

Thesis plan: Post war social housing in Vienna and Rotterdam

Is vienna different?

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Image source: The Urbanist

Content

| | |
|------------------------------------|-----------|
| Introduction | 3 |
| - The issue of affordable housing | 3 |
| - Rotterdam | 5 |
| - Vienna | 6 |
| - Post-World War II neighbourhoods | 7 |
| Research Question | 8 |
| Ethical Positioning | 9 |
| Theory and Methodology | 10 |
| - Academic context | 10 |
| - Methodology Overview | 11 |
| Next Steps | 16 |
| References | 18 |

Introduction

In this thesis, I examine affordable housing policy in Rotterdam and Vienna and its spatial and societal outcomes. I do this by focusing on the development and continued governance of post–Second World War projects undertaken in both cities. The goal of the thesis is to apply the insights gained through this comparison to develop a renovation plan aimed at improving the resilience and quantity of the affordable housing stock in that neighbourhood. The resilience of social housing is understood as a key component in addressing the long-term shortage of affordable housing.

The issue of affordable housing

The housing crisis in the Netherlands has been extensively covered by Dutch media. A growing population, decreasing average household size, and a lag in new housing construction have all contributed to a shortage of available homes. In fact, last year saw the highest year-on-year increase in average rent prices in over 30 years (CBS, 2024).

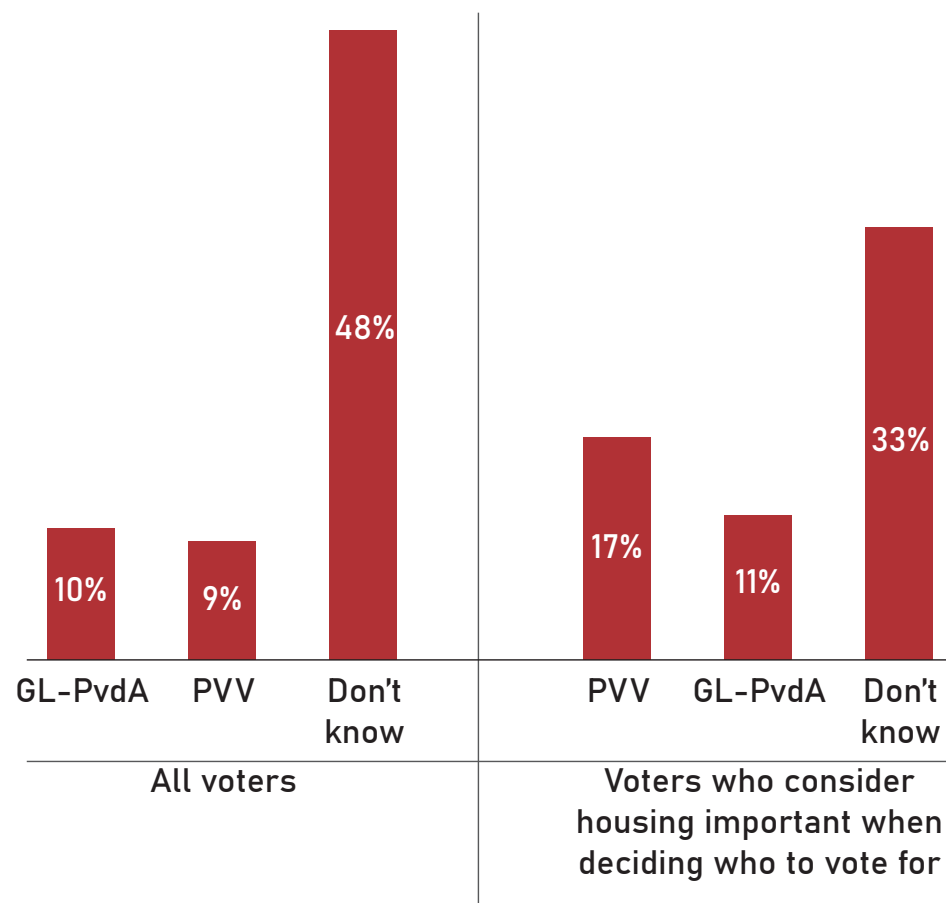
The shortage of housing is particularly apparent when we look at affordable housing. As more people are priced out of the unregulated housing market due to overall shortages, the demand for affordable housing has increased significantly. However, the social housing sector—which provides a large share of the affordable housing supply—has not been able to keep up with this rising demand.

The affordable housing crisis in the Netherlands is a particularly compelling subject for a thesis due to the way the public engages with the issue and the apparent ineffectiveness of current policies intended to address it.

The imbalance between the perceived importance of affordable housing and its actual political prioritisation in the Netherlands becomes clear when we look at recent opinion polling. In recent months, housing has consistently ranked among the top three issues that voters consider most important when choosing a political party (Ipsos, March 2025). However, in February, it was also the issue about which voters felt the least informed—48% said they didn't know which party had a housing programme (Ipsos, February

2025). After the national elections of 2023, the housing market was the issue the public most wanted the new government to address (Ipsos, Post-Election Survey).

What party has the best ideas about housing?



Source: Ipsos, 2025

Introduction

The disconnect between how important people believe the housing crisis is and how underdeveloped their ideas about potential solutions are highlights a lack of public understanding of the historical processes that have contributed to the current situation in the Netherlands.

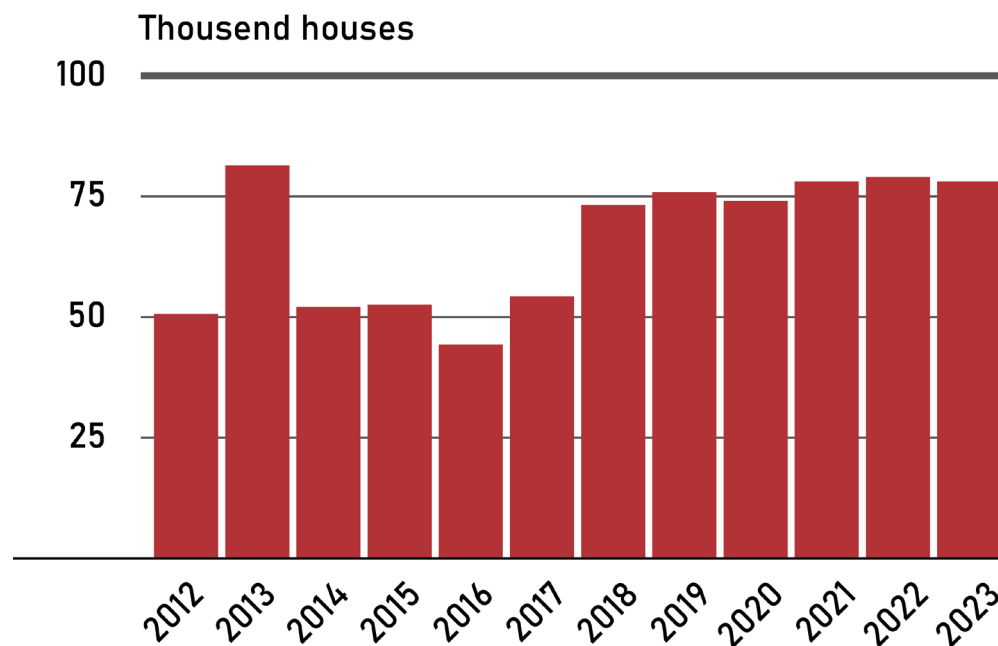
Secondly, current strategies to address the housing crisis have failed when measured against their own stated goals.

Two policy documents are particularly relevant in this context: *the Woningwet 2015* (Housing Act 2015) and the *Nationale Omgevingsvisie* (Environmental Planning Act). The Woningwet 2015 restricts the scope of activities for social housing associations. Specifically, it requires them to allocate 92.5% of their dwellings to households eligible for state rent assistance (Woningwet 2015, Article 48). This aligns with the EU's "level playing field" policy on government subsidies, ensuring that public support is directed towards low-income groups. As a result, a greater proportion of the housing stock managed by associations is reserved for low-income households.

However, Van Gent and Hochstenbach (2020) argue that this policy has led to increased residualisation (meaning that only those from lower socio-economic backgrounds now qualify for social housing. In extreme cases, this can lead to socio-economic segregation within housing estates) and has constrained the financial capacity of housing corporations to invest in new developments or improvements.

The *Nationale Omgevingsvisie* (National Environmental Vision) aims to streamline the planning system to accelerate housing development. However, the most recent monitoring report from the *Monitor Nationale Omgevingsvisie* (2024) shows that the target construction of 100,000 houses per year has not been achieved. Up until 2019, housing construction was increasing annually. Since then, the number of new homes built has stagnated at around 75,000 per year, and this figure is expected to decline further, as the issuance of building permits has decreased since 2021.

Houses built in the Netherlands



Source: Monitor Nationale Omgevingsvisie, 2024

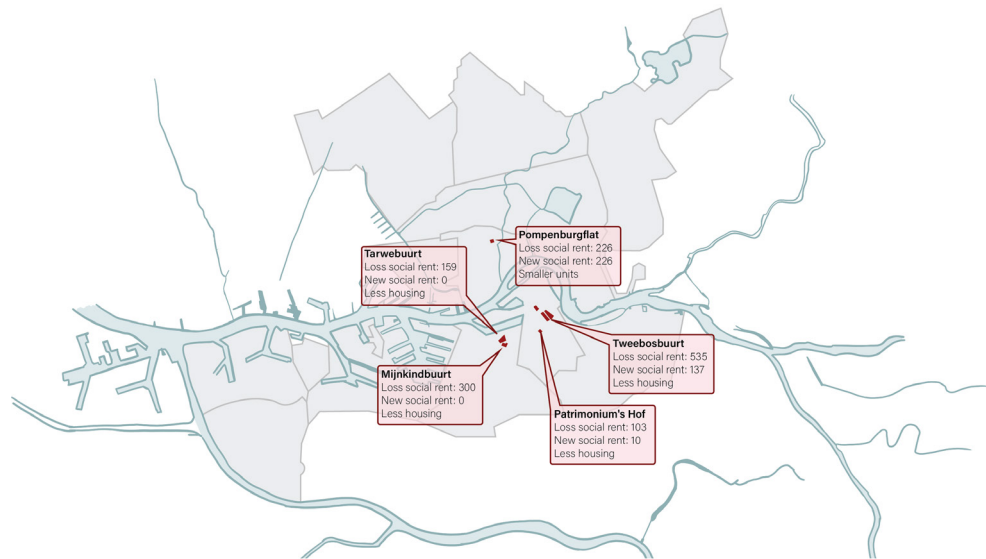
In addition to the construction of new social housing stock, the effective retention and management of existing units plays a major role in maintaining the absolute number of social housing dwellings. In the Netherlands, social housing associations increased the sale of their housing stock to new homeowners or private investors following the financial crisis of 2008. This trend peaked in 2015, with around 26,000 dwellings sold to either private investors or owner-occupiers (Kadaster, 2021).

Introduction

Rotterdam

Rotterdam has historically been a workers' city. To house the workers of the large shipping harbour, impressive social housing developments were built. In recent years, however, the city has become more expensive to live in, with Rotterdam seeing the highest year-on-year increase in average rent prices in the Netherlands (CBS, 2024).

Large demolitions of social housing stock Rotterdam



Source: Image by author

The city government has leaned into this shift by adopting a housing policy that aims to reduce the percentage of social housing in Rotterdam (Rotterdamse Woonvisie, 2023). This development has led to growing tensions, culminating in public responses such as the *woonprotest* (housing protest). These dynamics make Rotterdam an especially compelling case study for examining the spatial and policy dimensions of affordability and liveability.

Introduction

Vienna

Vienna is often cited as a beacon of social housing and progressive housing policy, both in the media and in academic literature. For instance, The Guardian reports that Vienna has become one of the world's most liveable cities through its commitment to social housing (Oltermann, 2024), while Förster and Menking (2018b) provide a detailed architectural and policy-oriented analysis of the qualities of the Viennese system in The Vienna Model 2.

Vienna is also noteworthy for the empirical results of its housing system. For example, Vienna's rent per square metre is among the lowest of major cities in Europe (Deloitte Property Index, 2024), at around a third of the cost per square metre of Rotterdam. This thesis will critically examine if lessons could be learned from Vienna, and if so, how they could be implemented in Rotterdam.



Source: Photo by author

Introduction

Post-World War II neighbourhoods

The decision to focus on neighbourhoods built during the reconstruction years after World War II was made for two main reasons: firstly, Vienna and Rotterdam both suffered extensive damage to their existing housing stock. Because of this, both cities were facing many of the same pressures, such as a lack of housing and a devastated economy. This gives us a similar starting position for both cities.

Secondly, the choice of neighbourhoods built around 1950 allows for the study of their development over time. As this thesis is particularly interested in the long-term effects of the spatial and governance aspects of affordable housing, and the resilience of design and governance systems, the long-term view offered by older neighbourhoods is critical.

Rotterdam after World War 2

Source: Unknown author, public domain



Research Question

Main Research Question:

How can lessons from Vienna's social housing model be used to help tackle the affordability and liveability crisis in Rotterdam?

Sub-Research Questions:

- 1 How liveable and affordable are the post-war neighbourhoods in Rotterdam and Vienna today?
- 2 What design and governance forces shaped the neighbourhoods into what they are today?
- 3 What lessons regarding urban planning and management can be learned by examining the different ways in which the studied neighbourhoods in Rotterdam and Vienna have developed?
- 4 How could the lessons regarding affordability and liveability be implemented spatially in a neighbourhood in Rotterdam?

Ethical Positioning

At the heart of my thesis is the ethical position that housing is a right. This right to housing has been recognised by numerous institutions, including the Dutch government (Grondwet, Article 22), the Council of Europe (European Social Charter, Article 31), and the European Parliament (Resolution 20210114IPR95632). However, the question of how to protect this right is still very much debated.

The EU has long held the position that housing assistance from the state should not interfere with the free market. This stance has led the Dutch government to limit which income groups housing associations can cater to (Priemus & Gruis, 2011).

Here we can see the conflicting ethical views on housing: on the one hand, housing is seen as a human right, while on the other, it is viewed as a market that should not be interfered with by government interventions. The starting point of this thesis is that housing is a basic human right, and that policy should be shaped to effectively facilitate access to housing for all—whether that is through the market, the state, or non-profits. No preferential treatment will be given to either of the systems.

Theory and Methodology

Academic context

Housing affordability

Pittini (2012) discusses the state of affordable housing in the EU, beginning with an overview of how affordable housing is defined. Among other definitions, she refers to the standard that considers housing affordable when it costs less than a certain percentage of the occupant's monthly income. She highlights a stark disparity: individuals earning less than 60% of the median income typically spend over 40% of their disposable income on housing, whereas those earning above that threshold spend less than 20%. This illustrates that the affordability crisis is most severe in the lower-income segment. Additionally, Pittini identifies the rise in owner-occupied housing—often at the expense of social housing—as a key factor contributing to the shortage of affordable homes.

Social housing

The role of social housing in providing affordable and liveable housing is well established, and in the Netherlands dates back to the introduction of the Woningwet (Housing Law) of 1902. Recent academic discourse in the Netherlands discusses how recent policy has impacted this.

Priemus and Gruis (2011) point out that economic laws aimed at protecting the level playing field have pushed the Dutch government to target its social housing only at the poorest segment of Dutch society. This limits the ability of the social sector to provide affordable housing for middle-income households, thereby restricting its overall capacity to address housing affordability.

Boelhouwer and Priemus (2013) highlighted the dangers posed to the Dutch housing sector by policy changes and, in particular, budget cuts. They also pointed to the negative public perception of social housing—in part attributed to perceived poor-quality living environments—as a contributing

factor to the severity of the cuts to the social housing sector. This underscores the interconnection between the quality and quantity of social housing stock.

Comparative studies

Comparative studies are often used to gain deeper insights into the effects of policy. A notable example is the study by Kadi and Lilius (2022). Through the use of a multi-dimensional framework that considers the various layers of governance in Helsinki and Vienna, they find that although the two cities have very different policies regarding social housing, both have successfully maintained the strength of their social housing sectors.

The academic value of this thesis lies in the comparative analysis between Rotterdam and Vienna, and in the examination of both the spatial qualities and the governance structures that have enabled and sustained them. This holistic approach to social housing—integrating physical design with institutional context—has not yet been applied in a comparative study.

Theory and Methodology

Methodology Overview

This thesis consists of three main parts: an information-gathering phase, where both cities are examined individually; an analysis chapter, in which both cities are examined together and best practices are described; and, lastly, a design and communication chapter, in which lessons from the analysis chapter are used as the basis for a spatial design for a neighbourhood in Rotterdam, and the results of the thesis are communicated to a wider audience. The research goals and methods are expanded upon further in this chapter.

Gathering

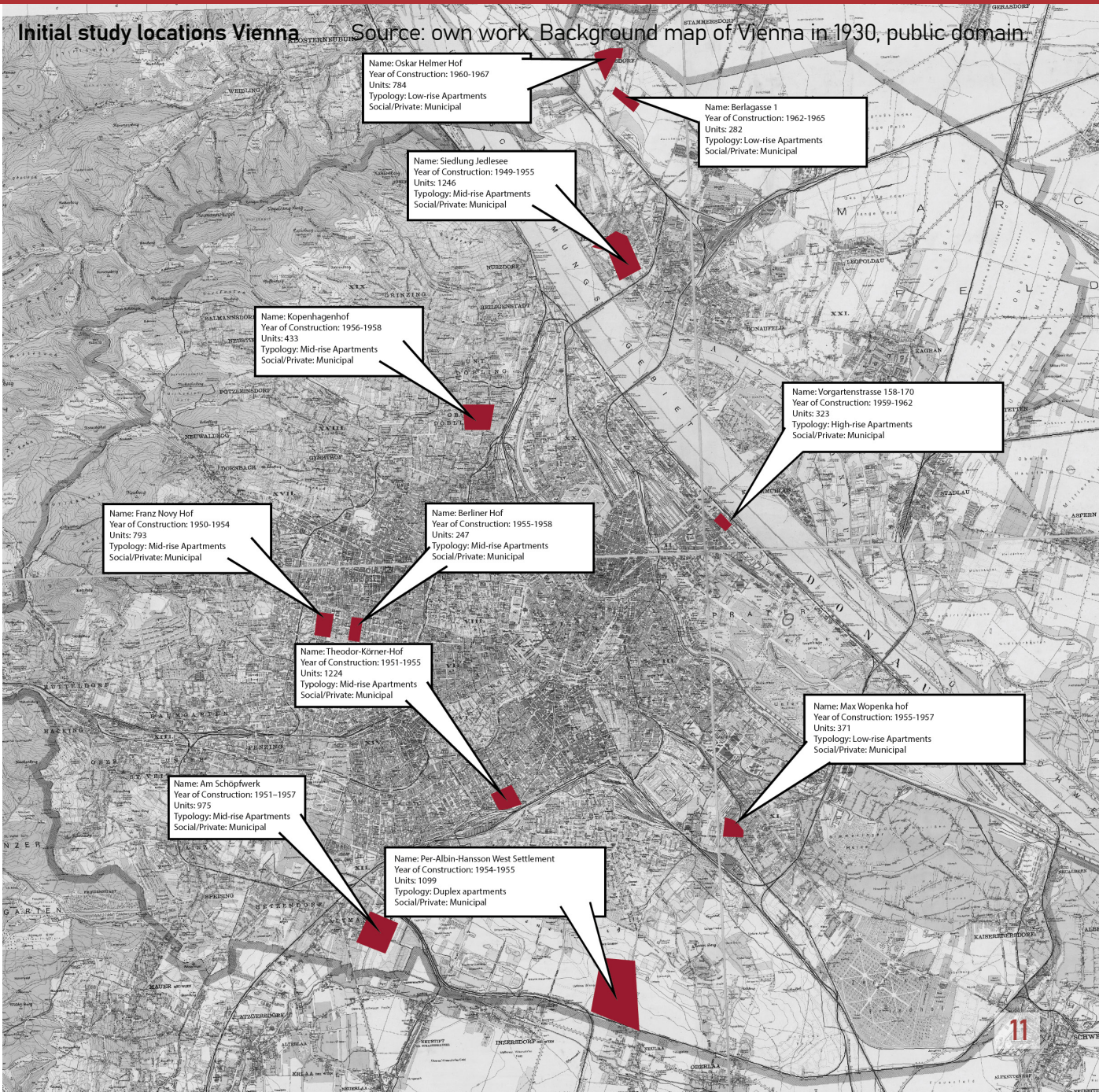
In the information-gathering part of the thesis, sub-question 1 will be answered. Below is a detailed overview of how this will be done.

Sub-question 1: How liveable and affordable are the post-war neighbourhoods in Rotterdam and Vienna today?

The examination of how the neighbourhood functions will focus on two main research topics: liveability and affordability. These topics will be investigated through the following guiding questions:

- 1: How liveable is the neighbourhood now?
- 2: How affordable and accessible is the housing?

The first question will be answered by a site visit,



Theory and Methodology

during which the spatial quality of the neighbourhoods will be examined. In addition, public data on key social indicators will be used. An analysis of the morphology and typology of the neighbourhood will also be conducted. Lastly, services in the neighbourhood will be analysed.

The second question will be answered by analysing neighbourhood data regarding average rent prices compared to income levels. In addition, policy regarding the allocation of housing units will be examined.

To allow for a more in-depth study, only two neighbourhoods in each city will be examined in this way. The neighbourhoods for deep examination will be selected during preliminary research on the cities.



Initial study locations Rotterdam

Source: own work. Background map of Rotterdam in 1940, Teprotides.

Theory and Methodology

Analysis

In the gathering part of the thesis, sub-questions 2 and 3 will be answered. Below is a detailed overview of how each sub-question will be addressed.

Sub-question 2: What design and governance forces shaped the neighbourhoods into what they are today?

The investigation into the forces that have shaped the development of the selected neighbourhoods will focus on three main research themes: spatial setup, governance structures, and resilience to change. The corresponding research questions are as follows:

What influence did the initial spatial setup have on the development of the neighbourhood?

What influence did the governance structures have on the development of the neighbourhood?

To answer the first question, we will examine how the initial spatial configuration (including typology and morphology) influenced later utilisation and renovations of the neighbourhoods. This will involve a study of historical and contemporary design maps, analysis of spatial elements such as building placement, green space, and infrastructure, and on-site observations to gain a better understanding of how the space is experienced today.

The second question will be addressed through an investigation into the key changes that have occurred in the neighbourhoods over time, both in use and in spatial form. Once these changes are identified, the governance structures and policies that caused or facilitated these transformations will be analysed. This will be carried out through a combination of literature

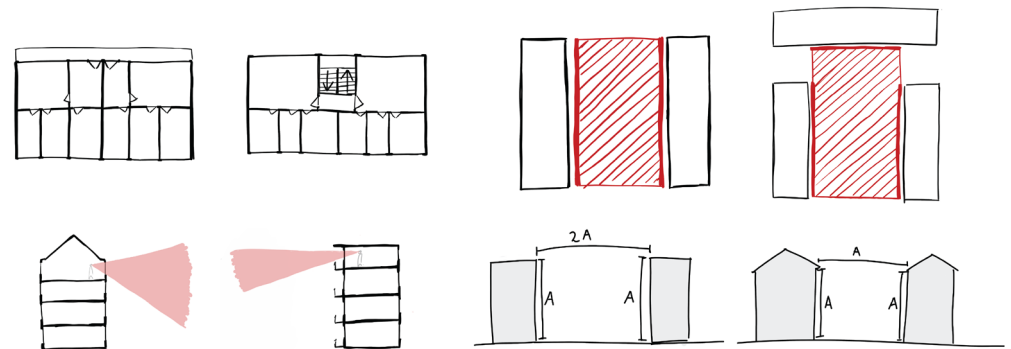
reviews, policy analysis, and interviews with experts.

In doing so, I will assess the resilience of the neighbourhoods in two key areas:

Spatial resilience – How did the spatial layout of the neighbourhood contribute to its ability to adapt to changes in use or other challenges?

Organisational resilience – How did the governance structure of the neighbourhood affect its capacity to respond to shifts in the zeitgeist or other external pressures?

Examples of analytical sketches



Source: Drawings by author

Theory and Methodology

Sub-question 3: What lessons regarding urban planning and management can be learned by examining the different ways in which the studied neighbourhoods in Rotterdam and Vienna have developed?

To answer this research question, I will compare the planning and governance mechanisms that influenced the development of the post-war neighbourhoods in both cities. This will be done through a comparative study.

This analysis will result in a list of design and governance characteristics that have had a positive impact on the development of the neighbourhoods in both Rotterdam and Vienna.

The final step in this chapter will be to review that list and evaluate how applicable these best practices are to the case study neighbourhood in Rotterdam. Special attention will be given to contextual differences, including:

- 1: Spatial context (e.g., the broader spatial fabric of the city)
- 2: Governance context (e.g., differences in the governance structures between municipality and province)

This reviewed list, similar to a pattern language, will be used in the later stages of the thesis to inform the design proposal.

Design and Communication

In the gathering part of the thesis, sub-question 4 will be answered. Below is an overview of how this will be done.

Sub-question 4: How could the lessons regarding affordability and liveability be implemented spatially in a neighbourhood in Rotterdam?

To answer this research question, I will propose a spatial design for one of the studied neighbourhoods in Rotterdam. In this design, I aim to improve the liveability of the neighbourhood while increasing the availability

of social housing. Throughout the design process, I will apply the best practices identified in the previous chapter to enhance the neighbourhood in three key areas: liveability, affordability, and resilience.

The design will seek to improve the neighbourhood in these three dimensions while preserving as much of the quality of the existing spatial and social fabric as possible. The tools used will include, depending on the findings from the previous chapter, densification, infrastructure improvements, better facilities, and enhancements to the urban design.

The proposed changes in the neighbourhood will then be reviewed to identify the policy and governance adjustments needed—not only to implement these changes but also to ensure that the neighbourhood remains resilient in the face of future challenges. This resilience will be assessed from three main perspectives: social resilience, financial resilience, and institutional resilience.

The governance requirements for social resilience should be understood as the governance structures needed to ensure the long-term functioning of the neighbourhood's social fabric. This includes, among other aspects, governance related to the selection of permitted inhabitants and governance structures that enable the provision of adequate social facilities, such as community centres and meeting spaces.

The governance requirements for financial resilience refer to governance structures that ensure the long-term financial stability of the entity maintaining the neighbourhood and the long-term affordability of the housing stock.

Lastly, the governance structures themselves should be resilient, ensuring that they remain effective during unfavourable political or social conditions.

Theory and Methodology

summary

Below is an overview of the sub-research questions and how they will be answered.

Sub-research question

Main method

How liveable and affordable are the post-war neighbourhoods in Rotterdam and Vienna today?

Study of city government documents on key indicators of liveability; analysis of average rent prices compared to income; site visit.

What forces shaped the neighbourhoods into what they are today?

Spatial study of neighbourhood design; historical analysis of the neighbourhood; governance analysis.

What lessons regarding urban planning and management can be learned by examining the different ways in which the studied neighbourhoods in Rotterdam and Vienna have developed?

Comparative study.

How could the lessons regarding affordability and liveability be implemented spatially in a neighbourhood in Rotterdam?

Design study of the built environment; policy proposals.

Next Steps

Although much can change in the seven months I have left for this thesis, a preliminary outline of the chapters and a rough timeline for the work have been laid out.

Contents:

1: Introduction

- 1.1: The issue of affordable housing
- 1.2: Rotterdam
- 1.3: Vienna
- 1.4: Post World War 2 neighbourhoods

2: Research Question

3: Ethical positioning

4: Theory and Methodology

- 4.1: Academic context
- 4.2: Methodology Overview

5: Introduction to housing governance in cities

- 5.1: Rotterdam
- 5.2: Vienna

6: Gathering

- 6.1: Rotterdam
- 6.2: Vienna

7: Analysis

- 7.1: Rotterdam
- 7.2: Vienna
- 7.3: Comparative study

8: Design case study

- 8.1: Spatial
- 8.2: Governance

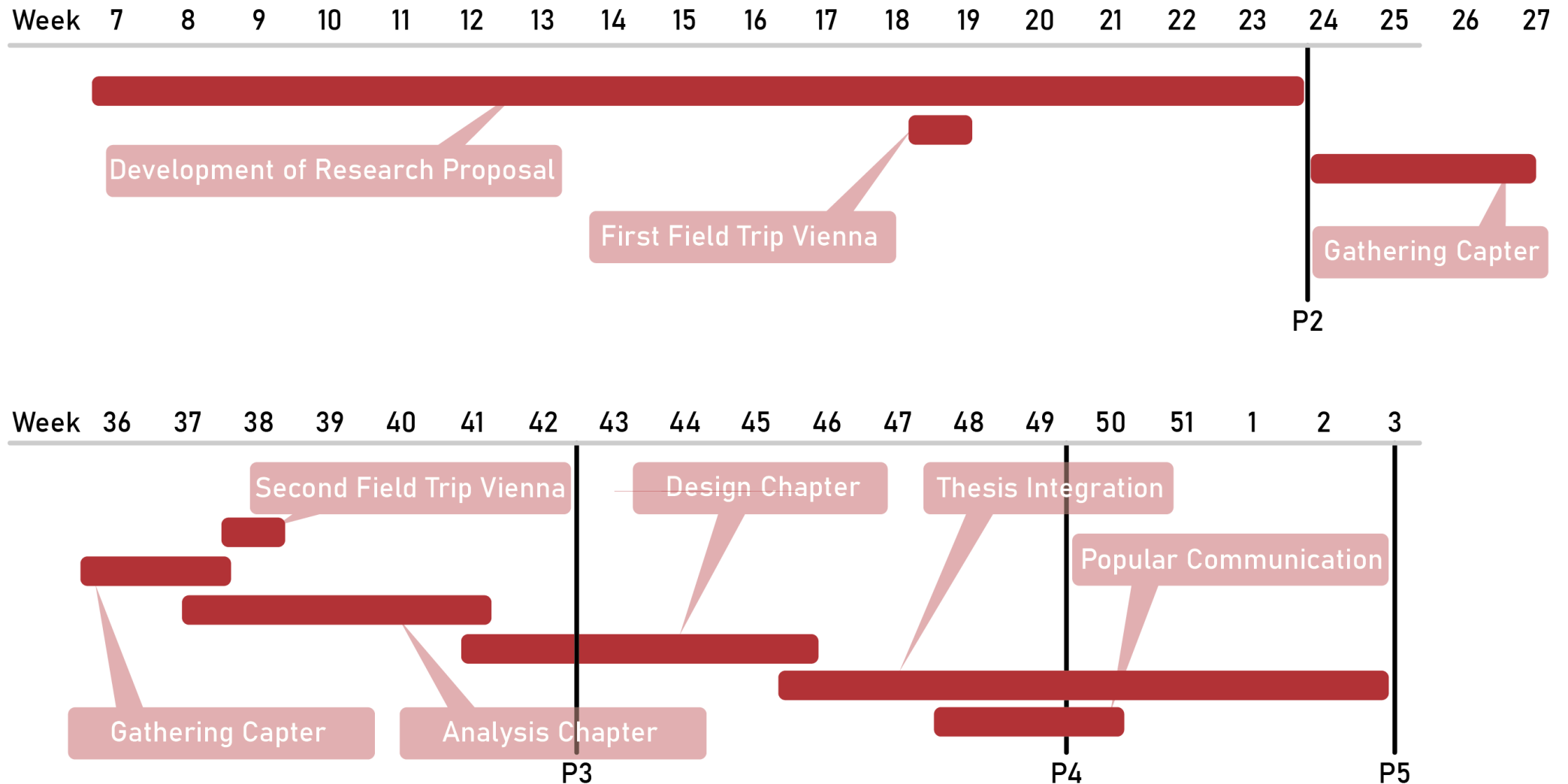
9: Communication

10: Reflection

11: References

Next Steps

Here you can see my planning for my thesis.



References

- Boelhouwer, P., & Priemus, H. (2014). Demise of the Dutch social housing tradition: impact of budget cuts and political changes. *Journal of Housing and the Built Environment*, 29, 221-235.
- Centraal Bureau voor de Statistiek. (2024, 4 September). Grootste huurstijging in ruim 30 jaar [Largest rent increase in over 30 years]. <https://www.cbs.nl/nl-nl/nieuws/2024/36/grootste-huurstijging-in-ruim-30-jaar>
- Centraal Bureau voor de Statistiek. (2024, September 4). Grootste huurstijging in ruim 30 jaar [Largest rent increase in over 30 years]. <https://www.cbs.nl/nl-nl/nieuws/2024/36/grootste-huurstijging-in-ruim-30-jaar>
- Deloitte. (2024). Property Index: Overview of European Residential Markets. <https://www.deloitte.com/nl/en/Industries/real-estate/perspectives/property-index-deloitte.html>
- European Parliament. (2021, January 21). MEPs: Access to adequate housing should be a fundamental European right [Press release]. https://www.europarl.europa.eu/press/news/expert/2021/1/press_release/20210114IPR95632/20210114IPR95632_en.pdf
- European Union. (2010). Charter of Fundamental Rights of the European Union. *Official Journal of the European Union*, C 83, 389-403. <https://fra.europa.eu/en/eu-charter/article/34-social-security-and-social-assistance>
- Förster, W., & Menking, W. (Eds.). (2018). *The Vienna Model 2: Housing for the City of the 21st Century*. Berlin: Jovis Verlag GmbH.
- Gemeente Rotterdam [Municipality of Rotterdam]. (2023, oktober). Rotterdamse Woonvisie 2023 [Rotterdam Housing Vision]. <https://www.woneninrotterdam.nl/wp-content/uploads/2023/10/Rotterdamse-Woonvisie-102023.pdf>
- Ipsos. (2023, December 4). Kiezeronderzoek Tweede Kamerverkiezingen 2023 [Voter Research House of Representatives Elections 2023]. https://www.ipsos.com/sites/default/files/ct/news/documents/2023-12/Kiezeronderzoek%20TK23_v1.0.pdf
- Ipsos I&O. (2025, February 20). Politieke peiling februari 2025 [Political Poll February 2025] (Report No. 2025/028). <https://www.ipsos-publiek.nl/wp-content/uploads/2025/02/politieke-peiling-februari-2025-met-correctie.pdf>
- Ipsos I&O. (2025, March 19). Politieke peiling maart 2025 [Political Poll March 2025] (Report No. 2025/049). <https://www.ipsos-publiek.nl/wp-content/uploads/2025/03/rapport-politieke-peiling-maart-2025-def-1.pdf>
- Kadaster. (2021, April 21). Verkopen woningcorporaties: alle data op een rij [Sales by housing corporations: all data summarized] [Article]. <https://www.kadaster.nl/-/verkopen-woningcorporaties-alle-data-op-een-rij>
- Kadi, J., & Lilius, J. (2024). The remarkable stability of social housing in Vienna and Helsinki: a multi-dimensional analysis. *Housing Studies*, 39(7), 1607-1631.
- Kuiper, R., & Spoon, M. (2024, September 20). Monitor Nationale Omgevingsvisie 2024 [National Environmental Vision Monitor 2024] [Report No. 5313]. Planbureau voor de Leefomgeving. <https://www.pbl.nl/system/files/document/2024-09/pbl-2024-monitor-nationale-omgevingsvisie-5313.pdf>
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2020). Nationale Omgevingsvisie [National Environmental Vision]. <https://open.overheid.nl/documenten/ronl-59b3033c-0826-4624-ba7f-41aec10b6d7a/pdf>
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2023). Grondwet voor het Koninkrijk der Nederlanden 2023. <https://open.overheid.nl/documenten/ronl-bfa3c90611c54fd791d929d4b94e0869ee6a7065/pdf>
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2025, februari 12). Woningwet [Housing Act]. <https://wetten.overheid.nl/BWBR0005181/2025-02-12>
- Oltermann, P. (2024, January 10). The social housing secret: How Vienna became the world's most livable city. *The Guardian*. <https://www.theguardian.com/lifeand-style/2024/jan/10/the-social-housing-secret-how-vienna-became-the-worlds-most-livable-city>
- Pittini, A. (2012). Housing affordability in the EU: Current situation and recent trends (pp. 1-12). CECODHAS, European Social Housing Observatory.
- Priemus, H., & Gruis, V. (2011). Social Housing and Illegal State Aid: The Agreement between European Commission and Dutch Government. *International Journal of Housing Policy*, 11(1), 89-104. <https://doi.org/10.1080/14616718.2011.548588>

References

Van Gent, W., & Hochstenbach, C. (2020). The neo-liberal politics and socio-spatial implications of Dutch post-crisis social housing policies. *International Journal of Housing Policy*, 20(1), 156-172.

AI acknowledgement: The text has been spell-checked by AI, original text was written by the author.