

The relationship between the urban structure of post-war neighbourhoods and their liveability



Groningen, August 2011

Master's thesis Research Master Regional Studies; Spaces and Places, Analysis and Interventions
Faculty of Spatial Sciences, University of Groningen, the Netherlands

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Acknowledgments

“Het is eindelijk een feit, ik weet ik ben volwassen. Ik moet nu op gaan passen met werk en geld en tijd. De jaren zijn voorbij van luieren en leren, onschuldig potverteren, beschonken zijn en blij”.
(Boudewijn de Groot, Voor vrienden van vroeger).

A weight is lifted off my shoulders as I hand in this final version of my master’s thesis for the Research Master Regional Studies; Spaces and Places, Analysis and Intervention. For me this thesis is not only a reflection of a period of hard work but it also represents the end of my ‘career’ as a student at the Faculty of Spatial Sciences at the University of Groningen. I really enjoyed all aspects of my student life during the last five years but now I am looking forward to beginning a new phase of my life.

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Thanks to my friends and family for their support and friendship. You are truly wonderful! Above all, I would like to express my gratitude to my parents, Ellen and Wim, for their unwavering support and their faith in me. And I would like to thank Arne for everything and more.

Thank you to you all!

Linden Douma
Groningen
August 2011

Abstract

The correlation between the urban structure of post-World War II (WWII) neighbourhoods and their perceived liveability is the central issue of this research. The resident's perception on liveability is especially valuable since residents can arguably describe best as well as evaluate liveability in relation to the contextual environment of their post-WWII neighbourhood.

The term liveability is defined as the extent to which the quality of both the physical and the social environment, within a certain geographical area, as perceived by people, facilitates wellbeing. Five main aspects are identified, namely dwelling, amenities, living environment, social cohesion, and safety. The term urban structure refers to the arrangement of the elements that make up a neighbourhood and how these elements interact. Three main aspects are identified; physical form, disclosure structure, and functional structure. It is argued that there is a strong correlation between the urban structure of a neighbourhood and its liveability, both physically as well as socially.

In the Netherlands, particularly a large number of post-WWII neighbourhoods are faced with a multitude of liveability problems. The distinctive urban structure of these neighbourhoods is the result of the idealistic and modernist planning approach of the 1950s, '60s and '70s. The emphasis on planning control during their construction is what unmistakably sets them apart from all other types of neighbourhoods.

In this research, the correlation between the modernist, post-war urban structure and perceived liveability is examined by means of a case study approach. The data collection for the current research is carried out in the neighbourhood Selwerd in Groningen, located in the northern part of the Netherlands. A mix of qualitative methods is employed, namely in-depth interviews and resident-created photography. Twenty-five research participants were involved in the in-depth interviews and six residents participated in the photography exercise.

Above all, the findings of the present study show that perceived liveability in Selwerd is not straightforward. Moreover, and importantly, the research concludes that there appears to be a correlation between urban structure and liveability. In other words, a suitable urban design is of significant importance for the liveability of a neighbourhood. It is argued that the post-modern urban structure is not by definition disastrous.

Key words: Liveability, urban structure, post-war neighbourhoods, Selwerd, the Netherlands, Groningen.

Table of contents

Acknowledgments	5
Abstract	7
Table of contents	9
List of figures	11
List of tables	13
1. Introduction	15
1.1 Introduction	15
1.2 Research objectives and research questions	16
1.3 Outline	16
2. Theoretical framework	17
2.1 Introduction	17
2.2 Liveability: background	17
2.2.1 Liveability	17
2.2.2 The social and the physical environment	18
2.3 Urban structure: background	21
2.3.1 Urban structure	21
2.3.2 The correlation between liveability and urban structure	22
2.4 Liveability and the urban structure in Dutch post-war neighbourhoods	23
2.4.1 Prevailing thoughts from 1945 to 1970	23
2.4.2 Prevailing thoughts on liveability in post-war neighbourhoods	26
3. Research design	29
3.1 Introduction	29
3.2 The case study approach	29
3.3 Case selection	30
3.4 Data collection methods	31
3.4.1 In-depth interviews	31
3.4.2 Photography	32
4. Case: Selwerd	35
4.1 Introduction	35
4.2 Area characteristics	35
4.2.1 Geographical location	35
4.2.2 Population characteristics	36
4.3 Urban structure analysis	36
4.3.1 History	36
4.3.2 Physical form	37
4.3.3 Disclosure structure	42
4.3.4 Functional structure	42
4.4 Trends in Selwerd's liveability	43
5. Findings	45
5.1 Introduction	45
5.2 Perceived liveability and its relationship with the urban structure in Selwerd	45
5.2.1 The physical environment	45

5.2.2 The social environment	50
5.3 Residents with cameras	54
5.3.1 The photographs	54
5.3.2 Selwerd's liveability through the lenses of its residents	61
6. Conclusion	65
References	67
Appendices	75
A Interview guide	75
B Explanatory letter for participants of the photography exercise	83

List of figures

Figure	Title	Page
1	General characteristics of liveability	17
2	Definition of perceived liveability	18
3	Two dimensions and five components of liveability	19
4	Urban structure	21
5	Characteristics of the urban structure in post-WWII neighbourhoods	25
6	Geographical location of the Municipality of Groningen in the Netherlands	35
7	Geographical position of Selwerd in the city of Groningen	36
8	Selwerd (1971) as seen from the west	37
9	Overview of the design of the urban structure in Selwerd	38
10	High-rise building in Selwerd, used for student housing	39
11	Single-family homes (public housing) in Selwerd	39
12	Medium-rise apartment building at Eikenlaan in Selwerd	40
13	The stamps in the design of the urban structure in Selwerd	41
14	Disclosure structure of Selwerd	42
15	Overview of Esdoornlaan Selwerd	43
16	Playground	44

List of tables

Table	Title	Page
1	Respondents' characteristics	32
2	Photographers' characteristics	33
3	Photographed aspects and their evaluations	61

[1] Introduction

1.1 Introduction

Liveability is the main theme in the urban policy of the Netherlands in the first decade of the 21st century (Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu (VROM), 2008; Leidelmeijer et al., 2011). The first studies on liveability in the Netherlands were conducted in the 1960s and '70s, but the concept is already used internationally since 1958 (Groot, 1969; van Geen, 1974; Leidelmeijer and van Kamp, 2003; McNulty, 2003). Liveable neighbourhoods are still considered important and improving liveability in order to support people's overall wellbeing is key objective in the policy of the current Ministry of the Interior and Kingdom Relations¹. One is particularly concerned with liveability in the larger urban agglomerations (Oppelaar and Wittebrood, 2006). The bigger cities in the Netherlands conduct liveability surveys every two years, but an increasing number of smaller cities also choose to do so in recent years (Gemeente Groningen, 2011). Thus, liveability is high on the political agenda and already a wide variety of initiatives have been launched to improve liveability in urban neighbourhoods (Kullberg, 2006; Leidelmeijer et al., 2011).

In particular a large number of post-World War II² urban neighbourhoods in the Netherlands suffer from liveability problems nowadays (van Beckhoven et al., 2005; van Dijk and Wittebrood, 2007; Argioli et al., 2008; van Bergeijk et al., 2008). Post-WWII neighbourhoods are neighbourhoods that were built between 1945 and 1970, after the Second World War (Jansen, 2000; Argioli et al., 2008; Nicis Institute, 2008). An important characteristic of these post-war neighbourhoods is the idealistic, modernist urban development plans according to which they were built in the 1950s, '60s and '70s (van Beckhoven et al., 2005). The modernistic planning approach can be described as rational, efficient and future-oriented (Knox and Marston, 2007). The emphasis on planning control during the period that the post-WWII neighbourhoods were constructed is the most glaring difference between the post-WWII neighbourhoods and all other types of neighbourhoods (Coleman, 1985). Never before and never again control on planning was so dominant in urban planning history. In recent decades, the post-war neighbourhoods are associated more and more with a variety of problems and difficulties (Coleman, 1985; van Beckhoven et al., 2005; van Dijk and Wittebrood, 2007; Argioli et al., 2008). Now, about five decades after the construction of these neighbourhoods, urban renewal is taking place in many of the post-WWII neighbourhoods in the Netherlands in order to solve liveability problems (van Beckhoven, 2007; Dekker and van Kempen, 2009).

Likewise, liveability problems in post-WWII neighbourhoods are present in several other Western-European countries, like Britain, France, and Sweden. The difficulties within these areas have become a major policy challenge in European cities (van Gent, 2008). Ouweland and Davis (2004) argue that the restructuring of post-WWII neighbourhoods is an ongoing activity.

Despite the increased attention post-WWII neighbourhoods have received from scientists and policymakers, there has been a lack of general insight into the correlation between the design of the urban structure of post-war neighbourhoods and their liveability (van Kempen and Bolt, 2003). Moreover, existing research on this topic predominantly reflects the perspectives and experiences of researchers, policy makers, and other professionals, thereby ignoring the perceptions and feelings of the actual residents of the post-war neighbourhoods. But, who other than the residents can best describe and evaluate liveability in relation to the contextual environment of the post-war neighbourhood they live in?

More research is needed to fill in the gaps in the existing scientific knowledge. The resulting additional knowledge about the correlation between the design of the urban structure of post-war neighbourhoods and their perceived liveability could be used to determine adequate interventions to solve the existing variety of liveability problems, therewith contributing to the wellbeing of the residents in post-war neighbourhoods. In this study, the focus is therefore on examining residents' prevailing perceptions on liveability in post-war neighbourhoods and the correlation with their urban structure.

¹ The tasks of the former Ministry of VROM are assigned to the new Ministry of Infrastructure and the Environment and the Ministry of the Interior and Kingdom Relations in the Netherlands since October 2010.

² In the present study post-WWII neighbourhoods are also called post-war neighbourhoods. Both names are used interchangeably and have the same meaning.

1.2 Research objectives and research questions

In order to examine the relationship between the design of the urban structure of post-WWII neighbourhoods and their perceived liveability the following research objective was formulated:

To examine the prevailing perceptions of residents on liveability with regard to the post-war urban structure in post-war neighbourhoods, to examine how this relates to the prevailing views of urban planners during the construction of these neighbourhoods, and to examine which elements of the post-war urban structure with regard to liveability are important according to the residents.

To achieve this, a main research question was formulated on the basis of the aforementioned objective, which functions as the main directory of the present study. The central question of this research is:

How do residents of post-war neighbourhoods perceive liveability within their neighbourhood in particular with regard to the design of the post-war urban structure, how does this relate to the prevailing views of urban planners during the time these neighbourhoods were constructed, and which elements of the post-war urban structure are important with regard to liveability in the neighbourhood, according to the residents?

In order to address the main research question, the following sub-questions need to be answered:

- *What were the views of urban planners on liveability in post-war neighbourhoods during the period in which these neighbourhoods were constructed, in particular with regard to the design of the post-war urban structure?*
- *What are the prevailing perceptions of residents of post-war neighbourhoods on liveability within their neighbourhood with regard to the post-war urban structure?*
- *According to the residents which elements of the post-war urban structure are important with regard to liveability in the neighbourhood, and how are these elements valued?*

In order to answer the first sub-question, the study uses a literature review. The second and third sub-questions require detailed data. Therefore, these questions are addressed by adopting a case study approach.

1.3 Outline

Following this introductory chapter, Chapter 2 discusses the theoretical background of the terms liveability and urban structure and elaborates on the assumed correlations between these two concepts. Subsequently, the remaining part of the chapter focuses on liveability and urban structure specifically regarding post-war neighbourhoods. Next, Chapter 3 elaborates on the methodology applied to the research. The study location of this research, the post-war neighbourhood Selwerd in the city of Groningen, is described in Chapter 4. In Chapter 5 the findings of the case study are discussed, and lastly Chapter 6 reviews the main outcomes and conclusions of the present study.

[2] Theoretical framework

2.1 Introduction

The central issue in this research is the relationship between the design of the urban structure in post-WWII neighbourhoods and their liveability, as perceived by residents. More specifically, this study examines the nature and degree of interplay between the urban structure of a post-WWII neighbourhood and the level of perceived liveability in that area. Section 2.2 discusses the background of liveability and elaborates on both the physical and the social dimensions of liveability. Subsequently, section 2.3 discusses the background of urban structure and its relationship with perceived liveability. This background is important because the relationship between these concepts is illustrated and discussed in the subsequent chapters of this thesis, based on a case study in Groningen. Section 2.4 focuses on the liveability in post-WWII neighbourhoods, specifically regarding the urban structure in these neighbourhoods. Section 2.4.1 reviews the prevailing thoughts on liveability during the time these neighbourhoods were built in relation to the design of the urban structure. Subsection 2.4.2 discusses the prevailing thoughts on the current liveability in Dutch post-WWII neighbourhoods.

2.2 Liveability: background

2.2.1 Liveability

There is no generally accepted definition of liveability that is used in scientific literature, although the term liveability has already been a part of widespread social debate for years. Many actors, including municipalities, housing associations, and residents are attempting to improve the liveability in urban neighbourhoods. Although liveability is commonly used to legitimate interventions within spatial planning and neighbourhood renewal, its attached meaning is different for every actor and individual. A very general definition of liveable is “suitable to live in or live with” (Van Dale, 2011). Above all, liveability is a multi-faceted notion and therefore it is not easy to develop an encompassing definition (RIGO, 2011). Therefore RIGO (2011, p.1) identified four general characteristics of liveability (as shown in Figure 1). These characteristics are also used to discuss the concept of liveability in the remaining part of this section.

The first characteristic is that liveability results from a process of interaction between people and their living environment. People have certain demands and needs with regard to their living environment. Veenhoven (2000) concludes that liveability refers to a certain degree of fitness of an environment to human beings. The environment is assumed to be liveable if a fitting relationship exists between people and their living environment (Veenhoven, 2000; Van Dorst, 2005).

Figure 1: General characteristics of liveability.

- **Liveability in an area results from a process of interaction between people and their living environment.**
- **Liveability relates to the living environment and consequently to a specific geographical scale.**
- **Liveability is made up of the inhabitants’ (more) subjective perceptions of the (more) objective characteristics of the living environment.**
- **Liveability is made up of both the social environment and the physical environment.**

Source: RIGO (2011).

Thus, liveability obviously concerns the living environment; however, one can look at the living environment on different levels of scale ranging from the individual to the global level (van Kamp et al., 2003). Therefore, geographical scale level is the second characteristic of liveability. Examples of different scale levels are the dwelling, street, city or, as in this study, the neighbourhood.

The third characteristic of liveability is that its level is determined on the basis of people’s subjective perceptions of indicators in the contextual environment. Liveability is not necessarily similarly perceived by

different individuals (van de Wardt and de Jong, 1997; Van Dorst, 2005). People are able to rate different aspects of liveability in their environment and to support their choices with arguments. The most logical way of determining liveability in a certain area is therefore on the basis of an individual's (non) appreciation (van de Wardt and de Jong, 1997; van der Valk and Musterd, 1998; Ministerie van Volksgezondheid, Ruimtelijke Ordening en Milieu, 2001). Similarly, Leidelmeijer and van Kamp define liveability as a "residents' evaluation of the living environment" (2003, p. 5). Residents' value allowances depend on the extent to which individual preferences and needs with regard to the living environment differ from the current situation (van Dorst, 2005). Therefore, Pacione (1990) argues that liveability is a "quality that is not an attribute inherent in the environment but is a behaviour-related function of the interaction between environmental characteristics and personal characteristics" (p. 95). On the basis of the before mentioned arguments, in this study people's perceptions of the liveability in their living environment (in this case the neighbourhood) are considered the most important; perceived liveability is therefore the key point in this study.

The fourth characteristic of liveability concerns the two dimensions of which the living environment is composed, namely the social and the physical environment. Residents' appreciation of liveability in their neighbourhood is based on the interplay between the quality of people's physical interactions with the built environment and the quality of people's social interactions within this built environment (Gifford, 1997; De Hart, 2002; Janssen-Jansen et al., 2009). So, the living environment is composed of both a social and a physical dimension. Section 2.2.2 elaborates further on different aspects within the social and the physical dimensions of the neighbourhood.

2.2.1.1 Defining liveability

Section 2.2.1 showed that liveability is indeed a multi-faceted notion with many possible definitions. Therefore, it is necessary to develop an integral definition that fits this study's emphasis on perceived liveability. As mentioned before, a very simple definition of liveability could be: residents' appreciation of the living environment (Leidelmeijer and Marsman, 2001). However, this definition does not fully incorporate the four characteristics of liveability that were described above (see again Figure 1). Therefore this study uses the definition of liveability shown in Figure 2.

Figure 2: Definition of perceived liveability.

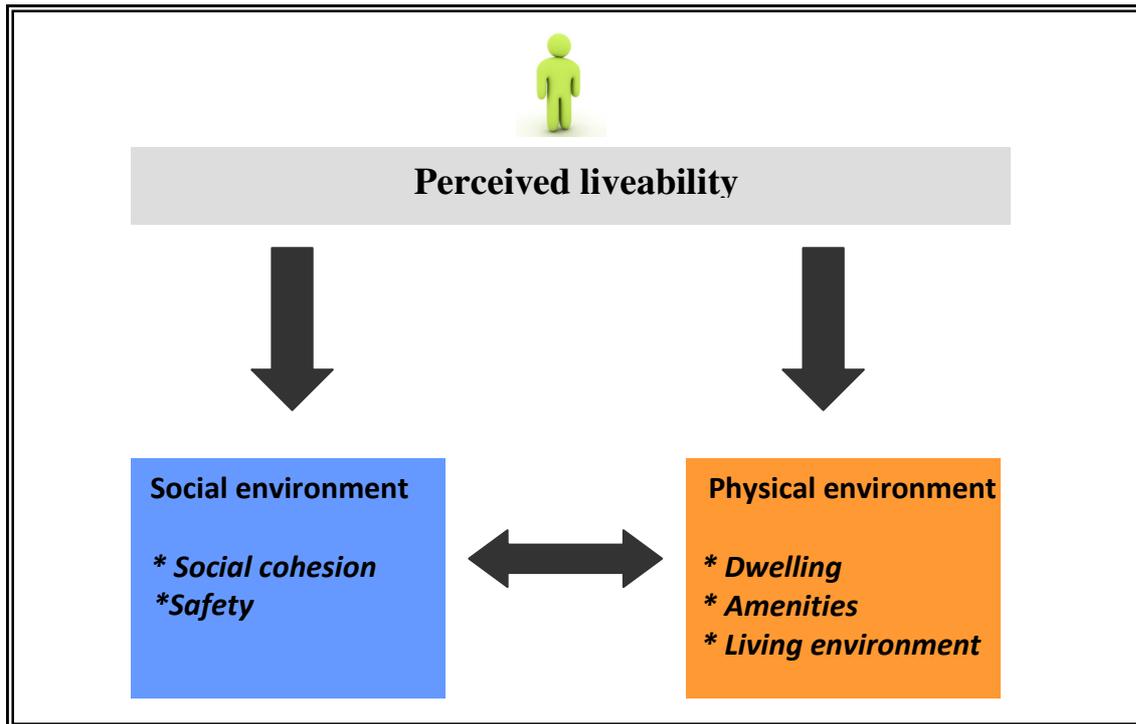
Perceived liveability is the extent to which the quality of both the physical and the social environment, within a certain geographical area, as perceived by people, facilitates wellbeing.

Source: Veenhoven (2000) and Janssen-Jansen et al. (2009).

2.2.2 The social and the physical environment

As was discussed in section 2.2.1, liveability is determined on the basis of people's perceptions of the quality of two different environments, namely the social and the physical environment. In turn, both of these dimensions are also made up of multiple components, as shown in Figure 3. These particular components were derived from liveability surveys and research (see for example Ministerie van Volksgezondheid, Ruimtelijke Ordening en Milieu, 2008; Gemeente Groningen, 2011). According to the Ministerie van Volksgezondheid, Ruimtelijke Ordening en Milieu (2008) there is a strong reciprocal relationship between the perceived quality of the physical environment and the perceived quality of the social environment.

Figure 3: Two dimensions and five components of liveability.



2.2.2.1 The social environment

In both literature and policy the urban neighbourhood has emerged as an important setting for social relations (Kearns and Forrest, 2001). As is shown in Figure 3, both social cohesion and safety are important aspects of liveability in the social environment (Doeschot, 2003; Ministerie van Volksgezondheid, Ruimtelijke Ordening en Milieu, 2008; Gemeente Groningen, 2011). Social systems can refer to different levels of scale. The present study is concerned with the meso scale-level, which is the neighbourhood or a community (Ruijsbroek and Verweij, 2009).

The concept of social cohesion is generally used to describe the social environment in a neighbourhood. The notion of social cohesion stems from the field of sociology and was introduced by Emile Durkheim, Georg Simmel, and Max Weber in the late 19th century and at the beginning of the 20th century (Dekker, 2006). The concept of social cohesion regained popularity in the 1990s and received much attention from urban researchers in several academic fields, including psychology, geography, and sociology. Kearns and Forrest (2001) also stress that social cohesion is one of those concepts that give the impression that everyone knows what you are talking about, even though its exact content is poorly defined. Different definitions of social cohesion exist in international literature and therefore it can be regarded as a multi-faceted notion, just like liveability (Bolt and Torrance, 2005).

Social cohesion concerns the extent to which individuals or groups are integrated within society and the extent of the connectedness, identification, and solidarity between those groups and individuals (de Kam and Needham, 2003; van Ginkel and Deben, 2002; Berkman and Glass, 2000). Komter et al. (2000) simply define social cohesion as the cement of society. It is not possible to provide social cohesion alone, it always involves multiple people. People's involvement in the living environment impacts on their behaviour as well as on their perceptions.

Bolt and Torrance (2005) distinguish three components that are meaningful to social cohesion on the neighbourhood level, namely:

- Behavioural component
- Values component
- Perceptual component

The behavioural component concerns the degree of residents' social participation. The behavioural component results from social interaction between residents of a neighbourhood and is regarded as essential for social cohesion (Ruijsbroek and Verweij, 2009). The values component concerns the degree of similar opinions about the norms and rules in the neighbourhoods. The social norms in an area influence people's behaviour in a given situation. Finally, the less tangible perceptual component covers residents' degree of identification and emotional attachment to the neighbourhood and its community (Kearns and Forrest, 2001). Bolt and Torrance (2005) argue that coherence exists among these three components; however the components can also act independently from each other. This independent nature of the three components is also noted by van der Horst et al. (2001), who stress that it is possible for people to have a strong sense of identification with their neighbourhood and neighbours (perceptual component), without having frequent contact with their neighbours (behavioural component).

Kearns and Forrest argue that "a cohesive society 'hangs together' if all the component parts fit in and contribute to society's collective project and wellbeing; and conflict between societal goals and groups, and disruptive behaviour, are largely absent or minimal" (2001, p. 996). The underlying assumption is that there is a negative correlation between social cohesion and the degree of societal problems that will occur (Kearns and Forrest, 2001; Ruijsbroek and Verweij, 2009). Therewith social cohesion can help enhance liveability in neighbourhoods (Dekker and Bolt, 2005). In this study the concept of social cohesion is the first aspect of the social environment in the neighbourhood that is discussed; the second aspect safety is safety.

Nowadays, the safety aspect of liveability has gained more importance in both policy and practice in the Netherlands. The Ministry of Justice and the Ministry of the Interior and Kingdom Relations jointly developed a safety programme called 'Towards a safer society'. This programme aims at improving both the objective and subjective safety of the residential environment (Wittebrood and van Dijk, 2007). But what is safety? Similar to liveability and social cohesion, safety is considered a multi-faceted notion (Bruinsma and Bernasco, 2004; Vanderveen, 2006; Boutellier, 2005). Two forms of safety are often distinguished, namely social unsafety and physical unsafety. Social unsafety concerns the threat that other people pose to health and goods. In contrast, physical unsafety concerns the threat to health and goods that is a consequence of accidents within the natural environment or technology (Helsloot, 2004; Elffers and de Jong, 2004). Similar to Bruinsma and Bernasco (2004) the present study does not take into account external threats to safety (from other countries, nature or technology), but only internal threats, like crime, nuisance, behaviour, and violations that lead to conflicts between (groups of) residents. Therefore, social (un)safety is the main concern here.

Social safety has both objective and subjective components (Leerkes and Bernasco, 2010). Objective safety does not take into account residents' perceptions but pertains to victimization (Lünnemann, 2003; Bruinsma and Bernasco, 2004; Wittebrood and van Beem, 2004). According to Leerkes and Bernasco, objective safety is "the measurable recorded experience of becoming a victim of a criminal act" (2010, p. 370). Subjective safety concerns "the assessment by residents of the local crime and nuisance rate, and the extent to which they feel safe, particularly in their own neighbourhoods" or homes (Elffers and de Jong, 2004; Vanderveen, 2006; Leerkes and Bernasco, 2010, p. 370). However, the relationship between objective and subjective safety is not so straightforward (Leerkes and Bernasco, 2010; Gemeente Groningen, 2011). Residents who live in comparable contextual circumstances with regard to crime usually do not feel the same degree of safety (Hale, 1996; Bernasco and Leerkes, 2010). So the use of crime rates alone is insufficient to explain or determine social safety and many other signs of disorder are important (Lewis and Salem, 1986; van Gemerden and Staats, 2006; Leerkes and Bernasco, 2010). Research has found associations between feelings of safety and aspects of both the social and the physical dimension of the neighbourhood (Ross and Mirowsky, 2001). For example, several studies have found that differences in the quality of the neighbourhood environment influence the actual and perceived levels of crime. 'Ordered' neighbourhoods with high levels of social cohesion, common social norms, and strong neighbourhood ties are assumed to have lower levels of crime (Sampson and Raudenbush, 1999; Ziersch et al., 2007). In contrast, residents are likely to feel less safe in 'disordered' neighbourhoods that are littered and poorly maintained, where neighbours do not know each other, and with a lack of shared social norms (Furedi, 1998; Palmer et al., 2005).

2.2.2.2 The physical environment

According to Dekker (2006) liveability is also affected by physical characteristics of neighbourhoods. The aspects of liveability generally examined in the physical environment are the dwellings, the available amenities, and the quality of the living environment (see again Figure 3). Resident's appreciation of the physical

environment is primarily based on its functionality and attractiveness. The first aspect of liveability in the physical environment is the dwelling. The relevant components of the dwelling are its maintenance, size, ambiance, and division.

The second aspect is the number and quality of the available amenities in the neighbourhood. For this research the studied amenities are public green spaces and shops and services in the neighbourhood.

The third aspect of liveability concerns the quality of the living environment. According to the Gemeente Groningen (2008), quality of the living environment is an important indicator for liveability in the neighbourhood. Signs of disorder, like neighbourhood dirtiness, graffiti, or vandalism may have a distinct negative impact on residents' sense of safety or comfort (Ziersch et al., 2007; Leerkes and Bernasco, 2010).

All in all, the different aspects and dimensions of liveability are highly interrelated. The initial quality of a neighbourhood can be a forceful determinant of its later situation, physically as well as socially (Prak and Priemus, 1986; van Beckhoven et al., 2005). Therefore it is argued that good urban design is needed to foster social cohesion and to prevent crime and physical disorder (Coleman, 1985; Saville and Cleveland, 2003; Ziersch et al., 2007). The assumed relation between liveability and the design of the urban structure in neighbourhoods is elaborated on further in the next section.

2.3 Urban structure: background

2.3.1 Urban structure

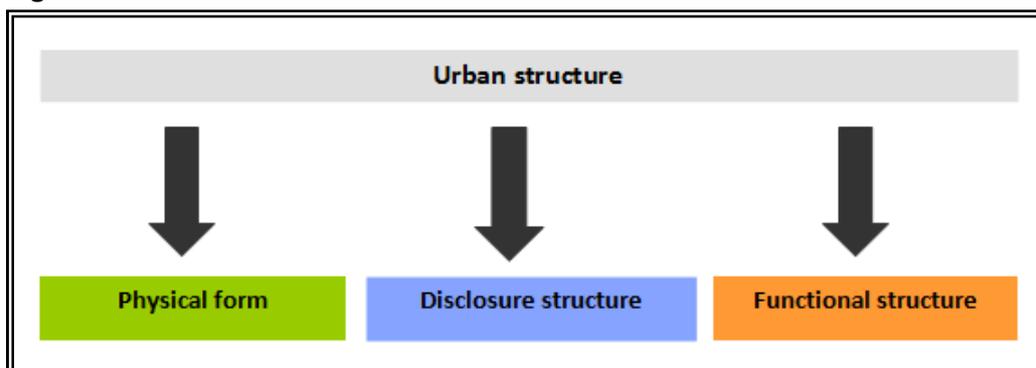
The term urban structure refers to the arrangement of the elements that make up a place in an urban area and how these elements interact. Basically a typology of the urban structure is made up of three elements, namely place, disclosure form, and construction form. Place concerns the underlying topography, for example open spaces or landscape. Disclosure form is the system of roads and sidewalks within an area. Finally the construction form is the range of building types. Lörzing et al. (2008) have turned these characteristics into three main aspects that can be used to characterize the urban structure in a neighbourhood (see Figure 4). These aspects are:

- The physical form of the built environment
- The appearance of the disclosure structure
- The functional structure

The physical form concerns the form of dominant buildings types, building blocks, and the building heights (Harbers et al., 2009). The disclosure structure refers to the road network (including sidewalks and bicycle paths), which can be subdivided in main and residential streets. This aspect also considers the extent to which dwellings are facing the direction of the streets. Lastly, the functional structure concerns the presence of amenities in the neighbourhood, and their location relative to the dwellings. The structure and form of the public spaces are also included in the functional structure. The interrelationships between all of these elements together determine the urban structure of a place; a well-planned, supportive urban structure lays the foundation for a liveable neighbourhood.

The urban structure influences liveability in both the physical and the social dimension. The relation between the urban structure and the aspects of liveability in the physical environment is rather straightforward and direct. However, the social environment aspects of liveability can also be influenced –although indirectly- by the urban structure. Section 2.3.2 elaborates further on the relation between urban structure and liveability.

Figure 4: Urban structure



Source: Lörzing et al. (2008).

2.3.2 The correlation between liveability and urban structure

As previously argued, the interrelationships between neighbourhood aspects together make places and a well-planned, supportive urban structure lays the foundation for a liveable neighbourhood. Cozens et al. (2005) argue that the significance “of the physical condition and ‘image’ of the built environment” has long been acknowledged. Similarly Verweij (2009) argues that the influence of the quality of a physical environment on its perceived liveability is high.

The first reason for this is that the design of the urban structure has a direct impact on the three aspects of liveability in the physical environment, which are the dwellings, the amenities, and the quality of the living environment. This is because the characteristics of these aspects are largely influenced by their building styles, their original design, and their initial quality. However, the appreciation of the physical environment also derives its meaning from its facilitating function for the social environment (van Dorst, 2002; van Dijk and Wittebrood, 2007). The neighbourhood functions as the social context of the behaviour of residents and other users. Quite recently, Ruijsbroek and Verweij (2009) noticed a strong correlation between quality of dwellings, the spatial layout of the neighbourhood, and social cohesion and subjective safety in neighbourhoods. Cozens et al. (2005) argue that a positive image of the built environment ensures that the physical environment continues to function effectively and “transmits positive signals to all users” (2005, p. 337). The neighbourhood’s positive self-image and proper functioning should therefore be safeguarded by means of maintaining the physical environment. Good urban design should be used to prevent signs of physical disorder in the neighbourhood (Saville and Cleveland, 2003; Ziersch et al., 2007). The design of the urban structure of the neighbourhood affects the behaviour of at least some residents and also of other users (Coleman, 1985). Therefore the urban design is not only considered to influence aspects of liveability in the physical environment, but also in the social environment.

Studies investigating the relationships between environmental design and liveability have been conducted since the mid-twentieth century (Lynch, 1960; Jacobs, 1961; Coleman, 1985). These studies identified several ways that the urban structure influence social cohesion and safety in neighbourhoods.

The first involves social cohesion; a suitable design of the urban structure of a neighbourhood could facilitate the possibilities for interaction between neighbours (Morrison, 2003; de Kam and Needham, 2003; Dekker, 2006). In contrast, certain aspects of the built environment can also make social contacts more difficult. The neighbourhood’s spatial lay-out needs a design that facilitates frequent contact between neighbours. The social cohesion in the neighbourhood and residents’ bond to the neighbourhood are positively influenced if people know each other (superficially), greet each other, and speak to each other. Consequently, problems like decay, nuisance, and crime are less likely to develop (Cozens et al., 2005). However, a high level of social cohesion does not necessarily require intensive interaction between neighbours; it merely requires that residents think that they can rely on each other whenever needed (Lee and Earnest, 2003). Residents of neighbourhoods where social networks are strong may feel higher levels of safety (Hale, 1996). Social cohesion is also positively related to social control (van Dijk and Wittebrood, 2007). Social control is a way to keep the neighbourhood liveable, as residents keep an eye on other users in the area (Janowitz, 1975). According to Coleman (1985), trust and social cohesion among residents are essential for social control in the neighbourhood. The interplay between the built environment and the degree of social control and safety is emphasized by Jacobs (1961), Jeffery (1971), Wilson and Kelling (1982), and Ross and Mirowsky (2001).

Jacobs (1961) called obscure places where people have the opportunity to conduct unwanted behaviour “streets with no eyes”. Spaces with low levels of lighting at night, high walls/fences, or thick trees or bushes can provide hiding opportunities for criminals due to the lack of surveillance (White, 1990; Weisel, 2002). Places that are clearly seen by neighbours or passers-by are less likely to become target of criminals (Sorenson, 2003). Similarly Hillier and Shu argue that “linear integrated spaces with some through movement and strong intervisibility of good numbers of entrances are the safest spaces” (2000, p. 226). Thus, both the physical form and the disclosure structure of the neighbourhood should be well designed. Other physical characteristics of neighbourhoods, like signs of physical disorder, such as vandalism, graffiti, noisiness, and neighbourhood dirtiness, can also have a distinctly negative impact on residents’ sense of safety (McCrea et al., 2005; Ziersch et al., 2007). Or as Hale puts it: “there is growing evidence to relate fear of crime to perceptions of the local

and physical environment. Even if crime levels are low, neighbourhoods with ‘broken windows’³ may have residents with high levels of fear as incivilities become potent visible symbols of the lack of social control and order” (1996, p. 131). In their work about the so-called ‘broken windows’, Wilson and Kelling argue that maintaining the physical environment is of vital importance because it is a physical indicator of the levels of social cohesion and informal social control (Wilson and Kelling, 1982; Cozens et al., 2005). The proper design and effective use and maintenance of the physical environment can contribute to good neighbourhood liveability (Ross and Mirowsky, 1999; Crowe, 2000, Cozens et al., 2005; Ziersch et al., 2007).

Liveability problems are highly interrelated and the part of a vicious cycle. This cycle starts with decay of the physical environment. An environment of low quality is thought to negatively influence the possibilities and chances of residents (Jacobs, 1961). Due to the declining quality of the physical environment, problems occur with the renting and sale of dwellings in the neighbourhood. Social decline starts; more and more ‘respectable residents’ move elsewhere and low-income households with different backgrounds from the previous residents move into the neighbourhood, as they do not have other options (Prak and Priemus, 1986; Raad voor de Volkshuisvesting, 1996). Van Beckhoven et al. argue that “the increasing mobility of residents causes faster turnover rates” (2005, p. 15). The changes in the composition of the population in the neighbourhood might influence the extent to which residents share similar social norms, affecting the values component as well as the perceptual component of social cohesion (Bolt and Torrance, 2005). In terms of the perceptual component of social cohesion, feelings of belonging to the neighbourhood are fostered by a relatively homogenous population with similar social norms and values (Hortulanus, 1995). As a result of the lack of similarity of social norms, residents’ senses of belonging to the neighbourhood are likely to diminish. Further, the behavioural component of social cohesion is affected. Residents do not know their neighbours anymore and social interaction among residents decreases. Thereby, social control may diminish and unwanted behaviour, vandalism, nuisance, and crime get the chance to expand in the disordered environment (Coleman, 1985; Bus, 2001; van Beckhoven et al., 2005). Consequently the attractiveness of the neighbourhood may decrease further and its residents may feel more unsafe. The deteriorating reputation of the neighbourhood has a negative influence on the attachment to the neighbourhood (Bolt and Torrance, 2005; Smith, 2009). Physical decay continues.

This section argued that there is a strong correlation between the design of a neighbourhood and its perceived liveability, physically as well as socially. The design of a neighbourhood’s urban structure is a forceful determinant of the characteristics of the environment in neighbourhoods (Adriaanse, 2004). According to Coleman (1985) and van Bergeijk et al. (2008), problems with liveability occur mainly in post-WWII neighbourhoods. Therefore the next section examines liveability and the characteristics of the urban structure in post-war neighbourhoods in more detail.

2.4 Liveability and the urban structure in Dutch post-war neighbourhoods

2.4.1 Prevailing thoughts from 1945 to 1970

(Early) post-war neighbourhoods are neighbourhoods that were built, between 1945 and 1970 after the Second World War, in line with the prevailing thoughts on urban town planning at that time (Jansen, 2000; Argioliu et al., 2008; Nicis Institute, 2008).

The specific design of the urban structure for many of these neighbourhoods after World War II attempted to address two major challenges. The first challenge was to provide enough high-quality dwellings to solve the post-war housing shortages. The second problem concerned liveability in the neighbourhood (van der Cammen en de Klerk, 2006). Regarding the first challenge, the Netherlands faced enormous housing shortages after the Second World War, like most other Western European countries in these decades (Dekker, 2006). In the period after the war, large-scale housing estates were planned and built in and around many European cities. Furthermore, urban planners had specific, idealistic views on the way the living environment had to be developed related to the dimensions of liveability. This is linked to the second challenge: the slow decrease in social cohesion among residents in their neighbourhood, which started in the years before WWII. Town planners had idealistic ideas about preferred levels of liveability in society, which resulted in a very distinctive

³ The Broken Window Theory is based on the assumption that “if a window in a building is broken and is left unrepaired, all the rest of the windows will soon be broken” (Wilson and Kelling, 1982, p. 31). A successful strategy for preventing vandalism and disorder is to remove the signs of disorder (e.g. graffiti, litter or broken windows) when they are small.

building structure in these neighbourhoods to support liveability. The underlying assumption was that the design of the urban structure had an influence on society. Coleman (1985) argues that the modernist planning approach was based on 'environmental determinism'. Environmental determinism is "the belief that if the environment is changed, human behaviour will also change" (Coleman, 1985, p. 19). Much attention was paid to the relationship between the design of the built environment and social cohesion and safety (Taylor and Harrell, 1996; van Gemerden and Staats, 2006). Consequently, many neighbourhoods that were built in this period are characterized by a distinctive urban structure. Ideally, the city needed to function as efficiently as possible and this efficiency was also expected of the inhabitants. There was a strong belief in social engineering. A noted American architect, Philip Johnson described the role of planning design as follows: "we really believed, in a quasi-religious sense, in the perfectibility of human nature, in the role of architecture as a weapon of social reform... the coming Utopia [...] heaven on earth" (in: Coleman, 1985, p. 3). The post-war period is characterised by its modernistic planning approach, which can be described as rational, efficient, and future-oriented (Knox and Marston, 2007).

According to Harbers et al. (2009), there are some common aspects in the design of the urban structure of post-WWII neighbourhoods, although different types of post-WWII neighbourhoods can be distinguished.

These characteristics are:

- Total design
- Open building blocks
- Orthogonal patterns
- Spatial segregation of functions
- 'Blind' lower parts of buildings
- Main structure of green and water

Each post-war neighbourhood is an example of a total design. Urban planners designed all of the elements and functions of the whole neighbourhood at the same time in one comprehensive plan. Within the design, the concept of the 'neighbourhood-unit' is considered a key element. Urban planners used the concept of the neighbourhood-unit as a guideline for the design of the urban structure in neighbourhoods (Hereijgers and van Velzen, 2001; Blom et al., 2004; van der Cammen and de Klerk, 2006). The belief in social engineering was the key point; it was used to attempt to stop the decrease in the feeling of community that had begun in the years before WWII. The neighbourhood unit was first used by Clarence Perry and he assumed that the city is build up from smaller units, namely the aforementioned neighbourhoods (Blom et al., 2004; van der Cammen en de Klerk, 2006; Nicis Institute, 2008). Neighbourhoods should therefore have a specific design to ensure a safe and clean living environment (the physical environment) and to foster community building (social environment). A particular social-spatial model was designed and the neighbourhood, made up of different neighbourhood units, became the most important spatial level in the city (van der Cammen en de Klerk, 2006).

The second characteristic is the use of open building blocks (Singelenberg and Roding, 1992). The underlying idea was to use detached building blocks without enclosed areas. Very common examples are the so-called 'stamps' or 'strips' (Groote, 2003; Lörzing et al., 2008; Harbers et al., 2009). Stamps and strips are protracted strips of residential buildings combined in a purposeful repetition of elements (Kenniscentrum Stedelijke Vernieuwing, 2011). This construction pattern was used repetitively, which resulted in clear, open, symmetrical neighbourhood structures. Furthermore, the design was based on orthogonal patterns, which are straight lines and angles for both streets and buildings. The use of orthogonal patterns is the third characteristic of post-WWII neighbourhoods.

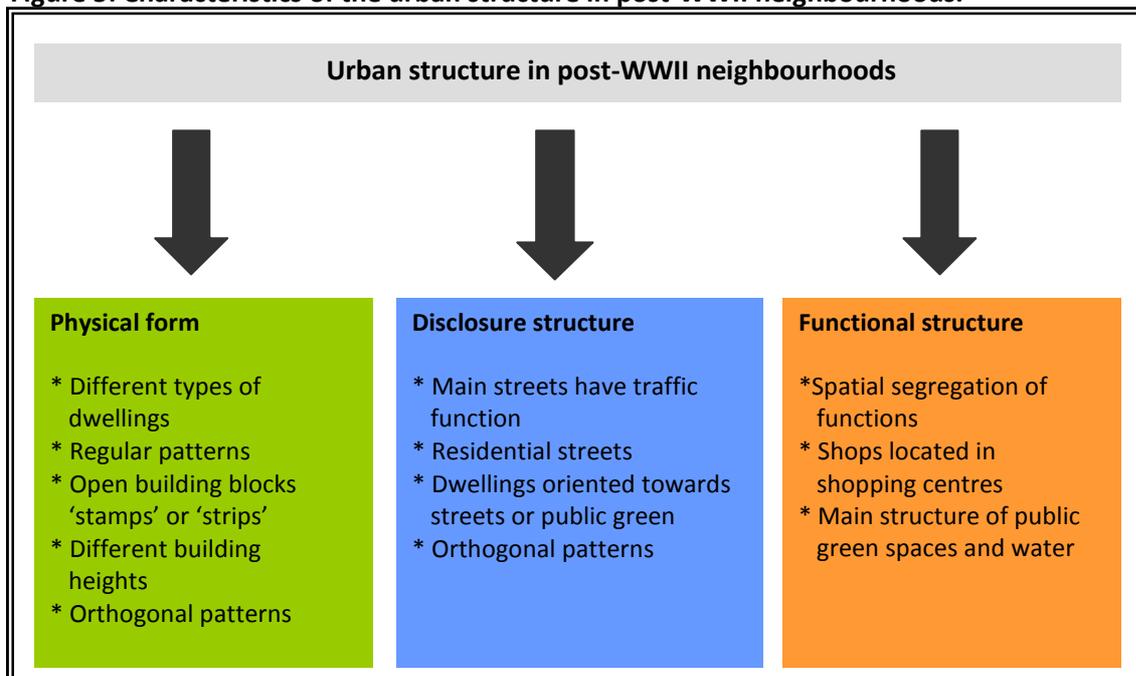
The most obvious difference between strips and stamps is the orientation of the residential buildings. In a stamp pattern, the buildings are oriented in more than one direction in a perpendicular way, in contrast to the parallel oriented strips. Another difference between stamps and strips is the relationship between their buildings' orientation on the environment. According to Lörzing et al. (2008) strips have a stronger emphasis on the relationship between the buildings and their environment. Within these neighbourhood-units, a mixed-social composition was regarded as important for people at different stages of the life course (van der Cammen en de Klerk, 2006). Neighbourhoods were designed to put people from different income levels in society next to each other in one area, being a reflection of the larger society (Groote, 2003). In England this specific urban structure was considered the solution for class differences, because the structure was assumed to facilitate social cohesion (de Kam and Needham, 2003). Consequently, different types of dwellings were needed to facilitate housing for each of these social groups and a limited number of each type of dwelling (single-family houses, medium-rise buildings, high-rise buildings, houses for elderly people) were mixed into a specific combination in the neighbourhoods designed according to the stamps principle (Groote, 2003).

The fourth characteristic is the spatial segregation of functions. With respect to the basic principles of spatial organization of the post-war neighbourhoods, land uses like living, working, transport, and recreation were spatially segregated, in order to avoid these activities from mutually hindering each other (Groote, 2003; Hall et al., 2005; van Beckhoven et al., 2005). The neighbourhoods were often planned as self-contained neighbourhoods and amenities like schools and shopping facilities were separately located in shopping centres in the neighbourhoods (Meier, 2006; Harbers et al., 2009). Van Beckhoven et al. (2005) argue that urban planners also had particular ideas about handling traffic. In some post-war neighbourhoods foot paths were separated from car traffic. Also, through traffic was led around the neighbourhood (Hall et al., 2005; Turkington et al., 2004; van Beckhoven et al., 2005).

The fifth characteristic is the 'blind' level in the under part of the building blocks. No dwellings are located here and mostly this part is used as storage space (Harbers et al., 2009). The blind lower parts are a result of the modernist concept of spatial segregation of functions and efficiency. The ground floors of the buildings blocks were meant for spatial functions other than housing.

The sixth and last characteristic is the planner's emphasis on a main structure of public green space and water in each neighbourhood. These public green spaces and water were considered the backbone of the spatial design of the neighbourhood. Medium- and high-rise buildings were seen as a very good solution to build a large number of houses and to facilitate the large spaces of public green. All of the before-mentioned characteristics of the urban structure of post-WWII neighbourhoods are summarized in Figure 5, on the basis of the aspects of urban structure (see again Figure 4).

Figure 5: Characteristics of the urban structure in post-WWII neighbourhoods.



Another unique characteristic of Dutch post-war neighbourhoods is the substantial government subsidized housing sector⁴, which is a result of the dominant position of the central government in the Netherlands (Prak and Priemus, 1986; van Beckhoven et al., 2005). It is also a reminder of the importance of public housing in the development of the welfare state (Kenniscentrum Stedelijke Vernieuwing, 2011). The size of the Dutch public housing sector is an important characteristic that differentiates it from other European countries, like Sweden, France, and Britain. The Netherlands has the largest public rental sector and these dwellings form the largest part of the housing in their post-war neighbourhoods.

All in all, the underlying idea of social engineering resulted in a distinctive planning style in post-WWII neighbourhoods in Western-Europe. The socially-progressive philosophy resulted in neighbourhoods with

⁴ In the present study the term public housing is used to indicate government subsidized housing.

different building heights, long horizontal lines, square shapes, and large green areas between the housing blocks (Dekker, 2006; Lörzing, 2008; Harbers et al., 2009). Initially, these neighbourhoods were received very favourably among residents and, compared to most pre-war districts, the post-WWII neighbourhoods were considered the most liveable (Dekker, 2006; Argioli et al., 2008). The quality of the dwellings was higher than in the pre-war neighbourhoods and residents favoured the relatively big houses and the large amounts of public green areas. The next section discusses the contemporary thoughts on the liveability in Dutch post-WWII neighbourhoods and its relationship to the characteristics of the urban structure in post-WWII neighbourhoods.

2.4.2 Prevailing thoughts on liveability in post-war neighbourhoods

Nowadays, little is left of the earlier optimism and the perceptions on liveability in Dutch post-war neighbourhoods are mostly negative. In recent decades, the post-war neighbourhoods are associated more and more with a multitude of problems and difficulties (van Beckhoven et al., 2005; van Dijk and Wittebrood, 2007; van Bergeijk et al., 2008).⁵ Liveability in many post-war neighbourhoods is threatened and these neighbourhoods are in need of quality improvement (Kelfkens, 2000; Kenniscentrum Stedelijke Vernieuwing, 2011). Many post-WWII neighbourhoods do not suit the requirements of today's continually evolving society (Bus, 2001; Qian, 2009). First problems in the physical environment of the neighbourhoods are discussed.

A commonly mentioned problem in post-WWII neighbourhoods is the low-quality of the dwellings (Kelfkens, 2000; Meurs, 2003). Mainly due to bad maintenance, the quality of the dwellings and buildings is decreasing. Due to the usage of new construction methods and poor quality materials many of these dwellings now face problems with their level of comfort, which are partly related to poor insulation (from both noise and energy). Also internal design problems are identified; the relative size and comfort of the dwellings do not meet demands of residents anymore (Turkington et al., 2004). Often the low-rise and medium-rise buildings lack the presence of an elevator. The largest part of the dwellings in post-war neighbourhoods still belongs to the (over represented) public housing sector and, due to their low-quality these houses are relatively cheap. Van Beckhoven et al. argue that the post-war neighbourhoods provide "relatively large, bright and sunny dwellings for a good price and clearly serve an important function for those at the bottom of the housing market" (2005, p. 5). However, there is a common fear that these cheap, low-quality dwellings will attract too large groups of low-income inhabitants (van Marissing, 2008).

The amenities still appreciated in post war neighbourhoods include the availability of public green spaces and neighbourhood shops (Adriaanse, 2004; Argioli et al., 2008). According to Bus (2001) and van Marissing (2008) however, the number of shops is decreasing in many post-WWII neighbourhoods. Adriaanse (2004) stresses that the large spaces of public green are perceived both positively and negatively by the residents. Although the neighbourhoods are appreciated for their open and spacious structure, these large green spaces also foster feelings of unsafety among residents if they are regarded as obscure places (Jacobs, 1961). Often the green spaces are used as a meeting point by criminals, youth or other people (Heeger, 1992; van Marissing, 2008). Finally, the quality of the living environment in these neighbourhoods is perceived as moderate or worse (Kelfkens, 2000). Argioli et al. (2008) notice their increasing levels of vandalism and dirtiness. Further, the quality of the public spaces is decreasing due to bad maintenance (van Marissing, 2008). In their research Argioli et al. (2008) found growing dissatisfaction with the dwellings and the living environment among residents of post-war neighbourhoods. Buildings once considered clean and modern are now considered monotonous and charmless. Also the site design of the neighbourhoods is unpopular, which is mainly caused by the monotonous and obscure physical structure of the post-WWII neighbourhood (Harbers et al., 2009).

The second dimension of liveability is the social environment, which consists of both social cohesion and safety. According to Argioli et al. (2008), social problems are increasing in post-WWII neighbourhoods. Social cohesion has diminished, and one perceives increasing levels of anti-social behaviour and conflicts between different groups. This is merely the result of population changes in the neighbourhood. Residents of post-war neighbourhoods complain about the new populations moving in, which affects the behavioural, the values, and

⁵ Many post-war neighbourhoods in the Netherlands are indeed facing a downward spiral of deprivation; however it should be noted that the nature of the problems within these areas is not as severe as in some areas with public housing in other countries, e.g. Britain or France (Buys, 1997, Bus, 2001). Although liveability problems exist, Dutch post-war neighbourhoods are not yet turning into slums; this scenario is also highly unlikely to happen in the future.

the perceptual component of social cohesion (Bolt and Torrance, 2005; van Marissing, 2008; Argioli et al., 2008). According to van Marissing (2008), a large number of post-war neighbourhoods faced demographical transformations. Stable middle-class neighbourhoods became cheaper neighbourhoods with high residential turnovers. The original residents are now elderly and a lot of the first pioneers have left, making room for new, low-income groups. Dekker and Bolt argue “increased differentiation in education, ethnicity, income, home-ownership structure, and lifestyle presents a challenge to social cohesion” (2005, p.1). The differences between the different groups of residents give rise to tensions and misunderstanding. Consequently, residents feel less safe in the neighbourhood.

Building on the arguments in section 2.3.2, the present study presumes a correlation between the design of the urban structure of neighbourhoods and their liveability. It was argued that good urban design is a prerequisite for liveability in neighbourhoods (Saville and Cleveland, 2003; Ziersch et al., 2007). With regard to post-war neighbourhoods, Coleman concludes that they have proved disastrous and she argues “it is the Utopians⁶ who should be experiencing the sense of social failure. They have had their day -40 long years of it- and it has become increasingly clear that their social engineering has not worked. Furthermore, it seems likely that further degeneration will occur” (1985, p. 184). Similarly Coleman notes “the vast housing-problems machine has committed one blunder after another in the name of social betterment. The betterment is often hard to find, especially when compared with what might have been, but the malaise and misery and tragedy are writ large as soon as one opens one’s eyes to the facts” (1985, p. 184).

Moreover, and importantly, Coleman blames the urban structure of the post-war neighbourhoods for their liveability problems and she notes “the trouble in Utopia may be due to Utopian design self” (1985, p. 19).

In her famous work ‘Utopia on trial’ Coleman concluded that the “vast housing-problems machine has committed one blunder after another in the name of social betterment. The betterment is often hard to find, especially when compared with what might have been, but the malaise and misery and tragedy are writ large as soon as one opens one’s eyes to the facts” (1985, p. 184). The disadvantaging modernist design of the urban structure in the post-WWII neighbourhoods is considered to be the cause of their liveability problems.

But the prevailing image of post-war neighbourhoods is not clear. Van Marissing (2008) argues that the previously mentioned problems are not applicable to a large part of the post-war neighbourhoods in the Netherlands. Hence, not all post-WWII neighbourhoods should be regarded as problem areas. Furthermore, differences within a neighbourhood are also common; most neighbourhoods have good as well as bad parts. Thus both differences between neighbourhoods and within neighbourhoods exist.

Increasingly, city planning professionals and residents even appreciate certain aspects and the distinctive design of the urban structure of post-war neighbourhoods. Therefore, Blom et al. (2004) argue that more research regarding the perceived qualities of post-war neighbourhoods is required. Each post-WWII neighbourhood is unique and therefore it is important to perform a thorough analysis of each area before reaching conclusions (Ouweland, 2009).

⁶ In her famous book ‘Utopia on trial’ Coleman (1985) uses the word ‘Utopia’ to indicate the post-WWII neighbourhoods.

[3] Research design

3.1 Introduction

This chapter discusses the methods of data collection used to address the questions outlined in Chapter 1. As noted previously in Chapter 1, detailed data is needed to explore the range of perceptions of residents on liveability and the design of the urban structure in post-WWII neighbourhoods. The following section 3.2 discusses why a case study approach is used. Following section 3.3 justifies the case selection. The emphasis in section 3.4 is on the qualitative methods for data collection that are used. Also the way in which participants were recruited is unveiled and the participants are introduced. Lastly the way in which the data is transcribed and analysed is made clear.

3.2 The case study approach

Yin states that “the case study method allows investigators to retain the holistic and meaningful characteristics of real life events – such as individual life cycles, organizational and managerial processes, neighbourhood change[...]" (2003, p. 2). Similarly Swanborn (2003), argues that a case study is a strategy with which researchers are able to study one case (or a few cases) of a social phenomenon very intensively. A case study approach is specifically suitable for studying the interaction between people and their environment, their perceptions, and attached meanings to their environment (Swanborn, 2003). Additionally Yin argues that case studies are particularly useful “when researchers [...] desire to cover contextual conditions and not just the phenomenon of study, and rely on multiple and not singular sources of evidence” (1993, p. XI). So, on the basis of before mentioned arguments such an in-depth approach seems appropriate to examine the detailed perceptions of residents living in post-WWII neighbourhoods.

Swanborn (2003) distinguishes six aspects that are important when considering the use of case study methodology. While present in many case studies, not all six aspects are prerequisite. Five of these aspects apply to the current research.

The first aspect is studying a social phenomenon with regard to a single social system, which can be one or more individuals or a group of individuals. In the present study, the social system is composed of a group of residents in the selected neighbourhood. Second, studying the subject of interest preferably takes place in the natural environment. Hence, the phenomenon should be studied within its contextual environment and not as an isolated phenomenon. In the present study, the natural environment is the post-WWII neighbourhood, and the perceptions of residents will be studied in relation to this contextual environment. This importance of the contextual environment is also acknowledged by Rakers (2009). He argues that the examination in relation to context is one of the strengths of the case study approach.

The third aspect, as distinguished by Swanborn (2003) is studying the phenomenon within a certain period of time. In the present research, data are collected at a single point in time, namely within a few weeks. Hence the study is in a cross-sectional time dimension, which one of the types of time dimension that characterizes case studies.

The use of different data collection methods is the fourth important aspect of the case study approach. The current research makes use of several methods of data collection, which will be discussed in the next section. The fifth aspect that characterizes case studies is their aim to provide a detailed description and interpretation of a number of variables, characteristics, or theoretical concepts (Braster, 2000). Special attention should be paid to social interaction and to the meaning that participants attach to their environment and to each other. A key point is attention to ‘multiple realities’ that exist in the studied social system. In the present study, the range of resident perceptions is an important focal point, and one of the studied concepts is liveability. Thus, the fifth aspect is also relevant to this research.

The sixth and last characteristic of the case study is that they test formulated descriptions and explanations by discussing them with their informants. However, this aspect is not completely relevant to this research. While informant opinion is doubtlessly important, the findings, thoughts, descriptions, and explanations of the researcher are not involved in the interaction with the informants. The study focuses instead on the descriptions and opinions of the informants in the process of data collection.

In summary, the case study approach “involves a study of one or a small number of cases, in their ‘natural’ environment, exemplifying a social phenomenon, using a variety of data sources, with attention for diverging perspectives” (Meijering, 2006, p. 36), and is therefore regarded the appropriate approach for this research.

There are at least five basic types of case studies, categorized in accordance with differences in their design. Yin notes “case study research can be based on single or multiple case studies. Whether a case study is single or multiple, the case study can be “exploratory, descriptive, or explanatory” (1993, p. 5). The present study is an explorative single case study. This approach makes it possible to discover patterns of similarities and differences within the selected case, a so-called ‘within site analysis’ (Swanborn, 2003). The research makes use of a single case study to examine the range of residents’ perceptions. Analysis and comparison within this case study will lead to a better understanding of residents’ perceptions of liveability with regard to the post-war urban structure, and the relation of these opinions to prevailing thought on these concepts by urban planners during the construction of the neighbourhood.

The generalization of research findings to other cases or to a larger scale is not common in case study research. Swanborn (2003) calls this the “problem of generalization” (p. 66), while Niederkofler (1991) states that “the case study investigator’s goal is not to demonstrate the validity of an argument for statistical population or universes” (p. 239). In addition, Flyvbjerg (2006) argues that it is difficult to generalize from a single case, but adds that the force of example must not be underestimated. As such, case study research can certainly contribute to scientific development. Mostly case studies are aimed at summarizing and generalizing of the results into a more general model or theory, instead of functioning as a sample for a larger population (Yin, 1993). This is largely due to the importance of the unique context of each case. Based on aforementioned arguments, the current study does not intend to generalize its results from this particular case as a common phenomenon in the sense that other cases would be expected to produce similar outcomes.

3.3 Case selection

The selected case in this research should ideally provide a lot of information (Meijering, 2006). As mentioned before, this research makes use of a single case study approach and it is therefore of crucial importance to select one suitable case out of the thousands of post-WWII neighbourhoods in the Netherlands. To achieve this, selection criteria are used which are based both on pragmatic and content-related considerations (Swanborn 2003). Pragmatic reasons are related to available time, distance, and money. The research focuses on post-war neighbourhoods in Groningen, which is located in the north east of the Netherlands. Groningen is a relatively small town in which all neighbourhoods are relatively accessible. Therefore, pragmatic considerations did not play a substantial part in the selection process of the study’s target neighbourhood.

On the other hand, content-related considerations did play a role in choosing the neighbourhood for study. First, it was necessary to conduct an overview of post-war neighbourhoods, built between 1945 (after WWII) and 1970. Several neighbourhoods answer this criterion, namely Corpus den Hoorn, Laanhuizen, De Wijert-Noord, Coendersborg, Selwerd, Paddepoel, and Vinkhuizen. All these neighbourhoods contain some spatial elements that are characteristic of the prevailing thought on urban planning after WWII. The modernistic, distinctive character of the urban structure (as discussed in Chapter 2) is more evident in the neighbourhoods which were built in the 1960s: Corpus den Hoorn, De Wijert-Noord, Selwerd, Paddepoel, and Vinkhuizen (Groote, 2003). However, in De Wijert-Noord, Vinkhuizen, Corpus den Hoorn, and Paddepoel substantial renewal is already taking place or even finished. Consequently, the design of the urban structure was adapted or demolished. The neighbourhoods that have been renewed were excluded from the study, similar to Swanborn (2003) who notes that one of the content-related selection principles is the selection of a case on the basis of its phase in a development process. Of all neighbourhoods, Selwerd is the only post-war neighbourhood that has not yet undergone renewal. Although it is the oldest post-war neighbourhood in the north district of Groningen, urban renewal in Groningen is taking place in a reverse order, beginning in the youngest post-war district, Vinkhuizen, and from there moving to Paddepoel. In contrast to these neighbourhoods, Selwerd has not been targeted by large-scale renewal programmes since it was built (Gemeente Groningen, 2010). Therefore, the original post-war urban structure and building forms in this area were preserved to a large extent. According to the Gemeente Groningen (2010), Selwerd is in need of attention from both residents and policy makers. Swanborn (2003) argues that selection of a case can be based on the amount of attention it already gained, meaning getting a lot of attention or getting no attention at all. Selwerd is an example of the last mentioned category. All in all it is decided that Selwerd is the most suitable neighbourhood for investigating the study topic. The methods of data collection are described the next section.

3.4 Data collection methods

This research aims at a deeper understanding of contemporary perceptions of residents on liveability of post-war neighbourhoods. Qualitative research is suitable, because qualitative research can help gain “a deeper and fuller understanding” of a particular topic (Babbie, 2007, p. 296). Within this research triangulation is used. Triangulation refers to the use of several data sources to enlarge the validity of the data, which is an important requirement for conducting case studies (as argued in paragraph 3.2). In addition to literature review and site visits, semi-structured in-depth interviews were conducted with Selwerd’s residents and resident-generated photographs were used.

3.4.1 In-depth interviews

Interviews are “verbal interchanges where one person (the interviewer) attempts to elicit information from another person” (Dunn, 2000, p. 51). Interviews have many advantages, such as “allowing researchers to understand how meanings differ between people, exploring topics more in-depth, giving informants an opportunity to intervene, and raise additional issues” (Trell and van Hoven, 2010, p. 94). The possibility of interaction with informants in order to cover relevant themes is especially valuable due to the subjective nature of the present research and the difficulty of measuring liveability by means of clear indicators. A semi-structured interview means that informants can have a large influence on the course of the interview although the main topics of the interview are predetermined (Legard, 2003). This type of interview is suitable for the current study, because while the informants were able to provide a lot of information on the basis of predetermined topics, new issues that arose during the interview and were not in the interview guide initially were also discussed. Ultimately, their stories represent both what is going on and what is considered important by the inhabitants of these neighbourhoods. According to Valentine (1997), the aim of interviews is not to be representative of a larger population, but to study how the context is perceived by individuals. The real purpose of interviews is “not counting opinions or people but rather exploring the range of opinions, the different representations of the issue” (Gaskell, 2000, p. 41). However, the aim of the present research is to maximize the opportunity of understanding the different viewpoints of residents, and the variety of opinions is a major factor of consideration during the recruitment of participants. Therefore, different strategies were used to recruit participants.

3.4.1.1 Recruitment of participants and the interviewing process

The informants were selected on the basis of their age, their location, and their type of dwelling in the neighbourhood of Selwerd. First I visited a meeting in Selwerd’s local community building which was publicly accessible for all residents of Selwerd. I introduced myself and asked people for their cooperation. Once contact was made with some residents, snowballing was used to come into with contact others. I also used a key-informant, namely the chairman of Selwerd’s neighbourhood council. He provided me with a list of possible informants. However, it should be noted that snowballing and using key-informants can increase the likelihood of selecting members of common social milieus, thereby diminishing the representativeness of the research. Consequently, the total group of informants is not likely to be an exact statistical sample of the population. However, the objective of this research is to gain an overview of views, thus representativeness is not crucial for the present study. Above all, testing representativeness is not possible. However, collecting data on as many different views as possible was kept in mind during the recruitment of participants. Therefore, I also made use of social networks to recruit residents living in Selwerd and I asked all my friends, family and acquaintances if they knew anyone living in Selwerd. Lastly I made some site-visits at different times and dates and I randomly asked people on the streets and in their gardens if they would like to participate in my research. In total, twenty-five residents participated in the research. An overview of the respondents to this research is shown in Table 1. In total nine males and sixteen females participated in the study. As is shown, the age of the respondents ranges from 27 to 93 years old. Both owners and renters are involved and so are all different housing types. The respondents live throughout the entire neighbourhood.

All interviews were conducted at the homes of the participants. Before I started the interview I introduced myself again and explained the process. Also participants were assured that they could request to stop the interview at any time during the interview and that they could request the audio-recorder to be switched off if they wanted to (see Appendix 1). Then I turned on the audio recorder and asked the respondent for their consent to record the interview. At the end of the interview I gave the respondent a small gift to thank them for their willingness to participate in this research. As mentioned before, the interviews were semi-structured.

The topics and questions included in the interview are based on the literature review. The questions are subdivided into three sections: personal characteristics, neighbourhood characteristics, and the social environment (see Appendix A). All interviews were audio-recorded and transcribed. The interviews ranged from twenty minutes up to ninety minutes in length. The audio recordings of the interviews were coded in MAXQDA, a qualitative data analysis program. The codes were based on the dimensions and the aspects of liveability as well as the aspects of urban structure as distinguished in Chapter 2. Coding on the basis of theory is also known as etic coding (Flowerdew and Martin, 2005).

Table 1: Respondents' characteristics. ⁷

Name	Age	Gender	Housing type	Owner/renter	Length of residence in current dwelling/Selwerd
Ellen	27	Female	Single-family home	Owner	4 years/21 years
Tess	29	Female	Single-family home	Renter	4 years/4 years
Amber	36	Female	Apartment	Renter	4 years/4 years
Wilma	36	Female	Single-family home	Owner	6 years/6 years
Herma	40	Female	Apartment	Renter	16 years/40 years
Marion	43	Female	Single-family home	Owner	17 years/17 years
Carlo	44	Male	Apartment	Owner	17 years/44 years
Peter	53	Male	Single-family home	Owner	24 years/24 years
Kate	56	Female	Single-family home	Owner	17 years/35 years
Jette	61	Female	Apartment	Renter	36 years/36 years
Rutger	62	Male	Single-family home	Renter	12 years/12 years
Willem	63	Male	Apartment	Renter	11 years/11 years
Eline	64	Female	Apartment	Renter	38 years/38 years
Marlot	64	Female	Single-family home	Renter	38 years/38 years
Charles	65	Male	Apartment	Renter	13 years/13 years
Nienke	65	Female	Apartment	Renter	14 years/37 years
Gerrit	66	Male	Single family home	Owner	38 years/38 years
Harry	67	Male	Apartment	Renter	15 years/30 years
Claire	69	Female	Single-family home	Owner	40 years/40 years
Sophie	72	Female	Apartment	Renter	45 years/45 years
Anna	75	Female	Single-family home	Owner	35 years/46 years
Judith	78	Female	Apartment	Renter	14 years/ 43 years
Marie	82	Female	Single-family home	Owner	36 years/36 years
Stein	82	Male	Single-family home	Owner	22 years/22 years
Jos	93	Male	Apartment	Renter	10 years/ 42 years

3.4.2 Photography

When exploring context-related information, interviews have the disadvantage of not taking place 'on location'. During an interview, the interviewee and the interviewer do not directly interact with the place or phenomenon the informant is talking about (Trell and van Hoven, 2010). "It is challenging then to capture small nuances, multi-sensual dimension and embodied practices of people's place experiences using only the interview method" (Trell and van Hoven, 2010, p. 94).

Much of our knowledge is built on the visual (Cele, 2006; Trell, 2009). As is stressed by Palibroda et al. (2009) the photo camera is one of most widely available, popular tools used by people to capture and share their experiences. The image offers powerful records of real-world and real-time events (Loizos, 2000). People's photographs are used to tell their stories and reveal what is important to them. Or in the words of Wang "images contribute to how we see ourselves, how we define and relate to the world, and what we perceive as significant or different" (1999, p. 186). Palibroda et al. argue that "photographs offer powerful concrete evidence of a reality in a way that words simply cannot capture" (2009, p. 10). In summary, it can be concluded that photographs can be useful to illustrate a certain context or a case and are also good mean to strengthen arguments visually (Pink, 2007).

⁷ Any names used in the present study are pseudonyms.

Photography can be used in the research process in different ways, e.g. researcher-created or participant-created photography (Prosser and Loxley, 2008). The present study uses photographs as a respondent-generated technique, so it places the camera in the hands of residents in order to enhance their contributions. Smith (2009) calls residents' perceptions the 'expert area perceptions'. Hence the opportunity to learn from the actual lived experiences of the residents is invaluable (Palibroda et al., 2009). Residents' photographs enable outsiders to see the neighbourhood through a resident's eyes. The main advantage of the respondent-generated method in this research is that it provides a valuable impression of residents' interaction with their neighbourhood, without physical interference by the researcher. Residents are offered an opportunity to identify and illustrate their neighbourhood's strengths and concerns (Wang and Burris, 1997; Wang, 1999). While the photographs will contribute to a visual description of the area, they are also expected to empower the residents, as they are able to choose the subjects of their interest, unrestricted by demands from the researcher. The use of photographs and accompanying text generated by residents living in the neighbourhood enables further contextualisation of the study area (Smith, 2009). Because of the aforementioned advantages of participant-created photographs, photography is another fundamental method used in the research.

3.4.2.1 Recruitment of participants and the process

Some participants to the photography exercise were recruited with the help of a key-informant at housing association De Huismeesters. This key-informant provided me with a list of possible participants living in Selwerd. Again, I also used my social network to recruit residents. Further, two site-visits were made at different dates and times and voluntary participation of residents was requested. In total two males and four females participated in the study. A limitation of the data could be that only six residents participated. However, the purpose of this resident-created photography exercise is not to generate a large data set based on a high number of participants. Rather its importance is derived from the inclusion of residents of post-WWII neighbourhoods as active participants in data generation, methodological diversity, and its potential use as a valuable tool in the current research (Smith, 2009). Table 2 shows an overview of the photographers' characteristics. As can be seen the age of the respondents ranges from 25 to 75 years old. Both owners and renters are involved. The length of residency among respondents ranges from two to forty-five years.

I personally handed over the explanatory letter to the participants and provided additional information about the process when needed (see Appendix B for the explanatory letter). Each participant was asked to take at least two photographs of places, situations, or aspects in Selwerd, that show either positive or negative aspects of liveability in their neighbourhood. Subsequently, the residents were asked to write a short descriptive text accompanying their pictures in order to comment on the content of the photographs. The participants were free to take photos of everything that seemed important to them. The total number of photographs taken by each participant ranges from two to six. However, some participants took multiple photographs of the same scene. For simplicity only one image was chosen; selection was based on the clarity of the photograph (Smith, 2009). In total, nineteen photographs were included in the current research.

Some of the participants used their own cameras to make pictures and sent these pictures to me by e-mail. Others did not own a camera. To them I lend my own camera and agreed to pick it up later at a set date and time. Specific details about my camera were explained to the guest photographers, e.g. how to use the flash, and how to use the camera zoom. Smith argues that the "text accompanying the photographs represents 'word for word' the participants written description, including grammatical errors and exaggerated emphasis on particular words" (2009, p. 65). However, the descriptions were originally in Dutch and had to be translated into English for the purpose of this study. It should be noted that sometimes original meaning of words and sentences might get lost in translation.

Table 2: Photographers' characteristics.

Name	Age	Gender	Owner/renter	Length of residence in current dwelling/Selwerd
Rosanne	25	Female	Renter	2 years/2 years
Sarah	35	Female	Owner	5 years/5 years
Philip	41	Male	Renter	17 years/41 years
Craig	60	Male	Renter	11 years/11 years
Barbara	66	Female	Renter	8 years/8 years
Ailene	75	Female	Renter	15 years/45 years

[4] Case: Selwerd

4.1 Introduction

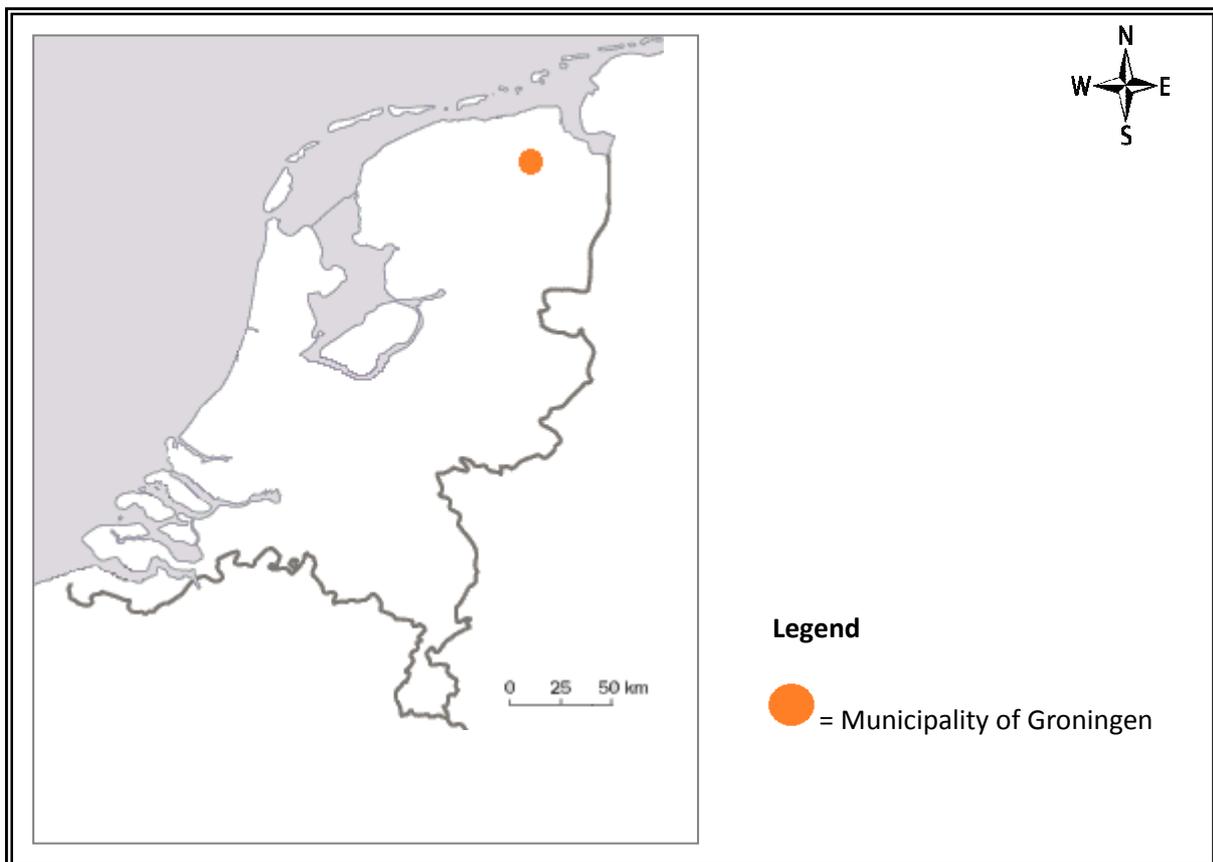
Section 3.3 justified the selection of the post-war neighbourhood Selwerd in the Municipality of Groningen as the research location of the present study. This chapter provides a descriptive profile of the post-WWII neighbourhood in which the research was undertaken. The area profile seeks to provide a background against which the findings of the research can be understood. Section 4.2 introduces the geographical position of Selwerd and its population characteristics. Subsequently, section 4.3 provides an analysis of Selwerd's urban structure on the basis of its physical form, its disclosure structure, and its functional form. In addition to the verbal descriptions of the area, photographs are included in order to provide a visual impression. Section 4.4 briefly reviews the trends in liveability in Selwerd on the basis of the outcomes of the Municipality's liveability survey that was conducted in 2011.

4.2 Area characteristics

4.2.1 Geographical location

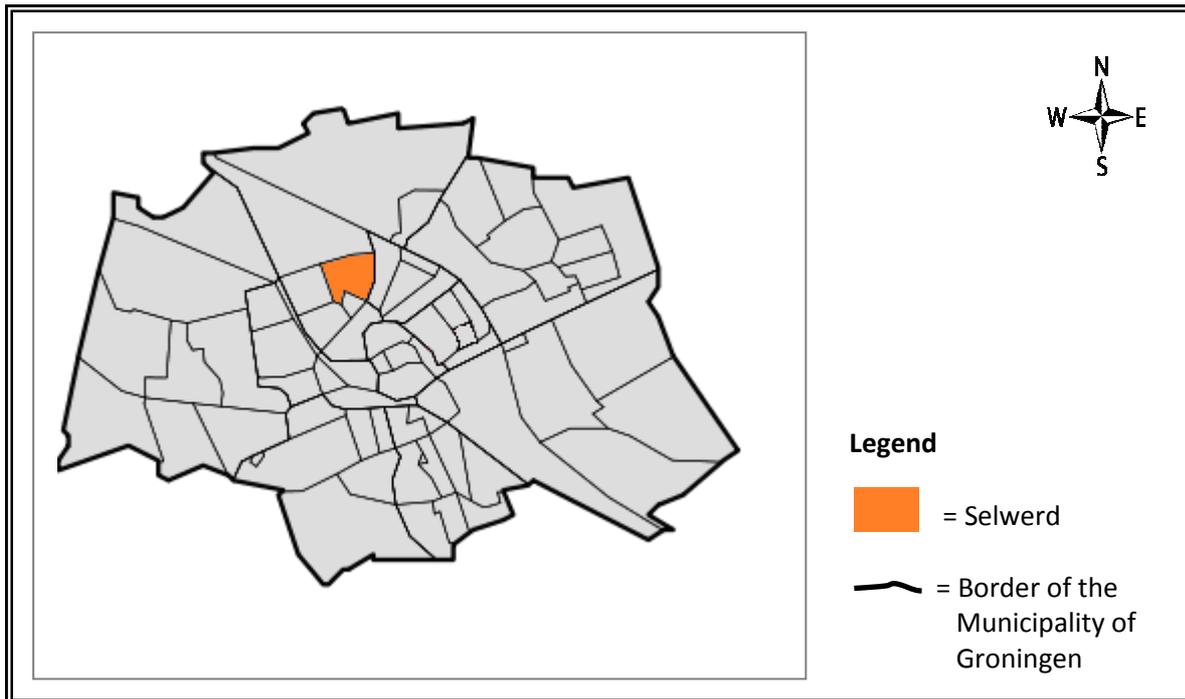
Figure 3 shows the geographical location of the Municipality of Groningen in the north east of the Netherlands. The Netherlands is divided into twelve provinces, one of which is the Province of Groningen. Groningen is the capital city and the biggest municipality of the twenty-three municipalities in the Province of Groningen. The Municipality of Groningen consists of forty-three neighbourhoods, one of which is Selwerd. Figure 7 shows the location of Selwerd in the Municipality of Groningen. As can be seen, Selwerd is located in the north.

Figure 6: Geographical location of the Municipality of Groningen in the Netherlands.



Source: Adapted from EduNas (2011).

Figure 7: Geographical position of Selwerd in the city of Groningen.⁸



Source: Adapted from Gemeente Groningen (2010).

4.2.2 Population characteristics

Selwerd had a population of 6,315 residents on December 31, 2010 (Statistics Netherlands, 2011b). In comparison, the Municipality of Groningen had a population of 190,148 inhabitants on the same day (Statistics Netherlands, 2011a). The age structure of both Selwerd and the Municipality of Groningen differs in certain aspects.

First, Selwerd has a substantial population group from 15-29 years old. Further, Selwerd's population is characterized by a relatively high number of elderly people compared to the average percentage of older people in the Municipality of Groningen (Gronometer, 2011). Initially, Selwerd was mainly inhabited by residents with children. The children of these residents grew up, left the parental home, and the ageing parents stayed behind in the neighbourhood (Gemeente Groningen, 2010). Selwerd still has many of these 'original' residents who have been living with their families for many years in Selwerd. Consequently older households form the biggest household group in the neighbourhood. A third characteristic of Selwerd's population is the relatively high percentage of households made up of a single individual. Nowadays, approximately 55% of all households in Selwerd are made up of a single individual.

Several rapid changes have been taking place simultaneously in Selwerd in recent years, i.e. an ageing population in the neighbourhood, a decrease in the number of family-households and an increase in both younger and elderly single-households, an increasing variety of ethnic populations, an increase in student-housing, an increase in the number of low-income households, and fast residential turnovers (Gemeente Groningen, 2010). Consequently the socio-demographical structure in Selwerd has been changing significantly.

§ 4.3 Urban structure analysis

4.3.1 History

Selwerd is the oldest post-war neighbourhood in the north of the Municipality of Groningen and its construction was finished in 1963. Selwerd was part of a massive building programme in the north of Groningen, which was a response to population projections in the 'Structuurplan 1960'. This plan predicted a total population of 265,000 inhabitants for Groningen in 1980 (Van de Beek en Hiddema, 1990). Hence a large

⁸ Unfortunately, no scale bar was provided for this figure.

number of new houses were needed to meet the future housing demands. The focus of urban planners had already shifted to rationality and quantity, whereas social engineering was the earlier focus of urban planners during the construction of the post-war neighbourhoods Corpus den Hoorn (1958) and De Wijert-Noord (1958) in the south end of Groningen. Selwerd is a good example of the shifting focus in modernist urban planning from social engineering towards economic efficiency, large-scale development, and quantity in the beginning of the 1960s (Jansen, 2000; Gemeente Groningen, 2010). Architect Henk Eysbroek designed the urban structure of Selwerd. Earlier, Eysbroek was co-designer of the neighbourhood Pendrecht in Rotterdam (1949), which is considered the prototype of the use of the neighbourhood unit in combination with the use of stamps in the spatial design of neighbourhoods in the Netherlands (Jansen, 2000). Eysbroek also designed the urban structure of De Wijert-Noord in Groningen. As in all post-WWII neighbourhoods, the quick realisation of the massive development projects in Selwerd and adjacent post-war neighbourhoods Paddepoel (1967) and Vinkhuizen (1971) was made possible by new construction methods related to prefabricated building components (Jansen, 2000; van Beckhoven, 2005). Selwerd has never faced large-scale renewal programmes, even though it is the oldest post-war neighbourhood in the north of Groningen. Consequently, Selwerd's original post-war urban structure is still rather well preserved (Platform Gras, 2011). Figure 8 shows Selwerd as it looked like in 1971.

Figure 8: Selwerd (1971) as seen from the west.



Source: Gemeente Groningen (2009).

4.3.2 Physical form

Selwerd's urban structure is discussed in this section and the next two sections on the basis of the identified general characteristics of the urban structure in post-WWII neighbourhoods (see again Figure 5). Figure 9 gives an overview of Selwerd's urban structure.

Selwerd's housing stock consists of different types of houses. All population groups in society were offered dwellings that suited their wishes and needs. Differentiation was not longer based on different social classes but on household size and the needed number of bedrooms. It is noteworthy that Selwerd's design was

specifically focused on providing single-family houses, which resulted in a relatively high number of detached single-family homes compared to other post-WWII neighbourhoods. Furthermore, so-called duplex houses were built specifically for older people. Another share of the housing stock in Selwerd is made up of four-storey- high apartment buildings. These multi-unit dwellings vary in size and their number of apartments. There is a common stairway in the front of the building and initially these building were not served by an elevator. Nowadays some of the buildings have elevators but these were constructed later.

Last, the housing stock of Selwerd consists of some higher apartment buildings. The building heights of the building blocks range from low- and medium- to high-rise buildings. The lower parts of most of the medium- and high-rise buildings are used for storage and therefore the buildings are said to be 'blind'. Figures 10, 11 and 12 illustrate the different housing types that are prevalent in Selwerd. As previously noted in section 2.4.1, a substantial public housing sector is an important characteristic of the Dutch post-war neighbourhoods. Correspondingly, a significant amount of the present housing stock in Selwerd is still formed by public housing (66%), which is predominantly owned by housing associations (Gemeente Groningen, 2010).

Figure 9: Overview of the design of the urban structure in Selwerd.



Source: Adapted from Gemeente Groningen (2010).

Figure 9 shows that Selwerd is made up of regular construction patterns of open building blocks that are used repetitively. Furthermore, Selwerd's urban structure is based on orthogonal patterns. These orthogonal patterns are characterised by straight lines and angles for both streets and building blocks, as is the case in Selwerd. As was mentioned before in section 2.4.1, both strips and stamps are considered open building blocks. The orientation of the residential buildings was identified as the most obvious difference between these strips and stamps. Stamps are characterised by their building orientation in more than one direction, which is the case in Selwerd. Hence, Selwerd is characterised by an urban structure made up of stamps. The design of the urban structure is composed of more than twenty stamps in total. These stamps are not all the same but vary in their designs. A stamp is made up of parts such as building blocks, garage boxes, parking places, streets, and gardens.

Figure 10: High-rise building in Selwerd, used for student housing.



Source: Arne Dijkers (2011).

Figure 11: Single-family homes (public housing) in Selwerd.



Source: Arne Dijkers (2011).

Figure 12: Medium-rise apartment buildings at Eikenlaan in Selwerd.



The stamp that is used the most in Selwerd is shown in Figure 13a. This stamp is made up of five rows of low-rise single-family houses. Four of these rows have a north-south direction and the fifth row is constructed in west-east direction. This stamp is used thirteen times in Selwerd. Some of the stamps though, vary slightly, due to lack of space or necessary cut-offs. Most of the privately owned houses are located in one of these thirteen stamps. Another stamp that is used frequently is shown in Figure 13b. This stamp contains two medium-rise apartment buildings which have a north-south direction. In front of each of these buildings blocks two other low-rise building blocks are constructed, which contain both single-family homes and duplex houses. An important characteristic is the large space of public green between the building blocks. The houses in the stamps are owned by housing associations. This type of stamp is used five times in Selwerd and all of these stamps are adjacent to the main road Eikenlaan. The streets between these stamps are not accessible from Eikenlaan by car but only accessible for pedestrians and cyclists.

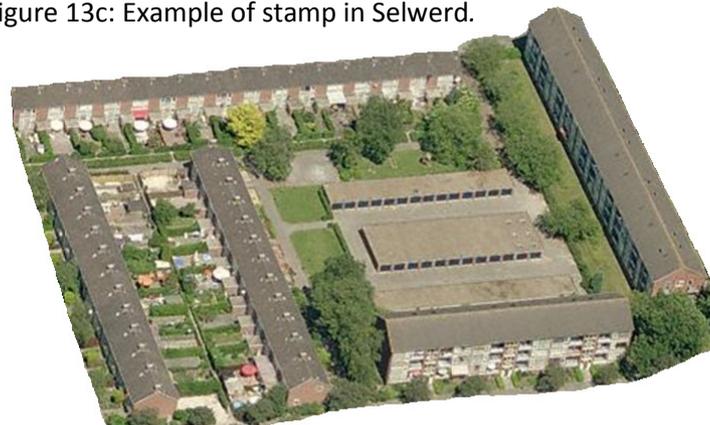
Figure 13: The stamps in the design of the urban structure in Selwerd.

Figure 13a: Example of stamp in Selwerd.

Figure 13b: Example of stamp in Selwerd.



Figure 13c: Example of stamp in Selwerd.



Source: Microsoft online (2011).

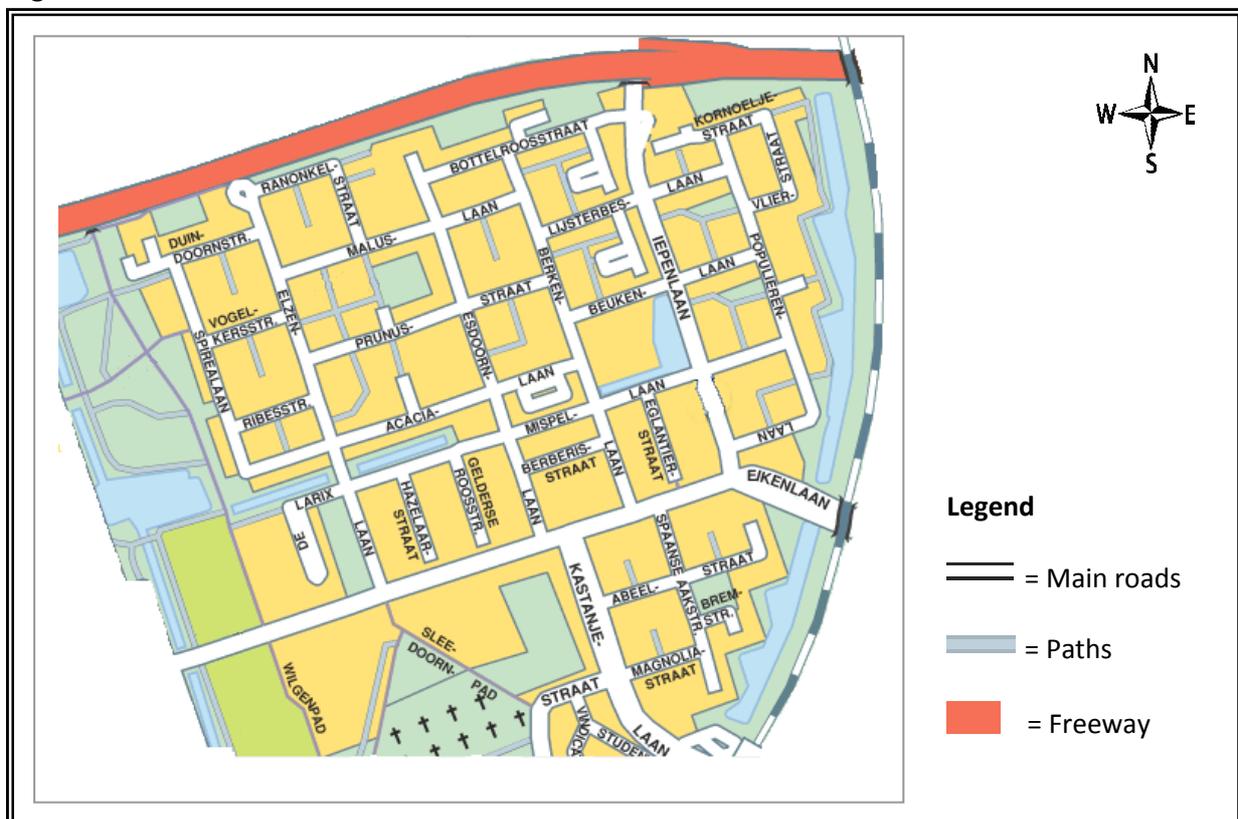
Lastly, Figure 13c shows the third stamp that was used in the urban structure of Selwerd. This stamp is made up of five building blocks with both low-rise single-family homes and medium-rise apartment buildings. Three of these blocks have a north-south direction and two of these blocks are constructed in a west-east direction. Additionally, rows of garage boxes are located in the middle of the stamp. This stamp is only used twice in Selwerd.

4.3.3 Disclosure structure

As was mentioned before in section 4.3.2, Selwerd's disclosure structure can be classified as orthogonal. Figure 14 shows that Eikenlaan and Kastanjelaan are the main roads connecting the neighbourhood Selwerd with the adjacent neighbourhoods and the other parts of the city. Selwerd's disclosure structure is characterised by a hierarchical structure. The four bigger roads in Selwerd are Elzenlaan, Esdoornlaan, Berkenlaan and Iepenlaan. These access roads connect Eikenlaan with other streets in Selwerd. Iepenlaan is the only way to get to the freeway. The other streets have a lower hierarchical position and mainly function as residential streets giving the residents access to their houses. As was mentioned before in section 2.4.1 the urban structure of post-war neighbourhoods is sometimes characterized by spatial segregation of traffic types. However, this is not the case in Selwerd. The streets in Selwerd are suited for cars and bicycles and footpaths are located on both sides of the road (see Figure 15).

Another characteristic of Selwerd's disclosure structure is the orientation of buildings blocks toward both streets and green areas. Specifically the fronts of some of the single-family homes are directed towards small residential paths which connect with the adjacent bigger residential streets (see again Figure 13a). Hence, these houses are oriented in the direction of the green spaces in between the houses.

Figure 14: Disclosure structure of Selwerd.



Source: Adapted from ANWB (2011).

4.3.4 Functional structure

In Chapter 2, segregation of land uses was identified as the basic principle of the spatial organization of many post-war neighbourhoods. In Selwerd as well, spatial functions are separately located throughout the neighbourhood. For example Selwerd's shopping centre is centrally located in the neighbourhood and provides a local solution for daily groceries and needs. The adjacent neighbourhood Paddepoel has a larger shopping centre which functions as a regional centre. In Selwerd, most of the shops and amenities of the neighbourhood are located in the shopping centre, i.e. supermarkets, a drugstore, a bakery, a pub and two hairdressers. The pharmacy and the doctors are also located close to the shopping centre. Another small shopping location is located in Prunusstraat.

Figure 9 also showed the main structure of public green spaces and water in Selwerd. The areas with large public green spaces and water are mainly located on the outer edges of the neighbourhood. Park Selwerd is located in the west side of the neighbourhood. The park forms a green zone between Selwerd and Paddepoel and has an important recreational function for the residents. However, Figure 9 does not show the large number of smaller public green spaces throughout the neighbourhood. Almost each street has its own field of grass. Many of these fields of grass have playgrounds for younger children. Figure 16 provides an impression of such a playground, located between two medium-rise apartment buildings.

Figure 15: Overview of Esdoornlaan Selwerd.



Source: Arne Dijkers (2011).

4.4 Trends in Selwerd's liveability

Before discussing the research findings in Chapter 5, it is useful to provide a bit more insight into the existing perceptions of the area and the experiences of policymakers and residents regarding Selwerd's liveability. As described previously in section 4.2.2, Selwerd has undergone a considerable process of change in recent years, which included the ageing of its population, a decrease in the number of family-households and an increase in both younger and elderly single-households, an increasing variety of ethnic populations, an increase in student-housing, an increase in the number of low-income households and fast residential turnovers. All together, the aforementioned trends have had a negative influence on Selwerd's liveability and its valuation lies under the municipality's average score (Gemeente Groningen, 2011). It is also remarkable that residents of Selwerd are the only residents in the whole Municipality of Groningen that negatively judge their neighbourhood's progress. Selwerd does not score well on liveability and many residents perceive deterioration and decline in their neighbourhood. Moreover, the inhabitants have a negative perception of the expected future of the neighbourhood's quality. On a neighbourhood level, this makes Selwerd the worst scoring neighbourhood in the municipality. Selwerd attracted the attention of the Municipality of Groningen because of these outcomes from the liveability survey. Mainly the out-dated public housing stock is blamed for the changes, because the cheap dwellings are considered to attract more low-income households. Urban renewal aimed at improving the public space and the housing stock is assumed to be the solution for the current liveability problems. The next chapter discusses the findings of the present study on perceived liveability in Selwerd.

Figure 16: Playground.



[5] Findings

5.1 Introduction

This chapter brings together and discusses the results and analysis of the in-depth interviews and the participant-led photography exercise conducted with residents living in the post-WWII neighbourhood Selwerd. The aim of the chapter is to capture the range of residents' prevailing perceptions on liveability in Selwerd and the correlation between these perceptions and the design of the urban structure. Also, and importantly, the elements of Selwerd's urban structure that are valued either positively or negatively by the respondents are identified. Liveability is determined on the basis of residents' perceptions of the quality of two different environments, namely, the social and the physical environment. The analysis starts with a discussion of the perceived liveability of the physical environment in Selwerd with regard to its urban structure in section 5.2.1. Subsequently, section 5.2.2 reviews the social environment of liveability. In addition, section 5.3 builds further on the findings of the in-depth interviews and reveals the photographs and descriptive texts from residents living in Selwerd.

5.2 Perceived liveability and its relationship with the urban structure in Selwerd

The in-depth interviews reveal that perceived liveability in Selwerd is not as straightforward as concluded in the liveability report of the Municipality of Groningen (2011). Pleasant, quiet, green, practical, centrally located, and convenient are words that are frequently mentioned by the respondents to describe Selwerd. In fact, respondents feel that Selwerd has been changing in a negative way only during the last couple of years. Correspondingly, some residents interviewed now perceive (parts of) the neighbourhood as being messy, noisy, changing, asocial, deprived, deteriorating, and decaying. This section analyses the correlation between respondents' perceived liveability and Selwerd's urban structure on the basis of the previously identified dimensions and aspects of liveability (see again Figure 3) and the three aspects of urban structure (see Figure 4).

5.2.1 The physical environment

5.2.1.1 Dwellings

According to Prak and Priemus (1986) the quality of the housing stock in a neighbourhood is of importance because it might trigger a spiral of social decline. Similarly van Beckhoven et al. argue, "no matter what you do, if the initial quality is low, deterioration may start quickly and continue rapidly. It is a well-known fact that post-WWII housing estates have not always been built to very high standards" (2005, p. 16). It is argued that the low quality of the dwellings is a frequently mentioned problem in post-WWII neighbourhoods (Kelfkens, 2000; Meurs, 2003; Argiolu et al., 2008). In fact, this research revealed that most respondents are quite happy with the quality of their houses. However, differences were found between distinct parts of Selwerd. Namely, respondents' perceptions of the quality of their houses differ greatly between owners and renters.

Peter (53, owner) is satisfied with the quality of the privately owned houses, he states, "*At the moment there is no need for improvement in our part of the neighbourhood. Like me, only owners live here and we maintain the houses ourselves*". However, renters complain more about the maintenance and the quality of their government subsidized houses. Overall the quality of single-family homes appears to be good but several renters indicate that the quality of the apartments in the medium-rise and high-rise apartment buildings is low. According to some of the residents interviewed, the dwellings are poorly insulated from both noise and the outside. Consequently, interviewees experience noise nuisance and energy losses. Willem (63, renter) comments on the poor quality of his apartment by saying, "*These apartments are very noise sensitive! When these houses were built, they were built quickly, and as cheaply as possible, really cheaply. But nowadays the dwellings do not fit the contemporary requirements anymore*". Amber (36, renter) shares similar experiences and tells, "*The apartments in the medium-rise buildings are out-dated and only suitable for students or for people that are in immediate need of a dwelling for whatever reason. Yes, this kind of apartment is only suitable for people like that*". Some of the older respondents interviewed raise concerns about the suitability of their apartments that are related to getting older and becoming less mobile. Most apartment buildings are not

served by an elevator and walking the stairs becomes a constraint for some people as their personal competences decline. As noted in subsection 2.2.2.2, residents' appreciations are primarily based on functionality and attractiveness. In terms of functionality, the findings show that internal design problems, related to the comfort of the medium-rise and high-rise apartment buildings, are considered to be the main problem with regard to the quality of the housing stock in Selwerd. Unlike Turkington et al. (2004) this research found no evidence for the existence of dissatisfaction with the relative size of the houses among respondents. As a consequence of the perceived poor quality of the apartments, some of the renters would like to move to a more comfortable house. In contrast, none of the house owners desire to move out because of the quality of their dwellings.

As described previously in Chapter 4, Selwerd's urban structure is characterized by regular patterns like most other post-WWII neighbourhoods. Harbers et al. (2009) argue that the dwellings are considered monotonous, charmless, and unpopular by the residents of post-war neighbourhoods. However, in terms of the attractiveness of the housing stock of Selwerd, respondents' opinions appear to be divided. Despite the fact that Selwerd's physical form is characterized by different types of dwellings, different stamps, and different buildings heights some interviewees do perceive the neighbourhood as being monotonous. Stein (84, owner) comments, *"Well, it is all the same. There is not much variety and there are long rows of houses of the same type. Yes, it is quite monotonous really"*. Similarly Marion (43, owner) notes, *"I consider the houses in the neighbourhood very monotonous. I mean, whether you live here or at the other end it is all the same"*. In contrast, other respondents perceive the physical form of Selwerd as attractive. This is exemplified in the following quotation: *"I don't think it is monotonous. I often consider that an interpretation of people who do not live here themselves. Why monotonous? It is clear and nice-looking"* (Peter, 53, owner).

In summary, the findings show that appreciation of Selwerd's dwellings is not as straightforward as argued by Harbers et al. (2009) and mostly it seems to be a matter of taste. The research also revealed that perceptions of the quality of the housing stock differ greatly between owners and renters. Thus it can be argued that it is ownership that matters for perceived liveability of the dwellings. However, the differences between owners and renters can in part be explained by the different types of houses in which the residents interviewed live. Namely, respondents living in the single-family homes, owners as well as renters, are generally content with the quality of their dwellings. A large majority of the owners live in single-family homes and correspondingly most owners are generally content. In contrast, the majority of the renters live in apartments. This research found that it is especially the renters of apartments in medium-rise and high-rise buildings who are dissatisfied with the relative comfort of their out-dated dwellings. Correspondingly, the percentage of renters who are generally content with their dwellings is less than the percentage of happy owners.

The aforementioned findings indicate that there is a correlation between the perceived comfort of the dwelling and its building type. Therefore, the large number of medium-rise apartment buildings in Selwerd are considered the weakest link in the physical form of Selwerd's urban structure. In contrast, the relatively high number of detached single-family homes in Selwerd is found to have a positive influence on the perceived liveability of the dwellings.

5.2.1.2 Amenities

The second aspect of liveability in the physical environment is amenities. The presence of amenities and their relative position to the dwellings is related to the functional structure of a neighbourhood (Lörzing et al., 2008; Harbers et al., 2009). The effect of the modernist planning approach on Selwerd's functional structure was already described in Chapter 4.

In terms of the quality as well as quantity of the available amenities, Selwerd's respondents are very happy and generally content. Selwerd's local shopping centre is found to be well located and interviewees appreciate its proximity. Most of the residents interviewed use both Selwerd's shopping centre and the larger shopping centre in the adjacent post-WWII neighbourhood Paddepoel. Charles (63, renter) describes the available amenities, *"Here you have Selwerd's shopping centre with all the shops, the Albert Heijn, Lidl. And also not far from here is the shopping centre Paddepoel, which I go to by bus. So what more can I wish for?"* Eline (64, renter) confirms, *"Everything is close by. All kinds of shops are located in Selwerd and Paddepoel. There is really no need to go to the city centre"*. Wilma (36, owner) tells, *"It is a very practical neighbourhood. Everything is close by. The shopping centre in Paddepoel, the sports centre and also the running club, which I am a member of, are not far off. And the swimming pool and the library are also close by. So yes, that's all very handy"*.

In accordance with the findings of Adriaanse (2004) and Argioli et al. (2008), this research found that the respondents appreciate and frequently use the local shops and amenities in Selwerd. Unlike the findings of Bus (2001) and van Marissing (2008), the findings show no evidence that the shops are disappearing.

Besides shops and services, public green spaces are the second type of studied amenities in this research. The large number of public green spaces in Selwerd is the result of Selwerd's main structure of public green spaces and water. The public green spaces appear to be very much appreciated by Selwerd's respondents. Jos (93, renter) notes, *"I think there is not much to be desired with regard to the amount of public green space here in Selwerd, especially when compared to many other neighbourhoods in Groningen"*. This quotation indicates that the initial, modernist main structure of public green spaces and water is still appreciated by Selwerd's respondents. Moreover, and importantly, it appears that it provides Selwerd an advantage over other types of neighbourhoods that do not have this main structure.

In Selwerd the public green spaces and the park are maintained by the municipality and by the housing associations. Most of the respondents appear to be generally content with the level of maintenance of the public green spaces and, unlike the research of van Marissing (2008), this research did not find evidence for bad maintenance of the public green spaces in this post-WWII neighbourhood. The playgrounds located on the fields of grass are enjoyed mostly by interviewees with younger children or grandchildren. As noted by Peter (53, owner), *"The playgrounds are used very intensively. A whole new generation is now playing there. And that's what makes the neighbourhood such a pleasant one to live in. In our neighbourhood, children still play outside a lot, which is not so common anymore nowadays"*. Other fields of grass are used as soccer fields by the youth. Park Selwerd is regularly used by respondents of all ages for recreational purposes.

In summary, it can be concluded that Selwerd's functional structure has a positive influence on its liveability. Specifically the proximity of the shopping centre and other amenities and the public green spaces in the neighbourhood are positively valued by the respondents and are therefore considered important elements of Selwerd's urban structure. Hence, the modernist ideas of spatial segregation of functions and self-contained neighbourhoods appear to have worked out well in the case of Selwerd.

5.2.1.3 Living environment

The third and last aspect of liveability concerning the physical environment is the living environment. Maintaining the living environment is considered important in order to safeguard a neighbourhood's proper functioning, its positive image, and its perceived liveability (Wilson and Kelling, 1982; Ross and Mirowsky, 1999; Crowe, 2000; Cozens et al., 2005; Ziersch et al., 2007). Commenting on the living environment in post-war neighbourhoods, Kelfkens (2000) and Argioli et al. (2008) argue that generally its quality is moderate or bad. Consistent with their findings, the in-depth interviews revealed that respondents do indeed have concerns about the quality of the living environment in Selwerd. For Marion (43, owner) the living environment was even a reason to consider moving. She reveals, *"We thought about moving, but that was not because of the dwelling. We wanted to move because of the environment. Selwerd has been changing during the last couple of years"*. Other respondents also thought about moving because of the perceived decline of their living environment. The most frequently mentioned word by interviewees with regard to Selwerd's living environment is 'deteriorated'. In the following quotations, residents interviewed highlight the deterioration of the living environment in Selwerd.

Ellen (27, owner): *"Closed curtains, skew curtains or no curtains in front of the windows. It doesn't look nice. And in my view it tells a lot about the people who are living in the houses"*.

Carlo (44, owner): *"I like the neighbourhood, but some parts are really deteriorated and I don't like the ambiance anymore. It looks poor. The gardens are not neat anymore. The curtains and the decorations are not neat anymore. So that's a negative development"*.

Eline (64, renter): *"Everyone used to keep up their house and their garden properly. But now, you should look at some of the gardens or staircases. No one ever cleans them. It looks ugly now. And I think that is very unfortunate"*.

Harry (67, renter): *"You can see things have changed by looking at the curtains in front of the windows. When I first moved here everything was fairly neat. And I do not know how things look inside the houses, but based on the outside..."*

Jos (93, renter): *"People used to have their gardens 'pico bello' it was a pleasure to walk through the streets. I still walk through, as a member of the renters' council of the housing association, in order to look at the quality of the gardens. Well, some gardens look so bad; sometimes the tears are running down my cheeks".*

Two remarkable points can be derived from the above quotations. The first point is that mainly it is the neglected maintenance of the gardens in the neighbourhood and the lack of proper curtains that appear to contribute to interviewees' feelings of deterioration. The second remarkable point is that some respondents associate the signs of visible deterioration with the social norms and behaviour of the respondents of the dwellings, therewith relating to the values component of social cohesion. As in the research by Argioli et al. (2008), messiness and dirtiness of the living environment appeared to an important concern of the respondents. Some of the interviewees are annoyed by the litter dropping behaviour of neighbours who leave their garbage bags or other stuff in front of the door or in the front or backyard.

Although the aforementioned problems are mentioned by owners as well as renters, the degree of deterioration of the living environment is found to differ within Selwerd. Rutger (62, renter) tells, *"We have a lot of problems near the Lijsterbeslaan. The cheap rental dwellings in that part and the medium-rise apartment building adjacent to the Eikenlaan, like the Hazelaarstraat, are now inhabited by junkies and other weird people. These areas have been run down, the houses are sealed with newspapers and you simply do not want to know what is happening there"*. Similarly Marion (43, owner) explains: *"Not the Eikenlaan itself, but the streets with the flats, you know the three medium-rise apartment buildings, have changed a lot. [...]. But also the area near the Bottelroosstraat has changed a lot"*. These quotations indicate that the deterioration seems to be more severe in the areas that are dominated by public housing. Based on the following quotations, it can indeed be concluded that deterioration of the living environment differs greatly between the areas characterised by owner-occupied dwellings and the areas with predominantly public housing.

Ellen (27, owner): *"The neighbourhood is really mixed. I like the part where I live but it differs for each part. Some areas are really deteriorated"*.

Wilma (36, owner): *"Well I have been living here for six years now but I did not really see deterioration. So, in my opinion it is not so bad. Well, maybe it is worse on the other end of the neighbourhood. It is possible that there is a lot more. In this part with the owner-occupied dwellings it is not so bad"*.

Claire (69, owner): *"I do not live in those parts, so I do not notice. But my sister has been living at the Prunusstraat for a while and I heard dreadful stories about her neighbours... But in the part which I live in everyone is actually quite happy"*.

This section started with arguing that maintaining the living environment is important in order to safeguard a neighbourhood's proper functioning, its positive image, and its perceived liveability. The findings of the current research show that the visible deterioration of the living environment negatively influences interviewees' perceptions of the living environment in Selwerd. Specifically the attractiveness of the living environment has worsened during the last few years, due to a variety of signs of deterioration. In accordance with Argioli et al. (2008) growing dissatisfaction among respondents is found regarding the quality of the living environment. It can also be concluded that there is a positive relation between ownership and the quality of the living environment; respondents who live in the areas with higher proportions of owner-occupied dwellings are more satisfied about the quality of their living environment. At this point there appears to be no clear evidence about the correlation between the urban structure and the deterioration of the living environment in Selwerd. However, and importantly, the findings show that respondents specifically relate the signs of visible deterioration in the living environment to the lifestyle and behaviour of other residents. Therefore, the following subsection elaborates further on the possible explanations for the deterioration of the living environment in Selwerd.

5.2.1.4 Causes of deterioration of the living environment in Selwerd

Commenting on the increased deterioration of the living environment in Selwerd, the respondents mention a few possible causes.

First, several interviewees argue that Selwerd's liveability problems are caused by the so-called 'water bed effect' of urban renewal in the adjacent post-war neighbourhoods Vinkhuizen and Paddepoel. The former residents of Vinkhuizen and Paddepoel had to be relocated prior to the renewal period in their neighbourhoods and, according to the respondents, they mainly came to Selwerd. In the following quotations Marion, Peter, and Willem highlight the influx of low-income households, which are coming from other neighbourhoods to Selwerd.

Marion (43, owner): *"A lot of people have been relocated in the city. Many of them now live in Selwerd. So the problem is moved but not solved"*.

Peter (53): *"Selwerd has become the drain of the city of Groningen. Only the people who could not afford anything else moved in here. It is getting messier and sheets are put in front of the windows. But hopefully it is not too late to stop the process"*.

Willem (61): *"Selwerd is really declining and it has become the drain of Vinkhuizen and Paddepoel [...]"*.

Two important points can be derived from the above quotations. The first point is that the process of decline of Selwerd's living environment appears to be affected by wider city forces. Therefore, it can be concluded that seeking causes for the process of deterioration in Selwerd only at the scale-level of the neighbourhood is too limited. The second point is that Selwerd's housing stock clearly serves an important function for housing the low-income households. As described previously in section 4.3.2, a significant amount of the housing stock in Selwerd is made up of public housing, which is relatively cheap. Corresponding to van Beckhoven et al. (2005) this research found that the government-subsidized rental houses mainly attract low-income households, often with different ethnic backgrounds. This is exemplified in the following quotations:

Marion (43, owner): *"Now, they [the housing associations] just put anyone in the houses who do not have any money. [...] because the houses are cheap you know"*.

Herma (40, renter): *"I like the houses, but they [the housing associations] just let the apartments to everyone. People without money, who live on unemployment benefits. I think, and I really do not want to overreact, but I think I am the only resident in the entire street with a permanent job"*.

Harry (67, renter): *"In some streets there aren't any nice people living there anymore, let me put it like that. But well, that's what happens in this neighbourhood because the houses are cheap and of reasonable quality. The flats over there, I don't know exactly what the rent is at the moment, but the apartments are affordable. Consequently a different kind of audience moves in"*.

The above quotations indicate that many respondents blame the new residents for the deterioration of the living environment in Selwerd. It has also been determined from this research that the influx of low-income households mainly affects the areas that are dominated by public housing. Specifically, the medium-rise building blocks experience rapid residential turnover. As argued previously in subsection 5.2.1.1, the large number of medium-rise apartment buildings are considered the weakest link in the physical form of Selwerd's urban structure. The aforementioned findings confirm this statement. The medium-rise apartments have an important function for housing the low-income households. However, groups of low-income inhabitants are also moving into the other types of houses in the areas with renter-occupied dwellings. Consequently, neglected maintenance and signs of deterioration in the living environment are also likely to increase in these areas.

At this point, the findings discussed confirm that ownership does indeed matter for the quality of the living environment; as residents who live in the areas with higher proportions of owner-occupied dwellings are less

likely to be confronted with the influx of low-income households and the resulting neglect of the living environment.

The second underlying cause of neglect of the living environment in Selwerd is rather different. According to the residents interviewed, the decline of the living environment is also caused by the increasing numbers of students moving in to the neighbourhood. Kate (56, owner) describes, *“It used to be a neat neighbourhood. But it is deteriorating, due to the student housing. A lot of students moved into our apartment building. And we were not so happy with that. I do not dislike students, but in general students have totally different lifestyles than families. So all the flat residents left and nowadays no families are left. In fact the families have been expelled by the students. Sad but true”*.

In accordance with the Gemeente Groningen (2011), the increase in student residents appeared to be another trend in Selwerd.⁹ As noted previously, the influx of low-income groups mainly affects the areas that have higher percentages of public housing. In contrast, the influx of students affects the entire neighbourhood; living in an area that is mainly owner-occupied or renter-occupied makes no difference. This is because students move into not only the rental dwellings but also the many relatively cheap single-family homes in the owner-occupied areas of Selwerd that were bought by landlords. Large groups of students moved into these houses, living among older people and families. According to the respondents, most of the students are messy and do not properly keep up their living environment. The Gemeente Groningen (2010) acknowledged the undesirable, negative effects of this trend and at the moment it is prohibited for landlords to buy houses in Selwerd.

In summary, Selwerd’s population has undergone a considerable process of change in recent years and its composition changed significantly. The influence of the concentration of households with lower socioeconomic statuses on liveability in the neighbourhood appears to be significant. According to the respondents, the behaviour, lifestyles, and social norms of Selwerd’s ‘new’ residents are negatively affecting the quality of the living environment in Selwerd. This is in accordance with Dekker and Bolt (2005) who stress that increasing liveability problems in post-WWII neighbourhoods are positively correlated to the increasing number of low-income, problem-causing households. The research findings show no evidence of a strong correlation between Selwerd’s urban structure and the perceived quality of the living environment. However, it can be argued that the physical form of the urban structure has an indirect impact on the deterioration of the living environment. The influx of new population groups was triggered by urban renewal elsewhere, but the characteristics of the physical form of Selwerd’s urban structure fortified its scope. Namely, because of the large number of cheap dwellings, the neighbourhood specifically serves the needs of these low-income households and consequently many people moved into Selwerd. Subsequently, the behaviour of the ‘new’ residents contributes to the deterioration of the living environment.

5.2.2 The social environment

5.2.2.1 Social cohesion

The first aspect of the social dimension of liveability is social cohesion. Like the study conducted by the Gemeente Groningen (2011), this research reveals a considerable process of change in Selwerd’s population, which includes an increase in student-housing, an increase in the number of low-income households, and an increasing variety of ethnic backgrounds. Selwerd’s population change appears to have followed the same trajectory as many other post-WWII neighbourhoods; higher income-groups leave the neighbourhood and are replaced by households with lower socioeconomic statuses and social norms and lifestyles different from those of the previous residents (van Marissing, 2008; Argioli et al., 2008). Peter (53, owner) summarizes the changes in Selwerd’s population in the following quotation: *“Initially mainly middle and upper-class people lived in the neighbourhood. So many doctors, lawyers, and teachers lived here. There was a considerable homogeneity and a lot of control. Everything was really neat, clean, and safe and therefore people really enjoyed living in Selwerd. However, Selwerd is now a much more multicultural neighbourhood with people from lower classes too. Consequently many middle-incomes and higher-income households have left”*.

⁹ Groningen has a large student population. In the Netherlands, it is very common for a group of students to live together in one house. These houses are bought by their parents or the students rent a room from landlords.

Demographical transformations as indicated in the above quotation are considered to have negative impact on the different components of social cohesion, i.e. the behavioural, values, and perceptual component (Bolt and Torrance, 2005; van Marissing, 2008; Argioli et al., 2008). Similarly Dekker and Bolt note, "Increased differentiation in education, ethnicity, income, home-ownership structure, and lifestyle presents a challenge to social cohesion" (2005, p. 1). As mentioned in section 2.4.2, generally social cohesion in post-WWII is considered to be diminishing.

Similarly this research finds that social cohesion among Selwerd's residents is indeed decreasing. Or in the words of Komter et al. (2000) Selwerd's 'cement' is crumbling. As mentioned previously, the behavioural component concerns the degree of residents' social participation. Most of the respondents appear to know at least who their neighbours are and every respondent interacts with his or her neighbours at least to some extent. The nature of the interaction between neighbours ranges from simply saying 'hello' to visiting each other and providing social support. Most interviewees were satisfied with the relationship with their neighbours, which they often described as moderate or good, but also superficial. It can be concluded that social cohesion in Selwerd is reasonably good because people know each other (at least superficially), greet each other, and speak to each other (Cozens et al., 2005).

As mentioned previously in section 2.3.2, the design of the urban structure of a neighbourhood could facilitate or hinder the possibilities for interaction between neighbours (Morrisson, 2003; de Kam and Needham, 2003; Dekker, 2006; Ruijsbroek and Verweij, 2009). The modernist design of the urban structure of post-war neighbourhoods was especially aimed at facilitating social cohesion among residents, in an attempt to stop the slow decrease in social cohesion that had begun in the years before WWII. The in-depth interviews do not provide clear evidence as to whether or not Selwerd's urban structure promotes interaction between neighbours. However, there appears to be considerable differences among the relationships of interviewees and their neighbours, which seem to be more related to the respondent's individual characteristics than to the design of Selwerd's urban structure. A positive relationship is found between house ownership and the interaction between neighbours as well as between respondents' length of residence and the interaction between neighbours. House owners generally enjoy good relationships with their neighbours. In contrast, generally the relationships between renters and their neighbours appear to be less developed, except among renters who had lived a long time in their dwelling. A possible explanation could be that, in general, the public housing areas face faster residential turnover rates than the areas that are dominated by owner-occupied houses. Consequently, renters are more often confronted with new neighbours, are less likely to know their neighbours, and social interaction decreases.

The interviews reveal that it is mainly the older respondents interviewed who feel that Selwerd's residents used to be a lot more sociable. Eline (64, renter) tells, "*We used to live here together for a very long time. My neighbour next door has been living here since the house was built. And I know her, but I do not know the other neighbours anymore. I often say 'if you live here you have neighbours for a year', and that's not very nice you know*". Commenting on social cohesion in Selwerd, Jos (93, renter) notes, "*I would like to see a change in people's mentality. But unfortunately mentality is hard to change. It is actually very simple; people should just greet each other. Now our neighbourhood hangs together like loose sand*".

However, most interviewees note that, regardless of the fact that they do not have a very close relationship with their neighbours, they know that they can rely on each other for help in case of an emergency. According to Lee (2003), the latter is an important prerequisite for social cohesion.

The present study also reveals negative changes in social cohesion in Selwerd related to the value component of social cohesion. In accordance with Bolt and Dekker (2005), the population changes appear to contribute to feelings of increasing differentiation among residents. Generally the 'original' residents of Selwerd have different social norms, rules, lifestyle, and behaviour than many of the new residents. The degree of understanding among the residents decreases and the lack of similarity leads to mutual incomprehension and annoyances. Mainly the lack of keeping up the house, the gardens, and the living environment are points of annoyance for the respondents. Commenting on the changing norms and behaviour of the new residents, Jette (64, renter) tells, "*You can notice that a different kind of people moved into the dwellings. You just notice. We are still used to removing the weeds among the tiles, but now one can notice that a lot of people who have moved in who think it is normal to leave it like that. Yes, Selwerd is really declining*".

Several studies have shown that feelings of belonging tend to be stronger among long-term residents in a neighbourhood (Hummon, 1992; Giuliani, 2003; Livingston et al., 2008; Smith, 2009). Similarly, the research findings indicate that the respondents' degree of identification with and attachment to their neighbourhood

and their neighbours appears to be higher among respondents, owners as well as renters, who have lived for a relatively long time in Selwerd. As noted by Nienke (65, renter), *"We have almost lived forty years now in Selwerd. And well, you feel connected to the neighbourhood"*. With regard to the perceptual component, it was argued that residents' affinity with their neighbourhood is likely to decrease if the physical and/or social environment declines. However, overall this research has insufficient evidence to support or reject this statement.

In summary, the research findings indicate that social cohesion appears to have somewhat decreased in Selwerd during the last couple of years. Following the same line of reasoning as in section 5.2.1.4, it can be argued that the decrease in social cohesion is indirectly influenced by the characteristics of the physical form of Selwerd's urban structure. Social cohesion is affected because the large amount of cheap dwellings attracts population groups with a lower socioeconomic status, as well as people with social norms, lifestyles, and behaviour that is different from those of the other residents. Generally, the rental dwellings face faster residential turnover, which in turn diminishes the likelihood of a resident's familiarity and affinity with the physical and social environment.

5.2.2.2 Safety

As was argued before in section 2.3.2, there is a positive relationship between social cohesion and social control; strong social cohesion diminishes the likelihood of problems like vandalism, nuisance, and crime (Coleman, 1985; Furedi, 1998; Bus, 2001; Cozens et al., 2005; Palmer et al., 2005). From this research, social cohesion appears to be somewhat decreasing among Selwerd's residents, so it is important to know how this relates to residents' perceptions of safety in the neighbourhood.

The in-depth interviews revealed that most respondents feel safe in Selwerd and seldom perceive any kind of nuisance, which is in contrast to the outcome of the liveability report of the Municipality of Groningen (Gemeente Groningen, 2011). Jos (93, renter) notes, *"There are a few troublemakers, but crime here is almost non-existent. Except for drug trafficking"*. Other interviewees also indicate that drug dealing is the main form of nuisance in Selwerd. Moreover, and importantly, the respondents note that the drug dealing is not a problem specific to Selwerd, but a more general problem.

The drug dealing is concentrated in certain parts of the neighbourhood. Mainly the respondents who perceive problems with open drug dealing either live near the parking area next to the shopping centre or in the residential area on the southern side of Eikenlaan, which is the main road. Subsection 2.2.2.2 argued that good urban design can prevent crime (Coleman, 1985; Ziersch et al., 2007). Both Jacobs (1961) and Sorenson (2003) maintain that places that are constantly seen by people or passers-by are less likely to become obscure places for criminals. However, the parking area where the dealing takes place is surrounded by one medium-rise and two high-rise apartment buildings, roads and is also lit by street lights. Thus many residents can keep an eye on what is going on at the parking area. Harry (67, renter) tells, *"Well, now and then you see something at the parking place. One comes, one deals, and one goes"*. Hence, in this case there is no logical explanation for the location of drug dealing on the basis of the characteristics of its urban design.

The correlation between the location of drug dealing in the southern part of Selwerd and its urban structure is clearer. Here the drug dealers have the opportunity to hide behind the garage boxes of the medium-rise apartment buildings and in the fire escapes of the single-family homes. Gerrit (66, owner) narrates, *"We see them contacting each other here. Some dealers live in the medium-rise apartment buildings there, at the lower levels. Cars stop here, people run by and they stop at the end of the garage boxes to look around the corner. I have often found small bags with needles and also filled with the other stuff. I regularly see those people putting stuff in the grooves in the wall of the garage boxes, which are meant for ventilation. Well, when they are gone I take the stuff out and put it in the bin"*. The quotation above indicates that there are fewer possibilities for social control and indeed this location can be considered 'a place with no eyes' (Jacob, 1961). Moreover, some respondents experience nuisance from the drug dealers who live in the apartments in the medium-rise apartment buildings. Herma (40, renter) tells, *"We have had a really bad period here. A drug dealer was living in the apartment above me and drug addicts were coming all the time. Day and night, day and night, ringing on my door too. So, no, it really wasn't a nice time"*.

Except for the drug nuisance in these particular areas, most residents do not have concerns over crime, nuisance, or safety. This is especially true for residents who live in the areas of Selwerd with higher shares of

owner-occupied houses; they barely perceive any form of nuisance or criminal activities. However, some owners and renters interviewed perceive the north-east part of Selwerd and the parts adjacent to Eikenlaan as unpleasant, due to some incidents that took place during the last couple of years. It is particularly noteworthy that these aforementioned areas are the same areas where the living environment was perceived to be the most declined by the respondents. Thus, there appears to be a relationship between the decline of the living environment in these areas and perceived safety.

Two other remarkable points can also be derived from the findings. First, both areas are mainly made up of rental dwellings. Second, the design of both areas is based on the stamps that are displayed in Figure 13b and 13c. Hence, the findings suggest a relationship between safety/nuisance and the presence of medium-rise apartments in the area. Based on the assumptions of Jacobs (1961) and Coleman (1985), one would expect criminal activities and nuisance to take place at the 'obscure places' like the public green spaces within the stamp. However, according to the interviewees this is not the case. None of the respondents perceive the spaces of public green as unsafe or unpleasant, or as a meeting point for youth or criminals. It can be concluded that, in this case as well, the medium-rise apartment buildings are the trigger. The drug dealers live in the cheap, easy to obtain apartments and cause disturbances for the residents of the areas around the building block. Hence, the relationship between perceived unsafety and medium-rise apartment buildings does not directly relate to the design of the urban structure, but again involves the residents of the medium-rise apartment buildings. This finding reaffirms the argument that the large number of the medium-rise apartment buildings in Selwerd are the weakest link in the physical form of Selwerd's urban structure.

Further, the findings show there are no areas that respondents purposefully avoid. Nor are any of the respondents restricted from going out by fear. Overall, Selwerd is generally perceived by the interviewees as rather safe. Except for some drug dealing nuisance, residents indicate that they seldom perceive crime or nuisance in their neighbourhood. None of the respondents expresses feelings of unsafety.

5.3 Residents with cameras

Chapter 3.4.2 already discussed the advantages of photographs as an informant-generated technique. This section presents a descriptive and pictorial account of the post-WWII neighbourhood Selwerd from the perspective of six residents. The photographs and their descriptions are useful to elaborate on the findings of the in-depth interviews. Section 5.3.1 displays the photographs and their accompanying text. The photographs and their descriptions are followed by a brief discussion in section 5.3.2.

5.3.1 The photographs

5.3.1.1 Photographer: Barbara (66, renter).



“Photograph 1 shows the garage boxes. Children are playing here because there isn’t any sign which prohibits playing there. It is really dangerous for the children to play here because not all car drivers slow down. It would be better for both car drivers and the children if someone put a sign here. It would prevent irritations and accidents”.



“Children are also throwing wooden planks with nails (photo 2), rocks and large branches in the area of the garage boxes”.

5.3.1.2 Photographer: Rosanne (25, renter).



“Photo 1 was taken next to the Berkenlaan/Mispellaan. I think that the public green spaces in Selwerd are very well maintained, which is a positive aspect. It makes the neighbourhood look neat and it is nice to look at for the residents”.



“This photo has been taken at Iepenlaan. I like the way in which this apartment building was renovated. Everything looks brand new. Also the small gardens in front of the flat look neat, in contrast to many other gardens in this street which are very sloppy. I hope that the other apartment buildings (including mine) soon will be renovated also in the same way”.



“This picture was taken at the corner of Eikenlaan and Iepenlaan. I am bothered by the empty flat. It is a big, notable, and ugly building. It is now occupied by squatters and I doubt that is a positive thing. One should find another use for the building because it will only decline further due to its vacancy”.

5.3.1.3 Photographer Sarah (35, owner).



“This is a photograph of the playground in Park Selwerd. It is used by teenagers. I think it is good to have such a playground because youth meet each other here and do not hang around in other places. I live close to the playground but seldom experience a nuisance from it”.



“Looking at this ugly building makes me feel depressed. I hope that there is no need to live in such a building when I am older”.



“This photograph shows ‘De Vensterschool’, the library, and the sports centre. I like the fact that multiple amenities are located in one building. I and my kids often make use of this building”.

5.3.1.4 Photographer: Philip (41, renter).



"I like the proximity of the small shopping centre. I do not have to walk very far and there are enough shops".



"This is the viaduct near Park Selwerd. Unfortunately someone has scrawled graffiti all over it. It looks deteriorated".



"I like the fields of grass and the small ponds in our neighbourhood. They make the neighbourhood look more colourful".

5.3.1.5 Photographer: Craig (60, renter)



"A great view of a house in a jungle".



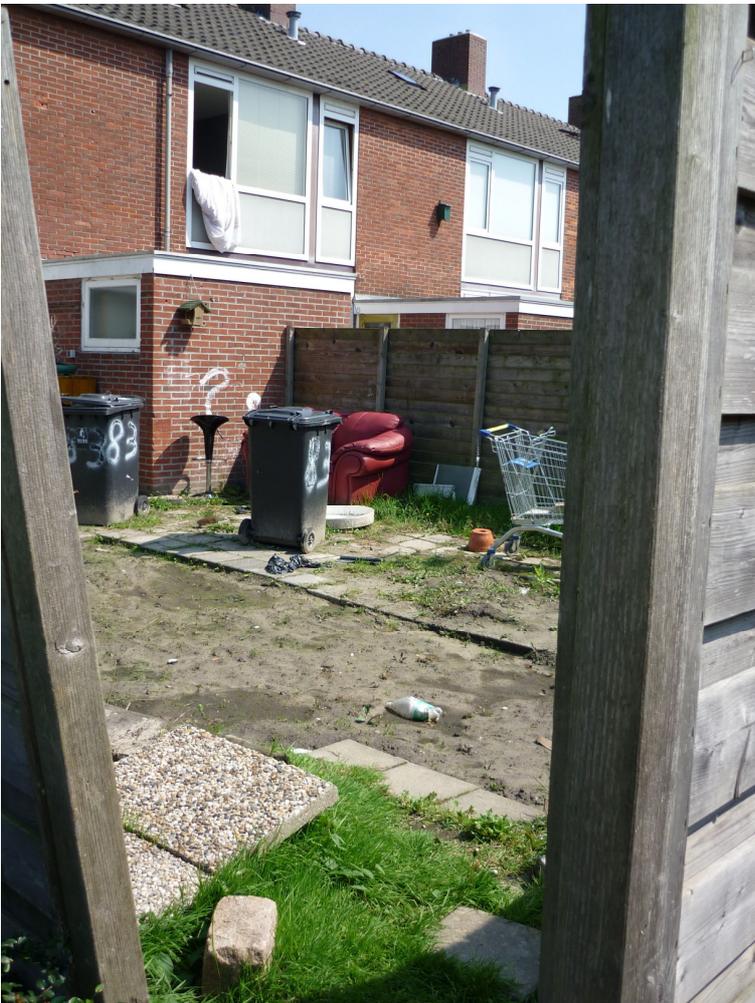
"There is always scrap in the front garden. Unfortunately the old rusty car is not in the photograph".



"If all residents would do only half of the work of what is shown in this photograph, we could have a very nice neighbourhood".



"There are plenty of playgrounds for the kids, like the one that is shown on this photograph. Everything has just been newly installed".



"This picture needs no explanation..."

5.3.1.6 Photographer: Ailene (75, renter).



'It should be forbidden to cycle on the shopping centre's square because cyclers and scooters make it very unsafe for pedestrians'.



"From my house I regularly see pedestrians being knocked down [by bikes or scooters] on the square".



"Here at the Berberistoren you cannot safely leave the building because cyclist and mopeds also use the pedestrian path passing the front door. Especially people with walking aids must be careful. The small posts that are placed on one side have no effect".

5.3.2 Selwerd's liveability through the lenses of its residents

As was noted previously, people can use photographs to tell their stories and illustrate what is important to them. It can be concluded that the photographs reflect the diversity with which the residents perceive and portray liveability in their neighbourhood. The photographs reveal a striking variety in their chosen location, coverage, content, and perceptions. This variety is discussed further in the next sub-sections.

5.3.2.1 Location and coverage

The photographs reveal a striking variety in their chosen locations. The locations of the photographs differ from the former elderly care home flat in Selwerd's east end to Park Selwerd in its west end and Bottelroosstraat in the north end of Selwerd. The area located south of Eikenlaan is not included by any of the participants. Barbara (66, renter) focuses in her photograph collection on the immediate surrounding of her house at Lijsterbeslaan. Similarly, Ailene (75, renter) focuses on the immediate surroundings of her apartment building, which is located adjacent to the shopping centre. The photographs of both ladies therefore have a much narrower focus than the collections of images from the other participants. For example, the radius of the photographs taken by Philip (41, renter), appears to span almost the entire neighbourhood. Rosanne's (25, renter) photographs cover the east part of Selwerd, whereas Sarah's (35, owner) photographs cover the wider central and western area of the neighbourhood. Craig (60, renter) took his five photographs around the outside of his own house, which is located on Bottelroosstraat in the north end of Selwerd. All in all, the whole neighbourhood, except for the south end, appears to be reasonably covered by the photographs.

5.3.2.2 Content and perceptions

The photographs also differ greatly in their content and evaluation. The subjects of the photographs and the photographers' positive or negative evaluation are determined by comparing each photograph with its verbal description. The subjects photographed by the participants can be categorized into five groups, which are based on the aspects of liveability as described in Chapter 2. In addition, every photograph is subdivided based on its negative or positive perception. Table 3 shows the organization of the nineteen photographs based on these categories.

Table 3: Photographed aspects and their evaluations.

Photographed aspect	Perception	
	Negative	Positive
Dwelling	2	1
Amenities	-	6
Living environment	4	1
Social cohesion	-	-
Safety	5	-

Amenities are the aspect of liveability that is most frequently photographed by the participants. Similar to the outcome of the in-depth interviews, the participants generally commented favourably on the availability and the quality of the amenities. None of the photographers included the amenities as a negative element of Selwerd's urban structure. Rosanne, Sarah, Philip, and Craig included the amenities in their photograph collection. Rosanne and Philip both like the public green spaces and ponds of water in Selwerd. According to Philip, the proximity of the shopping centre is a positive aspect of the neighbourhood; Sarah praises the presence of the multifunctional centre 'De Vensterschool'. The playgrounds are appreciated by both Sarah and Craig. In the text accompanying her first photograph, Sarah assumes that the playground in Park Selwerd prevents nuisance from teenagers elsewhere. Therefore she considers the presence of the playground to be a positive aspect of the neighbourhood.

In summary, it can be concluded that all the amenities have a positive influence on perceived liveability in Selwerd.

In accordance with the findings in section 5.2.1, the main structure of green space and water as well as the amount and proximity of the amenities are considered an important, positively valued aspect of Selwerd's urban structure. Hence, the functional form of the post-war urban structure of Selwerd supports liveability in the neighbourhood.

The second most frequently photographed aspects of liveability are the living environment and safety. A remarkable observation from Table 3 is the high number of photographs regarding negative perceptions of safety. Despite the fact that subsection 5.2.2.2 concluded that the residents interviewed seldom perceived crime or nuisance in their neighbourhood and correspondingly do not feel unsafe. This is in contrast to the findings in this section. However, a closer look at the photographs regarding safety reveals that all these photographs are made by Barbara and Ailene. Moreover, and importantly, multiple photographs more or less apply to the same situation. Barbara is concerned with the safety and nuisance near her garage boxes, as children often play there. Ailene is concerned with the safety of pedestrians at the square of the shopping centre as well as in front of her apartment building. Therewith, these photographs have a significant influence on the outcomes of the resident-led photography method.

The safety problems and nuisance are related to forms of traffic. However, there is no evidence that these safety issues are related to Selwerd's physical form of the urban structure. Again, the findings indicate that the problems result from the unwanted behaviour of other people.

In accordance with the conclusions in subsection 5.2.1.3, the living environment predominantly appears to be perceived negatively by the participants. However, in this case Craig is mainly responsible for the high number of photographs regarding the living environment, indicating concern about its deterioration. Craig appears to be highly annoyed by the neglect of the gardens of the dwellings in his neighbourhood. Photographs one, two, and five provide examples of the deterioration in Selwerd. His third photograph shows a garden that in his opinion should serve as a role model for all gardens in the neighbourhood. Based on the content of his photographs and the accompanying texts, the cause of the neglected maintenance of the gardens appears to be related to the residents living in the houses, i.e. human impact. What is especially noteworthy is that all houses portrayed on the photographs are government subsidized rental houses. Rosanne also comments in her description on the sloppy gardens in the neighbourhood. Again, the correlation between the residents of the rental houses and neglected maintenance of the environment is reaffirmed.

Philip took a photograph of graffiti on a viaduct, which in his opinion contributes to a negative image of the living environment. According to Coleman (1985) "graffiti can be interpreted as a way of making one's mark in an anonymous environment". The viaduct displayed in the photograph indeed meets this requirement. In this case, the design of the urban structure triggers unwanted behaviour, resulting in signs of disorder like graffiti.

The dwellings themselves were the third most popular subjects of the photographs. Rosanne's second and third photo both concern buildings. The second photograph and its accompanying description have a double meaning. At first sight she seems to appreciate the renovated medium-rise apartment building, but simultaneously she indicates that the other medium-rise apartments in Selwerd, including hers, are not as nice. For Rosanne, the renovated building serves as a role model for the other medium-rise apartment buildings in the neighbourhood. Her last photograph concerns the former elderly care home complex Hunzerheem, which now is occupied by squatters. Rosanne dislikes the aesthetic features of the building and foresees further decline of the building, which in her opinion influences Selwerd's liveability in a negative way. Sarah's second photograph also shows a big high-rise building, which is located near Selwerd's shopping centre. Sarah does not like the appearance of the building. In reference to their photographs of the high-rise buildings they use the word 'ugly'. Unfortunately, they do not explain why they consider the buildings to be ugly. Based on the aforementioned findings, the biggest detriment to the physical form of Selwerd's urban structure are the high-rise buildings and the out-dated medium-rise apartment buildings.

As was argued before, social cohesion is an important aspect of liveability in the social environment (Doeschot, 2003). However, the photographs and verbal descriptions offered by the participants do not directly present evidence of social connections, social norms, or attachment. Probably, this is due to their relatively intangible nature. However, according to Smith negative photographs or descriptions "can also be viewed as an indication of connection to place" (2009, p. 81). Residents who raise concerns about liveability in their neighbourhoods are considered to be expressing some degree of attachment to their neighbourhood.

In conclusion, the vast majority of the photographs were found to represent aspects of liveability in the physical environment. The results of the photography exercise provide further insight into residents' perceptions of liveability in Selwerd. The photographs and accompanying texts reaffirm that Selwerd's perceived liveability is not straightforward. The photographers had different perspectives, showing aspects of Selwerd that they perceive either positively or negatively, or in the words of Wang (1999) they showed both Selwerd's 'strengths and concerns'. There is no common focus on one particular aspect of the physical environment dimension of liveability, but a diversity of aspects is portrayed. Particularly noteworthy is the finding that Selwerd's modernist functional form suits the contemporary demands and wishes of its residents. The physical form of the post-modernist structure has a less positive impact on perceived liveability, specifically related to the aesthetic appearance of the medium and high-rise building blocks. The findings reaffirm that the main cause of the problems regarding the living environment and safety is human behaviour. No particular differences between areas within the neighbourhood were identified.

[6] Conclusion

An important aim of this master's thesis was to contribute to existing (scientific) knowledge about the correlation between the urban structure of post-war neighbourhoods and their liveability. In Chapters 2 to 5, the three sub-questions of the current research have been answered (see section 1.2 for the research questions).

This last chapter recapitulates the findings and discusses the conclusions drawn from the present study, focussing on the main research question:

“How do residents of post-war neighbourhoods perceive liveability within their neighbourhood in particular with regard to the design of the post-war urban structure, how does this relate to the prevailing views of urban planners during the time these neighbourhoods were constructed, and which elements of the post-war urban structure are important with regard to liveability in the neighbourhood, according to the residents?”

First the prevailing views of urban planners, during the time post-war neighbourhoods were constructed, are discussed in this paragraph. Chapter 2 discusses how the post-WWII neighbourhoods were built, between 1945 and 1970, in accordance with the idealistic, modernist urban development plans dominating planning at that time. The modernist philosophy is characterised by its rational, efficient, and future-oriented nature. The post-war neighbourhood was designed to offer high-quality houses and a good living environment for its socially mixed population. Specifically, the early post-war neighbourhoods were considered to be a reflection of larger society, housing people of different social classes or at different stages of life. Moreover, and importantly, there was a strong belief in social engineering by means of environmental determinism, particularly in the early post-WWII neighbourhoods. Urban planners assumed that the right design of the urban structure of the post-war neighbourhoods would positively influence residents' behaviour and social interaction, therewith contributing to liveable neighbourhoods. The modernist philosophy with its aforementioned goals resulted in a distinctive urban structure that unmistakably sets post-war neighbourhoods apart from all other types of neighbourhoods.

This paragraph discusses the findings regarding the perceptions of residents on liveability in post-war neighbourhoods. Chapter 2 revealed that in the Netherlands a larger number of post-WWII neighbourhoods specifically face a multitude of problems relating to different aspects of liveability, both physically and socially. Liveability in post-WWII neighbourhoods appears to be threatened and the neighbourhoods may no longer suit the requirements of today's society.

In this research the post-war neighbourhood Selwerd in Groningen was studied as a case. In Chapter 4 it was determined that perceived liveability in Selwerd is not straightforward. Pleasant, quiet, green, practical, centrally located, and convenient are words that are frequently mentioned by the respondents to describe Selwerd. However, the findings also indicated that Selwerd has been changing in a negative way only during the last couple of years. In fact, some residents interviewed perceive (parts of) the neighbourhood as being messy, noisy, asocial, deprived, deteriorating, and decaying. All in all, the research findings show that liveability in post-war neighbourhood Selwerd is still generally perceived as positive, so liveability in post-war neighbourhoods appears not to be as black and white as argued in existing literature (Coleman, 1985; van Beckhoven et al., 2005; van Dijk and Wittebrood, 2007; Bolt et al., 2008).

Two main arguments regarding the correlation between liveability and the urban structure of post-war neighbourhoods can be derived from the abovementioned findings.

The first argument is that Selwerd's urban structure is in fact suitable with regard to liveability and is therefore not perceived as a major problem. This argument is inconsistent with the arguments of Alice Coleman (1985) who argued that the urban structure of post-war neighbourhoods has proved to be disastrous and that it is the main cause of their contemporary liveability problems.

The second argument that can be made is that urban structure is not of significant importance for liveability in neighbourhoods. In Chapter 2 it was noted that some authors argue urban design is a forceful determinant for liveability in neighbourhoods (Prak and Priemus, 1986; Saville and Cleveland, 2003; Ziersch et al., 2007). Therefore, the second argument would be inconsistent with their findings.

The findings of the current research confirm that there is a correlation between Selwerd's post-war urban structure and its liveability. Chapter 5 showed that the characteristics of Selwerd's functional structure have a direct and positive influence on the perceived quality and quantity of the amenities in Selwerd. The location of the shops in the local shopping centre and the availability of other services is a result of the modernist emphasis on self-contained neighbourhoods. Another characteristic of the urban structure is the main structure of public green spaces and water, which also appear to be appreciated. Therefore, Selwerd's functional structure is an important, positively valued element of the post-war urban structure with regard to liveability.

In contrast, the findings show that the characteristics of the physical form of Selwerd's urban structure have a negative influence, directly as well as indirectly, on perceived liveability. Specifically the out-dated medium-rise apartment buildings were identified as a negatively valued element of Selwerd's post-war urban structure and these buildings appeared to be the biggest detriment to the physical form of Selwerd's urban structure for several reasons.

First the level of comfort and the aesthetic appearance of the medium-rise apartments are perceived to be poor, therewith directly impacting perceived liveability. Second, this research argues that the initial quality and building type of the dwellings play a role in attracting certain residents, therewith indirectly influencing aspects of liveability in the neighbourhood. The perceived negative changes in Selwerd's living environment and the decrease in social cohesion appear to be related to the influx of new households, with lower socioeconomic statuses, mainly in the medium-rise, government subsidized rental apartments in Selwerd. Due to their relatively low quality, the dwellings are relatively cheap and easy to obtain in comparison to other dwellings in the city of Groningen. The findings from the current research also demonstrate that the medium-rise apartments face rapid residential-turnovers. All in all, the findings indicate that the medium-rise apartments in Selwerd serve an important function for housing the low-income households. The different social norms and behaviour of these new residents have resulted in decreasing social interaction among neighbours as well as in neglected maintenance of the living environment. The perceived safety in Selwerd is also found to be related to the presence of the medium-rise apartments, as drug dealers live in the medium-rise apartment buildings.

Given these results, the present study argues that urban structure certainly is of significant importance for a neighbourhood's liveability, directly as well as indirectly. Hence, the current research invalidates the second argument that urban structure of neighbourhoods does not play a role in their liveability.

The first argument holds that in fact Selwerd's urban structure is not perceived as a major problem regarding its liveability. This argument is highly inconsistent with the arguments of Alice Coleman (1985), who argued that the urban structure of post-war neighbourhoods has proved disastrous and is the main cause of their contemporary liveability problems. In fact, from Chapter 5 it appeared that Selwerd's urban structure is reasonably suitable with regard to liveability, notwithstanding the fact that medium-rise apartment buildings were identified as the weakest link in Selwerd's urban structure. Moreover, the characteristics of the functional form of Selwerd's urban structure were found to positively impact on perceived liveability in the neighbourhood. Hence, this research argues that indeed Selwerd's post-war urban structure does suit the needs and wishes of contemporary residents with regard to liveability. Therefore, it is concluded that the urban structure of post-war neighbourhoods that were built in accordance with the idealistic, modernist urban development plans are not by definition disastrous.

In accordance with van Marissing (2008), the current research argues that there is no such thing as 'the post-war neighbourhood'. It is assumed that post-war neighbourhoods in the Netherlands differ greatly in their characteristics of the urban structure and their perceived liveability. Consistent with Ouwehand (2009), this study therefore argues that every post-war neighbourhood should be regarded as an individual case and it is therefore recommended to conduct a thorough analysis of each neighbourhood before reaching conclusions about adequate interventions in its area.

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Appendix A: Interview guide¹⁰

Interview guide

Algemene introductie interview

Vragen aan de respondent waar hij/zij graag wil zitten tijdens het interview in de woning, en audiorecorder klaar zetten.

Uitleg onderzoek

Goedendag, ik ben Linden Douma en ik ben onderzoeksmasterstudente aan de Faculteit der Ruimtelijke Wetenschappen van de Rijksuniversiteit Groningen. Ik ben nu aan het afstuderen en daarvoor ben ik aan mijn afstudeerscriptie begonnen. Centraal in mijn onderzoek staat de leefbaarheid in naoorlogse wijken, zoals Selwerd, in relatie tot de stedenbouwkundige structuur. Daarom doe ik verscheidene interviews in Selwerd. Ik wil het graag met u hebben over uw woning, de buurt en uw sociale contacten in de buurt.

Het interview zal ongeveer een uur in beslag nemen, dat hangt ook af van de hoeveelheid informatie die u met mij wilt delen. Als u het goed vindt, wil ik graag deze audio-recorder gebruiken om het gesprek op te nemen. Ik neem het interview op, omdat ik dan mijn aandacht bij het gesprek kan houden.

- Recorder aan!

Er zal vertrouwelijk met uw gegevens worden omgegaan. Daarom bedenk ik een fictieve naam voor u. De opnames zullen alleen beschikbaar zijn voor de mensen die betrokken zijn bij dit onderzoek. Dat zijn mijn begeleider en ik. U kunt mij op elk moment vragen om welke reden dan ook met het interview te stoppen. Ook als u even een pauze wilt kunt u dit natuurlijk zeggen.

De informatie die u geeft, zal gebruikt worden in mijn scriptie, in een presentatie en mogelijk een wetenschappelijk artikel of een andere manier om onderzoek te publiceren. Ook hierin zal niet direct naar u gerefereerd worden, uw naam blijft dus onbekend.

- Heeft u nog vragen of wilt u bijvoorbeeld nog iets meer weten over het interview of het onderzoek?
- Is alles voor u duidelijk en gaat u akkoord met het afnemen van dit interview?

¹⁰ Because current research was conducted in Dutch, the included interview guide and the explanatory letter in Appendix B are also in Dutch.

Introductie

Ik zou graag willen beginnen met vragen naar enkele persoonlijke gegevens. Zou u om te beginnen wat over uzelf kunnen vertellen?

- *Wat is uw leeftijd?*
- *Wat is uw burgerlijke status?*
- *Uit hoeveel personen bestaat uw huishouden?*

Dan zou ik nu graag met het volgende deel van het interview willen beginnen. Het interview bestaat uit drie onderdelen. Eerst zou ik graag het een en ander willen weten over uw woning. Dan heb ik een aantal vragen over de buurt en tot slot heb ik een aantal vragen over uw sociale contacten in de buurt.

Woning

Kunt u een korte beschrijving geven van uw woning?

- *Type woning (eengezinswoning, flat, vrijstaand, geschakeld)?*
- *Is het een koopwoning of een huurhuis?*

Sinds wanneer woont u hier?

- *Hoe lang in deze wijk?*
- *Hoe lang in deze woning?*

Waar heeft u hiervoor gewoond?

- *Stad?*
- *Wijk?*
- *Waar in de wijk?*

Waarom bent u hier naartoe verhuisd?

- *Waarom deze wijk of deze stad?*
- *Waarom dit huis?*
- *Was het uw eerste keus voor een nieuwe woning / wijk?*

Hoe voelt u zich in deze woning?

- *Positief of negatief? Waardoor komt dat?*
- *Wat vindt u van de kwaliteit van de woning? Positieve aspecten? Negatieve aspecten?*
- *Voldoet dit huis aan uw eisen en wensen? Wat zou u willen veranderen als u kon?*
- *Denk u dat u zich in een ander huis prettiger zou voelen?*

We hebben het tot nu toe vooral gehad over uw woning. Nu zou ik graag een aantal vragen stellen over de wijk Selwerd.

Buurt

Als u in enkele woorden uw buurt zou moeten omschrijven, welke woorden zouden dit dan zijn?

Kunt u een beschrijving geven van de buurt waarin u woont?

- *Hoe ziet de buurt eruit?*
- *Wat zijn kenmerken van deze buurt?*

Wat vindt u van het type bebouwing in Selwerd?

- *Positieve aspecten. Waarom?*
- *Negatieve aspecten. Waarom?*
- *Kwaliteit?*
- *Kwantiteit?*
- *Functionaliteit?*
- *Toegankelijkheid*
- *Wat zou u anders willen zien?*

Wat vindt u van het openbaar groen in Selwerd?

- *Positieve aspecten. Waarom?*
- *Negatieve aspecten. Waarom?*
- *Kwaliteit?*
- *Kwantiteit?*
- *Functionaliteit?*
- *Toegankelijkheid*
- *Wat zou u anders willen zien?*

Wat vindt u van het wegennetwerk in Selwerd?

- *Positieve aspecten. Waarom?*
- *Negatieve aspecten. Waarom?*
- *Kwaliteit?*
- *Kwantiteit?*
- *Functionaliteit?*
- *Toegankelijkheid*
- *Wat zou u anders willen zien?*

Wat vindt u van de voorzieningen zoals winkels in de buurt?

- *Kwaliteit?*
- *Kwantiteit?*
- *Functionaliteit?*
- *Toegankelijkheid*
- *Wat zou u anders willen zien?*

Hoe heeft u de buurt zien veranderen de afgelopen jaren?

- *Kunt u hier voorbeelden van geven?*

In welke mate bent u op dit moment tevreden met uw buurt?

- *Wat zou u graag veranderd willen zien in de buurt? Waarom?*
- *Wat zou u zeker niet veranderd willen zien in de buurt? Waarom niet?*
- *Vindt u dat het prettig wonen is in deze buurt?*

- *Zou u willen verhuizen? Waarom (niet)? Waarheen?*

Zijn er ook bepaalde plekken in de buurt die u probeert te mijden?

- *Welke?*
- *Waarom?*
- *Wat zou er moeten veranderen om deze plekken wel prettig of leuk te maken?*

Zijn er ook mooie of prettige plekken in de buurt?

- *Welke?*
- *Waarom?*

In welke mate ervaart u overlast in de buurt?

- *Kunt u daar voorbeelden van geven?*
- *Hoe heeft u hier persoonlijk ervaring mee?*
- *Hoe vaak heeft u overlast?*
- *Op welke plekken vindt de overlast plaats?*
- *Hoe komt dat volgens u?*
- *Van wie ondervindt u voornamelijk overlast?*
- *Hoe zou dat volgens u kunnen worden opgelost?*

Hoe ervaart u de veiligheid in de buurt?

- *Waarom?*
- *Kunt u daar voorbeelden van geven?*
- *Hoe heeft u hier persoonlijk ervaring mee?*
- *Is dit veranderd in de afgelopen jaren?*
- *Wat zijn plekken die u als veilig of onveilig beschouwd?*
- *Hoe komt dat volgens u?*
- *Hoe zou dit volgens u kunnen worden opgelost?*

Ik ben al een hoop te weten gekomen over uw woning en de buurt en tot slot zou ik graag nog wat meer willen weten over uw sociale contacten in de buurt

Sociale contacten

Hoe is het contact met uw burens of andere mensen in de wijk?

- *Met wie heeft u vooral contact? (Directe burens, andere bewoners in de wijk, medeflatbewoners).*
- *Wat is de aard van dit contact?*
- *Waar komt u deze contacten tegen?*
- *Waarom deze mensen?*

In welke mate is er volgens u sprake van samenhang in de buurt?

- *Waarom vindt u dat?*
- *Kunt u dit verklaren?*
- *Wat zou er volgens u moeten veranderen om deze samenhang nog te vergroten?*

In welke mate kunt u zich identificeren met uw buurtgenoten?

- *In welke mate heeft u het idee dat u dezelfde normen en waarden heeft als uw buurtgenoten?*
- *Heeft u voorbeelden van hoe deze verschillen tot uiting komen?*

In welke mate bent u betrokken bij de buurt?

- *Buurtvergaderingen?*
- *Wijkcentrum?*
- *Huurdersvereniging?*
- *Wat zijn onderwerpen die u vooral belangrijk vindt om te bespreken?*

Tot slot

- Wilt u misschien verder nog iets kwijt wat nog niet aan de orde is geweest?

Hartelijk bedanken voor het interview, aangeven dat het interview waardevol is voor mijn onderzoek en presentje overhandigen.

Appendix B: Explanatory letter for participants of the photography exercise.

Geachte heer/mevrouw,

Mijn naam is Linden Douma en ik ben student aan de Faculteit Ruimtelijke Wetenschappen van de Rijksuniversiteit Groningen. Momenteel ben ik aan het afstuderen en mijn afstudeeronderzoek gaat over leefbaarheid in naoorlogse wijken, zoals Selwerd. Hiervoor loop ik ook stage bij woningcorporatie De Huismeesters.

Binnen mijn onderzoek staan de meningen en de ervaringen van de bewoners over leefbaarheid in Selwerd centraal. Eerder heb ik interviews gehouden met bewoners en ik zou dit graag aan willen vullen met foto's van de wijk, gemaakt door bewoners van Selwerd, zoals uzelf.

Ik zou u willen vragen om in totaal twee of drie foto's te maken in uw wijk op basis van een of meerdere van de volgende opdrachten naar keuze:

- Aspecten in Selwerd die u als prettig of juist onprettig ervaart.
- Aspecten in Selwerd die u als leuk of juist minder leuk ervaart.
- Aspecten in Selwerd die u mooi of juist lelijk vindt.
- Aspecten in Selwerd die u waardeert of zaken die volgens u zouden moeten worden verbeterd.

U mag foto's nemen van alles wat volgens u de leefbaarheid in Selwerd positief of negatief beïnvloedt, bijvoorbeeld bepaalde plekken, winkels, huizen, gebouwen, straten, tuinen, speeltuinen, mensen, het maakt niet uit.

Vervolgens zou ik u willen vragen om deze foto's te voorzien van een korte beschrijving, waarin staat wat er op de foto te zien is en hoe datgene dat op de foto staat volgens u de leefbaarheid in Selwerd positief of negatief beïnvloedt.

Zou u de foto's inclusief de beschrijvingen van de foto's willen mailen naar: AfstudeeronderzoekSelwerd@gmail.com?

Daarnaast zou ik u nog willen vragen om in deze e-mail ook uw leeftijd, geslacht en uw woonduur in Selwerd te vermelden. Er zal uiteraard vertrouwelijk met uw gegevens worden omgegaan.

Graag wil ik benadrukken dat uw medewerking voor mij erg belangrijk is. Ook als u nog vragen of opmerkingen heeft, kunt u mij mailen op AfstudeeronderzoekSelwerd@gmail.com.

Alvast bedankt voor uw medewerking!

Met vriendelijke groet,
Linden Douma

