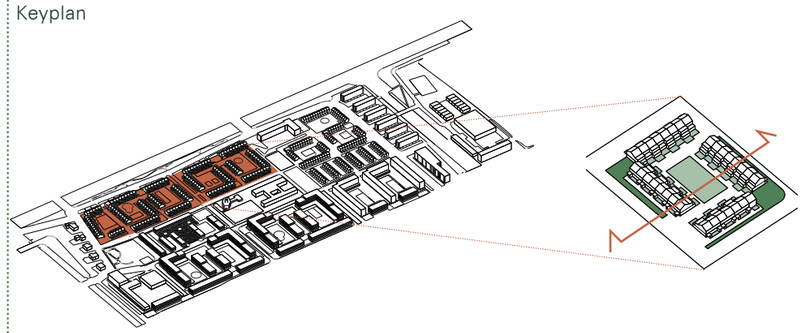
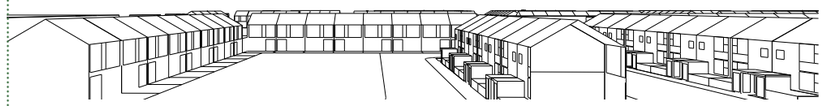


Figure 197. Visualisation and design quality of renovation
(illustrated by author)

Keyplan



Current condition



1 **Maximising courtyard capacity** as a social meeting space and to provide more living area as **a consequence of less indoor living** space in duplexhouses

a outdoor meeting x coworking area

b picnic area

c playground

d community garden

e shared storage

2 **Relocating parking on street** into one collective parking space and placing more public amenities **to create a lively** residential street

f bench

g bicycle parking

Building blocks system

Figure 198 shows how the renovation of the duplexhouses have an impact to the building blocks.

The houses create private zoning in the building blocks system, while the courtyard is a highly public area with a considerate amount of neighbourhood bearer toolbox applied there.

The residential street between the blocks is also transformed into a more public street with an additional bicycle parking area and bench. The parking is relocated into one communal parking area in the corner of the blocks (not visible in this illustration).

By doing this intervention, social engagement will indeed be achieved.

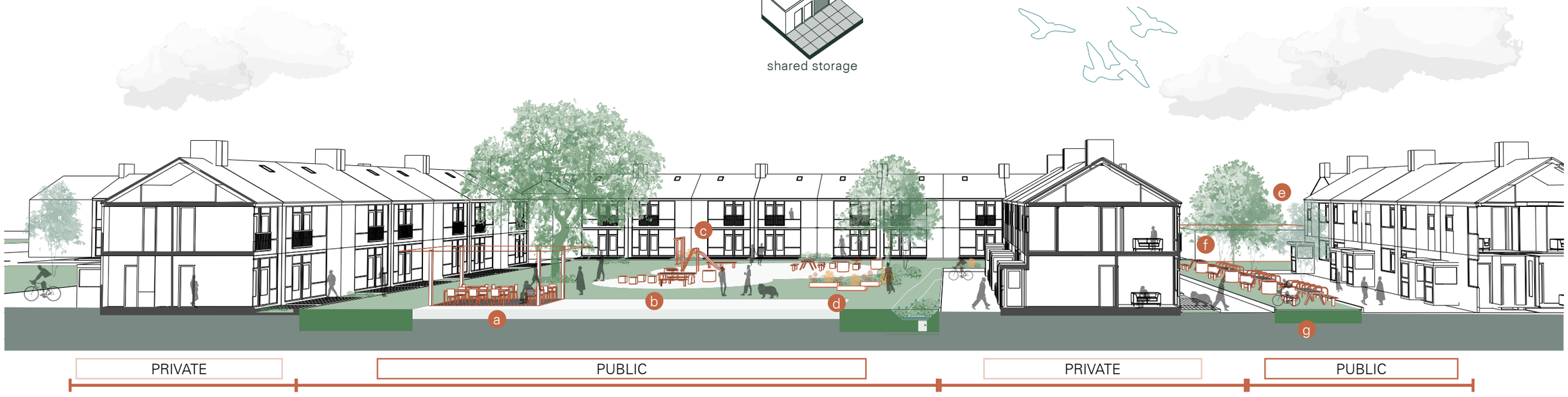


Figure 198. Building blocks system and toolbox implementation
(illustrated by author)

Improving green quality and achieving sustainability

The strategy to improve sustanability is similar to the previous scenario based on 1) landscape management, 2) integrating bioswales to the courtyard, and 3) integrating urban agriculture through a community garden.

Potz & Bleuze (2016) argues that urban agriculture is vital to improving biodiversity and improving social engagement between residents.

In conclusion, the greenery in Couperusbuurt has a role in increasing biodiversity, water catchtment, heat reduction, and social engagement.

1 Landscape management of green covering to **reduce heat** and **promote biodiversity**

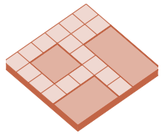
high shading
European beech

medium shading
Lindens Tilia

animal attractor bushes
Butterfly bush

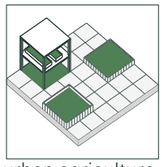
bushes/flower for planter
Little linda

2 Adding community garden in the courtyard to promote **social engagement** and **biodiversity**



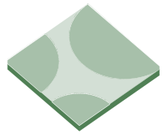
community garden

X



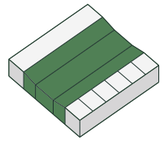
urban agriculture

3 Integrate bioswales to courtyard as **water catchment** area & promote **biodiversity**



neighbourhood park

X



bioswales

wet plants
Watermint

wet plants
European speedwell or Brooklime

Figure 199. Green quality in building blocks
(illustrated by author)

10.3.6 Densification Principle

Similar like previous strategy, an active plinth should be put facing towards the new Geuzenveld-Slotermeer avenue development. However, this scenario embraces collectivity even within the building blocks.

Second, the courtyard should be wide enough to accommodate public activities for all the residents. Lastly, the concept of distributed collectivity is that the public function in the centre could easily be connected to the courtyard in havenverkaveling. Therefore, a direct opening from the courtyard to the centre of the neighbourhood is necessary.

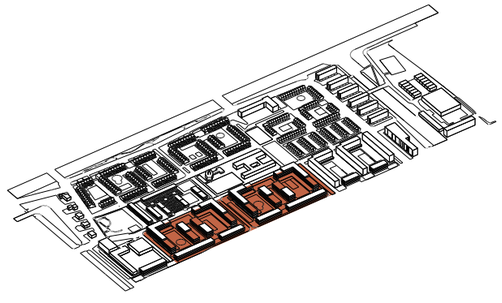


Figure 200. Area of densification
(illustrated by author)

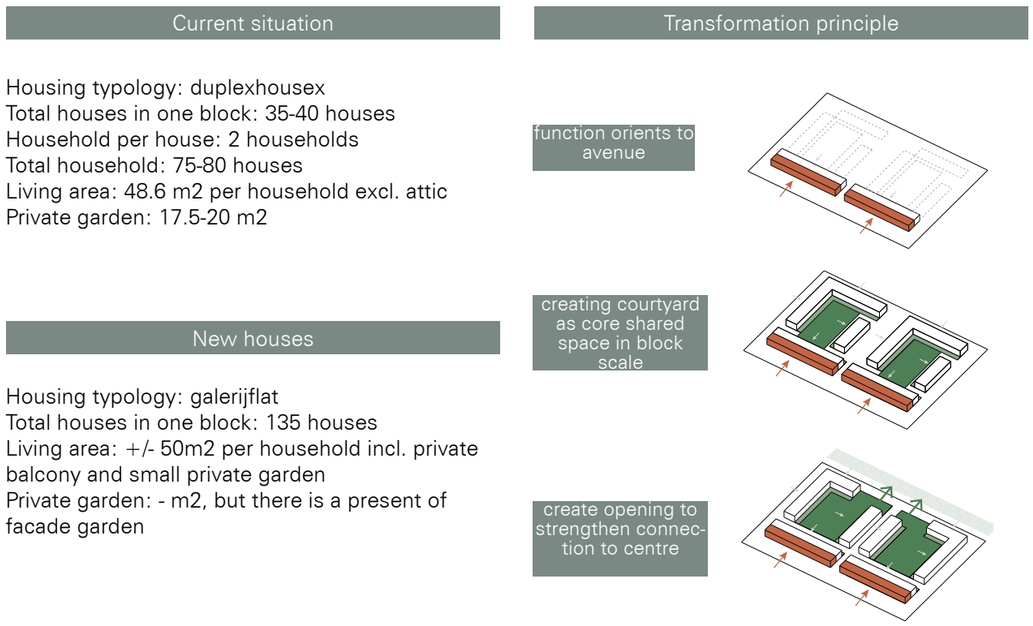


Figure 201. Steps for densification area
(illustrated by author)

Figure 204 illustrates the new building blocks typology. Similar like previous strategy, the concept of lucht, licht, ruimte is the heritage value that should be preserved. Therefore, it is vital to ensure that each house could get sufficient natural lighting.

There are three similar considerations: 1) ensuring an expansive courtyard to allow the sun to penetrate through, 2) transition area between two blocks will be used as a communal area to remove the car in the inner courtyard, and 3) height arrangement to allow direct sunlight to the buildings.

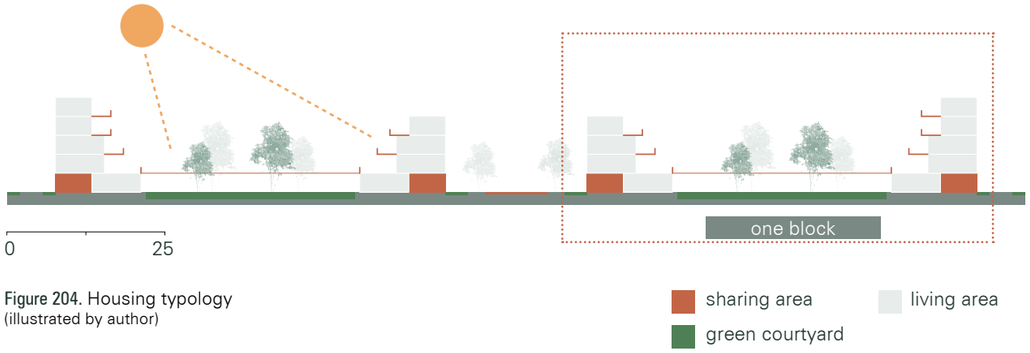


Figure 204. Housing typology
(illustrated by author)

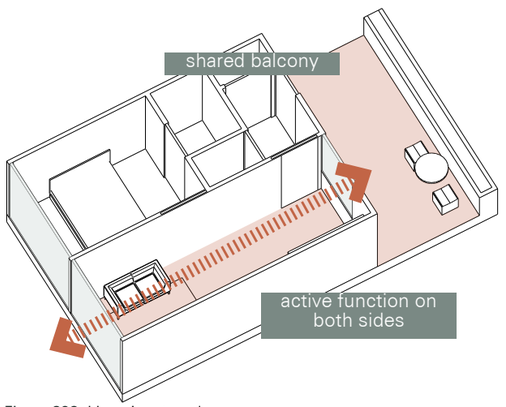


Figure 202. Housing typology
(illustrated by author)

To embrace the collectiveness in the residential function, units will share the entrance through the corridor based on the concept of galerijflat. However, the function should be more than just a corridor. It is also the balcony where people could sit, plant small plants and others.

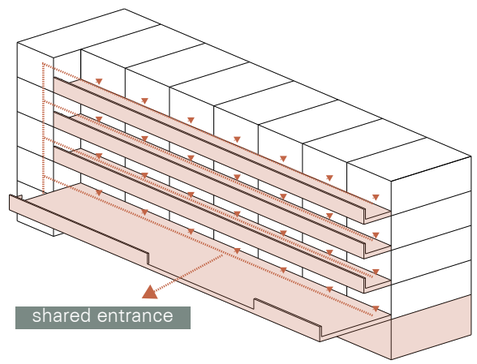


Figure 203. Building system
(illustrated by author)

The proposed principle in the building typology is that there should always be an active function in the ground floor that is accessible for all the residents in Couperusbuurt. On the first floor, the balcony could be extended to accommodate more public space for the residents.

Visualisation and design quality of galerijflat.

Figure 206 shows the visualisation of the galerijflat.

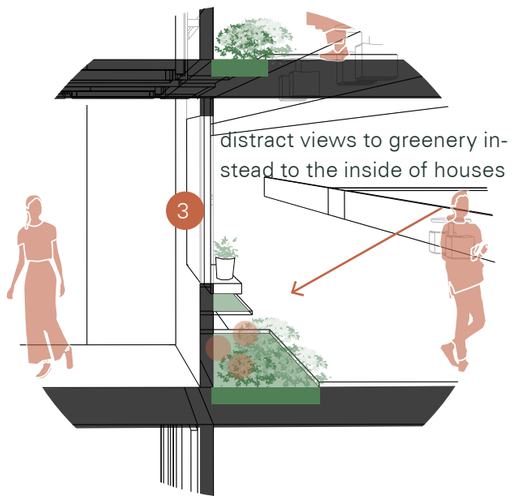
In the picture, Sanne (based on urban residents analysis) lives in one of the houses here. She lives on the ground floor of the new residential blocks. She likes that the courtyard is facilitated with adequate child-friendly public space (playground, educational garden), among many other qualities.

In addition, several qualities are vital in the renovation in this scenario:

1. Active function on both side of blocks to **increase eye on the streets.**

2. Connection to building across with small public function platform **to promote equal social engagement for all residents who live on the top floors and ground floor.**

3. Adding facade garden **as buffer so that privacy in the houses could still be achieved.**



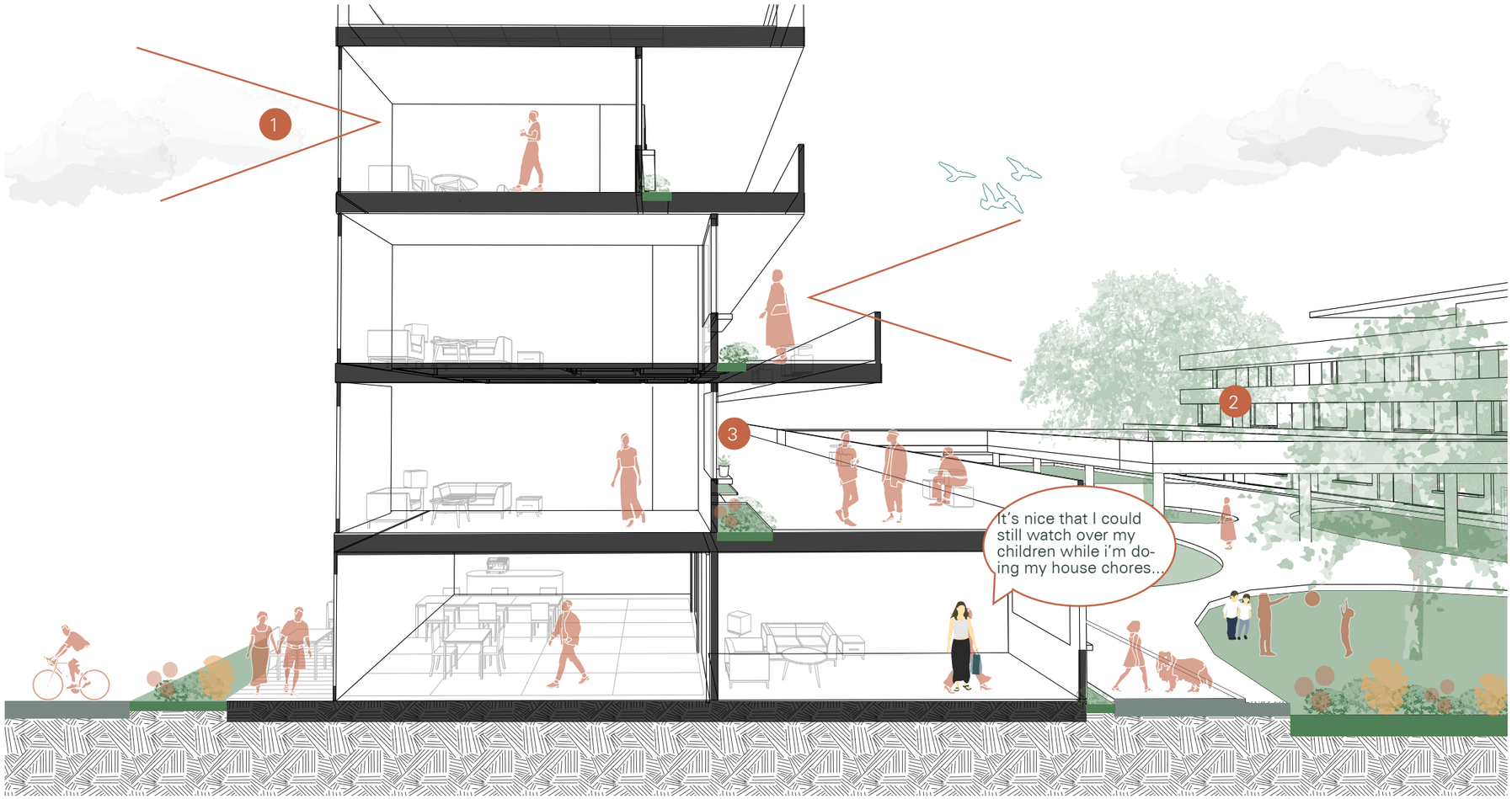
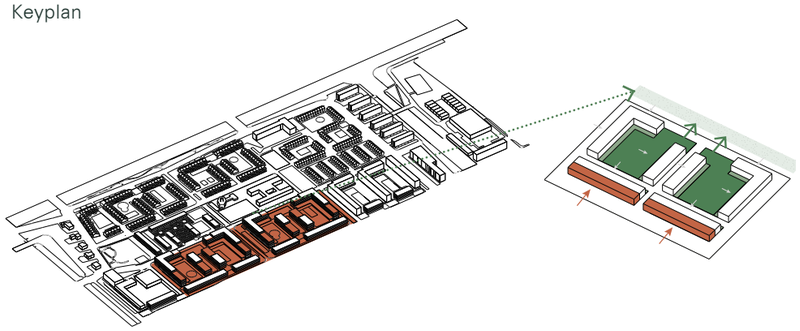
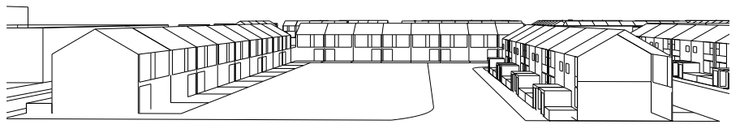


Figure 206. Visualisation and design quality of galerijflat
(illustrated by author)

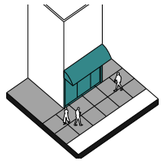
Keyplan



Current condition

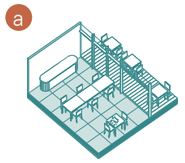


1 **Creating active plinth and lively street** by putting active function on ground floors



active plinth

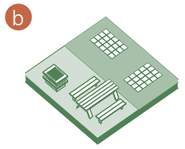
a



coworking space

2 **Relocate parking spaces** on the street into one collective parking area **to create direct access to greenery.**

b

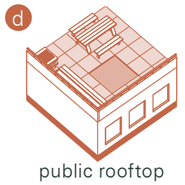


picnic area

c

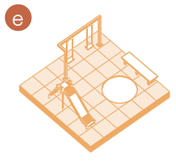
outdoor gym

d



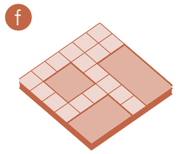
public rooftop

e



playground

f



community garden

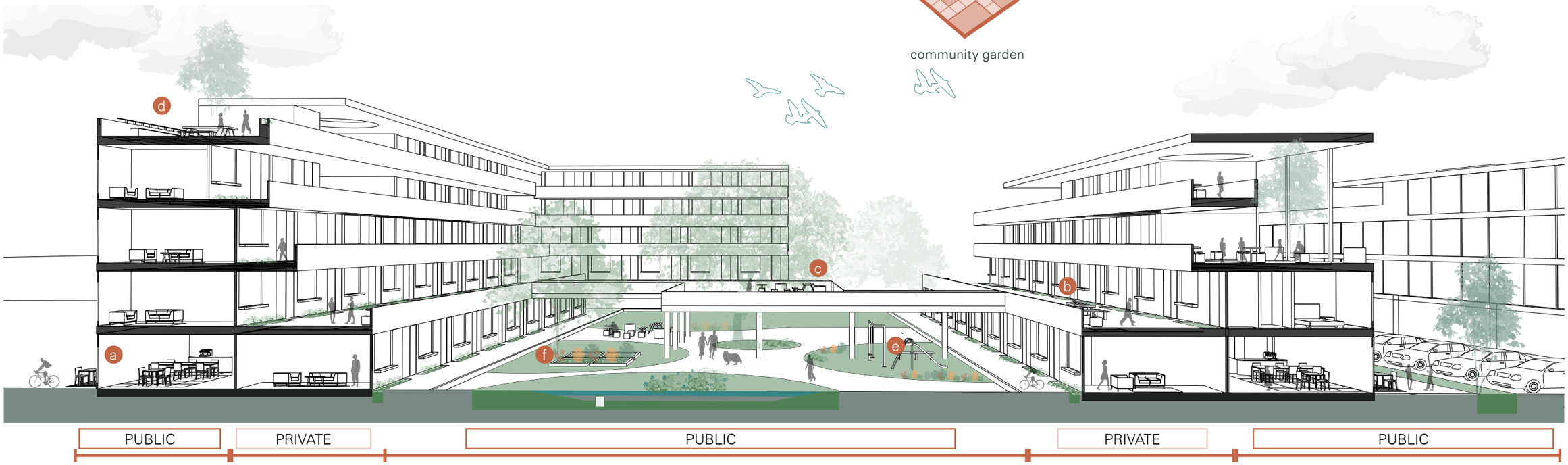


Figure 207. Building blocks system and toolbox implementation
(illustrated by author)

Building blocks system

Figure 207 shows the densified building blocks in Couperusbuurt.

The courtyard acts as the primary neighbourhood bearer in this block. The left and right buildings are connected through an elevated pathway with a small picnic area in the middle to promote more social engagement. This is also beneficial to promote more engagement between residents who live on the top floors and benefit residents on the ground floor.

Improving green quality and achieving sustainability

A similar strategy is applied to these building blocks: landscape management and bioswales function to increase biodiversity, water catchment, and heat reduction. Also, putting a community garden in the courtyard promote social engagement.

10.4 EVALUATION OF TWO SCENARIOS

The evaluation is vital to understand the benefit and consequences of the stakeholders in each scenario. In the evaluation, two main stakeholders are listed, which are the residents and the municipality. Based on the table, the advantage and disadvantage of each scenario are concluded. In addition, the heritage context for each scenario is also compared.

In evaluating residents, it is mentioned that scenario one might attract the interest of R3 (young starters and students) while scenario two might interest R1 and R2 (family and elderly). It is essential to understand that these scenarios are built based on the influx of these residents. However, in the actual situation, the preferences of the residences could not be generalised and predict. Thus, it is essential to bring the result of the scenario as soon as possible on the table and discuss it with the residences to grasp the actual residence's preference fully. Therefore, the role of the scenario as the participatory process could become evident.

To be more precise, the following subchapter will discuss this further.

Figure 208. Evaluation Table
(illustrated by author)

10.5 ROLE OF SCENARIOS AS PARTICIPATORY PROCESS

10.5.1. Using scenario and toolbox for participatory process

The next steps and the vital role of scenario by design in this project is to utilised it as part of the participatory process and design with the residents. In doing so, these are the steps that could be implemented:

1) Distribute the design result of each scenario to residents through a questionnaire/forum group discussion/workshop to understand which scenarios do the residents find to be more desirable.

Considering the limitation of public activity due to Covid-19, it is also possible to create a shared platform through the website of Couperusbuurt so that residents could also be actively updated regarding the renewal project.

2) Publish the toolbox of neighburhood bearer through a physical catalogue (for elderly) or online catalogue (through the website) so that people could vote on which function do they think is necessary for Couperusbuurt or their residential blocks. To make it more interactive, it is also possible to create a suggestion box where residents could propose a new function for the toolbox. After all, this is a toolbox of neighbourhood bearer, so the functions in the toolbox should be a function that they need and feel attached to.

In conclusion, the most beneficial result from this project is the scenario visualisation and the toolbox, which could be discussed with the residents.

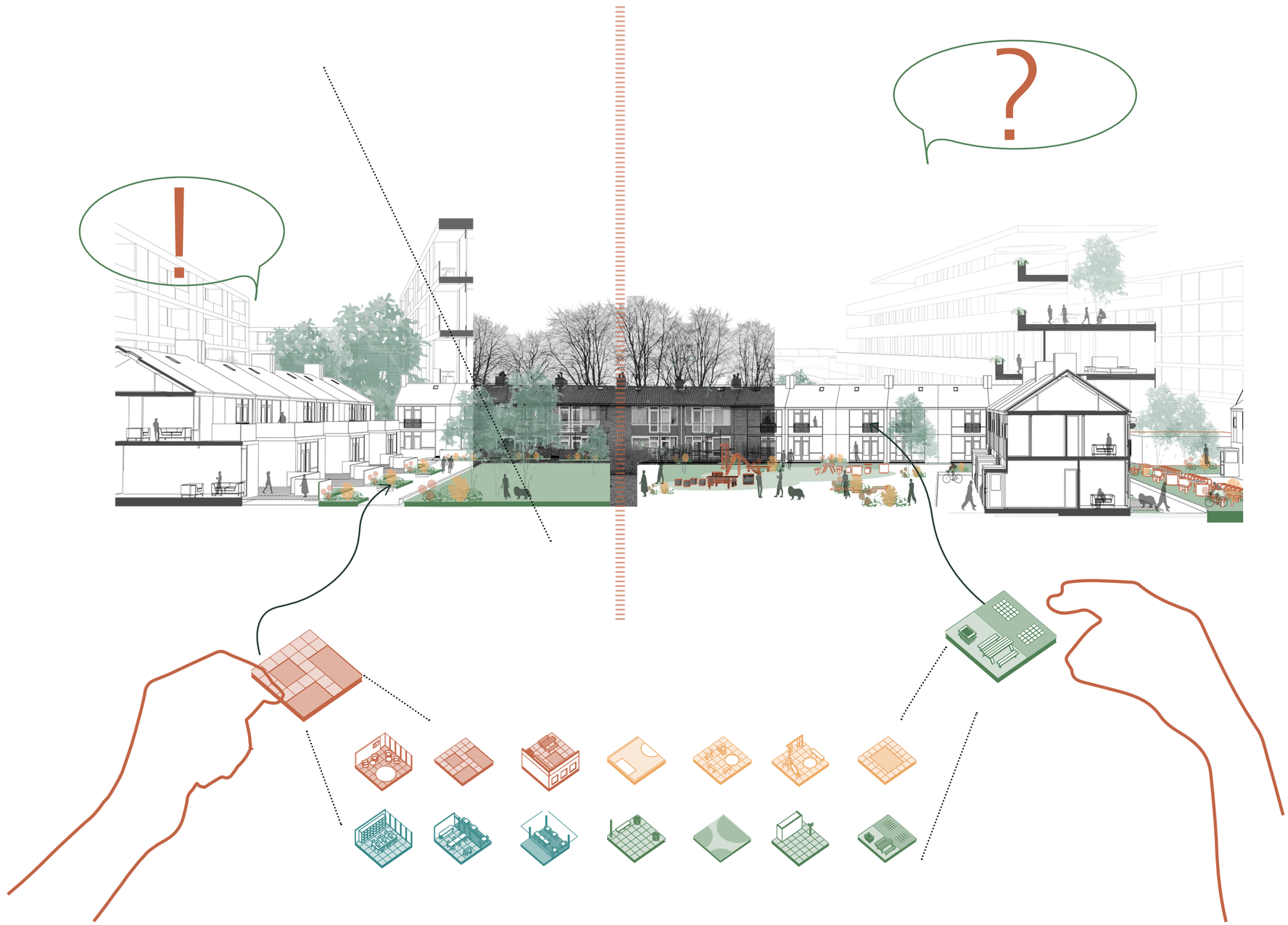


Figure 209. Scenario and toolbox as material for participatory planning (illustrated by author)

10.5.2. Position of this project to the whole planning & transferability to other project

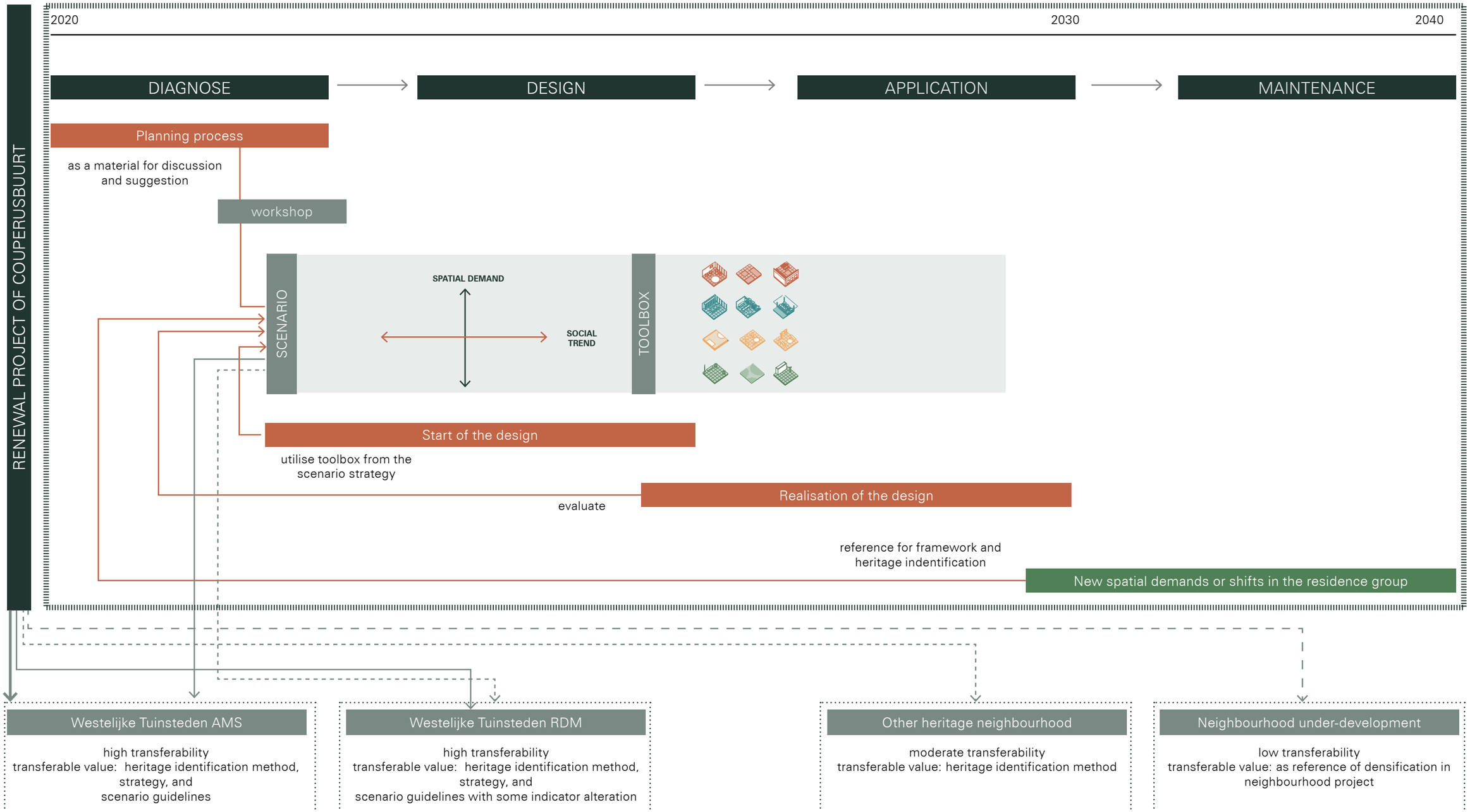
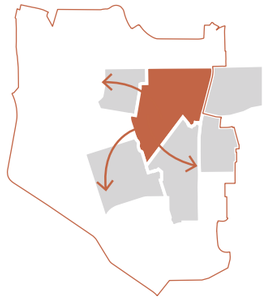


Figure 210. Role of scenario and the project
(Illustrated by author)

11 CONCLUSION & REFLECTION



This chapter will discuss the overall conclusion, limitation, and reflection of the whole project.

11.1 CONCLUSION

11.1.1 Conclusion

The conclusion is derived by looking back to the several core aspects of the research which are:

Problem

The most prominent problem in Couperusbuurt is the slow development of the area which cause an unlivable living environment and unsatisfaction of the residents. Also, the heritage status has created some limitation in doing an intervention in the neighbourhood. This project addresses the problem by showing the possibilities and the dynamic elements of heritage value instead of being limited.

Aim

The project aims to identify the heritage importance and integrate it with spatial planning and translate it into design. Through the process, it is prominent that heritage does not always have an obsolete layer. Through identifying Couperusbuurt, this project has addressed that the importance of heritage lies in the spatial (urban form), social (urban resident), and socio-spatial relationship (urban life). By fully understand the layer of heritage itself, the limitation and possibilities of the heritage value are explicit.

Research Questions

How can the renewal plan of Couperusbuurt, which focuses on its heritage importance, provide the design solution to the neighbourhood's demand?

By using scenario methods, the exploration of dynamic value of heritage is present while having some borders to not let the design be out of context of the heritage. In addition, the benefit of using scenario by design is that it could serve as a suggestion and material for discussion among the stakeholder involved. In conclusion, the design in the renewal plan is vital to present the possible design solutions based on the dynamic heritage components.

SQ1 What is the heritage importance in Couperusbuurt based on its urban form[a], resident[b] & life[c]?

The prominent heritage value in Couperusbuurt is not the collectivity in the neighbourhood. Though the greenery in Westelijke Tuinsteden is the highlight, the identifaction shows that green is utilised to bind people and promote social activities. However, it does not only cause by the organisation of the green itself and the organisation of the building function and how people use it.

SQ2 How can the heritage importance be integrated to the renewal strategy of Couperusbuurt?

The integration of heritage value to the planning strategy was not as difficult as identifying the heritage importance. In the previous steps, the once abstract value of heritage has been made concrete; thus, it is easily applicable in the strategy. Also, the specific categorisation of urban form, residents, and life plays an essential role in proposing the renewal strategy. The proposed strategy is preservation through development, participatory planning, and people place attachment. These strategies focus on the spatial, social, and socio-spatial which is based on the heritage importance layer.

SQ3 How does the strategy respond to the various demands of Couperusbuurt stakeholder?

The scenario methods work best in dealing with the different stakeholders as it directs the design to different probable future answers to various stakeholder demands. Also, the scenario design is helpful as a material to set the ground for discussion among different stakeholders.

SQ4

How relevant is the heritage development strategy of Couperusbuurt be implemented to other urban renewal of Westelijke Tuinsteden neighborhoods?

This project is highly relevant to the other Westelijke Tuinsteden neighbourhoods.

First, because the urban form of these neighbourhoods has highly similar characteristics, the current quality of living in most of Westelijke Tuinsteden is at a similar satisfactory level. Thus, the finding found in the investigation was **highly transferable**.

Second, the applied strategy is also **highly transferable** as Westelijke Tuinsteden's area is considered a heritage area. Thus the strategy that is built upon heritage importance is valuable.

Third, the design exploration through scenarios is **transferable** to other neighbourhood. The densification pressure does not only happen in Couperusbuurt; therefore, other Westelijke Tuinsteden neighbourhood could utilise these scenario building (qualitative and quantitative indicator) for their future planning.

In conclusion, this project investigation method and the proposed strategy is transferable to other Westelijke Tuinsteden neighbourhood while the design products could serve as a reference.

In addition to the overall project, this project proposes the strategy of community-driven spatial strategy. The diagram, as seen on the right, was made for the scale of Couperusbuurt. However, considering the high connectivity from one Westelijke Tuinsteden neighbourhood to others, it is crucial to understand the relation of this concept to other neighbourhoods. First, it is evident that this project mainly focuses on Couperusbuurt itself. Thus, the physical connection mentioned in the research only focuses on the connection axis to Sloterplas. Therefore, this research is an apparent limitation in showing the actual physical connection to other neighbourhoods.

However, the community-driven spatial strategy diagram (figure below) could illustrate how this project plays a role in the future Westelijke Tuinsteden neighbourhood.

In the future renewal of other Westelijke Tuinsteden neighbourhood, this project acts as a catalyst for the whole area. This project intends to use collectivity as driving factors for renewal as it is the investigated heritage value. In creating collectivity and community, it is vital to start from the neighbourhood scale to the district. Why? First, residents are vital in achieving community. Considering the highly diverse population of Amsterdam, this project illustrates how to achieve that on a neighbourhood scale.

Therefore, in the future, there are two possible effects of this project. First, the concept of achieving collectivity value in Westelijke Tuinsteden is directly translated into the more extensive scale due to the catalyst from this project. Second, the strategy from this project could be applied to other emerging neighbourhoods; thus, the collectivity value will slowly be built in the whole Westelijke Tuinsteden neighbourhoods.

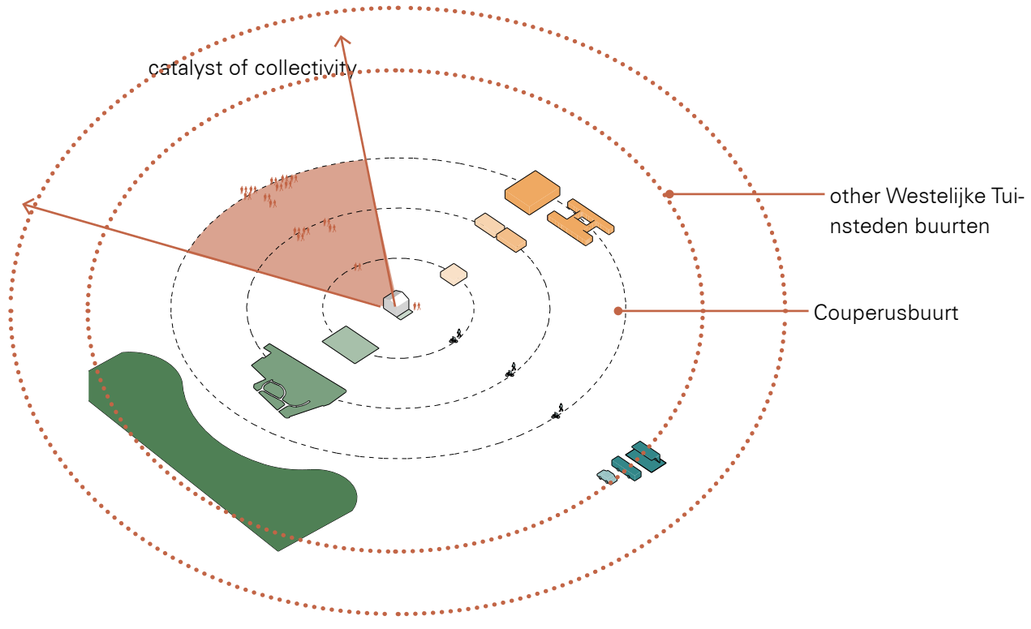


Figure 211. Role of project to Westelijke Tuinsteden
(Illustrated by author)

11.2 REFLECTION

11.2.1 Intention of the project

My graduation project focuses on finding the value of heritage through its tangible and intangible form, integrating it with spatial planning, and translating it into probable design elements for Westelijke Tuinsteden Amsterdam. The initial motivation is the writer's interest in a heritage context and the intention to explore the meaning of heritage and its position in spatial planning and design. The project is conducted simultaneously with Gemeente Amsterdam agenda for the urban renewal of Westelijke Tuinsteden neighbourhoods Amsterdam to renew and densify it. Therefore, there have been collaborations in the process, which helps to strengthen the research parts. This project focuses on exploring heritage-based design, and the result serves as a suggestion for the Gemeente Amsterdam.

Relation with graduation studio

This project is explored under the graduation studio of "Designing of Urban Fabric", which concerns the physical form of urban areas and its relationships between form and social processes (Hausleitner, 2020). In principle, heritage in urbanism context covers both the historic urban fabric and the socio-spatial process of how it was formed. Therefore, this project is strongly aligned with the studio's agenda to understand its complex process, which has created the current urban fabric and later explores its potential for future development. Also, densification has always been a concerning urban development issue, which is also the main pillars in the "Designing Urban Fabric" graduation studio. This project aims to find a way of preserving the heritage form in the densification challenge. Thus, it demonstrates that densification should be a careful process that considers the spatial and social environment.

Relation with master track urbanism

Master track urbanism aims to build the skill of urban designers who are competent to analyse and conduct the project through multiple scales and later established a vision for development (TU Delft, 2021). The first-year study has taught us the importance of having flexibility as designers to jump into one scale and zoom out to a bigger one while having a structured and coherent analysis and mapping. The importance of a sustainable environment and socio-spatial justice have always been the pillars that come along. However, as I mentioned in my motivation, the absence of heritage context in the first year of urbanism has become one solid reason to do this project.

The Dutch context of urban planning and design is another pilar in this master track. In The Netherlands, the paradigm towards heritage has been shifted from objectified assessment towards social and cultural engagement (Janssen et al., 2012). Therefore, heritage value in spatial planning is vital to create socio-spatial justice and as a catalyst for future development. Urban heritage holds significant meaning for the present and future of the city, as tangible and intangible heritage are sources of social cohesion, diversity, creativity and innovation for urban regeneration (UNESCO, 2013). Thus, even though heritage context has never been extensively discussed in Msc 1 and Msc 2 urbanism, I believe that the project is firmly aligned with the agenda to achieve a sustainable environment and socio-spatial justice. Therefore, this project aims to add the missing puzzle piece of urban planning and design in the Dutch context that has never been exposed during the first-year study.

11.2.2 Process and method of the project

Interrelation of research and design

The relation between research and design in this project is interrelated. At the premature steps of this project, I always thought that the project's strength would lean towards the latter dan the former. However, identifying heritage importance was not an easy task. The broad definition and complex heritage dimensions create a challenge in translating an abstract concept into concrete values. Therefore, identifying heritage values is strongly built based on the literature reviews that created the theoretical notion.

In the notion, it is mentioned that the layers of identifying urban heritage lie in the urban form (spatial), urban residents (social), and urban life (socio-spatial). As a result, this research has a balanced between socio and spatial context. Although the layers of heritage sound explicit, it was often found that they are overlapping and create confusion on which findings belong to which layers. Then, restructuring and reinforcing the literature research is vital to have a solid theoretical notion. Thus, the process of research in this project has always been back and forth.

The following steps after research are designing. Towards the design process, the research finding helps build a concrete design strategy that covers the spatial strategy and social strategy. One of them is participatory planning. Scenario-based design is chosen as the design method and as a tool of participation. Each scenario is built upon spatial demand and social trend or lifestyle; therefore, the role of research has once again become vital. Also, considering the scenario-based design method, the result of each scenario should be evaluated to understand the consequences of each scenario. Therefore, it is necessary to take a step back and relate the result of designing to the research findings. In conclusion, research and designing are interrelated and serve as the foundation and evaluation for the design results.

Advantage and limitation of methodology

The chosen methodology has helped the project advance and created limitation, considering the current circumstances of Covid-19. However, the collaboration with Gemeente Amsterdam has helped to fill some empty buckets which could not be filled by this project alone.

In the beginning process, the research is to identify the spatial form, social changes in the residents, and social life that happens in the neighbourhood. Therefore, one of the focus firmly lies on interviewing the residents and conducting surveys. Also, observation of the daily life and activities in the neighbourhoods are vital. However, the current situation of Covid-19 has hindered these intentions, especially in observing the daily activities in the neighbourhood. Most of the social life in the area rely on public building such as schools, shops, and offices. Due to the situations, all of these functions are closed from November 2020 until recently (March 2021). Therefore, the social life and activities that are happening in the neighbourhood are not valid. Luckily, the collaboration with Gemeente Amsterdam has filled this gap. A group of researchers from Vrije Universiteit Amsterdam has been researching the neighbourhood by interviewing residents and observing activities for the past years. The research has recently (March 2021) become public and helps fill the missing answer from the intended method.

For the design process, the chosen method is scenario-based design. This method helps to build a robust design exploration for the probable future development of the neighbourhood. Also, the chosen method serves as a tool for participation. Thus, it brings an advantage and strong proposal in term of spatial design and social participation, which are valuable for Gemeente Amsterdam. Personally, this method has been a challenge for me as well as an urban designer. It requires me to be flexible in designing with totally different circumstances of each scenario. This is a trait that I have been lacking, and I am glad to start developing it throughout the project.

11.2.3 Relevance of the project

Societal relevance

In Westelijke Tuinsteden, most of the neighbourhoods have dominant immigrant background residents. This circumstance has created the early challenges to achieve the goal of social cohesion in the neighbourhood. In the project, the importance of community is highlighted and later translated into participation planning and design. However, in practice, the application of the intended strategy is not always a textbook translation process. The strategy might seem coherent, but the reality is always proved to be more grey.

Improving social cohesion through creating active urban life in a diverse context is a complex task. Considering the neighbourhood's densification agenda, more people will come and live. Therefore, more diversity fort the neighbourhood. This project has tried to predict the possible future residents and their preferences through the social lifestyle and trend study. However, a prediction is just a forecast, and mistakes will always happen. Therefore, it is vital to ensure social cohesion through consistent communication and engagement in the neighbourhood. It is crucial to consider an extensive range of opinions from professional and individuals in the neighbourhood's future development.

Scientific relevance

Since Nota Belvedere's establishment in 1999, which has redefined the relationship between heritage and spatial planning in The Netherlands, the interest in the heritage sector has boosted significantly in the past decades (Janssen et al., 2012). Janssen et al. (2012) also argue that Belvedere has succeeded in interweaving heritage management and spatial planning to the reprogramming of the city by giving heritage a new meaning and place for the city and its users. In practice, heritage interpretation does not always have a concrete guideline and limitation (mainly intangible heritage). Meurs (2016) argues that a specific and sole method in dealing with heritage has never existed. Each context creates and holds significant values of heritage which requires special treatment that could not be uniformed. Thus, this project shows one of many examples of dealing with heritage. Janssen et al. (2012) add that the heritage sector should move from its comfort zone and exposed its importance in spatial planning. This project has taken steps to do so by confronting heritage importance since the beginning.

Ethical considerations

Concerning the social segregation in Amsterdam (as mentioned in the problematisation chapter), achieving a more coherent social environment is necessary. In the Westelijke Tuinsteden Amsterdam, this issues is critical. This project aims to achieve socio-spatial cohesion through heritage-based design, which promotes the community and their activities. The proposed strategy of participation and elaboration of design elements could promote social activities that bind the people.

In the master track of urbanism, one of many questions repeatedly asked was, "Who is your client?". In this project, I am proud to say that the residents of Westelijke Tuinsteden are my primary client, and the Gemeente Amsterdam is the second. In this project, social importance has been highlighted from the start. It has always been the goal to initiate social cohesion in this segregated neighbourhood of Amsterdam.

11.2.4 Role of the project for future endeavours

Transferability of project

Gemeente Amsterdam's current plan is to renew three neighbourhoods in Slotermeer South West, part of Westelijke Tuinsteden Amsterdam. This project covers one of them; therefore, this project serves as the initial stage of the actual renewal plan of the neighbourhoods.

The results of this project are the identification of heritage importance, the heritage-based strategy and the probable future and design explorations of the neighbourhood. Concerning the phasing stage of the neighbourhood's development, this project is valuable as a material for discussion between Gemeente Amsterdam and the residents. Concerning the method to identify heritage strategy for renewal of the neighbourhood, it is also highly applicable to neighbouring areas of Westelijke Tuinsteden.

Looking to the broader context of garden cities in The Netherlands, several neighbourhoods are also built based on the garden cities concept, such as Zuidelijke Tuinsteden in Rotterdam. Considering the similar characteristics and challenges that the country faces, which is the spatial pressure to densify and add more homes, this project is highly relatable. It is widely known that The Netherlands has a big densification agenda, thus putting pressure on several neighbourhoods, including garden cities neighbourhood with their low density. The role of this project is then to demonstrate how the value of heritage could still have room in the future densification of the neighbourhoods. It does not mean that the translation of the heritage values of this project is the same as other garden cities neighbourhood. However, identifying it and the strategies could serve as an example for other garden cities neighbourhood in the country.

Relevance of heritage for future researches

The notion to encourage the heritage sector to engage with spatial transformation and planning has been made evident in this project. The use of heritage value in contemporary culture and design is prominent, especially in the Dutch context. Hopefully, in future research, heritage value will always be one of many contexts that should be considered in the preliminary steps of urban development. Putting heritage value on the table as early as possible is vital as it could serve as an early input of cultural aspects and design disciples to address spatial challenges.

Personal takeaway from the project

This project has also influenced my perspective towards heritage as an urban designer. Initially, I always assume that heritage always has some restriction and limitation in contemporary design. However, this project has changed it tremendously. Through the project, I learned the dynamic layer of heritage and the limitless possibilities of its exploration. Spatially, preserving heritage means not to do anything to the form but more into transforming it while keeping its meaning. Socially, heritage means understanding the social activities that have influenced the urban areas. This knowledge that I obtained during the project is essential for my next steps as a practitioner in urban design. To establish a vision in urban development means to consider the past and not as tabula rasa. Thus, this project has deepened my understanding of heritage and realised its importance as an urbanist.

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APPENDIXES

LIFESTYLE STUDY BY SPRINGCO

Target audiences

CHARACTER: Aqua / Blue / Purple Lifestyles

Our analysis of Effective Demand shows that the front and rear of the building block on the city street attracts this target group. This group likes
comfort, luxury and privacy. That is why a high level of facilities (with catering and sports nearby) is a plus. The Couperusbuurt is not a dream location for the purple lifestyle, but the dynamics of Amsterdam make up for a lot.

CHARACTERLime / aqua / green lifestyle

Our analysis of Effective Demand shows that this target group is attracted to both the inside of the building block and the modest courtyards. A **shared system of norms and values** is important for this group. The 55 + ers (empty nesters) also find it important to take care of each other. This group does not like confrontation or other surprises.

CHARACTER Lime / yellow / orange

Our analysis of Effective Demand shows that the collective courts attract this target group. For this group **social cohesion** very important. Meeting family and neighbors is one of our favorite pastimes. The target group is usually active in nature and likes to get out and about.

Target audiences

LIVING PREFERENCES Aqua / Blue / Purple Lifestyles

A **own parking space** and **high level of facilities** (with catering and sports in the area) are a plus, because this group likes dynamics and diversity. There shouldn't be too many surprises for aqua and blue: they are looking for one **comfortable and balanced living environment.** These target groups prefer not to live among social rental homes. The house must reinforce its own identity and that is why modern and sleek construction are popular with them. **Private outdoor space** is very desirable, and is considered necessary when the group has a high income. The requested

living area is between 60m 2 and the 120m 2. depending on income and household composition.

LIVING PREFERENCE Lime / aqua / green lifestyle

Green lifestyles like to retreat to their own home. The preference is therefore for a cozy interior and a **peaceful public space.** This target group owns relatively few cars (are open to sharing) and prefers to use public transport. The desire for one **private outdoor space depends on the stage of life.** While empty nesters like to have their own garden in their old age, starters with the same lifestyle are less attached to it. The desired

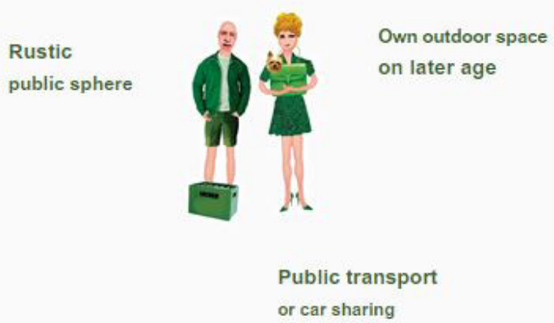
living space also depends on age. The starters find a surface **below 60m 2** fine, true **55+ prefer more space** have at their disposal.

LIVING PREFERENCE Lime / yellow / orange

Small households are open to car sharing, but families value parking space for their own car. In the case of a family are mainly

play facilities a plus. In the case of an elderly couple or elderly single person, the proximity of **care facilities** of interest. This group has a relatively great need for a sense of community, and often finds this in a community center or other

meeting space. Because the group is less inclined to withdraw to their own living environment, the living area is allowed **below 60m 2** lie. Also is **private outdoor space no must.**



THEORY PAPER (AR3U023)

Exploration of Identity and its Meaning in Urban Design Strategy

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Abstract

Heritage is considered to be one of the catalysts of the future of urban development. The paradigm towards heritage has shifted from looking at it as a static individual object into a more dynamic historical landscape that focuses on intangible aspects of cultural identity. However, urban transformation and regeneration often overlooked it and focused more on the physical urban form. In addition, the city that we are living in today is such a diverse place which makes it difficult to distinguish the identity that is embedded in the inhabitants and its city. This paper will explore the meaning of cultural identity as heritage in urban development and identifying the process of translating cultural identity as heritage into an urban design strategy. The methods that are used is by collecting several theories then summarize it into one coherent understanding. Also, a theory about the urban design strategy which is placemaker method will be discussed. To understand further the application of utilizing identity in urban design strategy, a case study was discussed and evaluated. The conclusion that could be derived is the cultural identity as the essence of heritage value could be integrated into urban life through the people-place attachment approach. To do so, intangible-tangible aspects of cultural identity should be translated into an urban design strategy which later could be the place maker and the catalyst of urban development.

Keywords: cultural identity, people-place attachment, placemaker method, urban design strategy

1. Introduction

City as the built environment that we are living in today is influenced by the historical background of physical and social structure that has contributed to the present situation (Thorn, 2002). In addition, Thorn (2002) also argues that the transformation of the city itself was affected by a lot of factors such as economic, social, political, cultural, and ecological that are also changing over time. These complexities then raised the question to find the balance of preserving the historical value of a place and transforming it for present and future needs, especially in the heritage context.

In 2013, UNESCO stated that both tangible and intangible heritage value in the historic urban landscape is vital for the present and the future of the city as they are the substances to achieve social cohesion, diversity of the city, and urban regeneration. Also, heritage is considered a promising strategy and concept for the development of the city (Meurs, 2015). Furthermore, Scitaroci (2019) argues that heritage is considered as non-renewable sources and gives special value to the place. However, to provide the current and future needs, the heritage value then should be adapted. Thus, it is not an absolute value that could not be changed. Heritage values should serve as a guideline that interprets historical meaning and value and applies it as a strategical solution for current means (Tutchener, 2013). In conclusion, heritage value holds importance in sustainable urban development that embodied the essence of the past and applicable to modern needs.

As stated before, heritage consists of tangible and intangible aspects which both are equally important. The duality of heritage then challenges the urban designer to translate the value of heritage into a concrete design strategy for urban development. Therefore, this paper aims to explore the meaning of heritage, its application to urban design strategy, and its implication for the built environment and the user.

2. Paradigm towards 'new' heritage approach

The perspective of understanding heritage has been changing in the past decades. It used to focus on the tangible aspect rather than its intangible aspect of stories, narrative, and memories. However, the paradigm towards heritage has shifted into heritage as a dynamic and complex component from seeing heritage as an object. This notion is supported by the term of the historic urban landscape (HUL). This approach is based on the realization that heritage is a dynamic source (UNESCO, 2013). Also, UNESCO (2013) stated that heritage consists of the interrelationship of natural and cultural, intangible and tangible, and international and local values that are present in the city. In the Dutch context, the perspective towards heritage was influenced by Nota Belvedere which was issued in 1999. It has the main objective to value cultural-historical and integrate it with spatial planning, thus creating a balance between conservation and development. Therefore, the paradigm towards heritage management does not lie on a monument itself but also the surrounding landscape and its cultural-historical value (Feddes et al., 1999)

To understand the complexities of heritage, a theory by Meurs (2015) about the layer of heritage will be discussed. In heritage, there are three defining dimensions layer of which are age-design value, expert-community value, and object-context value (figure 1). The first dimension (age-design value) explains the criteria to assess heritage, some are considered heritage because of its old existence and some are because of the design value that has a socio-architectural impact. Second, expert-community value explains the users who are involved in heritage. While some heritage could only be investigated by experts, others could be enjoyed by and investigated in a group of people (community). Lastly, the object-context value explains the scale of heritage. A single object could be considered as heritage, in

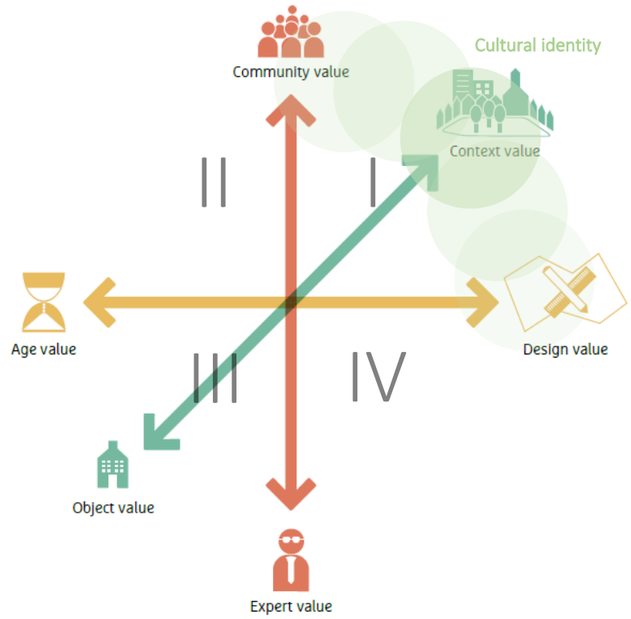

Figure 1. Layers of Heritage based on Meurs (2015)

contrast, an area, and its landscape could also hold a heritage value.

Regarding the paradigm shift, the valuation towards heritage was highly concentrated in age, object, and expert as deciding elements (quadrant III in figure 1). The approach towards historical urban landscape could not be determined on a specific period, thus the age value becomes less important. However, the transformation and the design value that it creates do matter. Previously, looking at heritage value in an object is done mostly by experts. However, when the scale of heritage itself grew from an object to the context, the impact that it has also expanded. Despite looking at heritage from the experts' lenses, it is more substantial to look at the perception of the community that shaped the heritage landscape. Thus, the paradigm shift has grown into a more complex understanding that is defined by the community, context, and design value (quadrant I in figure 1).

The relationship between these three elements in the new paradigm concept needs to be defined. The community in a heritage context is associated with the cultural background of the people. These cultural backgrounds shaped the needs of the community which requires design value to shape the built environment, thus the context. In other words, together these elements represent the notion of recognizing heritage value as the cultural identity of the place.

3. Definition of cultural identity

In this section, the meaning of cultural identity as the essence of heritage will be discussed. Cultural identity is the foundation that determines the qualities that exist in a particular place which is influenced by the socio behavior attributes to the place itself (Cheshmezanghi, 2015). In the heritage context, cultural identity could be translated as the essence that embodied the heritage value of a particular place which is influenced by the community. However, the term of cultural identity is often used in disciplines other than the urban context. Thus, the concept of cultural identity could be interpreted differently. Therefore, in the following paragraph, the meaning of culture and identity will be defined.

3.1 Cultural meaning

According to Cambridge (2020), culture has a definition of the way of life of a particular group that is created by behavior, habits, and moral and social beliefs. The cultural definition in a heritage context and the relation with the layer of heritage (figure 1) explain that culture is driven by the community value. The built environment also plays an important role in creating the culture. However, the main actor is the user who perceives and interprets the use of space. Thus, in analyzing cultural value, the background of the user (age, sex, religion, ethnicity, others) is important.

3.2 Identity meaning

The concept and meaning of identity have various definitions based on different disciplines. In general, the meaning of identity is the characteristic of a group that easily distinguishes them from others (Cambridge, 2020). Therefore, in the urban context, the most distinguished characteristics (tangible aspect) is the urban form. Thus, the meaning of identity will be discussed in the context of urban morphology by reviewing four theories.

First, the term of identity was initially introduced by Kevin Lynch in his theory image of the city. Lynch (1960) argues that the image of the city has three aspects which are identity, structure, and meaning. Identity creates a feature that distinguishes one city from others, structure covers the spatial relations in the city, while meaning defines the noticeable feature of the city for its residents. Second, identity was explained as having a strong relationship with the spirit of the place or sense of place (Cullen, 1961). Third, identity was defined as the phenomena of everyday life which consider building, meaning, and both built landscape and cultural landscape (Schulz, 1980). Fourth, Lynch, (1987) redefined the aspects of the image of the city into two main factors which are identity and structure. The former explains the sense of place in the city while the latter explains the formal component of sense in the city.

According to the four theories, it could be understood that that the concept of identity was first explained more as the feature in the built environment and it was shifting towards the concept of identity as a sense of place. Thus, the definition of identity itself has grown towards a stronger relationship between the space and the user.

3.3 Cultural identity meaning

Built from their definition, the meaning of cultural identity as an essence in the heritage urbanism could be concluded. Cultural identity is the integration between urban form (tangible) and social aspects of the residents (intangible), who are constantly shaping and interpreting the space for their current needs. In other words, to understand and appreciate the identity of an area, that consists of its social value for decision making and shaping the urban fabric should be the departure point in integrating heritage value in urban development (English Heritage, 2006).

4. Cultural identity and its relation to urban design strategy

This chapter will discuss the relationship and the integration of cultural identity as a heritage to the contemporary urban design strategy. Also, the method of applying cultural identity in urban design strategy will be discussed.

Meurs (2015) argues that in urban development, the usage of cultural identity as heritage could become a placemaker tool for urban life. For example the preservation and reuse of Hotel New York into hip-high en restaurant in Kop van Zuid, Rotterdam which has become a catalyst for the development of the area. Through the preservation and transformation of the monument, the growth of the area follows. The identity of the place was redefined and it creates an opportunity for cultural life, creative industry, and event spaces, thus it became a placemaker for the area's urban life. The urban life represents the place that we live in which consists of built features, natural sources, but the most important factors are the people that create a vibrant urban life (Cheshmehzangi, 2015). Thus, in integrating cultural identity as heritage in urban design strategy, the focus should be the relation of the people and the place and the objectives should be creating a place identity with people-place attachment value.

4.1 People-place attachment

To understand people-place attachment and its relation with cultural identity, three theories will be discussed and later a conclusion will be derived from them. First, the concept of place was introduced with three substantial components that shaped a place (Montgomery, 1998). These components cover both physical as well as psychological aspects (figure 2). From the diagram, it is apparent that both the activity and meaning components are highly dependant on the people as they are the ones who will conduct activities and interpret the physical form based on their perception. Therefore, the place could not be detached from the user as they also contribute to create the place and invest the meaning of the place (Soja, 1996).

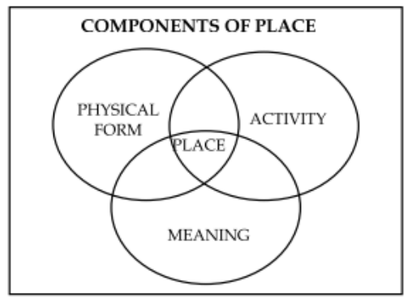

Figure 2. Components of place (Montgomery, 1998)

Secondly, Ujang (2015) breaks down the dimensions of place attachment which are consist of place dependence, place identity, and a sense of belonging and rootedness. The first dimension covers the connection between the people and the place that is created because of the people's needs, experiences,

and perceptions. Place identity in urban design context concerns mostly on the characteristics and features of the urban form with less emphasis on the people's perception toward the place. Last but not least, a sense of belonging and rootedness is associated when a particular place or urban form creates a strong attachment and meaning for the people. Thus, the sense of belonging and rootedness in other words is the people-place attachment.

Third, the people-place attachment was extensively discussed by collecting theories of people place attachment and deriving a conclusion from it. (Peng et al., 2020). In exploring the meaning behind the relationship between people and place, two components construct the attachment, they are place identity and people's place identity. Place identity concerns about the characteristics that are embodied in the built environment itself while people's place identity concerns about the people's way of translating and perceiving the places. Therefore, the distinction between people-place attachment that was concluded in the literature is that place is mainly about the physical, symbol, and shape which could be

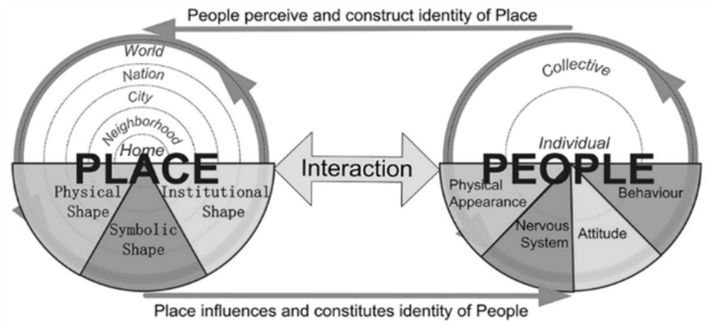

Figure 3. Relationship between people and place (Peng et al., 2020)

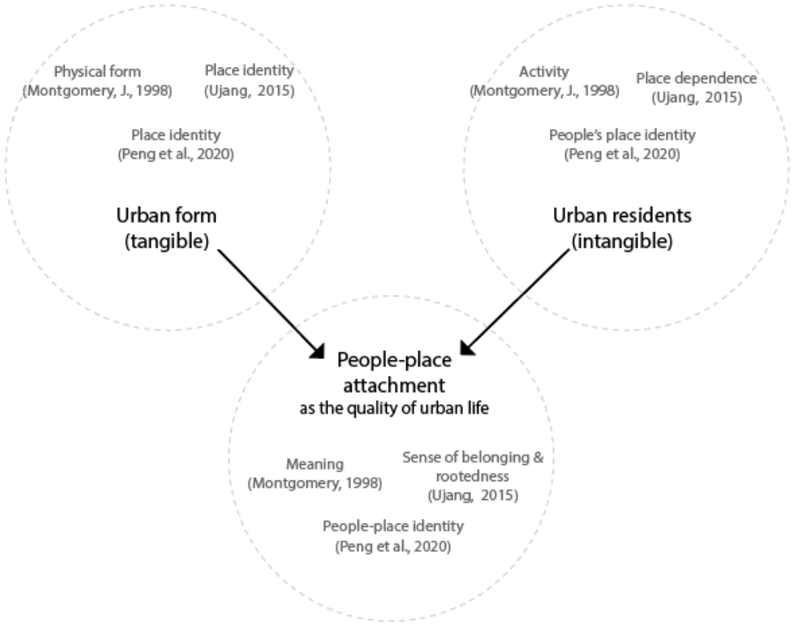

Figure 4. Conclusion diagram of people-place attachment components

analyzed through different scale, and people concerns more of the psychological aspects which influence their perception of the place (see figure 3).

Finally, a conclusion is derived based on three supporting theories and discussion about the people-place attachment. People-place attachment is created by the inevitable relationship between the urban form as the tangible aspects and the perception of the residents which is influenced by their cultural background thus making it an intangible aspect.

4.2 Method of applying cultural identity in urban design

Previously, the presence of cultural identity as heritage could be integrated into contemporary urban design through the people-place attachment approach. However, the concept of people-place attachment is somehow a bit abstract in the urban design strategy. Concerning cultural identity as heritage, Meurs (2015) also raises the question of how could heritage be integrated with urban development strategy and transforming the 'soft' heritage value into 'hard' heritage value in urban design. Therefore, this chapter will define the method to achieve people-place attachment through placemaker method by Sepe (2012). However, this method was designed for enhancing the place identity of a non-heritage context area. Therefore, the holistic approach in analyzing heritage value (Verschuure-Stuip, G., 2019) will be an added layer in this placemaker method to achieve one concise method.

4.2.1 Holistic approach in analyzing heritage (Verschuure-Stuip, 2019)

The methods of the holistic approach consist of a three main layer that is considered crucial in investigating the heritage value comprehensively, which are physical characteristic & visual connection aspect, socio-economic aspects, and mental or cultural aspects. In the physical layer, the elements that are analyzed are related to the landscape and architectural aspects of the heritage area. The architectural aspect covers most of the building such as building facades, floor plans, and building ornaments while the landscape covers the surrounding built environment. The socio-economical aspect covers the socio-economic background of the user which affects the transformation of the built environment. Lastly, the mental aspect covers iconography and people's perception of the place. Together, the cultural identity as heritage value in the area could be identified fully.

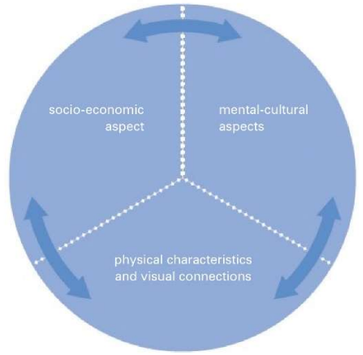

Figure 5. Holistic approach (Verschuure-Stuip, 2019)

4.2.2 Placemaker method (Sepe, 2012)

The Placemaker method is a design strategy to enhance place identity and creating a people-place attachment in the practice of urban design (Sepe, 2012). This method consists of eight phases which cover analysis in the first five and design in the last three phases (see table 1). The output of this method is to create a mapping system of the identity of the place which could be utilized as deciding factors in the design intervention process.

4.2.3 Value

Finally, the two methods are integrated and the connected value from the two methods was defined (see table 1). These values were defined based on the listed aspects of the holistic approach theory. Later, this value will be a list of a parameter that should be considered in urban design to achieve people-place attachment.

Placemaker method (Sepe, 2012)					Value	Holistic approach of Identifying Heritage (Verschuure-Stuip, 2019)
Phase		Objectives	Actions	Products		
analysis	1	Preliminary analysis	Observation	Mapping of the preliminary ideas of the place	Presence of monument, building, environmental condition, infrastructure	Physical aspect & mental aspect
	2	Perceptive analysis	Denominative survey	Mapping of the built environment	Presence of monument, building, environmental condition, infrastructure	Physical aspect
			Perceptive survey	Mapping	atmosphere & ambiance of the place (smell, sound, visual quality)	Mental aspect
			Graphical survey	Mental maps, sketches	Presence of monument, building, environmental condition, infrastructure	Mental aspect, physical aspect
			Photographic survey	Photo(s)	Record facts & actual data instead of perception	Physical aspect & mental aspect
			Video survey	Video(s)		Physical aspect & mental aspect
	3	Identification based on factual data	Research & mapping analysis	Map & set collection of data (statistic table, diagram, etc)	Presence of monument, building, environmental condition, infrastructure, demographic data (socio-economic background of user)	Physical aspect, socio-economic aspect
	4	Identification based on users	Interview Questionnaire	Mapping of the questionnaire results	People's perception of the place highlight the importance element of the area (understand people's attachment)	Mental aspect
	5	Data processing	Overlay maps	Conclusion map		Physical aspect, socio-economic aspect, mental aspect
design	6	Identification on resource of identity	Assessment of potential & problem area	Analytical map	Important element that could enhance place identity, identification of area in need of improvement	
	7	Identification on resource of identity by user	Questionnaire for user of the place	Map visualizing the results of the questionnaire	Important element that could enhance place identity, identification of area in need of improvement based on user needs	
	8	Summarized identification into project proposal	Overlay & elaboration of data collected	Graphic system Complex map of the place identity	Enhancement of architectural element that could increased people-place attachment	
			Definition and localization of design intervention			

Table 1. Integration of placemaker method (Sepe, 2012) & holistic approach in identifying heritage (Verschuure-Stuip, 2019)

5. Case study: Le Medi neighborhood, Bospolder-Tussendijken, Rotterdam

In this chapter, a case study will be conducted by analyzing urban development that promotes cultural identity as the main concept of the development. The case study will discuss the urban renewal of Le Medi, as part of the Bospolder-Tussendijken neighborhood to understand the method that is used in dealing with a heritage context area. Then, an evaluation will be made based on the parameter value that was defined in the previous chapter (table 1).

5.1 Background

The neighborhood of Bospolder-Tussendijken was struggling to provide a livable neighborhood for the residents. The main problems that the neighborhood was facing were segregated urban life, socio-economic problems, and safety issues. The segregation of urban life is happening in between the edges and the inner neighborhood area, where the former has an attractive urban form (considered as protected townscape heritage) and the latter is mostly packed with the vulnerable residential area (social housing with most of them are the lowest segment rental homes) (Gemeente Rotterdam, 2015). To add, the neighborhood also suffers from low socio-economic problems with one of the reasons being dominating immigrant background residents (more than 70%). The neighborhood of Le Medi is located in the inner area of the neighborhood, thus where the vulnerable residential area was located.

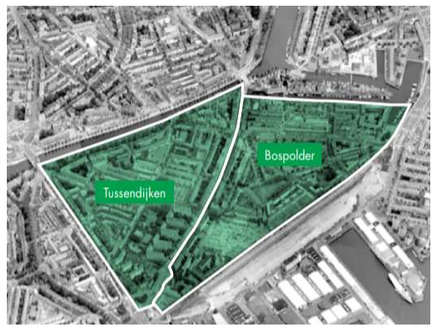

Figure 6. Areal view of Bospolder-Tussendijk (Steenhuis stedenbouw-landschap, 2009)

5.2 Heritage importance

The area of Bospolder-Tussendijken has some monuments and an area categorized as a protected townscape (red mark on figure 7). However, in the Le Medi itself, there was not any presence of monument, therefore the heritage importance in this neighborhood lies not on the tangible aspects (monuments) but the socio-architectural & behavior of the residents (cultural identity).

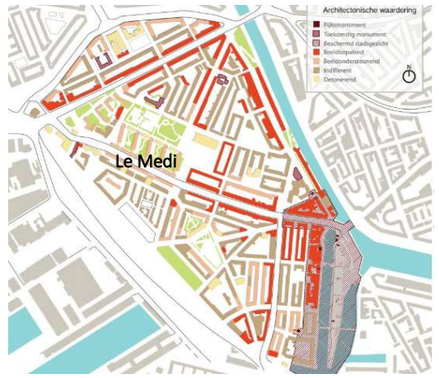

Figure 7. Map of Bospolder-Tussendijk (Steenhuis stedenbouw-landschap, 2009)

5.3 Strategy

The renewal strategy that is implemented in the Le Medi neighborhood is to create social cohesion by the urban renewal and housing transformation in the area. Today, the neighborhood of Le Medi accommodates people with 93 houses in a gated neighborhood

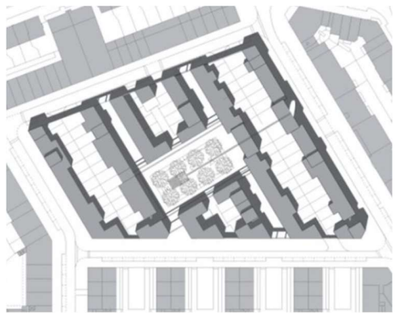

Figure 8. Blockplan of Le Medi (GS, 2019)

Before the design process, a Dutch-Moroccan urban planner together with the municipality proposed the concept of Mediterranean style architecture considering the high immigrant background residents. Then a working group (experts & residents) started to map the essence of Mediterranean & Arabian architecture elements and implemented them into a design toolbox (Meier, 2009). Thus, the approach is by community participation that translated into urban design & architectural elements.

The distinct architectural elements are visible through the building typologies, the colorful building block instead of Dutch-style red-brick material, and the creation of a square in the center of the neighborhood instead of creating a front yard Dutch-style garden. The attempt to achieve a high attachment between the people and the place is also implemented into small scale architectural elements such as the window style, the room division of the house, the opening of the houses, and others (KSA, 2006). Considering the socio-economic problem, some houses are sold in the condition that it is extendable for future needs. This strategy then also affects building typology.

The summary of the strategy of the Le Medi neighborhood is listed in table 2 which covers the methods, implementation of the heritage value & the impact on the neighborhood itself.

	Case study 2 Le Medi
Heritage importance	Cultural identity (socio-behavior background of the residents)
Methods	The community-led approach in creating a discussion between users
Implementation of heritage as cultural identity	Utilizing architectural element such as public spaces, building, and also small scale architectural intervention (windows, color, etc.) to strengthen the place attachment
Impact	Create social cohesion in the neighborhood where people feel at home and attached to the built neighborhood

Table 2. Conclusion of strategy in Le Medi

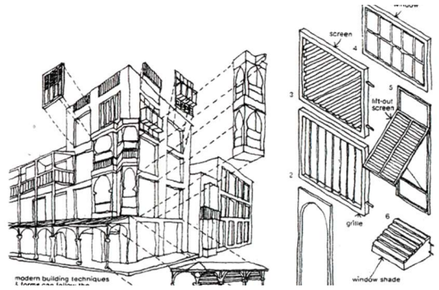

Figure 14. Small architectural design concept intervention (KSA, 2010)

Figure 13. Extendable housing building typology (KSA, 2010)

Figure 15. Public square ini Le Medi neighbourhood (KSA, 2010)

5.3 Evaluation of case study

This section will evaluate the design strategy that has been done in Le Medi and compare it to placemaker method & holistic approach in section 4 (table 1). However, due to the limitation of the data regarding the actual process of the project thus the step-by-step process could not be specifically compared. The idea is to used the integrated value from both methods (section 4.3.3 and table 1) and utilize the value as a parameter to compare it with the Le Medi neighborhood. The results of the comparison could be seen in table 3.

5.4 Discussion

The neighborhood of Le Medi shows a good example of utilizing cultural identity as a heritage of the neighborhood into a specific urban design strategy and intervention. It could be concluded that the people-place attachment in the neighborhood is strong considering the design approach was also done through community participation.

However, the integration of the identity of the place with the surrounding neighborhood was questionable. The social cohesion was indeed achieved in the neighborhood, however, the place identity that was created there seems exclusive to their residents and lack of strong connection to the surrounding area. Furthermore, the gated neighborhood concept increases the social exclusivity of the place.

Lastly, the concept of the Mediterannean architecture style has shown that it can increase people's attachment to their neighborhood. However, this approach could not be applied to other projects easily as it has a sensitive connection to the authenticity and it could lead to creating a staged authenticity in the area.

Value	Implementation in Le Medi
Presence of monument/building	Mediterranean building typology with architectural elements that embodied the identity of the residents. It is visible in the block typology, architectural elements such as windows, the color of the building, ornament of the building, neighborhood gate.
Environmental condition	This aspect was not covered in the design strategy
Infrastructure	In this context, the aspect of infrastructure will not be altered thus the connectivity of the neighborhood will be discussed. The neighborhood was made into a gated neighborhood as part of the concept to create an oasis of a Mediterranean neighborhood.
Atmosphere & ambiance of the place	The neighborhood has a very strong ambiance which the residents feel attached to. It could be achieved through the colorization of the neighborhood, urban design elements such as public space interior, gate, public square.
Socio-economic background of users	Extendable building typology to accommodate people with developing economic status.
People's perception & attachment of place	The community participation approach increase attachment of the residents with the place

Table 3. Evaluation of Le Medi urban design strategy

6. Conclusion

Through this paper, the meaning of both intangible and tangible value of heritage in contemporary urban design strategy was discussed and defined. Due to the shift of seeing heritage more as a collection of memory, narrative, story, in other words, cultural identity, the process of applying the heritage value has been more complicated than preservation or restoration of a heritage monument. Moreover, the historical aspect that shaped our built environment should always be considered for future urban development. Therefore, exploring the meaning of heritage in a contemporary urban design should increase the realization to always consider heritage as an important and catalyst for future development.

Also, the notion that was raised in this paper, which is to enhance people-place attachment as part of the strategy in implementing cultural identity in urban design strategy hoped to explain it clearly on the application of heritage value into urban design strategy.

Further study would be needed as part of complementary research to this paper because the process of translating tangible heritage aspects into urban design strategy should not only be limited through the people-place attachment approach because of the various intangible aspects that could be present in the heritage landscape.

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