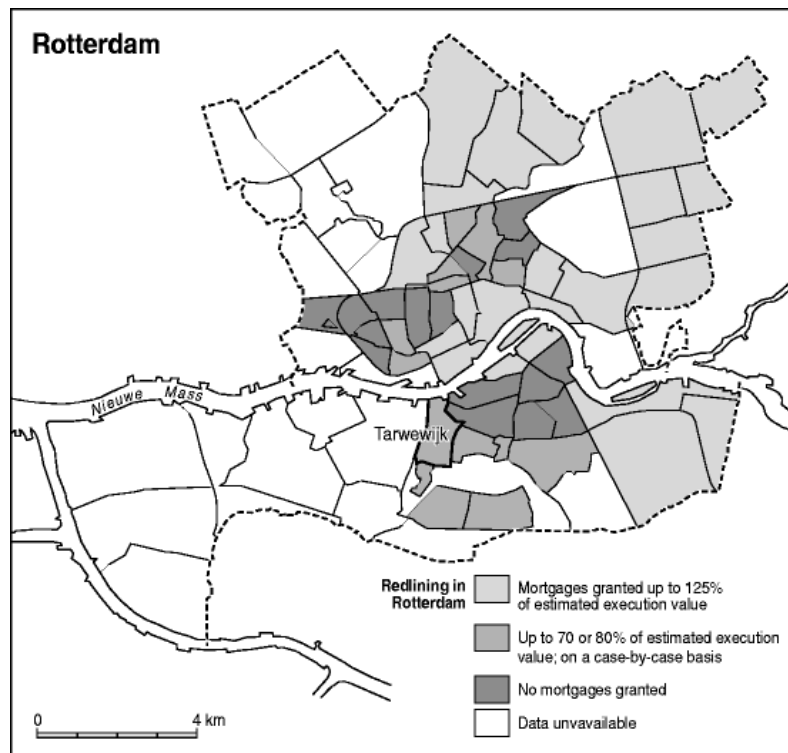


Uncovering the legacy of redlining: A study of Rotterdam's socio-spatial inequalities

How historical redlining practices influence contemporary neighbourhoods in Rotterdam socio-spatially

By
Tuur Deltrap



Bachelor thesis Geography, Planning and Environment (GPE)

Nijmegen School of Management

Radboud University Nijmegen

June 2024

Bachelor thesis Geography, Planning and Environment (GPE)

Nijmegen School of Management

Radboud University Nijmegen

June 2024

Supervisor: dr. H.G. Pettit

S1085256

Number of words: 18.500

Summary

Several neighbourhoods in Rotterdam were influenced by redlining practices in the late 1990s, including the neighbourhood of Oud Crooswijk. This bachelor thesis investigated the influence of historical and discriminatory redlining practices on current socio-spatial inequalities in Rotterdam, focusing on the comparative case study between the Oud Crooswijk and Kralingen-West neighbourhoods. Oud Crooswijk, as mentioned, is a former redlined neighbourhood. Kralingen-West, on the other hand, is not. Redlining was a practice in the housing market where lenders made estimates on discriminatory grounds about whether or not to grant mortgages or loans. These assessments were not made based on an individual's creditworthiness, but on the location of an individual's property. Residents of redlined neighbourhoods could not sell their homes and could not move themselves because they could not get a mortgage. People who wanted to live in redlined neighbourhoods also experienced problems. With this research, the aim is to gain more insight into the process of how these historical redlining practices from the 1990s in Rotterdam increased the deprivation of the Oud Crooswijk neighbourhood and limited development, leading to socio-spatial inequalities compared to Kralingen-West. From this, the following research question follows: How have historical redlining practices in the 90s influenced contemporary socio-spatial inequality between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam?

Two research strategies were used to answer this research question. Both desk research and a comparative case study were done, using a qualitative approach to gather in-depth information about the two neighbourhoods and regarding redlining. As research methods, semi-structured interviews were done and content analysis. These interviews were done with the chairmen of the Kralingen and Crooswijk neighbourhood councils, a professor in the field of redlining and an expert on racism in the housing market.

The results of this research can be divided into three sections, which form the three sub-questions of this study. The first deals with the impact of redlining in the first decade of the 21st century, the second section deals with the current socio-economic and demographic composition of neighbourhoods and finally a section on ongoing discriminatory practices. To get a good picture of the impact of redlining in the first decade of the 21st century, it is helpful to go back in time a few decades. Through this look back in time, the conclusion can be drawn that there are several factors at play in explaining the socio-spatial development of neighbourhoods. Redlining is a consequence of pre-existing socio-spatial inequality. Redlining reinforces this inequality. This discriminatory practice is not isolated and thus plays

out in interplay with other forms of inequality and discriminatory practices. The interviews reveal that the WWII bombings and subsequent urban renewal projects, as well as redlining, play an interplay in the unequal development of the two neighbourhoods. Redlining therefore at least reinforced inequality between Kralingen-West and Oud Crooswijk or stagnated socio-spatial development in Oud Crooswijk.

To bring the study to the present, the second part follows an analysis of the current socio-economic and demographic composition of the two neighbourhoods and the inequalities between them. Oud Crooswijk today still has all the characteristics of a formerly redlined neighbourhood. The neighbourhood is characterised by a high percentage of ethnic minorities, low incomes and many rented or cheap houses for sale. Kralingen-West scores better in all these areas. However, it is difficult to establish that these characteristics are the result of redlining, as this was also the situation in the neighbourhood before the redlining practice was implemented. One thing is certain, and that is that redlining has reinforced the unequal situation between the two neighbourhoods. Also, on the factors contributing to socio-spatial inequality, Oud Crooswijk scores worse than Kralingen-West on almost every factor. This also applies to social exclusion. Exclusion by housing creates many constraints for residents to develop personally.

Analyses for the third sub-question show that discrimination still exists in the housing market. This concerns owner-occupied housing, private rental housing and housing association rental housing. Even though redlining has not been implemented for a long time, discriminatory practices still appear to exist. They include both direct and indirect forms of discrimination. Redlining is one such indirect form of discrimination, which has had a major impact on residents of redlined neighbourhoods and the neighbourhood as a whole.

An unequivocal answer to the research question cannot be given, but what is beyond doubt is that redlining was a discriminatory practice in the late 1990s in Rotterdam in the housing market. The practice denied residents of redlined neighbourhoods the ability to get a mortgage, effectively denying home ownership. This led to economic inequalities and social exclusion of groups of people. Because residents of redlined neighbourhoods could not buy or sell a home, they were unable to accumulate capital. The result is a vicious cycle in which a neighbourhood becomes trapped, reinforcing socio-spatial inequalities.

Content

| | |
|---|-----------|
| Chapter 1 - Introduction | 5 |
| 1.1 Introduction | 5 |
| 1.2 Problem statement | 9 |
| 1.3 Research aim and research questions | 10 |
| 1.4 Scientific and societal relevance | 12 |
| 1.4.1 Scientific relevance | 12 |
| 1.4.2 Societal relevance | 15 |
| 1.5 Research model | 17 |
| 1.6 Thesis outline | 17 |
| Chapter 2 - Literature review, theoretical framework and operationalisation | 18 |
| 2.1 Literature review and theoretical framework | 18 |
| 2.1.1 Bourdieus' Habitus, Capital and Field | 22 |
| 2.1.2 Social exclusion | 25 |
| 2.2 Operationalisation of theoretical concepts | 28 |
| Chapter 3 - Methodology | 31 |
| 3.1 Research strategy | 31 |
| 3.2 Research methods, data collection and data analysis | 33 |
| 3.3 Validity and reliability of the research | 35 |
| Chapter 4 - Results | 36 |
| 4.1 What was the impact of redlining on the socioeconomic and demographic composition of the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam in the decade after the implementation? | 36 |
| 4.2 What is the current socioeconomic and demographic composition of the redlined neighbourhood Oud Crooswijk and the non-redlined neighbourhood Kralingen-West and what are the socio-spatial inequalities between these neighbourhoods? | 42 |
| 4.3 Since the abolition of redlining, to what extent have discriminatory practices remained in the field of the housing market in Rotterdam? | 51 |
| Chapter 5 - Conclusion | 55 |
| Chapter 6 - Discussion | 58 |
| Bibliography | 60 |
| Time planning | 70 |
| Annex 1 Oud Crooswijk vs Kralingen-West | 72 |

Chapter 1 - Introduction

1.1 Introduction

In Rotterdam there have been redlining practices in the 1990s. Redlining is a phenomenon in which lenders discriminate when making loans, insurance or mortgages and base lending decisions solely on the location of a property. Characteristics of the borrower themselves or the property are ignored. This usually means that lenders do not lend to neighbourhoods with ethnic minorities or other perceived risks to real estate investment. These neighbourhoods are 'redlined' (Hillier, 2003). As in the US, redlining in Rotterdam has its origins in a crisis, namely the housing recession of 1978-1981. During this three-year period, defaults were much higher than average. Defaults made banks more cautious and selective in issuing mortgages. In particular, mortgage applications from neighbourhoods with a high rate of defaults, were viewed with care and suspicion. Defaults generally occurred in neighbourhoods with relatively low housing values, but the cautious and selective behaviour of banks did not quite match the low housing values. Once the crisis was over and conditions had improved somewhat, almost no redlining took place in the period between 1990 and the end of the 1990s. After this period, restrictions on the issuance of mortgages based on geographical location took place again. As shown in Figure 1, no mortgages were granted in almost the entire south bank and some parts of the north of Rotterdam (Aalbers, 2005a; Aalbers, 2005b).

In October 1999, the "Rotterdam mortgage scandal" was publicly announced by Dominic Schrijer. He revealed that several neighbourhoods in Rotterdam were excluded from mortgage capital by mortgage lenders. In some neighbourhoods, mortgages were provided, but at high interest rates, high down payments and short funding periods. In Rotterdam, mortgage lenders used coloured maps to determine where they would issue home mortgage capital and where they would not (Abbing, 1999). These maps consisted of the colours red, yellow and green. As shown in Figure 1, in the red neighbourhoods (the darkest shade) no mortgages were issued. In the yellow neighbourhoods (the middle shade) up to 70 or 80 percent of liquidation value. And finally, in the green neighbourhoods (the lightest shade), mortgages were granted up to 125 percent (Aalbers, 2007a).

Besides the redlining maps, zip-code lists were also used by banks in Rotterdam. In figure 2 there is an example of such a zip-code, which has been used by the Rabobank for mortgage applications. These were used to divide neighbourhoods into three types. The first type was Code I, with the same description as the green neighbourhoods on the redlining map. The

second type was Code II, with the same description as the yellow neighbourhoods on the redlining map. Lastly, the third type was Code III, which had the same description as the red neighbourhoods on the redlining maps. Seventeen of the thirty-three neighbourhoods were assigned code III. Of the twenty-five neighbourhoods on the north bank, nine were redlined, whereas on the south bank (named “Werkgebied Zuid”) they were all redlined. For the remaining neighbourhoods or areas on the south bank, which are not listed, Code II applies. In that case, the situation will be critically reviewed on a case-by-case basis (Aalbers, 2005a).

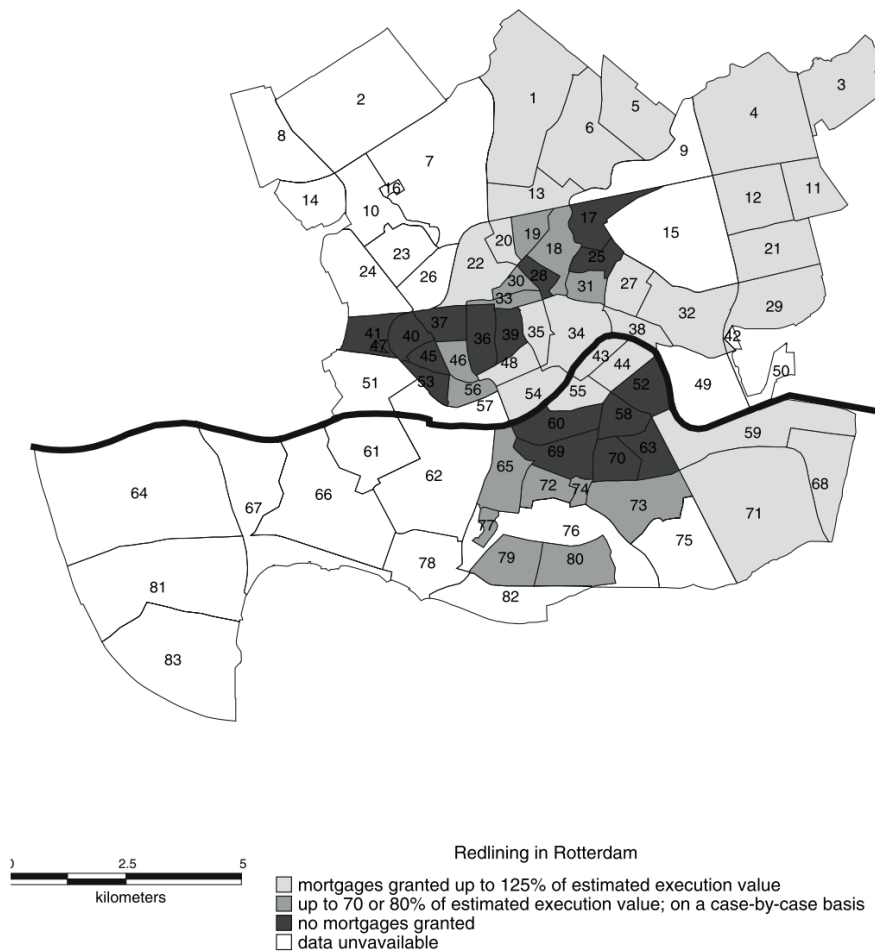


Figure 1 Redlining in Rotterdam in 1999 (Aalbers, 2007a)

Werkgebied Centrum/Noord/Kralingen

| Postcode | | Code: |
|----------|-----------------------------|---------------------------------|
| 3011 | Stadsdriehoek | I |
| 3013 | CS/Kwartier | II |
| 3014 | Oude Westen | III |
| 3015 | Dijkzicht | I |
| 3016 | Nieuwe Werk | I |
| 3021 | Middelland | III |
| 3022 | Nieuwe Westen | III |
| 3023 | Nieuwe Westen | II |
| 3024 | Delfshaven | II |
| 3025 | Bospolder | III |
| 3026 | Tussendijken | III |
| 3027 | Spangen | III |
| 3028 | Oude Mathenesse, Witte Dorp | III |
| 3031 | Rubroek | II |
| 3032 | Agniesebuurt | III |
| 3033 | Provenierswijk | II/achter het Centraal Station |
| 3034 | Crooswijk | III |
| 3035 | Oude Noorden | II |
| 3036 | Oude Noorden | II |
| 3037 | Liskwartier | II |
| 3038 | Bergpolder | I |
| 3039 | Blijdorp | I |
| 3061 | Kralingen West | I/overgang naar "het Kralingen" |
| 3062 | Kralingen Oost | I |
| 3063 | De Esch | I |



Werkgebied Zuid

| | | |
|------|-------------------------|--|
| 3071 | Feijenoord | III (uitgezonderd Kop van Zuid) |
| 3072 | Afrikaanderwijk | III (uitgezonderd Hilledijk 77 t/m 97 a,b,c,d -> code I) |
| 3073 | Bloemhof | III/begrensd door: Putselaan/Oleanderstraat |
| 3073 | Strevelsweg | III/vanaf de Lange Hilleweg |
| 3074 | Hillesluis | III/begrensd door: Slaghekstraat/ W.Varkenoordseweg/Riederln/BeijerlandseIn |
| 3081 | Tarwewijk | III/begrensd door Dordtseln/MijnsherenIn Wevershoekstraat/Wolphaersbocht/Pleinweg/Brielseln |
| 3081 | Katendrechtse Lagendijk | III/vanaf de Pleinweg (oude gedeelte) |
| 3081 | Gaesbeekstraat | III/vanaf de Pleinweg (oude gedeelte) |

Figure 2 List of zip-codes in Rotterdam used by the Rabobank (Aalbers, 2005a)

One constant, present in the above code III neighbourhoods in Rotterdam, is that they are all neighbourhoods with the same characteristics. These are neighbourhoods with a proportionally high number of low-income people and a relatively high percentage of ethnic minorities. In most cases, they also involve a relatively large number of rented and cheap owner-occupied houses, resulting in small mortgage loans (Aalbers, 2010). From Aalbers (2006a), it follows that this has been precisely the problem for many banks. Due to cheap

housing and small mortgages, the cost per mortgage is relatively high. The fixed costs of the mortgage do not outweigh the low profit rate of small mortgages.

But, on the first of January in 2000, the situation changed when Rotterdam started participating in the Nationale Hypotheek Garantie (NHG, National Mortgage Guarantee Fund). Since Rotterdam has joined NHG, no cases of redlining have been reported (Van der Vet, 2004). The role of the NHG with regard to redlining in Rotterdam is twofold. On the one hand, the NHG acts as a guarantee for mortgage loans, protecting lenders against default by homeowners (Aalbers, 2005a). This guarantee may help mitigate risks for lenders, possibly making them more inclined to provide mortgages to homeowners in certain areas, such as those previously disadvantaged by redlining. On the other hand, the NHG aims to promote access to affordable housing and provide financial stability to homeowners (Nationale Hypotheek Garantie, n.d.). In this way, the NHG can play a role in reducing the negative effects of redlining by providing mortgages to homeowners in neighbourhoods that were previously discriminated against, or neighbourhoods that had been redlined. The NHG thus helps stimulate economic development and reduce socio-spatial inequalities in Rotterdam by providing financial stability to homeowners.

However, joining the NHG is no guarantee that there is no discrimination in mortgage lending. For example, a study by the Sociaal Cultureel Planbureau (SCP) on discrimination in the Dutch housing market, which also looks at discrimination in mortgage lending, shows that 8% of the population tried to get a mortgage in 2018. 8% of respondents (N=8,536), who tried to apply for a mortgage, stated that they "had without doubt faced" discrimination in terms of obtaining a mortgage. 11% state that they were presumably treated discriminatorily when applying for a mortgage. Especially among people from migrant backgrounds, the suspicion of discrimination when applying for a mortgage is high (Andriessen et al., 2020). Besides discrimination in the provision of mortgages, discrimination also plays a role in the search for rental housing. In this sector of the housing market, housing-seeking tenants, as many as one in three people suspect that discrimination has occurred. The study shows that this is 3 times the percentage of people who experience discrimination when applying for a mortgage. As for housing associations, it is about 20 per cent who feel discriminated against. In both categories, Turkish and Moroccan Dutch people experience twice as much discrimination as native Dutch people (Andriessen et al., 2020). This indicates that even outside the realm of redlining, mortgages, there is perceived discrimination in the housing market.

To conclude, in this research, I seek to explain how historical redlining practices in the 90s influenced contemporary socio-spatial inequalities between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam.

1.2 Problem statement

Redlining practices from the 1990s have caused certain neighbourhoods in Rotterdam, which have been redlined, to become deprived and have limited development. This creates great socio-spatial inequalities between neighbourhoods that have been redlined in the past and those that have not been attributed this qualification. This socio-spatial inequality manifests itself in several ways: impeded access to housing, limited economic, social and residential mobility and unequal treatment in obtaining mortgages. Redlining has contributed to the deprivation of neighbourhoods resulting in limited development opportunities for residents. This has led to long-term socio-economic inequality between Kralingen-West and Oud Crooswijk. As said, residents of redlined neighbourhoods experience unequal treatment in terms of obtaining a mortgage or other loans from lenders. As a result, residents of redlined neighbourhoods both cannot easily sell their homes and, because they have difficulty obtaining mortgages, struggle to buy a home (Aalbers, 2005b). As a result, there is limited social and residential mobility. Residents are financially excluded, and with this research I try to stress why these residents are also socially excluded (Aalbers, 2005a). Moreover, the redlining practice is itself problematic because residents of neighbourhoods are not judged based on their creditworthiness but based on other neighbourhood-scale considerations (Aalbers, 2005a). Redlining has thus contributed to segregation and discrimination of populations in the housing market based on ethnicity, income and other socio-economic factors. This has created a divide between disadvantaged and affluent neighbourhoods or redlined and non-redlined neighbourhoods.

An article from the NRC in October 1999 made, by issuing some problems, clear what living conditions were like in Rotterdam's Tarwewijk-Millinxbuurt at the time. The disadvantaged neighbourhood in Rotterdam-Zuid, where insecurity and unlivability go hand in hand, was full of uninhabitable housing. There was extremely high unemployment, the neighbourhood had a large percentage of ethnic minorities, decay and squalor. It was a "black spot on the, as it turned out not imaginary, map of Rotterdam where mortgagees would rather not have customers." For banks and mortgage lenders, the risk in neighbourhoods in Rotterdam like this one was perceived to be too great (Abbing, 1999).

Despite the assumed abolition of redlining practices, since a few months after the revelation by Schrijer - see introduction - no signs of redlining were found in Rotterdam-South, the consequences of these historical redlining practices remain visible in contemporary Rotterdam neighbourhoods (Aalbers, 2005b). To deal with the consequences of redlining, it is necessary to examine how the historical redlining practices of the 1990s have influenced contemporary socio-spatial inequalities between neighbourhoods in Rotterdam.

1.3 Research aim and research questions

The research aim of this thesis is to gain a deeper understanding of the process of how historical redlining practices in the 90s in Rotterdam have influenced the neighbourhood Oud Crooswijk to become deprived and have limited development resulting in socio-spatial inequalities relative to Kralingen-West. This knowledge is gathered by doing qualitative research, in the form of interviews and content analysis.

Following the research objective formulated above, a set of questions can be formulated that should lead to the conclusion of this study. This question section consists of a research question and three sub-questions. The sub-questions serve to answer the research question.

Research question:

How have historical redlining practices in the 90s influenced contemporary socio-spatial inequality between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam?

Sub-questions:

- What was the impact of redlining on the socioeconomic and demographic composition of the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam in the decade after the implementation?
- What is the current socioeconomic and demographic composition of the redlined neighbourhood Oud Crooswijk and the non-redlined neighbourhood Kralingen-West and what are the socio-spatial inequalities between these neighbourhoods?
- Since the abolition of redlining, to what extent have discriminatory practices remained in the field of the housing market in Rotterdam?

1. Definition redlining

It is evident that redlining in Rotterdam differs from redlining in the US, but at its core, the practice of redlining boils down to the following: lenders discriminate in granting loans, insurance or mortgages, basing lending decisions solely on the location of a property. Characteristics of the borrower themselves or the property are disregarded. It usually means that lenders do not provide loans to neighbourhoods with ethnic minorities or other perceived risks for real estate investment (Hillier, 2003).

2. Definition spatial inequality

“The study of spatial inequality bridges sociology’s pervasive interest in social inequality with a concern for uneven development. It examines how and why markets of stratification, such as economic well-being and access to resources as well as other inequalities related to race/ethnicity, class, gender, age, and other statuses, vary and intersect across territories. The study of spatial inequality thus entails the investigation of stratification across places at a variety of spatial scales” (Lobao et al., 2007, p. 3).

3. Definition of social inequality

Social inequality “is the condition where people have unequal access to valued resources, services, and positions in the society” (Kerbo, 2003). Examples of such resources, services and positions are the access to housing, wealth, health, mobility and education. Also, environmental quality and the rate of criminality are circumstances that can constitute social inequality together with those mentioned resources, services and positions.

4. Definition of access to housing

In this study, access to housing is related to the availability of mortgages. Applicants for a mortgage from a redlined neighbourhood are excluded from housing because they do not get a mortgage, and applicants from outside are also excluded from housing because they do not get a mortgage for a house in a redlined neighbourhood (Aalbers, 2005a). So, the accessibility to housing depends on the availability of mortgages, which again depends on the label of the neighbourhood.

1.4 Scientific and societal relevance

1.4.1 Scientific relevance

Redlining is a concept that has often been and is being researched in the US, especially since the 1960s. In the US context, the focus is particularly on the aspect of racial discrimination in the practice of redlining. Much of the U.S. literature on redlining argues that it is generally racial minorities who inhabit redlined neighbourhoods. The assumption, put forward, is that banks generally consider members of certain racial groups less able to meet their financial obligations in terms of mortgage payments (Aalbers, 2005). Lenders argue that white applicants with the same creditworthiness are less likely to default than an applicant from a minority group. In doing so, they justify discriminatory financial policies against minorities (Ross & Yinger, 1999). The systematic implementation of discriminatory mortgage lending practices made it difficult for neighbourhoods with a high percentage of minorities to obtain mortgages, while mortgages were granted and investments were made in white neighbourhoods (Hillier, 2003; Hillier, 2005; Rothstein, 2017; Lynch et al., 2021). Schill and Wächter (1995) note that neighbourhoods in the US, where only a small percentage of the population belongs to a minority group, are generally already labelled as riskiest.

So, redlining practice is often viewed with a racial or ethnic lens in the U.S., but the consequences of redlining are also often examined. For example, Appel and Nickerson (2016) investigated the long-term effects of redlining. Their results show that “the negative effects of such policies [redlining] affect home prices and other characteristics of neighbourhoods decades after they are discontinued.”. They show results about the long-term effects of redlining in terms of home prices, rental rates, vacancy rates, structures in disrepair and racial composition of neighbourhoods. These are all results about economic and physical aspects, except for racial composition.

Aaronson, Hartley and Mazumder's (2021) research also attempted to trace the effects of redlining from 1940 to 2010. They look at differences between adjacent redlined and non-redlined neighbourhoods. For differences between category D (redlined) and C neighbourhoods (yellow-lined), they only see persistent effects on credit score and not on housing variables. Similarly, Krimmel (2018) looks at differences between neighbourhoods and notices an effect of redlining on housing supply and population density in the period between 1940 and 1970. He also noticed that a redlined neighbourhood experienced no new building on net, while a credit-favoured neighbourhood experienced a big increase in the

housing supply. Also, Park and Quercia (2019) elaborate on the spatial disparities of economic opportunity. According to their research, around four out of five neighbourhoods that are rated “Best” in the 1930s are currently high-income neighbourhoods and none are low income while on the contrary half of the neighbourhoods that have been labelled as ‘hazardous’ are currently low income. So again, the effects of mentioned studies are mostly focussed on economic effects.

However, there are also U.S. studies that do focus on socio-spatial inequalities between neighbourhoods as a result of redlining. Consider, for example, effects on crime rates, health outcomes, education and air pollution. Anders (2019) finds that cities with redlining maps are confronted with significantly higher crime rates, then cities without redlining maps. Another study, conducted by Lynch et al. (2021), focuses on other effects of redlining, namely health impacts. They argue that historical redlining practices, with the associated score assigned to neighbourhoods, is related to current lending discrimination and neighbourhood health indicators. They also argue that long-term disinvestment is associated with poor health outcomes for neighbourhoods. In the field of effects of redlining on education, Burke and Schwalbach (2021) have conducted research. They argue that inequality in educational opportunities persists in part because schooling is linked to housing, with access to public schools determined by school attendance area boundaries. Where a family can afford to live determines the quality of education for its children. Underperforming public schools today are often located in historically redlined neighbourhoods. Other researchers, such as Lane et al. (2022) and Jung et al. (2022), have investigated the impact of historical redlining practices on contemporary spatial disparities in air pollution. These are all studies that explore some of the effects of historical redlining practices on socio-spatial inequalities between neighbourhoods, but they mainly focus on one aspect of social inequality.

In conclusion, this scientific relevance shows that little extensive and comprehensive research has yet been done on the social inequality resulting from redlining practices of the past. Concepts such as financial exclusion and systematic racism or discrimination have already been frequently linked to the concept of redlining. Aalbers (2005), in discussing possible follow-up studies almost two decades ago, however, argues that “we need a connection between empirical analyses of redlining and financial exclusion, and the theoretical literature on the social construction and social embeddedness of markets and market actors...”. By this, Aalbers means that a better understanding of why markets do not work in the rational way, preached by neo-classical economists, is necessary. Markets are not only economic but also social constructs. They are shaped by social interactions, cultural norms and values, institutions and power. Economic activities, arising from the market, are

embedded in social relations and structures, or society. To follow up on this recommendation, I seek to fill the partly filled gap in this academic field through this research by linking historical redlining practices, which are particularly economically grounded, with theory on contemporary socio-spatial inequalities between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam. In doing so, the concept of redlining will among others be linked to the concepts of social exclusion and related socio-spatial inequality.

In addition, this research adds to the not too extensive literature on redlining practices and their consequences in Rotterdam. While there have been studies on housing inequality and socio-spatial inequality in Rotterdam, the link to redlining has only been made extensively by Professor Aalbers. He wrote an academic dissertation on redlining in the Netherlands and Italy. At least five chapters of his dissertation deal with redlining in Rotterdam, so this serves as a good basis for my research (Aalbers, 2005a; Aalbers, 2005b; Aalbers, 2006b; Aalbers, 2007a; Aalbers, 2007b). In addition to Aalbers, Koster & Van Ommeren (2022) also conducted research on redlining in the context of Rotterdam. The focus of their research is on the formation of a stigma effect as a result of redlining practices. They also provide evidence that there is a significant negative price effect on the housing market as a result of place-based policies that openly declare which neighbourhoods are deprived, such as historical redlining practices. Schinkel & Van Den Berg (2011) do have Rotterdam as their research area, but do not name the practice of redlining as such. The research does deal with urban policy and spatial exclusion.

This research is hence scientifically relevant, as it contributes, by using extensive literature review and interviews, to scientific knowledge on how historical redlining practices in the 1990s influenced contemporary socio-spatial inequalities between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam.

1.4.2 Societal relevance

Housing accessibility and socio-spatial inequality are critical social issues that have a direct impact on the well-being and opportunities of individuals and communities. In many urban areas, without exception in Rotterdam, historical redlining practices have had long-lasting effects on the distribution of housing, leading to socio-spatial inequality that still prevails today. Gaining a deeper understanding of the relationship between redlining and contemporary access to housing is not only scientifically important, but also socially relevant, since it illuminates ongoing challenges of housing inequality and social exclusion.

This research at its core touches on the United Nations SDGs number 10 and 11, that deal with reducing inequality within and among countries and with making cities and human settlements inclusive, safe, resilient and sustainable (United Nations, n.d.). It is in the interest of all of society that the SDGs be achieved. This research can contribute to the effort to address housing inequality and promote an inclusive urban environment in Rotterdam. It is socially relevant for three reasons. First, it exposes historical injustices, namely redlining. Second, it could promote equal treatment in terms of access to housing. Finally, the research potentially contributes to improving housing policy and practice and addressing socio-spatial inequality.

Figure 3 and 4 on the next page highlight some of Rotterdam's neighbourhoods. The map on the left (figure 3) shows the neighbourhoods where, according to a number of interviewees and according to (almost) all interviewees from Aalbers' research, place-based exclusion took place (Aalbers, 2007b). The areas where interviewees believe place-based exclusion has taken place largely correspond to neighbourhoods where more than 40 percent of residents belonged to an ethnic minority in 2005 (figure 4). Take, for example, the Tarwewijk neighbourhood on the south bank of Rotterdam (number 8 in figure 3). In this neighbourhood, according to almost all interviewees, place-based exclusion took place, and more than 60 percent of the inhabitants belonged in 2005 to ethnic minorities. This neighbourhood scores lower than Rotterdam's average score on both the physical index, the safety index and the social index, according to Wijkprofiel Rotterdam (Gemeente Rotterdam, n.d.b). I give this example here not to do a comprehensive analysis of this case, but to illustrate the societal relevance. Historical redlining practices have influenced the current situation in formerly redlined neighbourhoods, and residents of these neighbourhoods are still experiencing the consequences today.

By emphasising the enduring impact of historical redlining on contemporary socio-spatial inequalities in access to housing and social outcomes, this research stresses the pressing need to address housing inequality and promote inclusive urban development in Rotterdam. By exploring the origins and effects of redlining, this research seeks to contribute to the creation of more equitable and resilient communities in Rotterdam and beyond.

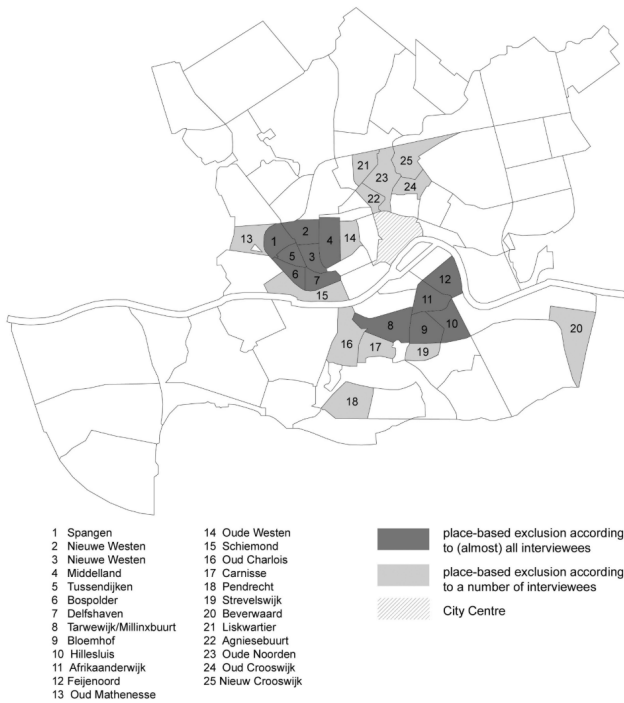


Figure 3 Place-based exclusion in Rotterdam (Aalbers, 2007b)

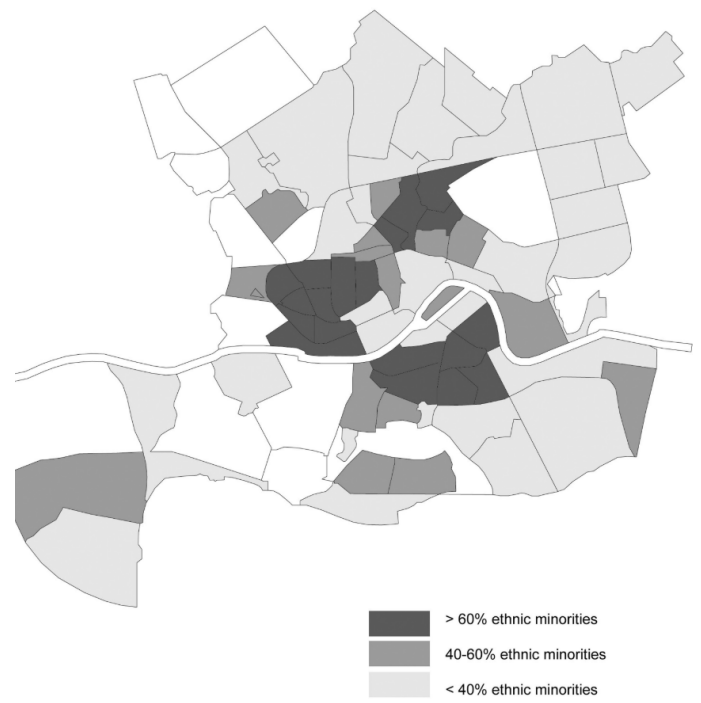


Figure 4 Ethnic minorities in Rotterdam (Aalbers, 2007b)

1.5 Research model

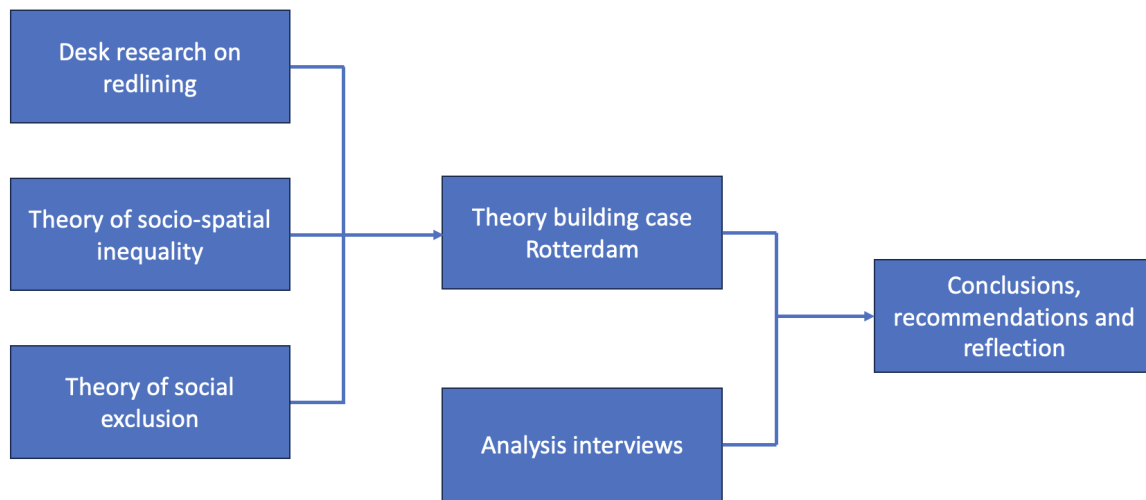


Figure 5 Research model. Own work

This research is structured according to the research model shown in Figure 5. Existing theories on redlining, socio-spatial inequality and social exclusion will be incorporated into a comprehensive theory formation about the case in Rotterdam. Besides the analysis and building of theory, interviews will be done, in which the theory can be tested and supplemented with empirical data. The purpose of this combination of research methods is to adequately answer the research question and achieve the research aim. This will be elaborated in the conclusion.

1.6 Thesis outline

The current chapter is an introductory chapter that provides insight into the topic of this thesis, addressing the research question, problem statement, objective and the scientific and societal relevance. Chapter 2 elaborates on the relevant literature and notes gaps in the scientific research field through the means of a theoretical framework. In addition, it operationalizes theoretical concepts from the theoretical framework. Chapter 3 provides an explanation and justification for the research strategy and methodology used, arguing how the data is collected and analysed. In addition, this chapter addresses the validity and reliability of the study. This is followed by Chapter 4. It presents the results obtained from the interviews and content analysis. This is followed by a conclusion in Chapter 5 and a discussion in Chapter 6. The discussion consists of a reflection on the research process, possible further research and implications of the research.

Chapter 2 - Literature review, theoretical framework and operationalisation

2.1 Literature review and theoretical framework

This section analyses the existing literature on redlining practices and socio-spatial inequality in three different contexts. The first is the U.S. context, the second the U.K. context and the third is the Rotterdam context. The aim is to outline the relationship between the context and the research topic. By critically evaluating the existing literature, I aim to provide insight into the historical and current situation regarding redlining.

In recent decades, socio-spatial inequalities and their impact on society as a whole and residents as individuals have received increasing attention worldwide. There are multiple forms of urban inequalities and housing policies on discriminatory grounds that are seen as common exclusionary practice today. Think for example about the exclusionary housing policy of gated communities (Traub, 2000; Roitman, 2010), e.g. in South-Africa, or the exclusion of Palestinians in the city of Jerusalem (Alkhalili et al., 2014). In Jerusalem, a planning mechanism is in operation that maintains demographic balance within the city limits by segregating Palestinian citizens in residual places. In this way, the Palestinian population is moved to the outskirts of the city and effectively removed from the planning agenda. The presence of Palestinians in the city has been shaped and defined by discriminatory laws and legislation, appropriation of land and demolition of homes, isolation as a consequence of the separation wall and incarceration in fragmented ghettos (Alkhalili et al., 2014). This is one of the many examples of exclusionary housing practices or exclusionary zoning on discriminatory grounds that result in socio-spatial inequalities. It is a housing policy designed to produce discrimination and segregation.

That exclusionary zoning has an effect on racial discrimination is clear, but the effects are particularly significant in the housing market. This sector is critical in developing economic well-being and building wealth. "Families who can purchase their own home in the neighbourhood of their choice at a fair price and see the value of their home grow over time do better economically in the long run" (Rouse et al., 2021). However, this pathway is not available to every family due to discriminatory practices. Minorities, especially black families, have been systematically discriminated against in access to housing by exclusionary housing policies in the US context. This results in great inequalities in measurable outcomes

between racially segregated neighbourhoods (Rouse et al., 2021). An example of such exclusionary housing policies is redlining.

Due to historical redlining practices, for a long time, people who lived in redlined neighbourhoods have been excluded from participating in the housing market, preventing them from accessing adequate, safe and affordable housing (Aalbers, 2005a). Mainly urban areas have faced historical redlining practices, so that's where the consequences of these practices are now evident in contemporary socio-spatial inequalities. This practice, embedded in the fabric of urban planning and financial institutions in the past, varying by location, has left lasting marks on contemporary cities, urban societies and affected individuals.

Redlining is a concept that has its roots in the US. The 1929 Wall Street crash and the ensuing economic crisis had major impacts on the housing market. After the 1929 crisis, half of all mortgages experienced default (Aalbers, 2014). In response to the Great Depression, President Roosevelt's Administration came up with the New Deal. This New Deal included for example increasing public works, restoring international trade and creating new mortgage markets (Rauchway, 2008). Related to the latter, one of the responses to the economic crisis was considered to be the establishment of the Home Owners' Loan Corporation (HOLC) (Aalbers, 2014; Appel & Nickerson, 2016). The purpose of the HOLC was to "provide emergency relief to homeowners by refinancing or purchasing defaulted mortgages" (Dennis & Pinkowish, 2004, 7). In other words, the aim was to prevent foreclosures on mortgages. Thanks to the HOLC, many people who could no longer afford their mortgages were able to continue living in their homes in the mid- and late-1930s (Gotham, 2002, 53).

Despite these positive intentions, the HOLC was also behind the creation of a neighbourhood rating system. As a result, the HOLC played a major role in implementing and institutionalising redlining practices (Aalbers, 2014). It gave lenders the opportunity and an excuse not to provide mortgages in certain neighbourhoods (Aalbers, 2011). Pynoos et al. (1973; p. 301) in their book "Housing urban America" define mortgage redlining as follows:

"Redlining is the denial of mortgage credit on properties located in certain geographic areas even though the market value of the property is sufficient collateral and the applicant is credit-worthy, or the approval of mortgage credit on less favourable terms than those granted on properties located in other areas even though the market value of the property and the creditworthiness of the borrower are similar."

This neighbourhood rating system, which had its output in maps, consisted of four categories, each with its own description, letter and colour. In fact, these are four categories of quality. Green is the best category and red is the worst category: (Jackson, 1980).

- Green - A: These neighbourhoods were labelled as 'best'. They were described as new, homogeneous and in permanent demand as residential locations, even in bad times. Homogeneous meant American business and professional men.
- Blue - B: These stable neighbourhoods were labelled as 'still desirable', which had already reached their peak.
- Yellow - C: These neighbourhoods were labelled as 'definitely declining', since, due to such a low price or rent range, undesirable elements are attracted.
- Red - D: These neighbourhoods were labelled as 'hazardous' and have already surpassed the things that are taking place in C neighbourhoods. Black and poor maintained neighbourhoods or areas with high levels of vandalism are invariably rated as D.

Jackson (1980) argues that black neighbourhoods inevitably belong to category D. These neighbourhoods received the colour red, which means that the neighbourhood is redlined. This is in line with an excerpt of Hillier's definition, which adds that it usually means that lenders do not provide loans to neighbourhoods with ethnic minorities (Hillier, 2003).

Besides the HOLC and private mortgage lenders, redlining practices were also implemented and institutionalised by the Federal Housing Administration (FHA). The FHA was an institution that was also created by the Roosevelt administration in 1934 and intended to insure private mortgage loans. In fact, FHA insurance went mainly to new housing projects in suburbs, leading to the neglect of city centres (Mollenkopf, 1983). The FHA ignored inner-city neighbourhoods because they had lower home appraisal values than those in the suburbs, thus not granting insurance. Despite intending to serve as public back-up to guarantee mortgage issuance, the FHA, like the HOLC, systematically rejected neighbourhoods. In these neighbourhoods, private actors would also be less likely to issue mortgages or only on less favourable terms (Aalbers, 2014). The quicker the deterioration of redlined neighbourhoods, the greater the institutional disinvestment. This excluded especially all black neighbourhoods and many neighbourhoods consisting of a significant number of European immigrants (Scott & Wilson, 1998).

In 1968, the Fair Housing Act was enacted, which legally prohibited redlining practices, or discrimination in housing based on mortgages. The FHA was thus compelled to change its policy and make mortgage insurance available for housing in previously redlined and

yellowlined neighbourhoods (Aalbers, 2011, Dymski, 2006). Despite this abolition and hopes for progress towards a more integrated society, the process of desegregation has been very uneven. Now, about half a century later, many metropolitan areas are still as segregated as they were in 1968 (Massey, 2015).

Redlining thus had its origins in the US, but redlining has also taken place in the UK. Underlying this are two historical processes. First, people of colour had a subordinate position in the allocation of social housing between the 1940s and 1970s. They were discriminated against, not represented and placed at the bottom of waiting lists. Those who were assigned housing were often housed in apartments in high-density urban housing developments. Second, when tenants were given the opportunity to buy housing from the municipality at a reduced price, residents of said flats were in many cases rejected by mortgage lenders. As in the United States, for decades, the discriminating practices of racist local authorities and mortgage brokers excluded large numbers of people of colour from homeownership in Britain (Wetherell, 2020).

Building upon this global understanding of redlining, this study will focus on the city of Rotterdam. Also in Rotterdam, there have been similar redlining practices in the 1990s. In October 1999, a city councillor for the Charlois borough office in Rotterdam-South made public the 'Rotterdam mortgage scandal'. Dominic Schrijer revealed that several neighbourhoods in Rotterdam were excluded from mortgage capital, while in other neighbourhoods they were only provided under unequal conditions. These included high interest rates, high down payments and short funding periods. He claimed banks used coloured maps of Rotterdam to determine where they would issue home mortgage capital and where they would not (Abbing, 1999). This map showed three colours, red, yellow and green. No mortgages were issued to neighbourhoods coloured red. Neighbourhoods coloured yellow were issued up to 70 or 80 percent of the liquidation value, and neighbourhoods coloured green were issued mortgages up to 125 percent (Aalbers, 2007a).

To conclude, in this research, I seek to explain how historical redlining practices in the 90s influenced contemporary socio-spatial inequalities between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam. The next section follows relevant theoretical frameworks through which to look at the phenomenon of redlining and its impact. These theoretical frameworks serve as a kind of lens, highlighting certain aspects of redlining and excluding others from the field of view.

2.1.1 Bourdieu's Habitus, Capital and Field

Socio-spatial inequality is a concept that has been extensively covered by Bourdieu. According to Bourdieu, everyone is part of a certain habitus, which can be described as an interwoven structure established over time (Bourdieu, 1990). It is how individuals perceive the world and how they are living in it (Weber-Newth, 2019). People within a habitus often have the same motives and socio-economic background, acting and speaking in a certain way in their daily actions. This habitus exists in people's subconscious, making it natural for most people. This naturalness is called 'doxa' in Bourdieu's (1994) theory. Habitus is an individualistic concept, but usually people with common life experiences have similar habitus. Consequently, they often have similar social status, belong to comparable communities in terms of social stratification and may have similar opportunities to obtain social positions (Israel & Frenkel, 2017). Related to this, Bourdieu (1986) distinguishes between classes. For example, there are the 'upper class habitus', the 'middle class habitus' and the 'lower class habitus'. Social mobility from one habitus to another habitus rarely happens (Bourdieu, 1990).

The habitus of residents of redlined neighbourhoods is strongly influenced by historical and to the present day ongoing economic and social marginalisation. The history of redlining has left a legacy on the collective habitus of communities in Kralingen-West and Oud Crooswijk. The exclusion and limited opportunities experienced by residents has led to a habitus of distrust towards financial institutions and authorities implementing redlining policies (Dutraiva & Gloukoviezoff, 2010). The reality of the daily lives of residents from economically deprived neighbourhoods reinforces the existing habitus. Limited access to quality facilities and networks leads to a reaffirmation of residents' limited capabilities and aspirations (Ismail et al., 2019).

Besides habitus, Bourdieu uses the concept of capital. He argues that economic capital is not the only determinant of an individual's social position (Hart, 2018). Instead, capital emerges in three different forms (Bourdieu, 1986):

- Economic capital, which can be converted directly into money and is possible to institutionalise as property rights. The problem with redlined neighbourhoods is that residents experience difficulties in accumulating economic capital. Redlined neighbourhoods, such as Oud Crooswijk, are often characterised by lower property values and lack of investment relative to non-redlined neighbourhoods. This leads to a cumulative economic disadvantage and limited access to further financial resources and opportunities for residents of redlined neighbourhoods (Hernandez,

2009). “Families who can purchase their own home in the neighbourhood of their choice at a fair price and see the value of their home grow over time do better economically in the long run” (Rouse et al., 2021). The opportunity to buy a home is being taken away from residents of redlined neighbourhoods.

- Cultural capital, which can be converted into economic capital under certain circumstances and can be institutionalised in the form of educational qualifications. Cultural capital exists in three forms: the embodied state, the objectified state and the institutionalised state. Institutionalised cultural capital is recognised and valued by society and is often an important determinant of access to privileges and opportunities, such as employment, social status and power (Bourdieu, 1998).
- Social capital, consisting of social connections or networks, can in certain circumstances be transformed into economic capital and can be institutionalised, for instance in the form of a noble title. Segregation through redlining has often resulted in socially isolated communities with limited social networks, further impeding social mobility (Sharkey, 2013). As a result, it is easier for residents of non-redlined neighbourhoods to perpetuate and increase social capital than for residents of redlined neighbourhoods.

This capital is available to the individuals within the habitus to varying degrees across habitus. The amount of capital someone has determines how skilled someone is in a given field.

Besides the terms habitus and capital, Bourdieu has a third term to explain his theory: Fields. 'Fields' are 'social spheres and domains' (Bourdieu, 1994). Within these spheres there is a dialectical relationship between habitus and field, since field doesn't only constrain or condition the habitus, but also the other way around, the habitus constructs the field. There is also a symbiotic relationship between habitus and agency. Habitus may constrain individuals' behaviour, but it also allows individuals to do certain practices (Weber-Newth, 2019). The different types of capital can be deployed in multiple fields, such as culture, economy and politics (Custers & Engbersen, 2020). Fields therefore need not be physical spaces (Bourdieu, 1994). Redlining involves the socio-economic field of the housing market. Different actors are active in this field, such as housing associations, neighbourhood organisations and government agencies. These agencies cooperate with each other and have mutual power relations, which determine the distribution of resources and opportunities within the neighbourhood. The historical context of redlining has reinforced these power structures, systematically disadvantaging redlined groups (Winling & Michney, 2021).

The three key concepts, capital, habitus and field, that constitute and are constituted by social life, must be taken as an interdependent trio: a 'methodological triad' (Weber-Newth, 2019). It follows from Bourdieu's theory that none of the three forms of capital by itself can fully explain the reproduction of socio-spatial inequalities (Israel & Frenkel, 2017).

However, Bourdieu's theory is not directly applicable to the phenomenon of redlining. Indeed, in redlining, formally and additionally at least in the Netherlands, there is no mortgage exclusion based on class or other homogenising groups. Exclusion occurs on the basis of location, which may include multiple social classes and possibly different habitus. Within a neighbourhood, there can be great heterogeneity. Therefore, the theoretical elaboration by 'place habitus' is useful.

The place habitus consists of the political milieu of the built environment, "expressing the values of a given community in a specific space and, at the same time, making a cognitive distinction from surrounding spaces" (Israel & Frenkel, 2017). A place habitus is thus an expression of a space that functions as a site for class reproduction. But, in the case of redlining, there is no class reproduction, but class production. Economic, cultural and social capital is accumulated within multiple socio-spatial levels (Israel & Frenkel, 2017). In the case of redlining, it is on neighbourhood-level.

Place habitus is reflected in the shared habits and social practices of neighbourhood residents, which are a function of occupational membership and cultural identity (Easthope, 2004; Hillier and Rooksby, 2005; Pain, 2008). Habitus creates a politics of exclusion ('us' versus 'them') and place attachment, which establishes who belongs to a particular place and who does not (Malone, 1999; Manzo, 2003). The 'us' in the case of redlining are the residents of redlined neighbourhoods and the 'them' are the residents of non-redlined neighbourhoods. The residents of redlined neighbourhoods generally have different habits, social practices, and a different level of capitals than the residents of non-redlined neighbourhoods. There is a clear distinction between the place habitus of redlined neighbourhoods and non-redlined neighbourhoods. This exclusion, that will be handled in the following paragraph, can be due to the lack of access to all three types of capital (Daly & Silver, 2008).

2.1.2 Social exclusion

Social exclusion is a concept that has been widely covered in social sciences. In fact, social exclusion is a potential consequence of a number of risk factors. It is a term for what can happen when people or areas, in the case of redlining neighbourhoods, suffer from a combination of interconnected problems such as unemployment, low incomes, poor housing, high crime, poor health, etc. One of these risk factors is the presence of redlining. From this theory, the risk factor redlining could potentially result in social exclusion. In general, the research field of social exclusion is often linked to the research field of poverty. In this way, combating poverty often equates to reducing social exclusion (Jehoel-Gijsbers & Vrooman, 2007). Another researcher who has delved into the concept of social exclusion, but who goes beyond the link between social exclusion and poverty, is R. Levitas. Levitas (1998) has written a book called 'The inclusive society?'. One of the chapters in this book deals with social exclusion, namely the 'Three Discourses of Social Exclusion' chapter. In this chapter, she mentions three discourses of social exclusion. The first she mentions is a redistributive discourse (RED), the second is a moral underclass discourse (MUD) and finally she mentions a social integration discourse (SID). Before a preference can be given to one of these discourses, it will have to be clear what social exclusion stands for. The process of social exclusion is according to Levitas (1998) described as "dynamic and multi-dimensional and linked not only to unemployment and/or low incomes, but also to housing conditions, levels of education and opportunities, health, discrimination, citizenship and integration in the local community."

The redistributive approach sees social exclusion as a consequence of poverty. However, this refers to a more complex conception of poverty than is generally popularly known. It takes into account the complexity of the process of social exclusion by emphasising its dynamics and multi-dimensionality. This approach therefore gives space for understanding discriminatory and exclusionary practices, which can potentially be causes of poverty. In the scope of this study, the link can be made to discriminatory and exclusionary practices in housing; redlining (Levitas, 1998; Aalbers, 2005a). The moral underclass discourse emphasises the individual morality of people living in poverty and argues that this is the main cause of exclusion. This discourse thus approaches exclusion as a moral and cultural choice of, for example, criminally minded, unemployed young men and unemployed single mothers. This approach focuses on the social order and the associated morally and culturally determined consequences of poverty for some people (Levitas, 1998). Finally, there is the social inclusion discourse. This approach focuses on unemployment and economic inactivity. People who are excluded are those who do not work or are at risk of unemployment. The

solution lies in social inclusion and cohesion through inclusion in paid work. The differences between these discourses are mainly in what those who are excluded lack. Simply said, according to RED they have no money, according to SID they have no job and according to MUD they have no morals (Levitas, 1998).

In this study, the first approach will be used, as it can be best applied to the phenomenon of redlining. Redlining is a process that produces inequality, which is one of the characteristics of redistributive discourse. However, Aalbers (2005a) has two reservations about using the first approach, arguing that the concept of social exclusion is broader than that of poverty for two reasons. First, social exclusion recognizes that people's living conditions depend not only on their personal and household resources, but also on the extent to which they have access to collective resources (Room, 1999). Room (1999) argues that we must go beyond conventional poverty studies that look at individual or household financial resources. He states that we must also look at resources that are available or lacking within the local community, e.g. a neighbourhood. In this study, the focus is on the lack of access to the collective resources of the housing market, and specifically the access to mortgages. This recognition is important because social exclusion can, in this way, also be approached geographically. This is important for applying this theoretical concept to a geographical phenomenon like redlining. In the practice of redlining, it is not about individuals or households that have limited financial resources, it is about entire neighbourhoods that are marked as high-risk areas for investment. It is about a lack of resources for an entire community, or neighbourhood.

Secondly, Aalbers cites Gordon et al. (2000) to argue that social exclusion should be subdivided into several exclusionary practices. Social exclusion is not only about poverty or labour market exclusion, but also about financial exclusion, service exclusion, exclusion from social relations and other forms of exclusion. The lack of access to financial services, such as mortgage lending or insurances, in certain spatial entities lead to financial exclusion (Leyshon & Thrift, 1994).

To narrow the social exclusion theory down to redlining as cause, the focus should be on the financial and housing market. Cameron and Field (2000) argue that you can talk about two forms of exclusion in the field of housing, namely exclusion from housing and exclusion through housing. People can be excluded from housing by the situation they find themselves in. For example, people can be limited by their financial ability and the availability of adequate housing. The other form of exclusion, exclusion through housing, is not about the lack of adequate housing, but is about the role of housing or the neighbourhood - think of

redlining, where financial institutions determine, which neighbourhoods are allowed to apply for mortgages - as a determining factor in the occurrence of other forms of social exclusion. Think, for example, of forms of social exclusion in the labour market and civil society (Aalbers, 2005a). Exclusion through housing is thus about how living in certain neighbourhoods hinders people from participating in other aspects of social life other than exclusion from the housing market. Exclusion from housing is not unlikely to lead to exclusion through housing. Residents of redlined neighbourhoods are excluded through housing because they cannot sell their homes, therefore they are trapped in the neighbourhood. Thus, in the case of redlining, two groups of people are excluded, those who want to move but cannot sell their house because of the redlined neighbourhood and those who want to buy a house in the redlined neighbourhood but cannot get a mortgage. As a result, redlined neighbourhood residents become excluded from the rest of society (Aalbers, 2005a).

2.2 Operationalisation of theoretical concepts

| Concept | Dimension | Empirical indicator |
|----------------------------|-------------------------------|--|
| Redlining | Mortgages | Redlining score / zip code |
| | Housing values (€) | |
| | Housing property (%) | |
| Socio-spatial inequalities | Economic well-being | Average household income (€) |
| | | Non-employed (%) |
| | | Poverty (%) |
| | | Social benefits (%) |
| | Neighbourhood characteristics | Ethnic minority (%) |
| | | Non-natives (%) |
| | Access to social services | Health: Residents who say they experience poor health (%) |
| | | Residents who say they experience health barriers (%) |
| | | Higher education graduates (%) |
| Social exclusion | Economic well-being | Non-employed (%) |
| | | Average household income (€) |
| | Housing conditions | Home ownership (%) |
| | | Overcrowding (%) |

| | | |
|---|----------------|--|
| | | Vacancy (%) |
| | Education | Residents saying they have difficulty reading Dutch (%) |
| | | Residents saying they have difficulty writing Dutch (%) |
| | | Residents (18 to 22 years) without starting qualifications (%) |
| | | Residents (23 to 75 years) without starting qualifications (%) |
| | Health | Residents who say they experience poor health (%) |
| | | Residents who say they experience health barriers (%) |
| | Discrimination | Residents who say they do not experience discrimination in and outside their own neighbourhood (%) |
| | | Residents who say that the interaction between ethnic groups in the neighbourhood is good (%) |
| | Citizenship | Participation |
| | | Binding |
| Residents who say they do not feel abandoned (%) | | |
| Residents saying that local residents know each other (%) | | |

| | | |
|--|--|--|
| | | Residents who say they feel at home with local residents (%) |
|--|--|--|

Table 1 Operationalisation of theoretical concepts. Own work.

Kadi et al. (2022) use a multidimensional measure to measure social status for assessing social inequality. This multidimensional measure includes labour market status, social benefit transfers, and educational attainment. Besides economic capital to measure socio-spatial inequality, they also use occupational, such as the labour market position, and cultural capital for a better assessment (Méndez et al., 2020). According to Boterman et al. (2020), in post-industrial societies the main fault lines of social differentiation are more and more related to social and cultural capital. That's why, for a nuanced assessment, we need a multidimensional assessment of the socioeconomic status for measuring socio-spatial inequality (Kadi et al., 2022).

Chapter 3 - Methodology

3.1 Research strategy

In order to properly fulfil the research objective and achieve a sound and adequate answer to the research questions from Chapter 1.3, this study adopts a qualitative approach. A qualitative approach is used when a researcher seeks to answer questions about experience, meaning and perceptions from the subject of study, in most qualitative cases the viewpoint of a participant (Hammarberg et al., 2016). Qualitative research is used to answer 'why' and 'how' questions, instead of 'how much' or 'how many' questions from quantitative research (Cleland, 2017). As this research focuses on how historical redlining practices have influenced current socio-spatial inequalities in neighbourhoods in Rotterdam, it uses a qualitative approach. The central research question therefore begins with 'how'. Also, the sub-questions are considered to be qualitative questions, since they don't ask for quantifiable data. This research uses a deductive approach because, based on existing theories on redlining and socio-spatial inequalities, it makes statements about the influence of historical redlining practices on contemporary socio-spatial inequalities between Oud Crooswijk and Kralingen-West. The theoretical framework precedes empirical research (Van Thiel, 2014).

In this research, two research strategies are used. Both desk research, and multiple case study are employed as research strategies. The research starts with a data collection to gain input for the research and to gain insight into what research has already been conducted. The collection of the data has been done in a consistent manner. By linking terms in searches, an attempt was made to systematically find as much useful literature as possible. The following terms were used in various combinations when searching for literature: Rotterdam, Redlining, Housing inequality, Spatial disparities/inequalities, Spatial exclusion, Social disparities/inequalities, Social exclusion. On the basis of this collection, the research problem is denoted. The information from the data collection also serves as a basis for the empirical results emerging from the multiple case study. This data collection can be done by doing desk research; a research strategy that uses existing data sources (Van Thiel, 2014). The collected data sources consist of both primary and secondary data. Primary data refer to raw data, collected and processed by the researcher or author himself (Van Thiel, 2014). In this research primary data has been used in the form of a newsletter and results statistics. Secondary data refer to research findings, which can be used again in other studies (Van Thiel, 2014). This information is obtained using databases like Web of Science, Academia, and Google Scholar and by searching for literature that is related to the research topic. From

there, a snowball method is used. This method consists of three steps. First, I start in the leading journals for any combination of terms to get a starter set of papers. Second, I go backwards by searching reference lists for relevant papers. Finally, I move forward by identifying articles that cite the papers I found in the previous steps (Jalali & Wohlin, 2012).

Van Thiel (2014) defines a case study as research that “is conducted in a real-life setting (‘the field’)”. Case studies focus on a limited number of situations, i.e. one or a few, and they are examined in profound detail. Since the aim of this research is to gain a deeper understanding of the process of how historical redlining practices in the 90s in Rotterdam, in particular, have influenced certain neighbourhoods to become deprived and have limited development resulting in socio-spatial inequalities within the city, a case study is chosen for this research. According to Van Thiel (2014) there are two types of case studies: single case studies and multiple case studies. In a single case study, the researcher studies only one single case. In multiple case studies, the researcher includes several (two or more) cases. This research applies a multiple case study strategy, since you need two or more neighbourhoods to conclude whether there are socio-spatial inequalities between neighbourhoods in Rotterdam. For this research, two heterogeneous cases will be studied (Van Thiel, 2014). The first case is Oud Crooswijk, a historically redlined neighbourhood in Rotterdam, and the second case concerns Kralingen-West, a non-redlined neighbourhood in Rotterdam. The choice of the particular neighbourhoods is based on the availability of (statistical) data, which have been requested from the municipality of Rotterdam. With this data, we looked at the worst scoring neighbourhoods. The neighbourhoods that came out worst overall were juxtaposed with the redlining map from Figure 4 to determine in which neighbourhoods redlining took place and in which neighbourhoods it did not. Oud Crooswijk was one of the worst scoring neighbourhoods and a neighbourhood in which redlining took place. To avoid choosing two completely different neighbourhoods, it was preferred to choose two neighbourhoods that are geographically adjacent and that do not differ too much in the data analysed. Kralingen-West also didn’t score really well overall in the neighbourhood data, but a bit better, and is located adjacent to Oud Crooswijk. Unlike Oud Crooswijk, Kralingen-West was not redlined. In this way, the two specific neighbourhoods were chosen.

To conclude, a case study can be measured at one or more moments in time (Van Thiel, 2014). This research will do a case study of one measurement moment because circumstances in the two neighbourhoods will not undergo major changes within a short period of time. It is therefore possible to have a measurement moment at one particular point in time.

3.2 Research methods, data collection and data analysis

3.2.1 Research methods and data collection

From the research strategies chosen, desk research and the multiple case study, a number of research methods emerged. The data gathered from the literature review and desk research, were analysed by the usage of content analysis (Van Thiel, 2014). Content analysis was used because it's a way of analysing the content of existing data sources or literature that is somehow related to the research problem (van Thiel, 2014). This involved (scientific) literature consisting of both inductive and deductive studies, which have been conducted using different methods and strategies (van Thiel, 2014). This information is gathered from databases like Web of Science, Academia and Google Scholar. When reading the literature, useful information was highlighted, after which it could be incorporated into the study. The desk-research method was particularly applicable in this research when it came to gathering information about the historical redlining practices or other historical data, which couldn't be gathered empirically. In most cases, this involved establishing facts.

The operationalisation table (Chapter 2.2) is filled-in with data collected from three different sources, making it possible to provide the most recent data possible. Most of the data is derived from an excel file made available to me by the Municipality of Rotterdam. This file is a data structure of neighbourhood profiles in Rotterdam. In addition, some data were obtained from a website that collects all kinds of figures on neighbourhoods, including Oud Crooswijk and Kralingen-West (Statistieken buurt Kralingen-West, 2024; Statistieken buurt Oud Crooswijk; 2024). Finally, data were derived from the Rotterdam Municipality's neighbourhood profile website (Wijkprofiel Rotterdam - Kralingen-West, n.d.; Wijkprofiel Rotterdam - Oud Crooswijk, n.d.).

To gather data from the multiple case study, semi-structured interviews were used. A semi-structured interview is an interview with a topic list, a guideline. This guideline listed a few topics that needed to be discussed during the interview with predetermined questions. The interviews were conducted to gather subjective information, for example opinions, perceptions or experiences and to verify objective information. In semi-structured interviews, there is the possibility of varying the order of the questions, depending on how the conversation goes. In such interviews, it is important to let the conversation flow naturally. This often leads to the most optimal amount of information. Where needed or necessary, probing questions were posed (Van Thiel, 2014). The interviewees were professor M. Aalbers, who is an expert on the field of redlining, the chairmen of the neighbourhood councils of Kralingen and Crooswijk and an expert on discrimination in the housing market.

The first sub-question will be answered by analysing articles from Professor Aalbers and an interview with Aalbers and the chairman of the neighbourhood council of Kralingen. The next sub-question is answered using analyses and data from the 'District Profile', the 'Neighbourhood Monitor' and the 'Municipality of Rotterdam' as well as an interview with the chairman of the area committee Kralingen-Crooswijk. Finally, an answer to sub-question 3 is formed by analysing a report by the Verwey-Jonker Institute on discrimination and racism in the housing market and by analysing an interview with one of the authors, Arwen Hoogenbosch.

The interviews were all conducted online in Dutch via Microsoft Teams or Zoom and were all recorded with consent for subsequent analysis and incorporation into the results. The interviews were transcribed using Microsoft Teams' transcript generator and Good Tape, which is also a transcript generator. To minimise the presence of errors in the transcripts, the interviews were transcribed as soon as possible after the interviews. Any errors in generating the transcripts could thus be carefully corrected. The transcripts were then analysed by highlighting useful information. These highlighted excerpts were then arranged by sub-question, after which it was possible to start writing the results chapter. Where useful and valuable, quotations have been used to include the acquired information as aptly as possible in the study.

| Sub-question | Research methods |
|---|--|
| What was the impact of redlining on the socioeconomic and demographic composition of the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam in the decade after the implementation? | <ul style="list-style-type: none"> - Semi-structured interviews (Aalbers, Chairman neighbourhood council Kralingen / former chairman area committee, Chairman neighbourhood council Crooswijk) - Content analysis |
| What is the current socioeconomic and demographic composition of the redlined neighbourhood Oud Crooswijk and the non-redlined neighbourhood Kralingen-West and what are the socio-spatial inequalities between these neighbourhoods? | <ul style="list-style-type: none"> - Semi-structured interviews (Chairman neighbourhood council Kralingen / former chairman area committee Kralingen-Crooswijk, Chairman neighbourhood council Crooswijk) - Content analysis |
| Since the abolition of redlining, to what extent have discriminatory practices remained in the field of the housing market in Rotterdam? | <ul style="list-style-type: none"> - Semi-structured interviews (Arwen Hoogenbosch) - Content analysis |

Table 2 Research methods per sub-question. Own work.

3.3 Validity and reliability of the research

This chapter discusses the validity and reliability of this research. On the one hand, validity refers to the extent to which the research measures what it aims to measure. Validity consists of both internal and external validity. The latter refers to the extent to which it is possible to generalise the research, and the former refers to the consistency of the research. On the other hand, reliability refers to the consistency and accuracy of the research results when the research is repeated at a different time and under different conditions (Van Thiel, 2014).

Meta-analysis ensures both external validity and reliability because the conclusions drawn are based on multiple research situations and units of analysis. Furthermore, this study also ensures reliability by analysing data in a systematic way. The literature review only collects data and information relevant to the study, thus promoting internal validity (van Thiel, 2014).

Normally, a case study scores well on internal validity and less on external validity. This is due to the limited number of situations studied, which is because the aim is depth rather than breadth (Bailey, 1992). It is almost impossible to generalise the findings of a case study research, which limits external validity. Since only two cases are being studied, the internal validity will be high. But despite the fact that only two cases are studied in this research, it is still possible to ensure external validity through triangulation. This means that there are multiple research methods used to gather information, namely case study and content analysis. Reliability will be ensured by conducting the case study systematically, to make repetition possible (Van Thiel, 2014).

To maximise validity and reliability, a semi-structured interview was chosen. The interview takes place according to a certain guideline and the questions are based on the theoretical framework and the literature review, making the internal and external validity high. Within the time available, as many interviews as possible will be conducted with available experts. This is conducive to validity (Van Thiel, 2014).

Chapter 4 - Results

In this study, the results consist of analyses of interviews with respondents and of pre-existing literature and documents. To ultimately answer the research question in the conclusion of this study, it is necessary to make it manageable in the form of sub-questions. The sub-questions, drawn up in section 1.3, will be elaborated in logical order in this chapter.

4.1 What was the impact of redlining on the socioeconomic and demographic composition of the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam in the decade after the implementation?

This section will examine the impact of redlining on the socio-economic and demographic composition of the Oud Crooswijk and Kralingen-West neighbourhoods in Rotterdam in the decade after the implementation of the redlining policy. To get a proper picture of the two neighbourhoods in the decade after the implementation of redlining, interviews were conducted with the chairman of the Kralingen neighbourhood council, who was also chairman of the Kralingen-Crooswijk area committee, and with the chairman of the Crooswijk neighbourhood council. This made it possible to give a thorough analysis of both neighbourhoods in the 00s. Unfortunately, no datasets were available for this time period. The earliest available data dates to 2014. So, the main question was what Kralingen-West and Oud Crooswijk looked like in the decade after the turn of the century. To give an adequate description of that situation, we must go further back in time than the '00s. Indeed, the Kralingen chairman states the following: "Both Kralingen-West and Crooswijk have actually had a very big intervention in the years before, since the Second World War. To give an example: Kralingen-West was largely affected by the bombing [in World War II]. As a result, a lot of businesses and a lot of houses in Kralingen-West were just destroyed. Crooswijk was a town, which was next to the centre and not affected by the bombing, but which was actually originally a very close-knit working-class neighbourhood, where a lot of people lived." So close-knit that "the door was always open". This shows great social capital and a strong community based on mutual trust, with a high degree of social cohesion. That the residents hold charity in high regard is also evident in their actions after the World War II bombings. "Crooswijk was also actually the neighbourhood that took in a lot of people who became homeless after the Second World War after a bombing." (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024)

As mentioned, the bombing destroyed a lot of businesses and houses in Kralingen-West. This required a plan for reconstruction in order to provide residents with housing in the neighbourhood again. This did not only apply in Kralingen-West, but to all affected

neighbourhoods in Rotterdam. Of course, this required all attention and effort, which is why reconstruction in Kralingen-West took place fairly quickly. Because of the focus on the affected neighbourhoods and on Rotterdam's suburbs, Crooswijk "stayed out of the 'picture' for a very long time." As a result, Oud Crooswijk became very rundown in the period after World War II until the late 1970s/early 1980s (Chairman neighbourhood council Crooswijk, personal communication, 07-06-2024). There was no investment in housing construction, despite an increasing population, resulting in overcrowding. "Of course, it was always a working-class neighbourhood, but also the business and the whole industry went away there." (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024; Chairman neighbourhood council Crooswijk, personal communication, 07-06-2024)

This degradation and decline came to an end in the last years of the 1970s and early 1980s, when urban renewal projects took place in Oud Crooswijk. From then on, houses that were in inadequate condition were demolished in large numbers, after which a very large stock of social housing was erected (Chairman neighbourhood council Crooswijk, personal communication, 07-06-2024). These social housing developments all belonged to the very lowest segment, "giving you a very uniform housing stock." This contrasts with Kralingen-West, which was more affluent and also had a larger stock of privately owned (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024).

Now, Aalbers (2010), an expert on redlining, argues that redlined neighbourhoods in Rotterdam generally share the same characteristic features, namely that these neighbourhoods have a relatively high number of low-income people, a relatively high percentage of ethnic minorities and usually involve large numbers of rented housing or cheap owner-occupied houses. The former chairman of the Kralingen-Crooswijk area committee could confirm this description as regards the situation in Oud-Crooswijk in the decade after the introduction of redlining.

"What I see in Oud Crooswijk is that after urban renewal, a lot of housing has obviously been put up in the lowest category. I know that housing associations also have certain obligations. So, you see at some point that a lot of ethnic minority people live there." "Yes, low income. That's also very recognisable. There were really people who had to scrape everything together and you still see that." He argued that shopping streets at one point were very difficult to put down properly because people have low income. Regarding the large numbers of rented and cheap houses for sale in Oud Crooswijk, a few things have already been said. The chairman was keen to add that the boundary between Oud Crooswijk and Kralingen-West cannot be drawn very hard either.

"...In Kralingen-West, of course, social housing has also been put down; we also have a lot of people from other ethnic backgrounds, but because not everything has been demolished, you see that at a certain point, because there are other streets (read richer streets) through it, it's mostly diversified. Then there is more balance. And that balance ensures that at some point you also see other role models, so to speak, but you also maybe get a bit more connection with the group."

There are career opportunities, allowing you to move to another place. "If you're in a neighbourhood where basically everything is just the same, and everyone who lives there is just the same, you also no longer have a kind of social ladder that you can climb up." The latter situation seems to be the case in Oud Crooswijk (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024). However, the chairman of the Crooswijk district council believes this is a theoretical social ladder. In practice, he believes this is not the case, because one must make do with what they have. After all, the opportunities to grow are there, no role models are needed for that (Chairman neighbourhood council Crooswijk, personal communication, 07-06-2024).

In this description of the two neighbourhoods in the period since World War II to 2010 and the analysis of the socio-economic changes the neighbourhoods went through, the phenomenon of redlining has not yet emerged. Hence my question on how the practice of redlining has influenced the development of the neighbourhoods. To this, the following answer was given by both chairmen: "If I go and see for myself, I think there are some other factors that have had much more influence" on the development of the neighbourhoods (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024).

To begin with the development of Oud Crooswijk, a neighbourhood labelled by banks as "dangerous to invest in", in other words, a neighbourhood that was redlined. The chairman argues, firstly, that the biggest factor for how the neighbourhood has developed has to do with an overly one-sided housing stock. "Because of the very one-sided housing stock put down in urban renewal, there has been little focus on the question: how do we ensure that we have certain diversity or balance in a neighbourhood so that their neighbourhood is liveable?" Oud Crooswijk was originally an old working-class neighbourhood with poor housing, and the implementation of urban renewal aimed to create a new neighbourhood with good-quality housing. The new houses were actually better, it's just that too little attention was paid to diversity. It was expected that again the same working class would live in the houses, so diversity was not considered necessary. Diversity refers to diversity in housing supply, such as owner-occupied housing, rental housing and social housing, and

diversity in terms of residents, in terms of ethnicity and socio-economic class. According to the chairman, the lack of diversity in residents was the second factor that had more influence on the development of the neighbourhood (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024).

The chairman's opinion is that redlining has had little impact because of the very short period of time that redlining has been practised. He thinks that it hasn't had much impact on the saleability of a house. According to Aalbers (Personal communication, 13-06-2024), however, it is difficult to indicate exactly what the duration of that period was. During the period around 2005, when Aalbers conducted research, it appeared that redlining was returning in a lighter form to some extent. While the period when certain people were denied mortgages may indeed have been of fairly short duration, the wider impact of restrictive measures on mortgages played a role for a longer period of time. Because someone could only get a smaller mortgage, then you could buy a less expensive home and that could have negative effects for people, but also for the neighbourhoods in which the restrictive measures apply.

The chairman questions at all the aspects of redlining that Aalbers mentions. According to him, the structure of the neighbourhood has not changed because of redlining, but more because of the major interventions in housing projects (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024). Aalbers (Personal communication, 13-06-2024) responds by arguing that redlining really did play a role in the uneven socio-spatial development of the two neighbourhoods. This takes a big step towards answering the sub-question and, in my opinion, cuts to the heart of the matter. He does acknowledge that redlining is also a consequence of pre-existing socio-spatial inequality. Without pre-existing inequality, there is no redlining. Redlining reinforces this inequality. "With these kinds of social issues, one interacts with the other and it is very difficult to start isolating what the impact of redlining is, because redlining does not take place in isolation." It takes place in combination with other forms of inequality and discriminatory practices, which can also create socio-spatial inequality. On top of the already unequal situation between Oud Crooswijk and Kralingen-West prior to the implementation of redlining, comes the reinforcing effect of redlining that has caused Oud Crooswijk to lag behind Kralingen-West. So, the bombings from WWII and urban renewal projects, as well as redlining, play a role in the uneven development of the two neighbourhoods.

Urban renewal brought a number of socio-economic and demographic changes to Oud Crooswijk. For example, as a result of the increase in ethnic minority residents, there were

many more shops with a foreign audience, which had a different offer than the original Crooswijkers were used to. "Many Oud Crooswijkers complained that the butcher disappeared, that the greengrocer disappeared and that only Turkish shops or small supermarkets came in return (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024)." This was obviously not the case, but the original inhabitants had this perception. Things Oud Crooswijkers were used to were moving further and further away, such as sports clubs and cultural associations. Schools, too, were increasingly poorly attended. But this was offset by the following: "Crooswijk was one of the first neighbourhoods where we then at one point had an Islamic school that was very well attended and doing very well (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024)." This sounds positive in itself, but according to the chairman, the original neighbourhood residents were less enthusiastic. "But yes, which does create an appearance at some point" (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024).

Surely the original residents of Oud Crooswijk were somewhat troubled by the changing demographic and socio-economic conditions in the neighbourhood. It had quite an impact on social cohesion, which moved the neighbourhood in the direction of social exclusion. "First, almost only workers lived there, and they got along well and at some point, there was an influx of 'other' people with a different culture." Added to this was the fact that jobs were moving away, old houses were demolished, and people started moving out without returning. So, you see that the close-knit community that used to be present in Oud Crooswijk has slowly but surely changed into a community in which signs of social exclusion are visible (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024).

In Kralingen-West, these demographic and socio-economic changes played less of a role and there were fewer problems in terms of social cohesion. Moreover, this neighbourhood was not redlined by banks. By the decade of the '00s, Kralingen-West was already a wealthier neighbourhood than Oud-Crooswijk. There were a number of small businesses, and many residents were employed by people in Kralingen-Oost, the richer part of Kralingen. The bombing meant there was an opportunity to start with a clean slate and redesign the neighbourhood. Reconstruction in the 1950s and 1960s saw a lot of new construction with a focus on lots of public space and greenery. In the decade of the 00s, some of those reconstruction houses were demolished again and new housing was built. The choice then was made for "cheap housing and a bit of social rent, and then for the slightly higher category, to get some kind of mix there." (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024)

This paragraph has offered a comprehensive description of the demographic and socio-economic conditions in the Kralingen-West and Oud Crooswijk neighbourhoods and an answer on the question what the impact of redlining was in the decade after the implementation. From the neighbourhood council chairman's point of view, redlining has hardly impacted the course of development of the neighbourhoods. In particular, he identifies the one-sided housing stock and the lack of diversity, in terms of housing supply and in terms of residents, or better the absence of a healthy mix, as the cause of the uneven development of Oud Crooswijk compared to Kralingen-West. He also argues that the period, during which redlining was implemented as a policy, was of too short a duration to see its effects in the saleability of houses. Professor Aalbers, on the other hand, argues that it is a sum of causes of inequality and that redlining did cause either the increase in inequality or a stagnation in the socio-spatial development of the neighbourhood. He also argues that it is not only about the short period of time in which redlining has been implemented. The period in which redlining has been implemented, has been a stepping stone for other restrictive measures in mortgage issuing that really have had a long-lasting effect, even to this day. The next section will focus on the current situation.

4.2 What is the current socioeconomic and demographic composition of the redlined neighbourhood Oud Crooswijk and the non-redlined neighbourhood Kralingen-West and what are the socio-spatial inequalities between these neighbourhoods?

So far, the study has focused on the historical redlining practices that took place in the late 1990s in Rotterdam and the decade after the abolition. The sub-question, which will be answered in this section, draws the research into the present. Indeed, the second sub-question reads as follows: What is the current socioeconomic and demographic composition of the redlined neighbourhood Oud Crooswijk and the non-redlined neighbourhood Kralingen-West and what are the socio-spatial inequalities between these neighbourhoods? This section will thus attempt to analyse the current socio-economic and demographic composition of the two neighbourhoods. It will also examine whether socio-spatial inequalities can be detected between these neighbourhoods. To analyse the current socio-economic and demographic composition, the operationalisation table, as shown in paragraph 2.2, will be used. This table helps to find the right information and draw conclusions about socio-spatial inequality and social exclusion.

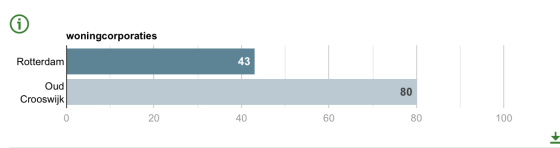
To understand the socio-economic and demographic characteristics of the two neighbourhoods, a descriptive analysis will first follow, based on the data obtained, using the operationalisation table. As mentioned earlier, both neighbourhoods belong to different redlining categories. Kralingen-West is a neighbourhood that was not redlined in the 1990s and Oud Crooswijk is a neighbourhood that was redlined in the 1990s. The most closely related data are housing values (€) and housing property (%). It is striking that there is a large difference between the housing values in Kralingen-West and Oud Crooswijk and that significantly more people own a house in Kralingen-West than in Oud Crooswijk. In the previous paragraph, the chairman of the neighbourhood council mentioned the main reasons for this. One other explanation is redlining. People could not get a mortgage in Oud Crooswijk in the late 1990s, which made it impossible for people to buy a house in this neighbourhood or move out of it. Kralingen-West belonged to the zip-code I neighbourhoods, so people could get a mortgage there. This leads to more than a quarter of residents being owner-occupiers by 2024. In contrast, only 8% of residents in Oud Crooswijk will own an owner-occupied home in 2024.

Research by Aalbers (2010) found that neighbourhoods with zip code III in Rotterdam generally had similar characteristics in the 1990s. In particular, they were neighbourhoods with a relatively high number of low-income people and with a relatively high percentage of ethnic minorities or migrants. In most cases, they were also neighbourhoods with a relatively

high proportion of rented and low-cost owner-occupied housing. If these characteristics are checked against contemporary neighbourhood data, they still correspond quite well to the situation in Oud Crooswijk in the past.

Indeed, today 29% of residents in Oud Crooswijk live in poverty with an average income of €21,100 per year, where the average for the municipality of Rotterdam is €29,100 per year. This equates to about 25% of households in Oud Crooswijk living around the social minimum. In Kralingen-West 17% of residents live in poverty, which is quite a difference. The chairman of the neighbourhood council argues that this has to do with the diversity of the housing stock and the diversity of the social-economic statuses present in Kralingen-West. There are streets where there is a lot of income, which raises the average income of the neighbourhood. He also compares the difference between Kralingen and Crooswijk to Wassenaar on the one hand and the Schilderswijk on the other (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024). The second characteristic of a redlined neighbourhood is the relatively high percentage of ethnic minorities or migrants. In Oud-Crooswijk, 38% of residents are migrants and 30% are of Dutch origin, while in Kralingen West it is 33% to 44%. Even when it comes to housing ownership, Oud Crooswijk's picture continues to match that of the 1990s. Anno 2024, 80% of the dwellings consist of rental housing owned by housing corporations; 11% of private rental housing and only 8% of owner-occupied housing (Figure 6). These owner-occupied houses have an average house value of €281,000. Kralingen West has both more owner-occupied houses (Figure 7) and a higher average house value. See Appendix 1 for graphs of residents' origins and housing values for both neighbourhoods.

Eigendom



Eigendom

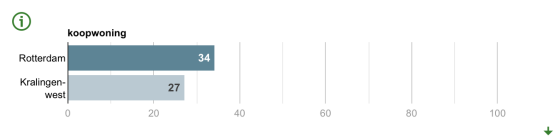
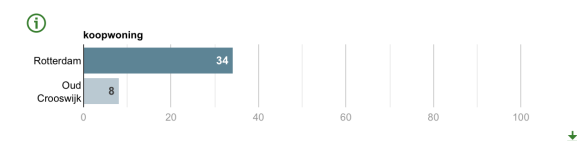
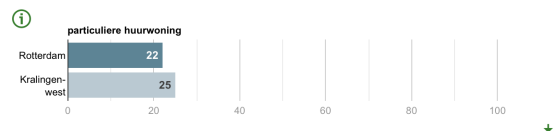
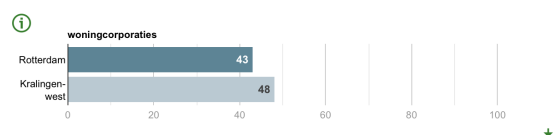


Figure 6 (left) Housing property (%) Oud Crooswijk (Wijkprofiel Rotterdam - Oud Crooswijk, n.d.)

Figure 7 (right) Housing property (%) Kralingen-West (Wijkprofiel Rotterdam - Kralingen-West, n.d.)

Socio-spatial inequality between neighbourhoods is divided into a number of dimensions. Namely economic well-being, the already mentioned neighbourhood composition and access to social services. These dimensions in turn can be subdivided into empirical indicators, which show different values for each neighbourhood. I will name the most striking and not yet mentioned differences between the neighbourhoods and the remaining values can be found in Table 3. In terms of economic well-being, there is a big difference between the neighbourhoods in the percentage of households that have social assistance benefits. In Oud Crooswijk, 19% of households are on social assistance benefits compared to 9% in Kralingen-West. When it comes to accessing social services, Oud Crooswijk scores significantly lower than Kralingen-West. For instance, the percentage of residents who are higher education graduates is 21.1% to 42.5% and the percentage of residents who are lower education graduates is 41.2% to 23.5%.

According to social exclusion theory, this also takes place on multiple dimensions. Namely economic well-being, housing conditions, education, health, discrimination, and citizenship. Again, I will name the most striking and not yet mentioned differences between the neighbourhoods and the remaining values can be found in table 3. In Oud Crooswijk, the unemployment rate is 19%, while in Kralingen-West it is 10%. There is also a significant difference in the percentage of residents without a starting qualification in both age groups. Both the percentage of residents between 18 and 22 and between 23 and 75 without a starting qualification is higher in Oud Crooswijk than in Kralingen-West. In Oud Crooswijk, 33% of the youngest category and 42% of the oldest category compared to 19% and 25% in Kralingen-West have no starting qualification. This greatly limits an individual's opportunities in Oud Crooswijk for employment and personal development.

Bourdieu's theory

The latter observation seems to be consistent with a conclusion by Israel & Frenkel (2017), who argue that people with common experiences in their lives share the same habitus. They argue that as a result, they often have the same social status, belong to the same communities in terms of social stratification and have the same chances of occupying social positions. Now, redlining is a practice that takes place at the neighbourhood level. It is a form of exclusion based on location. However, within these neighbourhoods, there can be multiple social classes and possibly different habitus. The empirical data on neighbourhoods are neighbourhood-wide data, which means that social classes cannot be distinguished. The chairman of the neighbourhood council states that in Oud Crooswijk, the experience is that people from Turkey and Morocco have a very strong mutual bond. They often have the idea of "we will solve it [problems] ourselves with our community." (Chairman neighbourhood

council Kralingen, personal communication, 15-05-2024). So, the concept of 'place habitus' is a better concept to use in the case of redlining. Within that 'place habitus', differences can therefore exist at the beginning, and it is an expression of a space that produces classes at the neighbourhood level. Redlining then ensures that eventually an entire neighbourhood is financially and socially excluded, creating a neighbourhood-level class.

Within this place habitus, residents have the opportunity to accumulate capital. This includes economic, cultural and social capital. Cultural capital includes, for example, educational qualifications. These qualifications, such as a diploma, are important for an individual's employment, social status and power. The already mentioned empirical data show that in the place habitus of Oud Crooswijk, people have limited opportunities for employment and personal development. In each place habitus, or neighbourhood in the case of redlining, individuals have varying degrees of access to these forms of capital. However, cultural capital alone cannot explain the reproduction of socio-spatial inequality. According to Bourdieu's theory, none of the three forms of capital can completely by itself explain the reproduction of socio-spatial inequality. As the empirical data show, significant differences can also be observed in terms of economic capital between the place habitus of Oud Crooswijk and that of Kralingen-West.

In terms of building economic capital through housing, three groups can be distinguished. The first group consists of people who buy a house in a non-redlined neighbourhood, where prices usually go up over time. These people therefore accumulate capital. The second group consists of people who are precluded from buying a house by redlining. They cannot participate in capital accumulation or can only do so several years later, when they have been able to save more in the meantime. Finally, the third group consists of people who already own a house in a redlined area. They are doubly disadvantaged. On the one hand, it is much harder to sell a house, as a new buyer cannot get a mortgage (group 2). This negatively affects the house price. And on the other hand, if they choose to stay where they live, they realise less house value. So, if they did move in the future, less capital is created. People then start considering whether it makes sense to move then, making people feel as if they are 'stuck' in the neighbourhood (Professor M. Aalbers, personal communication, 13-06-2024; Aalbers, 2016).

Only in terms of social capital, see among others discrimination and citizenship in Table 3, no significant differences can be found between the two place habitus. However, Kralingen-West continues to score better than Oud Crooswijk on every item except social 'binding'.

Social exclusion

With socio-spatial inequality, social exclusion goes hand in hand. As the operationalisation shows, social exclusion is not only about poverty or lack of access to mortgages. It is also about other forms of exclusion. Exclusion can occur both within neighbourhoods and between residents of neighbourhoods. Here first, an example of exclusion within the Oud Crooswijk neighbourhood. The chairman of the neighbourhood council argues that there are, however, still a number of real Oud Crooswijkers living there, who still refer to the past, who are less in tune with the neighbourhood's new residents. They still see the generation that came into the neighbourhood with urban renewal, the first and second generation of migrant workers, as a bit of an intruder. The chairman hears narratives like, "they influenced that culture of ours, because of that, butchers just left well the farmer [did well himself] and Turkish and Moroccan supermarkets came back for that." The original residents worry; "can I actually just still buy a meatball instead of it having to be halal." To this, the chairman makes the comment that it is something that lives in the neighbourhood, but that it is diminishing. It gradually phases out at some point (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024).

It is worth noting that, if we look at the recent data, there are currently few significant differences between the neighbourhoods in terms of discrimination within the neighbourhood, as shown in Table 3. As said, it is also possible to see social exclusion between residents of neighbourhoods. There is no data on this, but the chairman of the neighbourhood council Kralingen outlines a perception that prevails between neighbourhoods. He argues that if you talk to residents of Oud Crooswijk they will say that they feel socially excluded. "There is always a kind of Calimero effect in Crooswijk," he says. With that he means an inferiority complex (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024). According to the chairman of the neighbourhood council, this sense of inferiority comes from the things that residents of Oud Crooswijk have experienced in the past. Think, for instance, of employers moving out of the neighbourhood at one point and historic buildings being demolished for new construction. A kind of institutional distrust has developed towards the government, which is blamed for these developments and the experience of social exclusion (Chairman neighbourhood council Kralingen, personal communication, 15-05-2024).

An example of government policy from which Oud Crooswijkers feel socially excluded is the National Programme Rotterdam South (NPRZ). The NPRZ is a national programme implemented in 2012 in which many agencies work together to realise a healthy future for Rotterdam South. The aim is to increase the opportunities of the residents of Rotterdam

South by 2032 so that the level of education, labour participation and quality of living rise to the average of the four largest cities in the Netherlands. The reason for the plan was the large-scale socio-economic problems in Rotterdam South, which were gigantic by Dutch standards (Nationaal Programma Rotterdam Zuid, z.d.).

There is a lot of discontent in Oud Crooswijk regarding the NPRZ. 'Why does [Rotterdam] South get all those government funds? Why us in Crooswijk, where we actually experience the same problems, why not here? There is a kind of Calimero effect there (Chairman neighbourhood council Crooswijk, personal communication, 07-06-2024).' The chairman of the neighbourhood council of Crooswijk admits that it is also frustrating for them as a neighbourhood council that they must make a huge effort for every penny with the municipality to get the lobby done, while in Rotterdam South, buckets of money are coming in from the state. This is because a national programme has been set up for Rotterdam South with lots of government funding, but this is not the case for Oud Crooswijk (Chairman neighbourhood council Crooswijk, personal communication, 07-06-2024).

Completed operationalisation for the neighbourhoods of Kralingen-West and Oud Crooswijk (2024)

| Concept | Dimension | Empirical indicator | Kralingen-West | Oud Crooswijk | |
|----------------------------|---|--|---|--------------------|-----|
| Redlining | Mortgages | Redlining score / zip code | Green / zip code I | Red / zip code III | |
| | Housing values (€) | | €360.000 | €281.000 | |
| | Housing property (%) | | 27% | 8% | |
| Socio-spatial inequalities | Economic well-being | Average income per capita (€) | €29.2000 | €21.100 | |
| | | Non-employed (%) | 10% | 19% | |
| | | Poverty (%) | 17% | 29% | |
| | | Social benefits (%) | 9% | 19% | |
| | Neighbourhood composition | Migrant (%) | 33% | 38% | |
| | | Dutch origin (%) | 44% | 30% | |
| | Access to social services | Health: | Residents who say they experience poor health (%) | 15% | 18% |
| | | | Residents who say they experience health barriers (%) | 24% | 29% |
| | | Education: | | | |
| | | Higher education graduates (%) 2022 | 42,5% | 21,1% | |
| | Lower education graduates (%) 2022 | 23,5% | 41,2% | | |

| | | | | |
|------------------|---------------------|--|----------|---------|
| Social exclusion | Economic well-being | Non-employed (%) | 10% | 19% |
| | | Average income per capita (€) | €29.2000 | €21.100 |
| | Housing conditions | Home ownership (%) | 27% | 8% |
| | | Overcrowding (%) | 9% | 15% |
| | | Vacancy (%) | 5% | 5% |
| | Education | Residents saying they have difficulty reading Dutch (%) | 22% | 22% |
| | | Residents saying they have difficulty writing Dutch (%) | 23% | 27% |
| | | Residents (18 to 22 years) without starting qualifications (%) | 19% | 33% |
| | | Residents (23 to 75 years) without starting qualifications (%) | 25% | 42% |
| | Health | Residents who say they experience poor health (%) | 15% | 18% |
| | | Residents who say they experience health barriers (%) | 24% | 29% |
| | Discrimination | Residents who say they do not experience discrimination in and outside their own neighbourhood (%) | 87% | 70% |

| | | | | |
|-------------|--|---|-----|-----|
| | | Residents who say that the interaction between ethnic groups in the neighbourhood is good (%) | 50% | 40% |
| Citizenship | Participation (index) | - Subjective | 109 | 41 |
| | | - Objective | 116 | 102 |
| | Binding (index) | - Subjective | 131 | 81 |
| | | - Objective | 87 | 111 |
| | | Residents who say they do not feel abandoned (%) | 77% | 70% |
| | | Residents saying that local residents know each other (%) | 30% | 25% |
| | Residents who say they feel at home with local residents (%) | 50% | 40% | |

Table 3 Completed operationalization. Own work

4.3 Since the abolition of redlining, to what extent have discriminatory practices remained in the field of the housing market in Rotterdam?

The sub-question, which is answered in this section, deals with discriminatory practices in the present. Redlining is known as a discriminatory practice from the 1990s, which aimed at issuing mortgages to house seekers in a discriminatory manner. This section answers the following question: since the abolition of redlining, to what extent have discriminatory practices remained in the field of the housing market in Rotterdam? The answer to this sub-question is based on previously gathered information, the report 'Verkenning discriminatie en racisme op de woningmarkt' by Arwen Hoogenbosch, among others, and an interview with Arwen Hoogenbosch. The section is divided into four sections. First, it will clarify the distinction between two ways of discrimination, namely direct and indirect discrimination. Next, I will discuss how discrimination occurs in different housing types, namely owner-occupied housing, private rented housing and housing association rented housing. The third section assesses the current situation of the two neighbourhoods based on the first two sections. Finally, a partial conclusion follows.

Two ways of discrimination: direct and indirect

The aforementioned report and the interview with Arwen Hoogenbosch show that there are basically two forms of discrimination: direct and indirect discrimination. Direct discrimination is generally clearly detectable, but indirect discrimination, on the other hand, may be difficult to recognise. In the case of direct discrimination, a person is treated differently or worse on one of the grounds covered by EU law (EUR-Lex Europe, n.d.). According to European law, indirect discrimination occurs 'when a practice, policy or provision applies to everyone but disadvantages some people more than others. Some measures appear neutral at first sight, but nevertheless discriminate against a specific group. Whether there is an intention to discriminate is irrelevant here (EUR-Lex Europe, n.d.).'

Hoogenbosch mentions an example of both forms of discrimination in her interview. For example, direct discrimination occurs when respondents' surnames are considered when responding to housing advertisements (A. Hoogenbosch, personal communication, 22-05-2024). For example, when Dutch-sounding surnames have a greater chance of being invited than non-Dutch-sounding surnames, then there is direct discrimination. An example of indirect discrimination is redlining, for example, where certain postcodes are excluded for a mortgage. The policy affects certain groups more, but it is therefore indirect. So, it is more social inequalities that play out a certain way in mortgage policies. Access to mortgages varies by class, race and origin, but it is indirectly linked. 'As soon as you start excluding

cheap housing for a mortgage, that in turn [ensures] that lower-income groups cannot get those homes', but also then people from migrant backgrounds are generally hit harder (Verkenning discriminatie en racisme op de woningmarkt, 2023). Indirect discrimination is thus 'a sum of all kinds of situations' (A. Hoogenbosch, personal communication, 22-05-2024).

Discrimination against owner-occupied housing, private rented housing and housing associations

In the case of owner-occupied housing, there can be both direct and indirect discrimination. The example of mortgage policy is of course linked to owner-occupied houses. But besides indirect discrimination, there can also be direct discrimination. Think, for example, of a seller who has a certain preference to whom he wants to sell his house. 'As a seller, who do you award the house to? And then what the neighbours would want is still taken into account.' If the neighbours don't like having neighbours with a certain ethnic background, that can be decisive in the decision whether or not to sell a house to that person (A. Hoogenbosch, personal communication, 22-05-2024).

In private renting, both direct and indirect discrimination can also occur. In private renting, it has been proven that people with a non-Dutch name are less likely to get a rental property. Prejudices about people with non-Dutch names play a major role in private renting (A. Hoogenbosch, personal communication, 22-05-2024). Indirect discrimination is difficult to recognise, but because the process of private rental housing is not as transparent and the selection is often not based on objective criteria, it can be concluded that indirect discrimination does exist in the private rental housing market (Verkenning discriminatie en racisme op de woningmarkt, 2023). Partly due to the high level of discrimination, the 'Wet goed verhuurderschap' has come into effect in Rotterdam since 1 July 2023. This law aims to prevent and counter discrimination and harassment (Municipality of Rotterdam, n.d.a).

Finally, with rental housing owned by housing associations, it is a different story. There is no direct discrimination here, but there is possible indirect discrimination. There is no direct discrimination because there are rules around housing allocation. In Rotterdam, you can register with Woningnet and then you get on a waiting list. Based on that waiting list, it is possible to respond to rental properties. 'There is just a very transparent system there' (A. Hoogenbosch, personal communication, 22-05-2024). However, there can be indirect discrimination, for example through municipal policies. For example, consider the Rotterdam Act - the Metropolitan Issues Act - 'that is also indirectly discriminatory in my perspective.

That's just policy that can discriminate' (A. Hoogenbosch, personal communication, 22-05-2024).

The municipality of Rotterdam established the law with the aim of creating an attractive living environment for all residents of Rotterdam. It has proved necessary to actively improve liveability in a number of streets and neighbourhoods through government policy. The NPRZ mentioned in paragraph 4.2 is an example of an integrated approach to improve neighbourhoods. The Rotterdam Act is an addition to the package of measures already taken. This law basically states that in neighbourhoods where there is already too much residential nuisance, no new nuisance-creators will be added to the neighbourhood. The underlying idea is that settling in other parts of the city should contribute to nuisance-makers being more likely to correct their behaviour. This should create a more attractive living environment for all Rotterdam residents. This Rotterdam Act applies to all persons aged 16 and over, both prospective tenants and co-tenants (Gemeente Rotterdam, z.d.b). In practice, therefore, the Act allows the municipality of Rotterdam to have the option to allocate housing to relatively affluent people in vulnerable neighbourhoods. This is because the city council has the option to decide that some parts of defined neighbourhoods should only allow people who have a paid job, their own business or a good pension to live in them. As a result, unemployed and people who are unfit for work cannot get housing permits for properties in these neighbourhoods. In this way, benefit recipients are excluded, which is discriminatory policy (Woonbond, 2023).

Situation Oud Crooswijk and Kralingen-West

The previous section shows that only a very small proportion of the housing stock in Oud Crooswijk is owner-occupied. The vast majority of housing is owned by housing associations, where no direct discrimination takes place. There is therefore little chance of direct discrimination taking place in Oud Crooswijk, as this form of discrimination could theoretically take place in 20% of the housing stock. What is possible is that indirect discriminatory policies are taking place.

The Rotterdam Act is an example of indirect discriminatory policy. Article 10, one of two articles, of this law applies to a number of streets in Oud Crooswijk, but not to Kralingen-West. This article means that the police first checks whether the house seeker has caused a nuisance or displayed criminal behaviour in the past. If this is found not to be the case, then the house seeker will get the housing permit (Gemeente Rotterdam, z.d.c). So, you have to have a permit to live in those streets and 'indirectly, that can cause discrimination.' This is

not so much discrimination towards housing, but towards the right to free settlement (A. Hoogenbosch, personal communication, 22-05-2024).

In Kralingen-West, direct discrimination is more likely to occur because here the proportion of rental housing of corporations is smaller. Indirect discrimination could occur if there are policies that, for example, impose requirements on the source of income, indirectly affecting groups.

Partial conclusion

'A mortgage provides the opportunity to buy a home and build wealth, it is an "enabler". On the other hand: people who do not have access to a mortgage are excluded from it and in that sense, it is a 'great divider' (Verkenning discriminatie en racisme op de woningmarkt, 2023). There are many people who cannot get owner-occupied housing and, as a result, they also do not build wealth through their homes. In fact, people with owner-occupied homes build wealth at a subsidised rate. So, this leads to inequality. Moreover, this inequality is passed on to future generations. If your parents do not have a house to buy and therefore do not build wealth through it, you often cannot buy a house yourself either due to the lack of support from your parents. However, according to Arwen Hoogenbosch, the problem is not that not everyone has a house to buy, but she says the problem is that a house to buy is the ideal and it is subsidised. The big problem lies in the accumulation of inequalities for some people (A. Hoogenbosch, personal communication, 22-05-2024).

To give an unequivocal answer to the sub-question is difficult. This is because the degree of discrimination in the housing market varies by neighbourhood, even by street; by type of housing and there is still a difference between direct and indirect discrimination. Looking at the two neighbourhoods, direct discrimination is more likely to occur in Kralingen-West than in Oud Crooswijk, because the percentage of social housing owned by housing corporations is higher in Oud Crooswijk.

Chapter 5 - Conclusion

In this thesis I've researched how historical redlining practices in the 90s have influenced contemporary socio-spatial inequality between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam. This conclusion explains the complex relationship between past discriminatory practices and the unequal socio-spatial development of the two neighbourhoods. Because both theoretical frameworks, empirical data analysis, content analysis and interviews were used, a valid conclusion can be drawn about this thesis.

To begin with, a summary of the results. The WWII bombings played a role in the uneven development of the two neighbourhoods. Reconstruction and urban renewal in the decades that followed also played a role. Oud Crooswijk was a true working-class neighbourhood with very high social cohesion in the post-WWII period. Since the urban renewal of the late 1970s and early 1980s, a lot of social housing was built in Oud Crooswijk from the lowest segment, creating a very uniform housing stock. During that period, Kralingen-West actually had a varied housing stock with more affluent residents and a higher proportion of owner-occupied houses. After urban renewal, Oud Crooswijk showed many characteristics mentioned by Aalbers (2010) for redlined neighbourhoods. Namely many ethnic minority residents, low income and a high percentage of rented and cheap housing.

Moreover, during the interviews, the chairmen of the Kralingen and Crooswijk neighbourhood councils expressed their views that redlining has had no impact at all on the socio-spatial inequality between the two neighbourhoods. The chairman of the Kralingen neighbourhood council argued that redlining was only of such a short duration that it had little impact on the saleability of a property. He also suggested that the structure of Oud Crooswijk has not been changed at all by redlining, but by the major reforms and new building projects in the neighbourhood. The latter argument was also supported by the chairman of the Crooswijk neighbourhood council.

However, these perspectives contrast with the empirical data and expert analyses. Aalbers refuted in the interview (personal communication, 13-06-2024) these assertions with scientific knowledge by stating that redlining did play a role in the uneven development of Oud Crooswijk compared to Kralingen-West. He said redlining reinforced existing inequalities and slowed down any positive developments or that these positive developments had to start from a deeper point. So, if inequalities were deeper, then it took longer to minimise any inequalities. While the perspectives of neighbourhood council chairmen offer valuable local insights, empirical data and expert knowledge indicate that

redlining was definitely a contributing factor to socio-spatial inequalities between Oud Crooswijk and Kralingen-West. Redlining is thus one of many factors, alongside WWII bombing, urban renewal and the one-sided housing stock, among others, that explain inequalities between the neighbourhoods. Redlining does not take place in isolation, which also makes it impossible to isolate the influence of redlining.

With this research, I have answered the following research question: How have historical redlining practices in the 90s influenced contemporary socio-spatial inequality between the neighbourhoods Oud Crooswijk and Kralingen-West in Rotterdam? Indisputable is that redlining was a discriminatory practice in the late 1990s in Rotterdam, which had a huge impact on the lives of many house-seeking Rotterdammers. It was discriminatory policy, denying residents of redlined neighbourhoods the opportunity to apply for a mortgage. They were effectively denied home ownership. It led to economic inequalities as well as social exclusion of groups of people. People in redlined areas were unable to buy or sell property, depriving them of the opportunity to build capital, both social and economic. This creates a vicious cycle in which socio-spatial inequalities are reinforced. The denial of home ownership through redlining leads to economic deprivation, which translates into wider socio-spatial inequalities.

Oud Crooswijk today, as mentioned, has all the characteristics of a formerly redlined neighbourhood, namely a high percentage of ethnic minorities, low incomes and a lot of rented and cheap owner-occupied housing, and Kralingen-West scores significantly better than Oud Crooswijk in all these areas. However, it is difficult to say whether these characteristics are due to the redlining policy, as this was actually already the situation in the decades before the redlining practice. At most, it might have reinforced it, but in any case, it is not the only cause for the uneven situation of these characteristics of the two neighbourhoods. Bourdieu's theory has been a framework used to analyse how these inequalities are reproduced in habitus at the neighbourhood level.

Looking at the other factors contributing to socio-spatial inequality between the two neighbourhoods, it is at least striking that the formerly redlined neighbourhood scores worse than Kralingen-West on almost all factors. I am referring, for instance, to the percentage of households on welfare, educational attainment and health rates. Also, in terms of social exclusion, things look less prosperous for the residents of Oud Crooswijk compared to the residents of Kralingen-West. This exclusion through housing throws up many constraints for residents to develop personally.

To conclude, this research has provided in-depth understanding of the multifaceted aspects of redlining and related socio-spatial inequality and social exclusion. In addition, the third sub-question highlighted that discrimination still exists in the housing market today. Whether it is in the market of owner-occupied housing, private rental housing or housing association rental housing, discriminatory practices exist even without redlining. These include direct and indirect forms, with the indirect forms often difficult to detect. Redlining was one such form of indirect discrimination that has caused great harm to many, both in terms of social capital and economic capital. As the research model shows, the aim was to integrate existing theories on redlining, socio-spatial inequality and social exclusion into a new theory on the impact of redlining on the neighbourhoods of Kralingen-West and Oud Crooswijk in Rotterdam.

Chapter 6 - Discussion

The discussion section of this bachelor thesis on the impact of historical redlining practices on contemporary neighbourhoods in Rotterdam consists of three parts. Firstly, it provides a reflection on the process of the research, secondly, it provides insight into the implications of the research findings and their significance for understanding housing discrimination and socio-spatial inequalities in the broader context. In addition, thirdly, recommendations for follow-up research will be made in conclusion.

To begin, first some reflections on the process of the study. To avoid choosing two completely different neighbourhoods, it was preferred to choose two neighbourhoods that are geographically adjacent and that do not differ too much in the data analysed. This is why there are relatively small differences between the two neighbourhoods in terms of socio-spatial factors. The choice of adjacent neighbourhoods contributed to the validity of the findings by reducing the influence of external variables because if two completely different neighbourhoods had been chosen, the relationship with redlining as a determinant of inequality would have been less plausible. A second point of reflection is about approaching respondents. Through this research, I learned that finding respondents is not an easy task. In particular, reaching residents of the two neighbourhoods proved difficult. Even after sending frequent emails and making phone calls to people who could put me in touch with residents, I still failed to find residents willing to do an interview. I got in touch with one resident, but unfortunately this resident was not willing to cooperate with my research. In future research, I will have to take a different approach when interviewing residents. For instance, I could go out on the streets to recruit respondents. A third point of reflection is that Bourdieu's theory from the theoretical framework proved too complicated for the interviewees. In fact, only Professor Aalbers was familiar with the theory. After explaining it in broad strokes, it still turned out not to be entirely clear. Perhaps next time it would be helpful to inform the respondent in writing about this in advance. I considered removing Bourdieu's theory from my research because I had doubts about its relevance. In the end, I chose to adapt the theoretical framework and make the theory relevant. I did not find the option of removing the theory appropriate because I had already addressed Bourdieu's theory in the interviews and results. Therefore, I felt it was a better choice to make the theory as relevant as possible to my case. The final point of reflection concerns access to literature. In section 2.1.2, I relied in part on literature from professor Aalbers. This is because I did not have free access from the Radboud to original articles that Aalbers relied on. As a result, I did have to refer to Aalbers, as I was unable to review the content of the original literature.

The implications of this bachelor thesis highlight the enduring legacy of redlining in shaping Rotterdam's socio-spatial landscape. The research highlights how historical discriminatory practices have influenced and continue to be influencing socio-spatial inequality and social exclusion in the city. The research also contributes to a better understanding of housing discrimination and socio-spatial inequality, by exposing the processes by which redlining has marginalised certain neighbourhoods. These findings can contribute to policy interventions, which are focussed on addressing the historical injustices. By addressing it and being aware of its weaknesses and mistakes, it is possible to promote more equitable urban development.

Furthermore, the discussion addresses the intersectionality of factors contributing to socio-spatial inequalities in Rotterdam. In addition to redlining, the research has identified a complex layered constellation that consists of economic and spatial factors that perpetuate inequalities in access to housing, and mortgages in particular. By exploring the layered interconnectivity between race, class and geography in shaping urban inequalities, this research stresses the importance of adopting holistic approaches to address housing discrimination and promote inclusive urban development. In addition, this discussion looks at the implications of the research findings for policy and practice in Rotterdam itself. This research recommends targeted interventions to address housing inequality and promote equitable access to mortgages and other forms of housing. Targeted investments in formerly redlined neighbourhoods and policy reforms to address discriminatory practices in the housing market could help in this regard.

The final section of this discussion provides some recommendations for possible future research. The first recommendation is to explore the perceptions and experiences of residents in these neighbourhoods by the use of interviews to get a better picture of how redlining practices have affected their lives. Unfortunately, despite attempts to include this target group in the study, this was not successful due to time constraints and lack of response from residents. Moreover, subsequent research could address the degree of influence of redlining practices on the two neighbourhoods, as multiple factors may have contributed to perceived socio-spatial inequalities. This would require both qualitative and quantitative approaches. While this research concludes, it also serves as a stepping stone for further exploration and analysis of the complex dynamics of urban inequality and discrimination. This could be either in the context of Rotterdam or in a broader context. By continuing to explore the intersections of historical legacies and current socio-spatial structures, there is hope for equitable and inclusive cities for all residents.

Bibliography

- Aalbers, M. B. (2005a). Place-based social exclusion: Redlining in the Netherlands. *Area*, 37(1), 100–109. <https://doi.org/10.1111/j.1475-4762.2005.00609.x>
- Aalbers, M. B. (2005b). Who's afraid of red, yellow and green?: Redlining in Rotterdam. *Geoforum*, 36(5), 562–580. <https://doi.org/10.1016/j.geoforum.2004.11.002>
- Aalbers, M. B. (2006a). Place-based and race-based exclusion from mortgage loans: New evidence from the Netherlands. AMIDSt. <http://repository.tudelft.nl/assets/uuid:20a8be63-6523-421d-aa0b-85db2ed27176/Aalbers.pdf>
- Aalbers, M. B. (2006b). 'When the banks withdraw, slum landlords take over' : The Structuration of Neighbourhood Decline through Redlining, Drug Dealing, Speculation and Immigrant Exploitation. *Urban Studies*, 43(7), 1061–1086. <https://doi.org/10.1080/00420980600711365>
- Aalbers, M. B. (2007a). What types of neighbourhoods are redlined? *Journal Of Housing And The Built Environment*, 22(2), 177–198. <https://doi.org/10.1007/s10901-007-9074-9>
- Aalbers, M. B. (2007b). Place-Based and Race-Based Exclusion from Mortgage Loans: Evidence from Three Cities in the Netherlands. *Journal Of Urban Affairs*, 29(1), 1–29. <https://doi.org/10.1111/j.1467-9906.2007.00320.x>
- Aalbers, M. B. (2010). Redlining: terug van weggeweest. *Rooilijn*, 43(1), 28–33. https://pure.uva.nl/ws/files/1006095/80604_Aalbers_2010_Rooilijn_2_.pdf
- Aalbers, M. B. (2011). *Place, Exclusion, and Mortgage Markets*. <https://doi.org/10.1002/9781444342314>
- Aalbers, M. B. (2014). Do maps make geography? Part 1: Redlining, planned shrinkage, and the places of decline. *ACME: An International Journal For Critical Geographies*, 13(4), 525–556. <https://ojs.unbc.ca/index.php/acme/article/viewFile/1036/890>

- Aalbers, M. B. (2016). Housing finance as harm. *Crime, Law And Social Change*, 66(2), 115–129. <https://doi.org/10.1007/s10611-016-9614-x>
- Aaronson, D., Hartley, D., & Mazumder, B. (2021). The Effects of the 1930s HOLC “Redlining” Maps. *American Economic Journal: Economic Policy*, 13(4), 355–392. <https://doi.org/10.1257/pol.20190414>
- Abbing, R. R. (1999). Nieuwe kleur voor Millinxbuurt. *NRC*. <https://www.nrc.nl/nieuws/1999/10/20/nieuwe-kleur-voor-millinxbuurt-7467007-a648458>
- Alkhalili, N., Dajani, M., & De Leo, D. (2014). Shifting realities: dislocating Palestinian Jerusalemites from the capital to the edge. *International Journal Of Housing Policy*, 14(3), 257–267. <https://doi.org/10.1080/14616718.2014.933651>
- Anders, J. P. V. (2019). The Long Run Effects of Transformational Federal Policies: Redlining, the Affordable Care Act and Head Start. *Texas A&M University*. <http://oaktrust.library.tamu.edu/handle/1969.1/187155>
- Andriessen, I., Hoegen Dijkhof, J., Torre, A. V. D., Berg, E. V. D., Pulles, I., Iedema, J., & Voogd-Hamelink, M. D. (2020). *Ervaren discriminatie in Nederland in Nederland II*. Den Haag: Sociaal en Cultureel Planbureau. [https://www.scp.nl/publicaties/publicaties/2020/04/02/ervaren-discriminatie-in-nederland-ii#:~:text=Ruim%20een%20kwart%20\(27%25\),bedreiging%20of%20seksueel%20lastig%20vallen.](https://www.scp.nl/publicaties/publicaties/2020/04/02/ervaren-discriminatie-in-nederland-ii#:~:text=Ruim%20een%20kwart%20(27%25),bedreiging%20of%20seksueel%20lastig%20vallen.)
- Appel, I., & Nickerson, J. (2016). Pockets of Poverty: The Long-Term Effects of Redlining. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.2852856>
- Bailey, M. T. (1992). Do Physicists Use Case Studies? Thoughts on Public Administration Research. *Public Administration Review*, 52(1), 47. <https://doi.org/10.2307/976545>
- Boterman, W., Musterd, S., & Manting, D. (2020). Multiple dimensions of residential segregation. The case of the metropolitan area of Amsterdam. *Urban Geography*, 42(4), 481–506. <https://doi.org/10.1080/02723638.2020.1724439>

- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Red.), & R. Nice (Vert.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241–258). <https://www.socialcapitalgateway.org/sites/socialcapitalgateway.org/files/data/paper/2016/10/18/rbasicsbourdieu1986-theformsofcapital.pdf>
- Bourdieu, P. (1990). Structure, Habitus, Practices, The Logic of Practice. In Stanford University Press eBooks. <https://doi.org/10.1515/9781503621749>
- Bourdieu, P. (1994), 'Some Properties of the Fields', *Sociology in Question*, London: Sage, pp. 72-77.
- Bourdieu, P. (1998). The State Nobility: Elite Schools in the Field of Power. *Contemporary Sociology*, 27(4), 351. <https://doi.org/10.2307/2655468>
- Burke, L., & Schwalbach, J. (2021). *Housing Redlining and Its Lingering Effects on Education Opportunity*. The Heritage Foundation. <https://www.heritage.org/education/report/housing-redlining-and-its-lingering-effects-education-opportunity>
- Cameron, S., & Field, A. (2000). Community, Ethnicity and Neighbourhood. *Housing Studies*, 15(6), 827–843. <https://doi.org/10.1080/02673030020002564>
- Cleland, J. (2017). The qualitative orientation in medical education research. *Korean Journal Of Medical Education*, 29(2), 61–71. <https://doi.org/10.3946/kjme.2017.53>
- Custers, G., & Engbersen, G. (2020). Bourdieu in de buurt : Sociale klassendebat en de klassenstructuur van Rotterdam. *Sociologie*, 15(2), 117–147. <https://doi.org/10.5117/soc2019.2.001.cust>
- Daly, M. E., & Silver, H. (2008). Social exclusion and social capital: A comparison and critique. *Theory And Society*, 37(6), 537–566. <https://doi.org/10.1007/s11186-008-9062-4>
- Dennis, M.W. and Pinkowish, T.J. (2004). *Residential Mortgage Lending: Principles and Practices*. 5th edn. Mason, OH: Thomson South-Western.

- Dutraive, V., & Gloukoviezoff, G. (2010). Financialization and Social Inclusion: An Analysis of Financial Exclusion Based on the Institutionalism of J. R. Commons. *Revue Interventions Économiques/Interventions Économiques Pour Une Alternative Sociale*, 42. <https://doi.org/10.4000/interventionseconomiques.1242>
- Dymski, G. A. (2006). Discrimination in the Credit and Housing Markets: Findings and Challenges. In *Edward Elgar Publishing eBooks*.
<https://doi.org/10.4337/9781847200150.00016>
- Easthope, H. (2004). A place called home. *Housing Theory And Society*, 21(3), 128–138.
<https://doi.org/10.1080/14036090410021360>
- EUR-Lex Europa. (n.d.). *Ken uw rechten bescherming tegen discriminatie*. eur-lex.europa.eu. Retrieved on 24 May 2024, from
https://eur-lex.europa.eu/resource.html?uri=cellar:5a511c88-b218-47b5-9f3e-4709d650e28b.0001.04/DOC_2&format=PDF#:~:text=Indirecte%20discriminatie%20kan%20in%20bepaalde,bereiken%20passen%20en%20noodzakelijk%20zijn.
- Gemeente Rotterdam. (n.d.a). *Screening huurders*. Retrieved on 18 June 2024, from
<https://www.rotterdam.nl/screening-huurders>
- Gemeente Rotterdam. (n.d.b). *Wijkprofiel Rotterdam*. wijkprofiel.rotterdam.nl. Retrieved on 18 February 2024, from <https://wijkprofiel.rotterdam.nl/nl/2022/hulp/themas>
- Gemeente Rotterdam. (n.d.c). *Wet goed verhuurderschap*. Retrieved on 24 May 2024, from
<https://www.rotterdam.nl/wet-goed-verhuurderschap#>
- Gordon, D., Adelman, L., Ashworth, K., Bradshaw, J., Levitas, R., Middleton, S., Pantazis, C., Patsios, D., Payne, S. R., Townsend, P., & Williams, J. C. (2000). *Poverty and social exclusion in Britain*. <https://doi.org/10.51952/9781447366843>
- Gotham, K.F. (2002). *Race, Real Estate, and Uneven Development: The Kansas City Experience, 1900–2000*. Albany: State University of New York Press.
- Hammarberg, K., Kirkman, M., & De Lacey, S. (2016). Qualitative research methods: when to use them and how to judge them. *Human Reproduction*, 31(3), 498–501.
<https://doi.org/10.1093/humrep/dev334>

- Hart, C. S. (2018). Education, inequality and social justice: A critical analysis applying the Sen-Bourdieu Analytical Framework. *Policy Futures in Education*, 17(5), 582–598. <https://doi.org/10.1177/1478210318809758>
- Hernandez, J. (2009). Redlining revisited: Mortgage lending patterns in Sacramento 1930–2004. *International Journal Of Urban And Regional Research*, 33(2), 291–313. <https://doi.org/10.1111/j.1468-2427.2009.00873.x>
- Hillier, A. E. (2003). Redlining and the home owners' loan corporation. *Journal of Urban History*, 29(4), 394-420. <https://doi.org/10.1177/0096144203029004002>
- Hillier, A. E. (2005). Residential security maps and neighborhood appraisals: the home owners' loan corporation and the case of Philadelphia. *Social Science History*, 29(2), 207-233. <https://www.jstor.org/stable/40267873>
- Hillier, J., & Rooksby, E. (2005). *Habitus: A Sense of Place*. Routledge.
- Ismail, A. S., Azili, N. S., & Taufik, F. A. (2019). The effectiveness of public facilities in low cost in housing flats from residential satisfaction towards sustainable living. *Asia Proceedings Of Social Sciences*, 5(1), 1–6. <https://doi.org/10.31580/apss.v5i1.1066>
- Israel, E., & Frenkel, A. (2017). Social justice and spatial inequality. *Progress in Human Geography*, 42(5), 647–665. <https://doi.org/10.1177/0309132517702969>
- Jackson, K. T. (1980). Race, Ethnicity, and Real Estate Appraisal. *Journal Of Urban History*, 6(4), 419–452. <https://doi.org/10.1177/009614428000600404>
- Jalali, S., & Wohlin, C. (2012). Systematic literature studies: database searches vs. backward snowballing. In *Proceedings Of The ACM-IEEE International Symposium On Empirical Software Engineering And Measurement*, 29-38. <https://doi.org/10.1145/2372251.2372257>
- Jehoel-Gijsbers, G., & Vrooman, C. (2007). Explaining Social Exclusion. The Netherlands Institute For Social Research|SCP. <https://www.narcis.nl/publication/RecordID/oai:scp.nl:aec6f98d-b4c2-4492-98a8-b0e2572d9bed>

- Jung, K. H., Pitkowsky, Z., Argenio, K., Quinn, J. W., Bruzzese, J., Miller, R. L., Chillrud, S. N., Perzanowski, M., Stingone, J. A., & Lovinsky-Desir, S. (2022). The effects of the historical practice of residential redlining in the United States on recent temporal trends of air pollution near New York City schools. *Environment International*, 169, 107551. <https://doi.org/10.1016/j.envint.2022.107551>
- Kadi, J., Banabak, S., & Schneider, A. (2022). Widening gaps? Socio-spatial inequality in the “very” European city of Vienna since the financial crisis. *Cities*, 131, 103887. <https://doi.org/10.1016/j.cities.2022.103887>
- Kerbo, H. R. (2003). *Social Stratification and Inequality: Class Conflict in Historical, Comparative, and Global Perspective*. McGraw-Hill Humanities, Social Sciences & World Languages.
- Koster, H., & Van Ommeren, J. (2022). Neighbourhood stigma and place-based policies. *Economic Policy*. <https://doi.org/10.1093/epolic/eiac039>
- Krimmel, J. (2018). Persistence of Prejudice: Estimating the Long Term Effects of Redlining. *SocArXiv*. <https://doi.org/10.31235/osf.io/jdmq9>
- Lane, H. M., Morello-Frosch, R., Marshall, J. D., & Apte, J. S. (2022). Historical Redlining Is Associated with Present-Day Air Pollution Disparities in U.S. Cities. *Environmental Science & Technology Letters*, 9(4), 345–350. <https://doi.org/10.1021/acs.estlett.1c01012>
- Levitas, R. (1998). Three Discourses of Social Exclusion. In *Palgrave Macmillan UK eBooks* (pp. 7–28). https://doi.org/10.1057/9780230372528_2
- Leyshon, A., & Thrift, N. (1994). Access to Financial Services and Financial Infrastructure Withdrawal: Problems and Policies. *Area*, 26, 268–275. [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1475-4762/homepage/Leyshon.pdf](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1475-4762/homepage/Leyshon.pdf)
- Lobao, L., Hooks, G., & Tickamyer, A. (2007). Introduction: Advancing the sociology of spatial inequality. ResearchGate. https://www.researchgate.net/publication/279567098_Introduction_Advancing_the_sociology_of_spatial_inequality

- Lynch, E. E., Malcoe, L. H., Laurent, S. E., Richardson, J., Mitchell, B. C., & Meier, H. C. (2021). The legacy of structural racism: Associations between historic redlining, current mortgage lending, and health. *SSM, Population Health*, 14, 100793. <https://doi.org/10.1016/j.ssmph.2021.100793>
- Malone, K. (1999). "Growing up in cities" as a model of participatory planning and "place making" with young people. *Youth Studies Australia*, 18(2), 17–23. <https://search.informit.com.au/documentSummary;dn=991111860;res=IELAPA;type=pdf>
- Manzo, L. C. (2003). Beyond house and haven: toward a revisioning of emotional relationships with places. *Journal Of Environmental Psychology*, 23(1), 47–61. [https://doi.org/10.1016/s0272-4944\(02\)00074-9](https://doi.org/10.1016/s0272-4944(02)00074-9)
- Massey, D. S. (2015). The Legacy of the 1968 Fair Housing Act. *Sociological Forum*, 30(S1), 571–588. <https://doi.org/10.1111/socf.12178>
- Méndez, M. L. H., Otero, G., Link, F., López-Morales, E., & Gayo, M. (2020). Neighbourhood cohesion as a form of privilege. *Urban Studies*, 58(8), 1691–1711. <https://doi.org/10.1177/0042098020914549>
- Mollenkopf, J.H. (1983). *The contested city*. Princeton: Princeton University Press.
- Nationaal Programma Rotterdam Zuid. (z.d.). *Nationaal Programma Rotterdam Zuid*. nprz.nl. Retrieved on 18 June 2024, from <https://www.nprz.nl/>
- Nationale Hypotheek Garantie. (n.d.). *Over NHG*. NHG. Retrieved on 22 February 2024, from <https://www.nhg.nl/over-nhg/over-nhg/>
- Pain, K. (2008). Spaces of Practice in Advanced Business Services: Rethinking London—Frankfurt Relations. *Environment And Planning D: Society And Space*, 26(2), 264–279. <https://doi.org/10.1068/d410t>
- Park, K. A., & Quercia, R. G. (2019). Who Lends Beyond the Red Line? The Community Reinvestment Act and the Legacy of Redlining. *Housing Policy Debate*, 30(1), 4–26. <https://doi.org/10.1080/10511482.2019.1665839>

- Pynoos, J., Hartman, C. W., & Schafer, R. (1973). *Housing Urban America: Ed.*
- Rauchway, E. (2008). *The Great Depression and the New Deal: A Very Short Introduction*.
<http://ci.nii.ac.jp/ncid/BA85004976>
- Roitman, S. (2010). Gated communities: definitions, causes and consequences.
Proceedings Of The Institution Of Civil Engineers, 163(1), 31–38.
<https://doi.org/10.1680/udap.2010.163.1.31>
- Room, G. (1999). Social exclusion, solidarity and the challenge of globalization. *International Journal Of Social Welfare*, 8(3), 166–174. <https://doi.org/10.1111/1468-2397.00080>
- Ross, S.L., Yinger, J., (1999). *Other evidence of discrimination: recent studies of redlining and of discrimination in loan approval and loan terms*. In: Turner, M.A., Skidmore, F. (Eds.), *Mortgage Lending Discrimination: A Review of Existing Evidence*. Urban Institute Press, Washington, DC, pp. 85–106.
- Rothstein, R. (2017). *The color of law: A forgotten history of how our government segregated America*. Liveright Publishing.
- Rouse, C., Bernstein, J., Knudsen, H., & Zhang, J. (2021). *Exclusionary Zoning: Its Effect on Racial Discrimination in the Housing Market*. The White House.
<https://www.whitehouse.gov/cea/written-materials/2021/06/17/exclusionary-zoning-its-effect-on-racial-discrimination-in-the-housing-market/>
- Schill, M. H., & Wächter, S. M. (1995). The Spatial Bias of Federal Housing Law and Policy: Concentrated Poverty in Urban America. *University Of Pennsylvania Law Review*, 143(5), 1285. <https://doi.org/10.2307/3312477>
- Schinkel, W., & Van Den Berg, M. (2011). City of Exception: The Dutch Revanchist City and the Urban Homo Sacer. *Antipode*, 43(5), 1911–1938. <https://doi.org/10.1111/j.1467-8330.2010.00831.x>
- Scott, D. M., & Wilson, W. J. (1998). When Work Disappears: The World of the New Urban Poor. *African American Review*, 32(3), 493. <https://doi.org/10.2307/3042249>

- Sharkey, P. (2013). Rich neighborhood, poor neighborhood: How segregation threatens social mobility. *Brookings*. <https://www.brookings.edu/articles/rich-neighborhood-poor-neighborhood-how-segregation-threatens-social-mobility/>
- Statistieken buurt Kralingen-West*. (2024). AlleCijfers.nl. Retrieved on 8 May 2024, from <https://allecijfers.nl/buurt/kralingen-west-rotterdam/>
- Statistieken buurt Oud Crooswijk*. (2024). AlleCijfers.nl. Retrieved on 8 May 2024, from <https://allecijfers.nl/buurt/oud-crooswijk-rotterdam/>
- Traub, A. M. (2000). The Wall Is Down, Now We Build More: The Exclusionary Effects of Gated Communities Demand Stricter Burdens Under the FHA, 34 *J. Marshall L. Rev.* 379 (2000). *The John Marshall Law Review*, 34(1), 16. <http://repository.jmls.edu/lawreview/vol34/iss1/16/>
- United Nations. (n.d.). *THE 17 GOALS | Sustainable Development*. sdgs.un.org. Retrieved on 18 February 2024, from <https://sdgs.un.org/goals>
- Van Der Vet, J. (2004). Boekrecensie - Manuel Aalbers (2003) Redlining in Nederland: oorzaken en gevolgen van uitsluiting op de hypotheekmarkt. *AGORA*. <https://openjournals.ugent.be/agora/article/62289/galley/186673/view/>
- Van Thiel, S. (2014). *Research Methods in Public Administration and Public Management*. In *Routledge eBooks*. <https://doi.org/10.4324/9780203078525>
- Verkenning discriminatie en racisme op de woningmarkt. (2023). In *Verwey-Jonker Instituut*. <https://www.verwey-jonker.nl/publicatie/verkenning-discriminatie-en-racisme-op-de-woningmarkt/>
- Weber-Newth, F. (2019). The Game of Urban Regeneration. In *The Game of Urban Regeneration* (pp. 67–90). <https://doi.org/10.1515/9783839444863-005>
- Wetherell, S. P. (2020). “Redlining” the British City. *Renewal*, 28(2). <https://eprints.whiterose.ac.uk/163168/>

Wijkprofiel Rotterdam - Kralingen-West. (n.d.). wijkprofiel.rotterdam.nl. Retrieved on 8 May 2024, from <https://wijkprofiel.rotterdam.nl/nl/2024/rotterdam/kralingen-crooswijk/kralingen-west?toon=alles#contextindicatoren>

Wijkprofiel Rotterdam - Oud Crooswijk. (n.d.). wijkprofiel.rotterdam.nl. Retrieved on 8 May 2024, from <https://wijkprofiel.rotterdam.nl/nl/2024/rotterdam/kralingen-crooswijk/oud-crooswijk?toon=alles#contextindicatoren>

Wining, L. C., & Michney, T. M. (2021). The Roots of Redlining: Academic, Governmental, and Professional Networks in the Making of the New Deal Lending Regime. *The Journal Of American History*, 108(1), 42–69. <https://doi.org/10.1093/jahist/jaab066>

Woonbond. (2023). *Rotterdamwet*. Retrieved on 24 May 2024, from <https://www.woonbond.nl/thema/huren-recht/rotterdamwet/#>

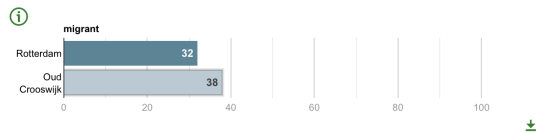
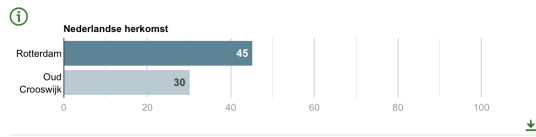
Time planning

| Time Planning bachelor Thesis 2023-2024 | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|
| | Feb | Mar | Apr | May | Jun | Jul | Aug |
| Research proposal phase | | | | | | | |
| Writing introduction to the research | | | | | | | |
| Writing literature review and theoretical framework | | | | | | | |
| Writing Methodology | | | | | | | |
| Making the time planning | | | | | | | |
| Processing feedback from supervisor | | | | | | | |
| Data collection | | | | | | | |
| Establishing cases in Rotterdam | | | | | | | |
| Adjustment to research proposal | | | | | | | |
| Planning interviews | | | | | | | |
| Developing interview guide | | | | | | | |
| Conducting semi-structured interviews | | | | | | | |
| Literature review (content analysis) | | | | | | | |
| Multiple case study | | | | | | | |
| Data analysis | | | | | | | |
| Highlighting important information from transcripts | | | | | | | |
| Reporting results | | | | | | | |
| Writing empirical results | | | | | | | |
| Answering research sub questions | | | | | | | |
| Writing discussion | | | | | | | |
| Writing conclusion | | | | | | | |
| Writing introduction | | | | | | | |
| Writing summary | | | | | | | |
| Writing preface | | | | | | | |
| General tasks | | | | | | | |
| Lay-out check | | | | | | | |
| Spellcheck | | | | | | | |
| Processing feedback | | | | | | | |
| Finalising research proposal | | | | | | | |
| Finalising bachelor thesis | | | | | | | |
| Feedback moments supervisor | | | | | | | |

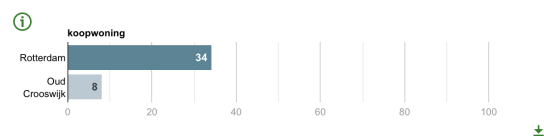
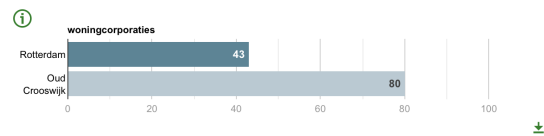
| Deadlines | | | | | | | |
|---|------------|--|--|--|------------|--|--|
| Deadline research proposal | By 23rd | | | | | | |
| Deadline draft version bachelor thesis | | | | | By 7th | | |
| Deadline thesis – 1 st opportunity | | | | | By 26th | | |

Annex 1 Oud Crooswijk vs Kralingen-West

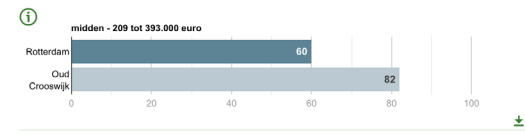
Herkomst



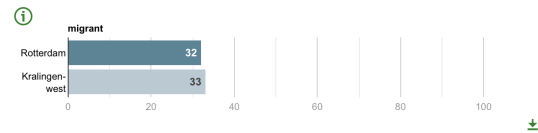
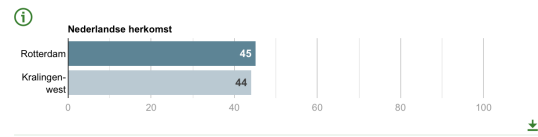
Eigendom



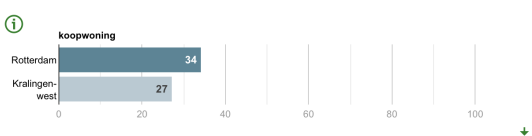
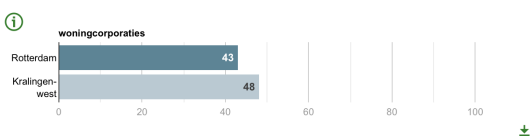
WOZ-waarde



Herkomst



Eigendom



WOZ-waarde

