



DEGREE PROJECT IN THE BUILT ENVIRONMENT,  
SECOND CYCLE, 30 CREDITS  
*STOCKHOLM, SWEDEN 2019*

# **Promoting 'Age-Friendly' Cities**

Assessing Elderly Perceptions of Public Spaces

**DANIEL BLYTH**

TRITA TRITA-ABE-MBT-19427

## ***Abstract***

Understanding the features of urban public spaces that attract or exclude elderly residents is becoming an increasingly pressing concern in cities across the world. The present study is underpinned by the aim to uncover the desires, needs, values, uses and aspirations of elderly residents in public spaces across Stockholm. Using the concept of 'Age-Friendly Cities', this research examines the links between these specific elements and broader feeling of belonging or wellbeing that can arise from access to inclusive public spaces. Participants from two contrasting neighbourhoods were recruited to partake in a mental mapping and photo elicitation study of their surrounding areas. These visual materials were used to assess the age-friendliness of the two areas. Findings were analysed according to three themes: outdoor green spaces, transport infrastructure and urban development and growth. These themes were used to inform a discussion around what constitutes age-(un)friendliness. Flexible, inclusive, open, accessible places sensitive to local histories were found to be preferred. The design of transport infrastructure, such as roads and metro stations, were identified as features that contribute to discomfort in public spaces. These concerns were further exacerbated and amplified by concerns at the rapid growth of the city. Age-unfriendliness was therefore characterised by issues such

as exclusion from access to new developments and a loss of identity, quality of life, resources and local character.

## ***Acknowledgements***

I would first like to sincerely thank all those that participated in this research project, either through simply taking the time to meet with me and introduce me to relevant people or by taking part in the study and producing the photographs and maps that are central to this thesis.

I would also like to thank my supervisor Stefan Lundberg for always taking the time to read drafts of the work and for taking a genuine interest in the research.

Finally, I am grateful to everyone that read parts of previous drafts or took time to discuss my ideas with me and guided me to interesting research or case studies, many of the insights and arguments that make up this thesis stem from these conversations.

## **Table of Contents**

<b>Chapter One: Introduction</b> .....	<b>5</b>
<i>Why Study 'Age-Friendly' Cities?</i>	
<i>Research Aims</i>	
<i>Study Area</i>	
<i>Structure of Thesis</i>	
<b>Chapter Two: Literature Review</b> .....	<b>23</b>
<i>Ageing Policy</i>	
<i>Policy Shortcomings</i>	
<i>Urban lives of Elderly</i>	
<i>Opportunities of Urban Ageing</i>	
<b>Chapter Three: Theoretical Framework</b> .....	<b>35</b>
<i>A Lifecourse Perspective on Ageing</i>	
<i>Outdoor Public Spaces and Public Realms</i>	
<b>Chapter Four: Methodology</b> .....	<b>42</b>
<i>Why Qualitative Methods?</i>	
<i>Why Visual Methods?</i>	
<i>Photo Elicitation</i>	
<i>Mental Mapping</i>	
<i>Interviews</i>	
<i>Site Visits</i>	
<i>Spatial Analysis</i>	
<i>Data Collection</i>	
<b>Chapter Five: Analysis</b> .....	<b>61</b>
<i>Outdoor Green Spaces</i>	
<i>Transport Infrastructure</i>	
<i>Urban Development and Growth</i>	

<b>Chapter Six: Discussion</b> .....	<b>91</b>
<i>Value of Visual Methods</i>	
<i>What Does Age-(un)Friendliness Look Like?</i>	
<i>Lessons for Stockholm and Next Steps</i>	
<b>Chapter Seven: Conclusion</b> .....	<b>101</b>
<b>Appendix 1</b> .....	<b>104</b>
<b>Reference List</b> .....	<b>108</b>



# Chapter One

# Introduction

## ***Why Study Age-Friendly Cities?***

Assessing the ability of the social and physical structures that make up the built environment to enable active and healthy ageing is becoming a priority in cities across the world (Buffel et al., 2012). This recent surge of policy and academic interest stems from two global population shifts. The first of these is the general ageing of societies as birth rates decrease and life expectancies increase (WHO, 2015). The second of these is the simultaneous trend towards urbanisation resulting in a larger number of elderly adults living in cities (United Nations, 2019). As a result of these interlinked processes, residents of retirement age across European cities are often projected to be the fastest growing demographic over the coming decades (Baker & Ferry, 2006). The shared nature of these challenges has driven a range of international bodies to engage with these issues to shape collective action. Coordinated by the World Health Organisation (WHO), the notion of an 'Age-Friendly' city has gained currency to denote urban areas that support successful ageing for all over the course of a lifetime (WHO, 2007; Green, 2013). Following extensive engagement by the WHO with elderly residents and their carers from cities across the world, eight domains, including buildings and outdoor environments, transportation and social participation, were identified as key areas of intervention (WHO, 2007). The resulting action plan and accompanying guidelines are underpinned by a set of indicators and a review mechanism to monitor the progress of the report's goals within and across cities over time (Plouffe & Kalache, 2010; WHO, 2015). The guidelines cover everything from

access to adequate public toilets and seating to the implementation of inclusive design standards and affordable housing provision. The report acts as a call to action for tackling the challenges that ageing populations will present to cities. The term 'Age-Friendly' therefore denotes both a normative policy goal and an evaluative measure through which to assess diverse urban environments.

The 'Age-Friendly' model encourages the creation of environments that promote 'Active Ageing' which advocates for health, participation and security as the three determinants of a high quality of life in old age (WHO, 2007). The consensus is that this heterogeneous and diverse demographic requires environments that allow for dignified ageing characterised by mental and physical wellbeing, self-fulfilment, financial stability and active engagement in social, political, economic and physical activities (Buffel et al., 2014; Fitzgerald & Caro, 2014; Handler, 2014a). The built environment and the everyday interactions within it are understood to shape, either positively or negatively, the opportunities for successful ageing. The aim of research into 'Age-Friendly' urban environments is predicated on this understanding as it seeks to identify age-(un)friendly features, policies, behaviours and attitudes and to address any barriers to 'Active Ageing'. Within this conception, neighbourhoods can emerge as therapeutic and health promoting or conversely as isolating and disabling (Kearns, & Moon, 2002). Crucially, these features of the environment, although amplified for elderly residents, have adverse impacts on the quality of

life for everyone (Steels, 2015). Assessing and addressing age-friendliness, rather than elderly-friendliness, in cities can ensure that they are inclusive for all ages and offer the best opportunities for ageing over a lifetime, thus addressing upstream health determinants through a preventative strategy rather than focusing on downstream investments in healthcare (Steels, 2015; Stockholm Äldreombudsmans Rapport, 2017).

There is an implicit recognition in this framework that the built environment is made up of both social and physical infrastructures that interact to mediate the experience of ageing in the city (Klinenberg, 2001; Andrews et al., 2013; Handler, 2014a). The presence of physical infrastructure alone therefore does not guarantee age-friendliness (Cummins et al., 2007). This can be illustrated by the recent rise of cashless payments for services such as public transport or public toilets. These trends reduce the ease of access to these vital infrastructures for the elderly and other marginalised groups, such as low income earners and people with disabilities, thus undermining the publicness of these services (Access to Cash Review, 2019). Similarly, public consultation processes for new urban developments may not adequately reach out to older residents as they may require formal representations to be made online, further narrowing the definition, role and scope of various publics in urban developments (Handler, 2014b). Often conceptualised as a lack of physical infrastructure, age-unfriendliness thus emerges as a more systematic exclusion from decision-making, information, political power and

representation (Madanipour, 1998; Handler, 2014b). This holistic approach ties into broader shifts in health and gerontology studies emphasising the role of social and spatial characteristics of the built environment as determinants of wellbeing and quality of life (Klinenberg, 2001; Kearns & Moon, 2002; Andrews et al, 2013; Andrews et al., 2014). Public spaces, combining as they do the physical resources of the city with opportunities for social interactions and physical activity, emerge as key sites of intervention for achieving the 'Age-Friendly' city (Hander, 2014b).

### ***Research Aims***

The aim of this thesis is to assess the age-friendliness of public spaces in Östermalm and Kärrtorp, two distinct neighbourhoods of Stockholm Municipality. The research attempts to offer insights into the links between age-friendliness and specific features of outdoor public spaces. This aim is underpinned by a desire to look beyond the physical barriers and enablers that shape experiences in public spaces. Instead the research will attempt to assess the personal ties, social infrastructures and meanings attached to neighbourhoods and spaces and the ways these in turn shape patterns of behaviour in the public realm (Wiles et al., 2012; Handler, 2014b). These can include interactions with acquaintances in public spaces, knowledge of local histories, attachment to certain features of the built environment or the performance of social routines that take place in public (Handler, 2014a). The choice to comparatively assess two neighbourhoods with differing urban

morphologies stems from a desire to assess a wide range of public spaces and understand the importance of the wider neighbourhood context in determining the value of public places.

The emphasis on outdoor public spaces in this research relates to the almost inevitable negotiation of shared social spaces during everyday interactions with the built environment. Furthermore, positive experiences of 'Active Ageing', which may include regular physical exercise, maintaining independence, creating and strengthening social networks or simply retaining confidence and a sense of purpose, can all be enabled or constrained by personal experiences, and use, of public resources. These considerations relate to the model of wellbeing presented by Andrews et al. (2014, 240) which emphasises the role of "affective environments" and the immediacy and power of everyday responses to places to improve wellbeing and quality of life. In this model, wellbeing emerges as an everyday phenomenon, rather than a fixed state, which arises from interactions and personal reactions to people, places, practices and activities (Andrews et al., 2014). Understanding the ways in which elderly residents value their local environments will offer a framework for suggesting interventions that will improve access, use, comfort and feelings of safety and belonging in public spaces.

The aim outlined above is underpinned by two research questions:

*What characteristics of urban public spaces contribute to age-(un)friendliness?*

*How do these relate to behaviours, wellbeing and a sense of belonging among elderly residents?*

These questions will be answered using a set of qualitative visual methods seeking to uncover the meanings and attachments people create with their local neighbourhoods through their everyday use of public spaces. The use of qualitative methods stems from a conscious decision to interrogate the subjective experiences of populations currently ageing in Stockholm. The goal is to empower elderly residents to draw attention to the issues and places that affect their daily lives. The use of two visual methods, photo elicitation and mental mapping, in conjunction will not only offer a range of contrasting material relating to elderly conceptions and use of public spaces but will also inform a discussion of the merits and limitations of the two methods. Similarly, the comparison of two neighbourhoods with differing urban morphologies will seek to uncover commonalities and differences among elderly populations and their interactions with public spaces of contrasting characteristics.

### ***Areas of Study***

The scope of this study is to understand the specific challenges and opportunities presented by Stockholm's urban form, development pattern and population growth. The over 65-year-old population of the municipality is set to grow by 65% by 2040, thereby representing 18% of the population.

Furthermore, particularly fast growth in the over 80-year-old population is

predicted with an increase of 107% envisaged in that timeframe (Stockholms Stad, 2017). These trends will have consequences on the accessibility, affordability and adaptability of a range of services and amenities, including housing, public transport, social and health care, with implications for the quality of life of this growing age cohort (Stockholms Stad, 2017). Addressing these challenges requires the coordinated action of a number of municipal and private service providers. With an estimated 20% of over 65 year olds receiving some form of assistance from the municipality, ranging from emergency bracelets to use in case of falls to permanent social care, the overall ageing of the city will necessitate a political commitment to maintain or improve the support offered by public services (Stockholm Äldreombudsmans Rapport, 2017). Equally pressing are the impacts these demographic shifts will have on issues such as loneliness and the representations or perceptions of ageing which relate to these broader planning issues. Crucially, the city has committed to addressing these challenges in partnership with elderly residents and to offer greater scope for participation in developing an 'Age-Friendly' Stockholm (Stockholms Stad, 2017). Furthermore, the recently installed Äldreombudsman (elderly ombudsman) at the municipality has reaffirmed their commitment to overseeing a paradigm shift in how the city tackles ageing. This shifts focus from care to health and wellbeing, accessibility and inclusivity to prevent the marginalisation and exclusion of the elderly (Stockholm Äldreombudsmans Rapport, 2017). Accordingly, a detailed audit of the current age-friendliness of the city is needed to support future action and ensure that any strategy for

achieving 'Age-Friendliness' is built upon a solid evidence base that engages with elderly residents.

The first thing to note is the uneven distribution of the elderly population across the municipality. Figures 1 and 2 map the percentage of elderly residents for two geographical units, Small Areas for Market Statistics (SAMS) and the more detailed Demographic Statistics Areas (DeSo) respectively. The areas are classified into equal quantiles to represent the same number of geographical units into quarters. The emergent pattern is one in which the central city districts of Södermalm, Norrmalm, Kungsholmen and Östermalm as well as a few clusters around Farsta in the South, Bromma to the West and, to a lesser extent, the area of Hässelby-Vällingby and Spånga in the North West, contain a large number of the areas that have the highest percentages of elderly residents. Consequently, the impacts of an ageing population will not be equally felt across the city.

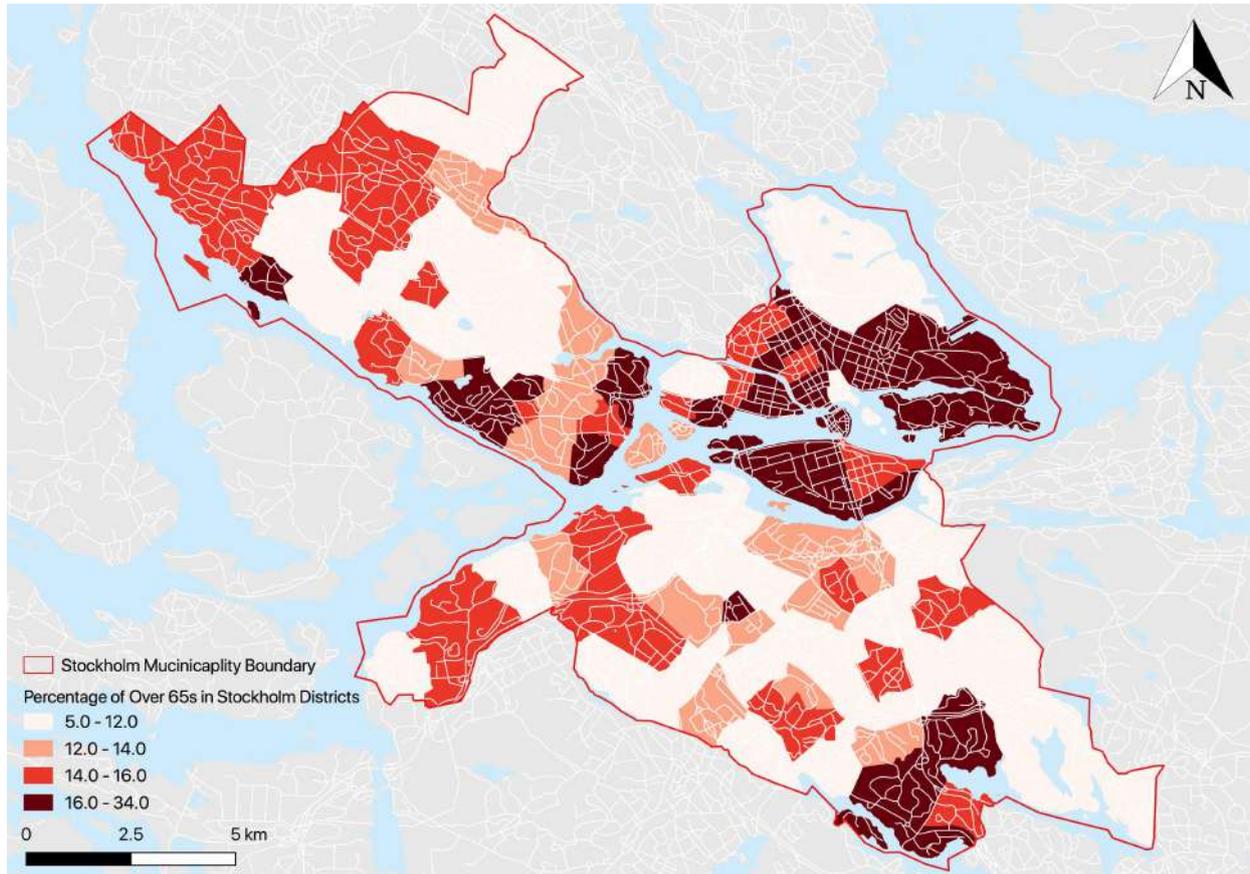


Figure 1: Quantiles of Over 65-Year-Old Percentages for SAMS in 2017  
 Source: Figure made in QGIS by the author using data from SLU

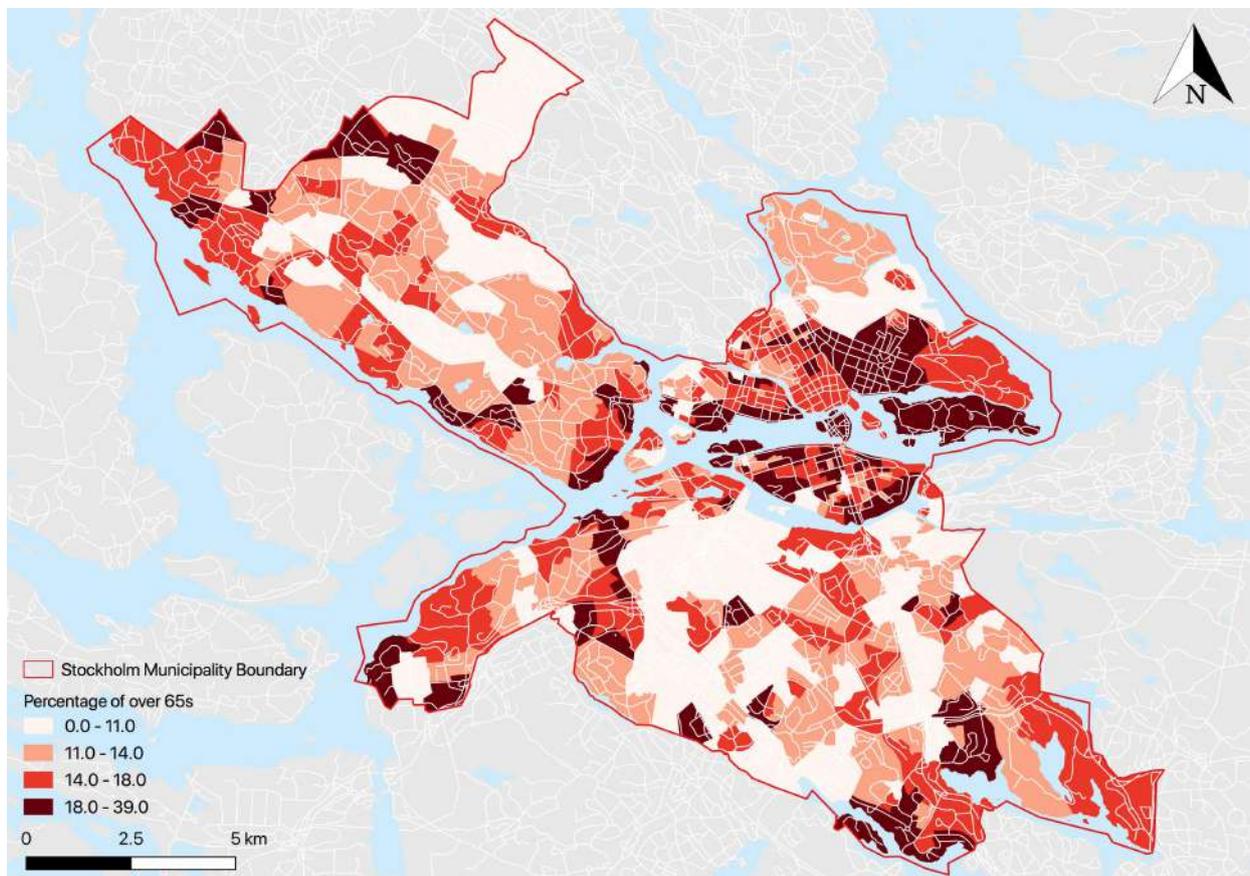


Figure 2: Quantiles of Over 65-Year-Old Percentages for DeSo in 2017  
 Source: Figure made in QGIS by the author using data from SLU

The concentration of a large number of elderly residents in the city centre characterised by a dense urban structure of multi-family housing will provide a particular set of challenges as well as opportunities for an ageing population. For example, figure 3 shows a map of all the metro, tram and commuter train stations in the municipality surrounded by a 400m buffer, which is generally considered to represent a reasonable walkable distance. As the figure demonstrates, most of the inner city falls within these buffers meaning that access to rail-based public transport is well supported by the inner city's transport infrastructure. This can be contrasted with some of the suburban areas in the outskirts of the municipality, such as Hässelby-Vällingby and the south of Skarpnäck in the North West and South East respectively, where areas with a significant percentages of elderly residents are poorly served by these modes of transport and consequently more reliant on buses and private transportation for access to other neighbourhoods and services in the city. However, the inner city is also the site of many older buildings that may not have internal lifts or widespread step-free access which presents a challenge for an ageing population that may experience reduced mobility later in life.

Similarly, as figure 4 illustrates, forecasts for the elderly population in 2027 predict that the rate of growth of different areas will also vary significantly. As the figure shows, although Södermalm and Östermalm will continue to house the largest over 65-year-old populations, the four districts with the largest growth rates are all suburban: Hässelby-Vällingby, Hägersten-Liljeholmen,

Skarpnäck and Spånga-Tensta which will all experience at least a 32% increase in their elderly populations in a ten-year period. The challenge faced by the city is thus twofold. In central dense parts of the city, which already have significant elderly populations, services and resources will need to be strengthened and maintained to preserve a high quality of life and opportunities for independent living. In the four districts identified above, a more proactive approach may be necessary to ensure that new services, community resources and appropriate spaces are planned to meet this rapid demographic shift. This may be especially pressing as these areas overlap with the previously identified areas where poor access to rail-based public transport and elderly clusters are both found. The local environmental conditions may therefore play a more determining role for the wellbeing of elderly residents in these neighbourhoods.

In line with the dual challenge identified above, the present study will seek to engage with elderly residents to compare two contrasting neighbourhoods: Östermalm and Kärrtorp, shown in figure 5. The first of these currently has the highest percentage of elderly residents with around 20% of the population over 65 years old in 2017 (SLU Befolknings data). Of the fourteen districts of Stockholm mapped in figure 4, it currently has the second largest elderly population. However, the growth rate of this demographic over the next ten years is the lowest in the city at just 18%. The area is the site of the large scale Norra Djurgårdstaden new development and is centred around the Karlaplan,

Gärdet, Ropsten, Stadion and Östermalmstorg metro stations. With high density multifamily housing, proximity to the city centre and a number of large open spaces, the area is varied but reflects many of the traditional characteristics of the central city. Kärrtorp on the other hand is a far smaller area centred around the metro station of the same name which leads out onto a public square and a number of businesses. As a more recent neighbourhood within the residential suburbs south of the central city, the area has a very different urban morphology with a preponderance of single family housing, dispersed open green spaces and lower population densities resulting in far fewer services than Östermalm. The area is within the district of Skarpnäck, identified above as one of the four districts with the fastest population growth among over 65 year olds.

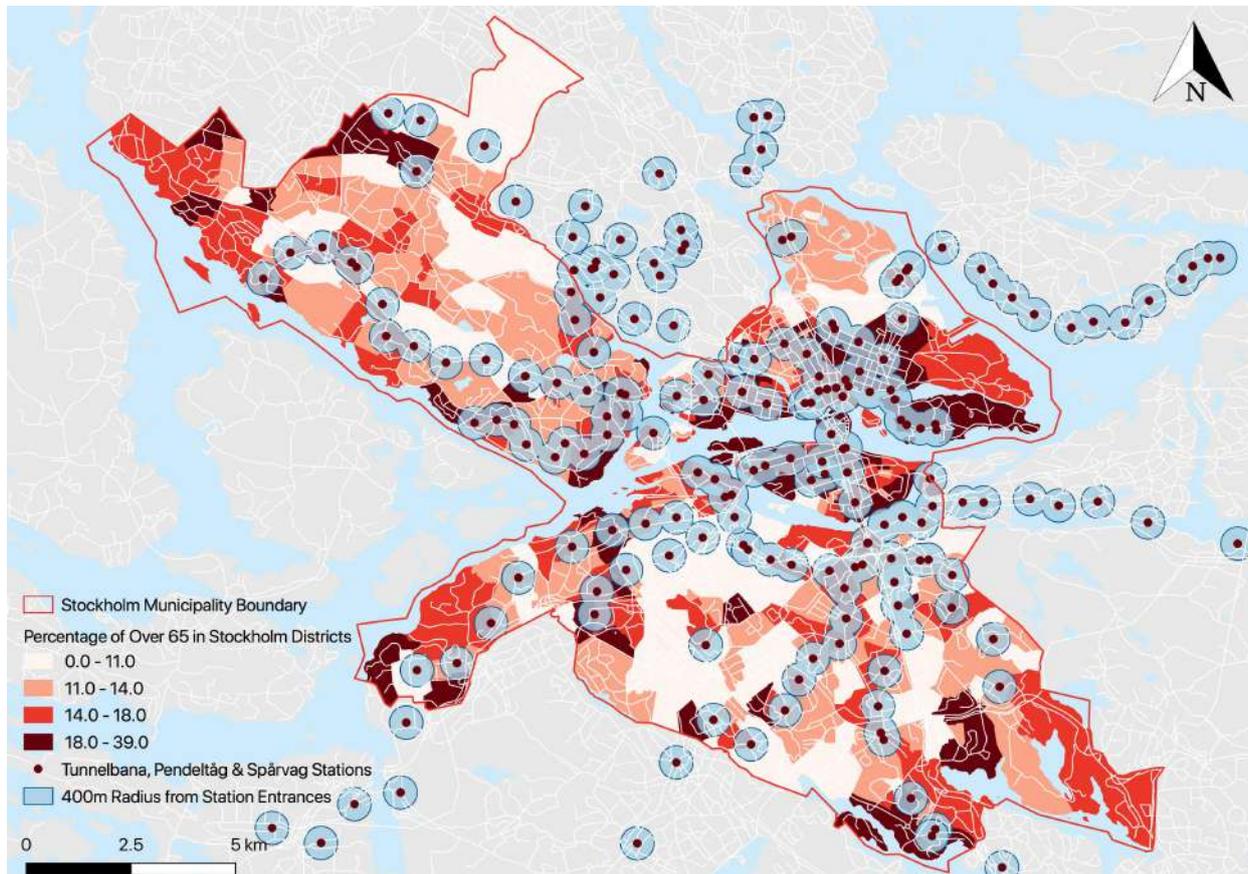


Figure 3: Public Transport Station and 400m Buffer Radius Overlaid over Quantiles of Over 65-Year-Old Percentages for DeSo in 2017.

Source: Figure made in QGIS by the author using data from SLU

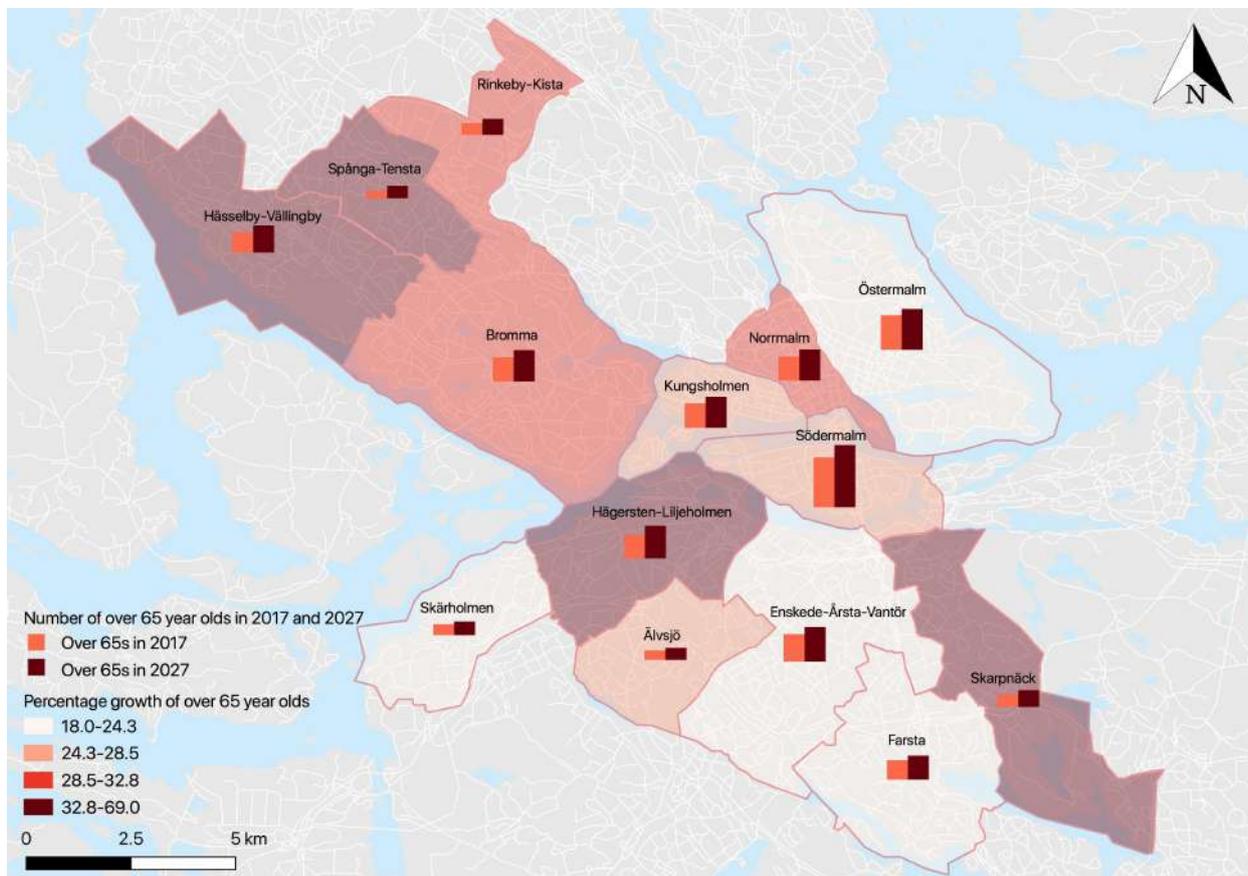


Figure 4: Stockholm districts categorised according to growth of over 65-year-old population between 2017 and 2027.

Source: Figure made in QGIS by the author using data from SLU.

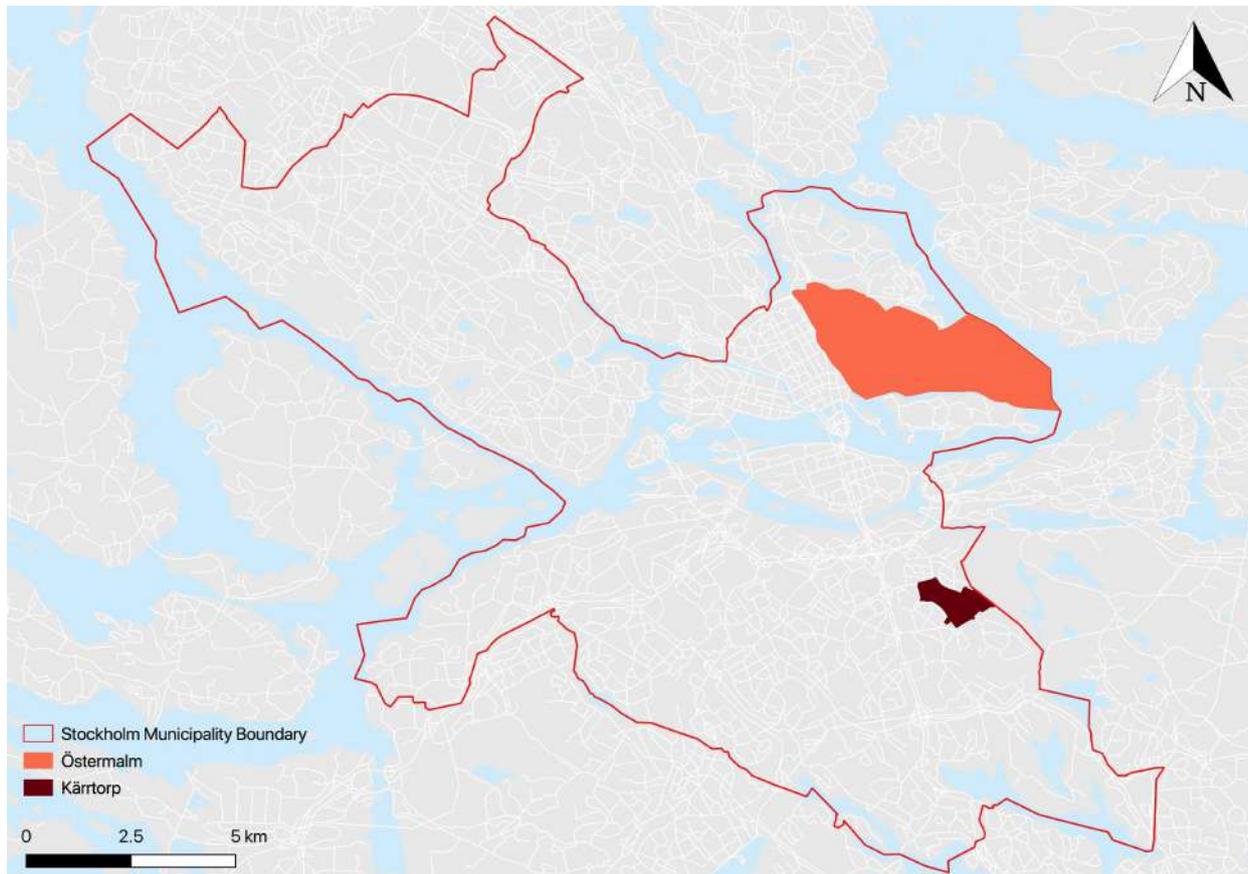


Figure 5: Map of the two study areas within the municipality of Stockholm.  
 Source: Figure made in QGIS by the author using data from SLU

### **Structure of Thesis**

Chapter 2 will present some of the background to this research. First of all, ageing policies will be assessed to highlight the contested meaning of commonly used and accepted terminology such as ‘Active Ageing’ and ‘Ageing in Place’. This evaluation will highlight the context-specific understandings, strategies and implications of policies as well as the shortcomings of current ageing strategies. This will be followed by a synthesis of recent research on the lives, preferences and behaviour patterns of urban elderly populations. This discussion will highlight some of the challenges and opportunities that face ageing cities.

Chapter 3 will introduce the theoretical framework that underpins this research.

The first of these is the life course perspective on ageing and the ecological

model as well as the implications these understandings have on planning for ageing societies. Following this, the ideals of public space and the ways in which elderly populations interact with, and may be excluded from, these spaces are explored.

Chapter 4 introduces the methodology of the research by first justifying the use of qualitative methods before evaluating the subset of visual methods. These broad considerations will be followed by specific appraisals of photo elicitation and mental mapping as they relate to the current research project.

Furthermore, the use of spatial analyses, site visits and interviews that informed the findings of this research will be evaluated. This will be followed by a critical description of the data collection as well as the analysis process that took place.

Chapter 5 presents an analysis of the data generated by the participants in this research project. The data is divided into three themes: outdoor green spaces, transport infrastructure and urban development and growth. These themes are addressed separately using data from both study areas to identify and evaluate age-(un)friendliness in the two neighbourhoods.

Chapter 6 discusses the findings from the previous chapter, beginning with an evaluation of the two methods and the study's methodology as a whole. This is followed by an attempt to define specific 'Age-Friendly' features of public spaces as well as what constitutes age-unfriendliness. Finally, the implications

of these findings for Stockholm municipality are addressed before a brief conclusion to the research project as a whole.



## **Chapter Two**

# **Literature Review**

## ***Ageing Policy***

One of the challenges when planning for rapidly ageing societies is the lack of consensus around what constitutes desirable ageing and what the social, economic and political consequences of achieving, or failing to achieve, these goals will be (Simpson, 2015). The elderly tend to be portrayed as an unproductive drain on resources reliant on an ever smaller active population funding state pensions for a growing age cohort (WHO, 2007). Simpson (2015) argues that ageing populations have been characterised in terms of both crises of dependency and of programming suggesting that the assumed loss of independence among the elderly requires a radical redesign of both cities and the welfare state to respond to these challenges. Allied to this is the unprecedented nature of these challenges which offers little in the way of best practices to learn from. Furthermore, the context specific and shifting needs of the elderly, coupled with the dynamic and constant (re)development of the city, creates a complex environment within which to plan for future demographic changes (Simpson, 2015). The socially constructed and multifaceted ideals of desirable ageing are best illustrated by the multiple competing policy models of ageing that emerge in different historical, geographical and cultural contexts (WHO, 2007; Steels, 2015). Although the WHO (2007) model of 'Active Ageing', centred as it is around the three pillars of health, security and participation, offers a globally applicable framework, these goals are nonetheless subject to various interpretations, prioritisations and a range of strategies to achieve them. For example, the policy model of 'Lifelong Neighbourhoods' developed

in the United Kingdom (UK) can be contrasted with the model developed in the United States (US) of ‘Naturally Occurring Retirement Communities’, known as NORCs, to highlight the tensions that exist between policy goals, resource allocation and the resulting distinct lived experiences of ageing. Both models advocate for ‘Ageing in Place’, a widely shared policy goal encouraging seniors to maintain social and emotional ties that are spatially bound to homes, communities and neighbourhoods (Wiles et al., 2012). The aim is to promote independence and autonomy, reduce rates of nursing home placements and ultimately reduce public expenditure by increasing in-home care and treatment (Elbert & Neufeld, 2010).

The first of these models advocates adapting housing, services and the built environment to ensure that neighbourhoods offer the flexibility and diversity to accommodate changing needs as residents age (Buffel et al., 2014; Fitzgerald & Caro, 2014). Every neighbourhood is therefore planned to contain a range of housing types and tenures that can be adapted to changing living arrangements as people age. This is codified in the National Planning Policy Framework (NPPF) which stipulates that any new development of more than 11 flats must contain a minimum percentage of affordable and disabled access apartments (NPPF, 2019). In theory, this ensures that if people need or decide to change their living arrangements they will find suitable alternatives in their immediate neighbourhood if not within their street or building. This model can be conceptualised as a national and top down policy enforced through the

planning system that imposes these requirements on private developers. This contrasts with the US model which implicitly recognises the tendency for clusters of demographics to form in specific neighbourhoods. Funds are allocated to these areas to retroactively adapt them to the needs of elderly residents (Plouffe & Kalache, 2010). Originally used to denote demographic islands of elderly residents in urban settings, the term NORC has since evolved to include the localised and community driven provision of services in these locations (Vladeck et al., 2010). Combining state funding, voluntary, health and social services as well as the involvement of residents themselves, the model encourages the reframing of the elderly from passive consumers and recipients of resources to active agents and leaders with agency over their quality of life (Bookman, 2008). The strategy thus combines the empowerment of the elderly with the provision of accessible and affordable context specific social and health care services (Bookman, 2008; Bedney et al., 2010). This approach can be characterised as a more decentralised form of multi-actor governance.

These contrasting models based around similar goals highlight the multiple, contingent, fluid and conflicting understandings of terms such as 'Age-Friendliness' or 'Ageing in Place' that are commonly used in academic and policy contexts (Lui et al., 2009). Furthermore, the implications for cities, residents and health service providers differ widely between the two models. The US model directs funding to places where the benefits of urban density are most easily harnessed to provide accessible and affordable services to as

many people as possible. Conversely, the UK model actively seeks to avoid the clustering of elderly residents by diffusing adapted housing within all neighbourhoods. The cases outlined above are illustrative of both the lack of consensus and the ways in which planning for ageing societies encompasses far more than healthcare management to include issues of housing, urban planning, architecture and design, social welfare and economics (Bowling, 2008; Wiles et al., 2012). Tackling the challenges of ageing urban populations is therefore contested and predicated on a collaborative governance framework between a range of actors.

### ***Policy Shortcomings***

Policies have often failed to acknowledge the heterogeneity and diversity of the ageing experience, relying instead on a rights-based approach focused around accommodating the basic needs that are common to all (Handler, 2014a). This approach is best illustrated by the WHO Age-Friendly Cities framework that offers a universal and comprehensive checklist of actions to implement for all cities to become age-friendly (WHO, 2007). Although laudable and often necessary, the changes advocated engender an essentialising narrative of ageing characterised almost exclusively by reduced mobility and cognitive ability. This perspective frames older residents in terms of differences to be accommodated and designed for rather than as productive and engaged citizens with a range of needs, desires, aspirations and goals (Handler, 2014a). As Shaw et al. (2018) argue, the adoption of 'Ageing in Place' as a policy goal

in Sweden illustrates the ways in which the implementation of a policy can have a range of undesired effects due to the heterogeneity of elderly groups. The policy implementation has resulted in a larger number of elderly residents living alone as the country tightened the eligibility criteria for accessing assisted living facilities. Although living independently later in life requires high levels of functionality, it is often those most vulnerable and financially insecure with mobility impairments that live alone (Shaw et al., 2018). The goal of 'Ageing in Place' may therefore imply independence and autonomy to some whereas it may be a result of a lack of socio-economic mobility for others unable to move to adapted housing (Wiles et al., 2012). Consequently, in some cases, 'Ageing in Place' may be detrimental for quality of life, wellbeing and autonomy. Despite the appealing policy rhetoric of people living independently in later life, the lived experience of this policy may in fact reflect a retreat of the welfare state.

These discourses and the resulting policies they stem from and shape combine to reduce the potential for elderly residents to engage as active citizens in the planning of their communities (Handler, 2014b). Similarly, policies for creating desirable ageing environments are presented as planned for the elderly rather than with them (Rooke & Wuerfel, 2007). Furthermore, an emphasis on basing strategies around quantifiable and measurable indicators has undermined research and policy that addresses less tangible nuanced lived experiences of ageing (Kearns & Moon, 2002; Wiles et al., 2012; Handler, 2014a). These more

personal accounts and narratives can uncover instances of age-unfriendliness previously unconsidered or can be used to assess the efficacy and impact of changes that seek to improve age-friendliness (Rooke & Wuerfel, 2007).

Therefore, there is a need to move beyond the rights-based approach of 'Age-Friendly' planning to consider new forms of governance, service provision and co-design that empower elderly residents and offer flexible solutions to meet diverse needs.

### ***Urban Lives of Elderly***

Understanding and responding to a variety of aspirations and needs requires an initial baseline understanding of the mobility patterns, transport habits and daily lives of elderly urban residents (Handler, 2014b). Despite their heterogeneity, certain tendencies can be discerned. The first thing to note is that elderly residents often have their range of accessible services restricted to their proximal residential neighbourhood (Plouffe & Kalache, 2010).

Consequently, elderly residents spend the longest amount of time of any demographic group in their local surroundings (Handler, 2014b). This can be attributed to a number of factors that include reduced walking speeds as residents age (Arup, 2015). Furthermore, the lack of supporting walking infrastructures such as benches, smooth walking surfaces and public toilets can be disabling as they make outings precarious and reduce the confidence of the elderly (Lui et al., 2009). The impact of maladapted environments is particularly important as older residents in European cities are more likely to

walk and use public transit for personal mobility as car use decreases with age (Arup, 2015). This reliance on public transit and walking can limit mobility depending on an individual's physical and cognitive capacity, the extent of the public transit network or the proximity to transit stops (Arup, 2015). For example, older residents in the UK were deemed more likely to be dissatisfied with their surrounding environment and were consequently less likely to achieve the recommended levels of weekly exercise to maintain good health and wellbeing (RIBA, 2013; Handler, 2014b). Furthermore, dissatisfaction with one's neighbourhood has been linked to increased fear of crime and feelings of loneliness (Buffel et al., 2012).

The centrality of the local surroundings for the lives and wellbeing of the elderly is further emphasised by the findings of the Inclusive Design for Getting Outdoors (I'DGO, 2012) research project in the UK. Results suggest that the presence of open green space within a ten minutes walk of a household doubled resident's satisfaction with life and that this association grows stronger with age (I'DGO, 2012). Furthermore, Chaudhury et al. (2016) have found that physical activity among the elderly most often takes place at home or in the immediate neighbouring surroundings. These results are reinforced by a meta-analysis of studies exploring elderly activities in green spaces that suggests a preference for nature-based recreation (Wen et al., 2018). These findings all suggest the importance of neighbourhood characteristics for both the mental and physical health behaviours and outcomes, such as depression,

anxiety, obesity or self-related health, of elderly residents (O'Campo et al., 2015). This implies that high quality, accessible and dispersed open spaces are key features of an age-friendly city (Handler, 2014b). However, despite the importance of local public spaces, studies have also found that larger spaces offering a wider range of facilities and attractors are also crucial resources for elderly residents (Zhai et al., 2019). Thus, distance alone is not the only determining feature for the use of public spaces as issues such as social networks and organised or informal activities can contribute to the accessibility of a space (Cummins et al., 2007). Therefore, public space needs to be assessed in terms of both quality and value. Quality here refers to the range of functions and amenities found within the space whereas value relates to the relational characteristic of a public space within a broader neighbourhood. Thus low quality space may still be of value if it is located in an area that lacks public space. These considerations are key when planning and designing public spaces with the aim of attracting elderly residents and may help identify strategic areas where benefits can be maximised relative to costs.

These findings have been conceptualised in terms of the amplification of local characteristics as older residents become more acutely aware, dependent and reliant on their immediate surroundings for quality of life, access to services and wellbeing (Handler, 2014a; O'Campo et al., 2015). Given this amplification of impacts on elderly residents, positive small scale changes to highly localised spaces can have a significant impact. Conversely, these factors also

interact to ensure that elderly residents are particularly affected by processes of urban regeneration and development as changes to the urban environment are keenly felt (Rooke & Wuerfel, 2007; Wiles et al., 2012). The paradox is that despite this link between the local urban context and the everyday and lifelong opportunities for 'Active Ageing', older residents are often marginalised from the decision-making processes behind these urban shifts (Handler, 2014b; Arup, 2015). This occurs despite the fact that older residents often have valuable knowledge of local histories and heritage while benefitting the most from a recognisable and familiar environment that encourages spending time outdoors in welcoming settings (Mitchell & Burton, 2006; Rooke & Wuerfel, 2007). Furthermore, these connections to the landscape and the acquisition of local knowledge can create a sense of belonging and attachment which contributes to wellbeing in older age (Wiles et al., 2012; Simpson, 2015). These considerations are becoming increasingly relevant as the elderly are more likely to live alone and spend the majority of their day at home (Horgas et al., 1998; Simpson, 2015; Shaw et al., 2018). The affective and emotive qualities of outdoor public spaces therefore become crucial as opportunities for social interaction attract the elderly to use and claim urban space (Handler, 2014a). This suggests that the 'Age-Friendliness' of urban space relies on its recognisability, legibility and stability along with the meanings attached to these spaces as much as the physical attributes that make up the space (Wen et al., 2018). This approach recognises the determining role of both the processes behind urban development and the feelings the environment can

engender in promoting inclusion, wellbeing and a sense of belonging (Andrews et al., 2013; Handler, 2014b).

### ***Opportunities of Urban Ageing***

As healthy life expectancy increases, the concept of the third age has gained currency (Simpson, 2015). Characterised by an active age cohort with the potential for increased leisure opportunities, continued civic and political engagement and fulfilling lives, the third age is both a policy and personal goal as well as a societal opportunity (RIBA, 2013). However, despite the fact that many retirees undertake care duties, volunteer work or continue to be active in paid employment, a survey of retired British adults found that over three quarters felt their skills were being wasted (RIBA, 2013). This suggests that more can be done to accommodate the desires of the elderly by offering opportunities for meaningful work with the aim of utilising or developing skills and competencies. Facilitating continued employment activities can further reduce the risks of social isolation and loneliness which can in turn be beneficial to public health and reduce strains on health services (Klinenberg, 2001). Furthermore, it has been suggested that improving the accessibility of services for the elderly could be a strategy for revitalising commercial high streets, distributing the use of services across the day and ensuring that city centres remain vibrant and interesting places to be in and visit (RIBA, 2013). This highlights the importance and multiple benefits of creating safe, welcoming and comfortable environments for the elderly and the ways in which

doing so can align with multiple goals.

It is important to note that the desire to continue being active in employment later in life stems from many factors but can include people being forced back into the labour market due to insufficient income (European Commission, 2014). Similarly, the rise of volunteering among the elderly, although beneficial for individuals and communities should not reduce the duty of the state to provide adequate welfare for all that need it. Issues of theoretical and policy importance such as continued productivity and the importance of enabling environments are not necessarily considered by elderly populations themselves as important dimensions of successful 'Active Ageing' (Bowling, 2008). Policy debates therefore need to acknowledge these differences and the contested notions of nuanced constructs of desirable ageing. Despite these possible shortcomings, it is clear that increased healthy life expectancy offers opportunities for elderly residents to remain active well into old age with a number of social benefits stemming from these trends.



## **Chapter Three**

# **Theoretical Framework**

## ***A Life Course Perspective on Ageing***

A range of needs among elderly populations arise from differing physical and cognitive functions and the uneven distribution and access to opportunities, resources, healthcare and a high quality of life (Plouffe & Kalache, 2010). This assertion draws on the ecological model of ageing suggesting that dynamic socio-spatial environmental features and individual characteristics interact to shape the embodied experience of ageing in cities (Lui et al., 2009; Menec et al., 2011). This model stipulates that individual characteristics, such as socio-economic status, race and gender, and the social and physical environment will all have shaped the ageing experiences of the elderly through a number of pathways such as access to services, welfare, education or healthcare (Bowling, 2008; Lekkas et al., 2017). These diverse pathways will in turn be reflected in uneven patterns and distribution of healthy life expectancy, housing conditions, quality of life, wellbeing and social networks. For example, the housing and neighbourhood conditions people live in has been shown to impact the amount of leisure and physical activity that elderly residents undertake with more deprived neighbourhoods supporting lower activity rates (Annear et al., 2009). Similarly, experiences of gender discrimination in employment across the course of a lifetime have been shown to jeopardise the financial independence of elderly women in Europe which reduces their ability to age actively (European Commission, 2014). A further example relates to access to information, which may be linked to educational levels or social ties, the lack of which may render proximate services inaccessible (Cummins et al.,

2007; Buffel et al., 2014). These trends are illustrative of the cumulative effects of socio-economic inequality over a lifetime which render elderly populations often more unequal than other age groups (Phillipson & Scharf, 2004; Buffel et al., 2014). These multiple processes combine to leave certain populations vulnerable, marginalised, excluded and at increased risk of suffering from mental or physical illness (Handler, 2014b). The key is that although individual characteristics and the social and physical environment people age in are crucial determining factors, it is the interaction of the two that shape the experiences of ageing.

Given the challenges of urban ageing identified above, outdoor urban public spaces emerge as a key dimension of age-friendliness in cities. Identified as one of eight domains cities should focus on by the WHO (2007), outdoor spaces and buildings provide the physical and social environments within which people age (Chaudhury et al., 2016). The experiences of navigating shared public spaces have been characterised as embodied whereby the physicality of passing through these spaces is a key part of the daily urban lives of the elderly (Watson, 2006). Thus, both the objective and subjective characteristics of public places play a role in the ageing experience (Chaudhury et al., 2016). Importantly, these experiences and the meanings and identities constructed around public spaces are relational and subject to temporal changes rather than being static or discrete (Andrews et al., 2013). Consequently, engagement with these changing spaces and their publics is

linked to personal perceptions, orientations and movements which may change over time or a life course (Low, 2003; Lekkas et al., 2017). Ensuring these interactions with shared public spaces are safe, comfortable, useful, pleasant and enjoyable across time has the potential to improve wellbeing and reduce urban isolation among the elderly (Andrews et al., 2014). The implications of poorly planned or exclusionary disabling spaces range from observable public health ramifications as reduced levels of outdoor activity negatively impact mental and physical health (Andrews, 2001; Klinerberg, 2001) to the more intangible loss of comfort and sense of belonging in urban space with equally harmful impacts on opportunities for active, engaged and empowered ageing (Madanipour, 1998; Madanipour, 2010; Wiles et al., 2012). This study therefore draws on the importance of everyday interactions with the social and physical elements of public space as a determining feature of age-friendliness.

### ***Outdoor Public Spaces and Public Realms***

Understandings of public space have tended to emphasise public ownership as the defining characteristic that differentiates these varied places in cities from the private sphere (Varna & Tiesdell, 2010). However, this dichotomy between public and private space has become blurred as semi-public and quasi-public spaces emerge from public private partnerships with private actors policing and maintaining these spaces and limiting the type and scope of activities that can take place in them (Mitchell, 1995; Mitchell, 2003; Low,

2017). This fragmentation of public space has been conflated with diminishing public life, weakening citizenry and the creeping commercialisation, privatisation and co-optation of truly public spaces (Mitchell, 1995; Klein, 2000). As Madanipour (2010) argues, public spaces have come to reflect the insidious atomisation, polarisation and fragmentation of public life as private interests increasingly shape urban development and everyday life in cities. These trends are further reflected in the increased valuing of public spaces in terms of potential for commercial activity based on their aesthetic qualities (Amin, 2008; Madanipour, 2010). There are a number of examples of investment in public spaces by private developers being predicated on the simultaneous development of commercial and retail space. The recent controversy at Apple's decision to locate its new flagship Stockholm store in Kungstragården is a recent paradigmatic example of these processes.

This narrative, whereby genuinely public space becomes a rarity, relies on a conceptualised intrinsic link between public spaces and a broader public realm (Smith & Low, 2006; Amin, 2008; Low, 2017). This idea has been characterised by Low (2017) as the process through which histories and experiences of urban life, and the identities that emerge from these shared histories, are materialised and given a spatial form. Public spaces become places where publics are seen, manifested and formed and it is therefore in these spaces that protests, celebrations, commemorations and other social events and constructions of identity tend to take place (Iveson, 1998; Andrews et al., 2013). Crucially, these

spaces both reflect and shape publics and their shared identities as well as the public life that animates these places (Varna & Tiesdell, 2010). Thus, successful public spaces should reflect urban diversity by allowing multiple publics to have access and lay claim to these spaces and be seen and heard as members of a broader collective (Young, 1990; Amin, 2008). This implies flexibility and the construction of a public realm based around shared values of inclusion and democracy (Watson, 2006; Low, 2017). This interpretation of public space is inherently political as it emphasises the symbolic representation of difference as a key function of public space (Mitchell, 1995). Public space thus emerges as a political resource which consequently reflects and strengthens forms of marginalisation or can be designed and managed to reduce instances of exclusion. Public spaces that lack older residents, as they present either too many barriers or too few attractors, will therefore skew the representation of these spaces further towards younger more mobile residents. This will have consequences for how these places are imagined and planned (Lefebvre, 1991).

Beyond the health and wellbeing implications of making public spaces inclusive and accessible outlined above, there is a political and symbolic value in making spaces truly 'Age-Friendly'. Based on the above interpretation, exclusion from public space emerges as a form of discrimination as access to the power to shape the images and meanings of a city are denied to those that are marginalised (Madanipour, 1998). As a result, accessibility, inclusion and

openness to difference have been argued as the key indicators of truly public space (Madanipour, 2010). The publicness of public space can therefore be understood as a continuum based on the publics that are permitted to enter and the activities that are acceptable in these spaces, rather than a static characteristic simply based on ownership (Varna & Tiesdell, 2010). Thus, spaces traditionally understood to be public such as parks, civic squares, gardens, streets and train stations are not necessarily equally public while other spaces such as libraries, community centres, courtyards and terraces can emerge as neither quite public nor entirely private but rather a hybrid form in terms of functionality and accessibility. The result is that public spaces become characterised by exclusionary and marginalising processes as they increasingly limit their design and activities to a narrow profile of urban consumers (Smith & Low, 2006). With these considerations in mind, this study will attempt to uncover the exclusionary practices that marginalise elderly residents from public spaces and the impacts these have on their wellbeing and sense of belonging.



# Chapter Four

## Methodology

## ***Why Qualitative Methods?***

The choice of methods for this project is underpinned by the research questions outlined in Chapter 1. The first of these asks what characteristics of urban public spaces contribute to age- (un)friendliness. The second question seeks to understand how these features relate to behaviours, wellbeing and a sense of belonging among elderly residents. Qualitative methods lend themselves to answering these questions as they can interrogate the link between lived experiences and the resulting behaviours of elderly residents in outdoor public spaces. The relationship being studied is not directly observable or quantifiable and is instead grounded in individual perceptions, rationalities and understandings (Cope, 2014). Consequently, the methods need to reflect the subjective, contested and possibly contradictory nature of the context specific and personal answers to the research questions (Kindon et al., 2007). The assumption is that the answers to the research questions are knowable and more importantly valuable within a desire for the research to be actionable. This approach follows the advice set out by Cope (2014) suggesting that the ontological, epistemological, methodological and ideological frameworks that underpin a research project should align. In the case of this project, the desire to assess, and ultimately contribute to improving, the age-friendliness of a city stems from an ideological position. This aim is informed by the ontological position that individual and shared experiences can be meaningfully conveyed to researchers and that these can form the basis of broader theories. The methodology detailed below stems

from this epistemological understanding of knowledge production and a social constructionist perspective. This suggests that old age and the experience of it is varied and responsive to environmental and policy changes rather than fixed and uniform across different socio-cultural environments.

### ***Why Visual Methods?***

Within a qualitative methodological framework, visual methods are a diverse and distinct subset of approaches that use a variety of visual media as part of a research project. This media can take a range of forms from photographs, films and maps to installations, floor plans, designs or artwork (Rose, 2016). Beyond simply utilising diverse mediums, different visual methods analyse and interpret data in a range of ways. Rose (2016) broadly distinguishes between two categories of visual methods. The first of these analyse items created independently of the research project. These can include historical or contemporary materials and can serve illustrative or analytical purposes according to the research questions and the researcher's framework of analysis (Rose, 2016). In these cases, the content, context, silences, representational conventions and intended audiences for the visual media can all be the subject of interrogation (Packard, 2008; Rose, 2016). These approaches can be differentiated from media that is actively created by participants and forms an integral part of the research itself. Often referred to as native image making, these methods engage respondents by asking them to create the data that informs the project according to their experiences

(Guillemin & Drew, 2010; Rose, 2016). It is from this category of methods that this research will draw from.

The potential usefulness of these approaches relates to the dual role of images as both representations of the world and tools for communication (Rose, 2014). First of all, visual media is always representative of broader meanings (Rose, 2016). This can be characterised as either the overarching visual cultures that make media legible and understandable according to socio-cultural conventions (Packard, 2008). Alternatively, individual identity work that is embedded in any representation of the real world through specific stylistic choices can be interpreted (Rose, 2016). Visual media thus say something pertinent about both the author of the artefact and the context within which it was created (Packard, 2008). Secondly, these items act as forms of communication that differ significantly from other forms of communication, relying as they do on implicit shared conventions and symbols (Packard, 2008). Using these media in research may elucidate different perspectives and reveal contrasting rationalities (Wolfe, 2016). Furthermore, what is communicated, either intentionally or not, through visual media depends on culturally specific ways of seeing and interpreting (Rose, 2016). Using visual methods can therefore encourage researchers to question individual experiences, understandings and beliefs as they relate to broader socio-cultural norms, symbols and conventions (Rose, 2016). The researcher thus plays an interpretive role evaluating data produced by participants (Packard, 2008).

Furthermore, asking participants to co-create the data that will inform the research empowers and enables respondents to display their latent knowledge and expertise (Guillemin & Drew, 2010). In this respect, unacknowledged and taken-for-granted assumptions by both the researcher and the researched can be studied indirectly (Rose, 2016). Accordingly, these methods have the potential to discover what has been termed the “unknown unknowns” (Allen, 2011, 487) of research meaning the aspects that the researcher and participants have previously unknowingly and unintentionally left unconsidered.

In the case of urban research, visual methodologies can be particularly useful as the city is something that is viscerally and visually experienced through everyday interactions with, and within, the built environment (Wolfe, 2016). The lived experience of cities has been characterised as being mediated by a number of representations of space that are mobilised to produce urban space (Lefebvre, 1991). These representations of space, although not exclusively visual in nature, can include physical artefacts such as photographs and films or more individual perceptions such as mental maps and memories (Lynch, 1960; Giesecking, 2013). This understanding of space contends that representations of space created by a range of users or producers of space shape not only the image of a city but the experience of it as well (Lefebvre, 1991). As such, the ways in which the city is negotiated and represented is contested and varied rather than uniform (Packard, 2008). This is particularly

relevant as individual characteristics, such as age, will impact the embodied experience and representation of cities (Rose, 2016; Wolfe, 2016). Visual methods therefore offer the opportunity to study these representations through both an analysis of the ways people represent space and an understanding of how these representations shape everyday life in the city (Lefebvre, 1991). The choice to base this research around visual artefacts therefore consciously seeks to uncover non-verbal representations that may help to answer the research questions.

### ***Photo Elicitation***

The first visual method used in this project is photo elicitation which invites participants to photograph scenes, objects and features that follow instructions set out by the researcher (Rose, 2016). These participant-produced photographs then form the basis of subsequent interviews or workshops where the choices, meanings and framing of the images are justified and explained by participants (Guillemin & Drew, 2010). In attempting to uncover the reasoning behind the images and what they represent, the researcher may broach a range of topics, themes or insights that relate to the participants and their responses to previously identified research questions. This step is crucial as the meaning attached by participants onto their photographs and representations are more important than any inherent feature of the image itself (Guillemin & Drew, 2010). This approach allows the researcher to both uncover local knowledge while examining the assumptions

and norms employed by respondents (Packard, 2008). The method has been suggested as a particularly adept way of making participation in a research project more stimulating and engaging (Rooke & Wuerfel, 2007). Furthermore, the method may be used to successfully bridge cultural or linguistic differences between researchers and participants (Collier & Collier, 1986). The tool can empower people to steer research to the issues that are meaningful to them and offer thoughts into surprising and unplanned topics (Rose, 2016). Finally, the method has been suggested as enabling researched groups to achieve their goals of drawing attention to their lived experiences, expertise and aspirations which may have political and policy implications (Packard, 2008; Chaudhury et al., 2012). The method is therefore both a data gathering tool and a possible medium through which to easily disseminate the findings of the research (Chaudhury et al., 2012).

These features of the method render it particularly relevant in the context of this research project as it allows elderly participants to engage in the research and guide the findings to issues they consider important in their everyday lives (Chaudhury et al., 2012). This can be contrasted with interviews or surveys in which participants are responding to prompts, cues or questions that are informed by research, theories or assumptions stemming from different contexts that may not be applicable to their lived experiences (Packard, 2008). Furthermore, the formulation of questions in other research methods may shape responses to suit the framing of the issue. The method therefore has the

potential to uncover deeper meanings, attitudes, memories and understandings than traditional methods as participants are given more freedom to creatively represent their thoughts (Harper, 2002). Follow up interviews can be richer and more detailed as they are guided by the ways in which participants interpret the instructions and choose to display their experiences through photography (Rose, 2016). Collecting the unmediated opinions and views of elderly residents is a key goal of this research. Thus, the benefit of the method is that the role of the researcher is curtailed and participants are given more time to think about how to formulate their experiences (Wolfe, 2016). The power imbalance between researcher and participants is therefore somewhat mediated as the latter are the ones interpreting their own images and displaying expertise as researchers link these findings to broader theoretical analyses (Packard, 2008). The subject of the interview therefore shifts from the participant to the photograph (Collier & Collier, 1986). This method is adept at answering questions beyond simply visual considerations and can instead be used to uncover social relations, identities, shared histories and sensory interactions in cities (Rose, 2016). Finally, the method allows for participants to engage in a form of storytelling by detailing personal accounts of their everyday lives and routines (Wolfe, 2016). Despite offering respondents greater scope to shape the data collection, photo elicitation nonetheless relies on a set of questions devised by the researcher to explain the types of photos that respondents should take (Packard, 2008). The

role of the researcher is therefore still a key determining factor in the type of data that is gathered. This shortcoming can be further exaggerated when researchers decide what photos to discuss according to pre-existing beliefs and assumptions which may shape the interpretations offered by participants (Packard, 2008). This is particularly relevant as there is no single explanation or interpretation for an image (Wolfe, 2016). The process that follows the participant photography is therefore a vital part of the research meaning that conventional interview techniques will be critical (Rose, 2016). The role of the researcher as the primary audience for the photographs will also impact the choice of photos and justifications as they seek to respond to the research needs of the researcher (Guillemin & Drew, 2010). Packard (2008) suggests a possible solution to this issue is to print two copies of the photos to offer one to the participant, thus clearly demonstrating that the image creation is collaborative with dual ownership established. Furthermore, because the topics discussed following the image creation are determined by the choices of participants, there is a risk that the method does not address the anticipated themes that the researcher would ideally want to examine. This risk arises as a consequence of the flexibility and empowering nature of the method which has been conceptualised as one of its strength. Finally, the method may ask for deeper engagement and a more onerous time commitment from participants which may limit the appeal of engaging in the project. This may be exacerbated if participants require some training to use the technology (Packard, 2008).

## ***Mental Mapping***

The second method undertaken was mental mapping which asks respondents to conceptually sketch mapped routes, neighbourhoods or specific features of the built environment that they encounter in their daily lives or routines from their cognitive map or memories (Giesecking, 2013). Initially conceived by Kevin Lynch (1960), the method hopes to uncover distinct ways in which people conceptualise, navigate and understand their local neighbourhoods and beyond. Furthermore, the approach seeks to uncover the relations between human experiences and the built environment (Giesecking, 2013). Instead of asking for accurate representations of the environment, this technique seeks to understand the relational aspects of space and how the environment relates to residents and other places further afield (Phillipson et al., 2013). The act of mapping is a different way of conveying experiences to photography and verbal communication and may therefore offer differing insights (Handler, 2014a). Themes such as mobility, accessibility, local history and daily routines can be captured by this tool (Rooke & Wuerfel, 2007). Different respondents will perceive the city differently and consequently, the spatial representation of their surroundings and routines will vary significantly (Lynch, 1960). However, Lynch (1960) contends that group identities will share some commonalities in the way they perceive, value and react to the built environment. Using mapping as a research tool is only possible because of the ubiquity and familiarity of maps and the symbolic representational conventions that underpin them (Ball

& Petsimeris, 2010). The value of the participant-produced material will be linked to the use of symbols to communicate knowledge and behaviours grounded in spatial relations (Ball & Petsimeris, 2010). Crucially maps communicate information about their creators and the physical as well as socio-cultural context within which they are drawn (Giesecking, 2013).

Mental mapping may be a worthwhile method in this project as elderly urban residents spend the most time in their local neighbourhoods and may have intimate local knowledge accumulated over many years of living in the city (Handler, 2014b). As such, the maps will offer insights into the features of the outdoor environment that are stimulating, memorable and valuable to the research participants. However, the reading and interpretation of maps is a necessarily contested process. This can be related to some of the conventions that underpin cartographic practices. For example, the fact that negative statements are rarely found on maps reduces the possibility of maps to convey critiques of current situations based on features missing from the built environment (Ball & Petsimeris, 2010). Similarly, maps are usually valued for their accuracy and legibility rather than their ability to communicate subjective meanings and values. This limits the ability of maps to display ideals or a desired future state of affairs. Harley (1988) suggests that these challenges can be addressed by evaluating not simply what a map shows but crucially what is missing as these so-called “silences” reveal biases, assumptions and the presumed use of the map. In the context of this research project, this approach

may be instructive to assess what features of the built environment do not feature as prominent landmarks, way-finding guides or sites of interest for respondents. As with photo elicitation, the interpretative role of the participant will be key to ensuring that the map is able to communicate the intended meanings. Consequently, the type of data that will be produced is hard to predict as different individuals will use different scales and symbols to represent their personal responses through a visual and spatial tool. Trends and commonalities may therefore be hard to discern, compare and theorise. Despite these limitations, the method can provide further insights into the individual representations of space that shape the everyday urban lives of elderly residents.

### ***Interviews***

The two methods described above were complemented by an interview process as participants were encouraged to justify their choices and reflect on their experiences. Furthermore, the elderly ombudsman of Stockholm Municipality was interviewed to provide some background on the role of the municipality in tackling the challenges of ageing and the governance frameworks and scales at which the municipality is working with these issues. Interviews were all conducted in English which, depending on the interviewee's confidence in their second language, may have limited their ability to fully express their thoughts. Similarly, the interviews were not recorded to give them a more informal and unstructured feel. Although questions and prompts for

respondents were prepared, the exploratory and open-ended nature of the research meant that these questions often lead to very different themes depending on the photos and maps participants had created. This informal setting and the fact that interviews often took place in indoor public places, such as a senior meeting point or building atriums, meant that onlookers were encouraged and able to interject and offer their thoughts once the scope and reason for the interview was explained. These features of the process enabled a larger dataset to be collected and encouraged respondents to take their time to answer questions, often asking for help translating words from Swedish into English from nearby acquaintances. Furthermore, it allowed for groups of people to challenge each other and their descriptions of local features that are well known to everyone. The process was therefore successful in encouraging the widest range of participants possible to offer input.

### ***Site visits***

Following the data gathering process, site visits were conducted to many of the places described by the respondents. Because the data collection was conducted in the two study areas, the site visits were not the first introduction to the two neighbourhoods. However, using the maps and photographs as well as the anecdotes offered by the respondents, these subsequent visits provided insight into the places from which photographs were taken or the ways in which places were related to each other in maps. This was instructive as the stories being told often drew on extensive knowledge of places I was

unfamiliar with. It was important to physically be in the space and observe behaviours that had been described to me. On one occasion, sitting in Tessinparken following a discussion with a respondent about their experiences of the park, I engaged in a conversation with an elderly local resident while sitting on a bench that had been praised as providing opportunities for social interactions. I similarly witnessed the ways in which dog walkers would attract interest and conversations from passers-by. Although the scope of this study did not focus on observations of public spaces, these experiences highlighted both the richness of data that can be gathered from simply being physically present in a space and observing behaviours and interactions in these spaces (Gehl, 2011). Furthermore, it suggested that a follow up study would benefit from a more systematic approach to observations in public spaces as a complement to the native image making methods described above which could help identify points of interest to observe behaviours previously only described. Such a multi-method approach could provide a robust, rich and compelling narrative of the lives of the elderly.

### ***Spatial Analysis***

Finally, the two native image making methods were complemented by a demographic spatial analysis of the ageing trends in Stockholm municipality. The results of this were presented earlier to emphasise the spatially variegated nature of the general ageing trend in Stockholm. Using spatially geocoded demographic data at a range of scales, from the smallest scale of

Demographic Statistical Area to the fourteen districts of the municipality, a more nuanced understanding of ageing in the city could be presented. The challenges and opportunities of ageing societies are most often presented at larger scales, implying uniform challenges across varied spaces. The use of Geographic Information Systems (GIS) in this study was useful to both visualise and analyse these complex trends. It further highlighted the importance of considerations around the scale at which challenges such as demographic shifts should be tackled. The choice was made to analyse each scale in terms of the percentage of over 65 year olds that currently make up the residential profile of a unit and to divide these into equal quantiles to find the areas with the highest percentage of elderly residents. From this baseline assessment of Stockholm's current demographic trends, population forecasts for the fourteen districts were mapped to assess the parts of the city that will experience the most dramatic change in their population composition, even if the absolute numbers of new senior residents are smaller than in other districts. The method was adept at identifying the challenges that Stockholm will face and emphasised the value of assessing public places in neighbourhoods that reflect the spatial variation of both the city structure and its changing demographics.

### ***Data Collection***

Participants for the study were recruited by contacting a municipality-run senior meeting place in Östermalm that hosts a number of activities for elderly

local residents and a senior co-housing scheme in Kärrtorp. Once the project was briefly explained, interested participants were handed a set of instructions in Swedish, which can be found in Appendix 1, and a disposable camera. The task was explained and the use of the disposable camera was demonstrated ensuring that all participants understood the expectations and how to use the equipment. Following this initial meeting, a date was set to collect the cameras, completed instructions sheets and hold informal interviews about the task. In total, nine participants completed all parts of the research with a further two contributing partial responses or participating in discussions. The participants ranged from 65 to 79 years old with six women and three men fully participating and a further man and woman partially contributing to the research. The research took place from the 12th of March 2019 until the 12th of April 2019. Respondents were individually interviewed in Östermalm at the senior meeting place where the instructions were first handed out. Participants from Kärrtorp shared their photos and experiences as a group in a communal space at their co-housing complex. In both instances, nearby non-participants offered input into discussions as a result of the open and ad hoc nature of the interview process. These interviews lasted from ten minutes to an hour and a half depending on both the availability of the respondent and the richness of the anecdotes and stories associated with the photographs. Following these discussions, site visits were conducted to some of the places that were mentioned by respondents and some of the mental maps were used to navigate the neighbourhoods and observe some of the features described by

participants. This was instructive in further contextualising and understanding the experiences being related.

The instructions described the project and asked for some basic information to be able to identify the participants and their photographs from one another.

The instructions included a questionnaire that asked three questions to be answered by a photograph and one question to be answered by drawing a mental map. These questions were:

*1. Could you take a photograph of an outdoor public place (such as a park, street, garden, square, market etc) in your local area where you might go for leisure and feel comfortable, happy and safe.*

*2. Could you photograph an outdoor public place in your local area (such as a park, street, garden, square, market etc) where you do not feel comfortable, safe or welcome.*

*3. Could you photograph an outdoor public place that has changed or where your experiences there have changed for the better or worse in the last ten years.*

Below each of these questions were a further set of questions asking respondents to describe and justify their choice of photograph. The first question always simply asked what the photographed showed to be able to identify it before asking for a brief explanation of their choice of place and an attempt to characterise the space. The answers to these questions were useful

in guiding the follow up interviews and to structure a discussion around some of the themes written about. This approach was able to mitigate one of the main shortcomings of the photo elicitation method resulting from the use of disposable cameras and the sharing of one camera between several participants meaning that some of the follow up interviews took place before the photos were all developed.

The mental mapping exercise was introduced in the instructions and the task was described in terms of a single question that asked participants to:

*“sketch in the box below a conceptual map of a route that you enjoy going to frequently in your local neighbourhood. The map does not need to be accurate and can include names of places, features such as roads, buildings, parks or anything else that helps you both navigate and locate the route.”*

Although possibly too prescriptive, these instructions and the clear format following a conventional questionnaire resulted in the successful completion of the task by all but two of the participants. All but one participant filled in their questionnaires in Swedish which limited my understanding to a very basic outline of their answers before I could fully translate the responses. A further limitation resulted from the participant recruitment process which skewed heavily in favour of elderly residents more inclined to participate in social and physical activities regularly by their very involvement in a municipal run meeting place or as residents of a co-housing scheme. Participants were

therefore less likely to suffer from social isolation. These limitations reduce the ability of this study to capture the opinions of people that use public spaces less frequently and may be more attuned to the barriers that exist in these places. Furthermore, only participants with a confident knowledge of English were recruited despite efforts to accommodate non-English speakers. Despite these limitations, a large amount of varied data around the use and value of public spaces in the two neighbourhoods by elderly residents was gathered. This data was grouped into three themes that reflect the recurring themes but remain broad enough to cover the majority of the data generated. The findings will be discussed in relation to these themes in the following chapter.



## **Chapter Five**

# **Analysis**

## ***Outdoor Green Spaces***

In line with previous findings, the importance of green spaces and nature-based recreation in the urban lives of the elderly was stressed by participants in the present study (Handler, 2014b; Wen et al., 2018). Respondents drew attention to a range of environmental features such as parks, forests, community gardens, lakes and nature reserves. These spaces were cited for their importance to the local history, identity and biodiversity of their neighbourhoods as well as for the opportunities they provided for socialising and undertaking leisure and recreation activities. The photographs and maps produced by respondents and the subsequent discussions about these materials raised issues of scale and temporality and suggested some differences between the types of space and the activities that attract people to them. These issues are first discussed in relation to two places that recurred in several responses. The first of these is Nackareservatet to the East of Kärrtorp and the second is Tessinparken in Östermalm. Following this, an analysis of the outdoor green spaces in both study areas as well as the differences and similarities between the two neighbourhoods is offered.

Nackareservatet is a large area of protected forests and lakes bordering the neighbouring municipality of Nacka. Respondents frequently mentioned the nature reserve in relation to the opportunities it provides for engaging in leisure and physical activities either alone or with friends and family. These included cycling, using the outdoor gyms, walking as well as swimming in the summer

months and cross country skiing or ice skating in the winter months. These activities hint at the flexibility and importance of the space across the year. One respondent specifically mentioned the visible change in seasons as an attractive feature of the space while another mentioned the opportunities for restorative activities and access to sunlight during the darker winter months as reasons for frequent visits to the reserve (both Kärrtorp residents aged 69 and 77 respectively). Another attractive feature of the space for respondents was the lack of car traffic, the natural beauty and the relative quietness of the area (Kärrtorp resident aged 71). These responses relate to the therapeutic functions of green spaces and the links to wellbeing, physical activity and leisure (Wen et al., 2018). However, despite these positive features and the value of the space, it did not feature in the mental maps residents drew of walks they enjoyed doing in their neighbourhoods, all of which started from respondents' homes. In discussing and explaining their photographs and maps, respondents drew attention to the fact that despite the nature reserve feeling like a local feature, it was most often accessed by bicycle (Kärrtorp residents aged 71 and 77). This highlights the fact that larger, more flexible spaces which provide opportunities for a range of leisure activities across the year are valued and frequently used despite not being within walking distance (Zhai et al., 2018). Respondents from the area all valued the area's protected status and suggested that the space was of wider importance for residents of nearby suburbs as well as for the biodiversity of the city as a whole. These results suggest that the presence of relatively local, accessible, large protected

green spaces are an important feature of an 'Age-Friendly' city.

In contrast, Tessinparken is a small local urban park between Karlaplan and Gärdet metro stops in Östermalm. Featuring in the photographs and mental maps of two respondents (Östermalm residents aged 77 and 79), the area is similarly valued as a space to experience nature. The presence of flowers and access to sunlight as well as the possibilities for picnics and reading were all mentioned as attractive features of the park. However, opportunities for consumption were also mentioned as key draws to the park with nearby cafés and flower shops specifically referred to as reasons for visiting the park (Östermalm resident aged 77). Furthermore, the ability to talk and socialise with friends and family, as well as the opportunities for spontaneous interactions with strangers and acquaintances, was brought up as a positive feature. This suggests that the space plays an important role in the neighbourhood as a whole and offers forms of what Handler (2014a) calls convivial infrastructure by providing spaces that encourage these interactions. Features such as the benches, fountain and playgrounds and activities such as dog walking were all discussed as offering opportunities for these exchanges to take place (Östermalm resident aged 77). These features can be seen in figures 6 and 7. Finally, the mental map from figure 8 highlights the ways in which the respondent (Östermalm resident aged 79) selected a longer route to their destination to pass through the park for the opportunity to sit at the benches, avoid traffic and see the flowers drawn at the bottom left hand corner of the

map. The park is therefore characterised as animated and attractive as both a destination and a route.



Figure 6 and 7: Östermalm respondent's photographs of dog walkers and playgrounds as attractive features in Tessinparken.

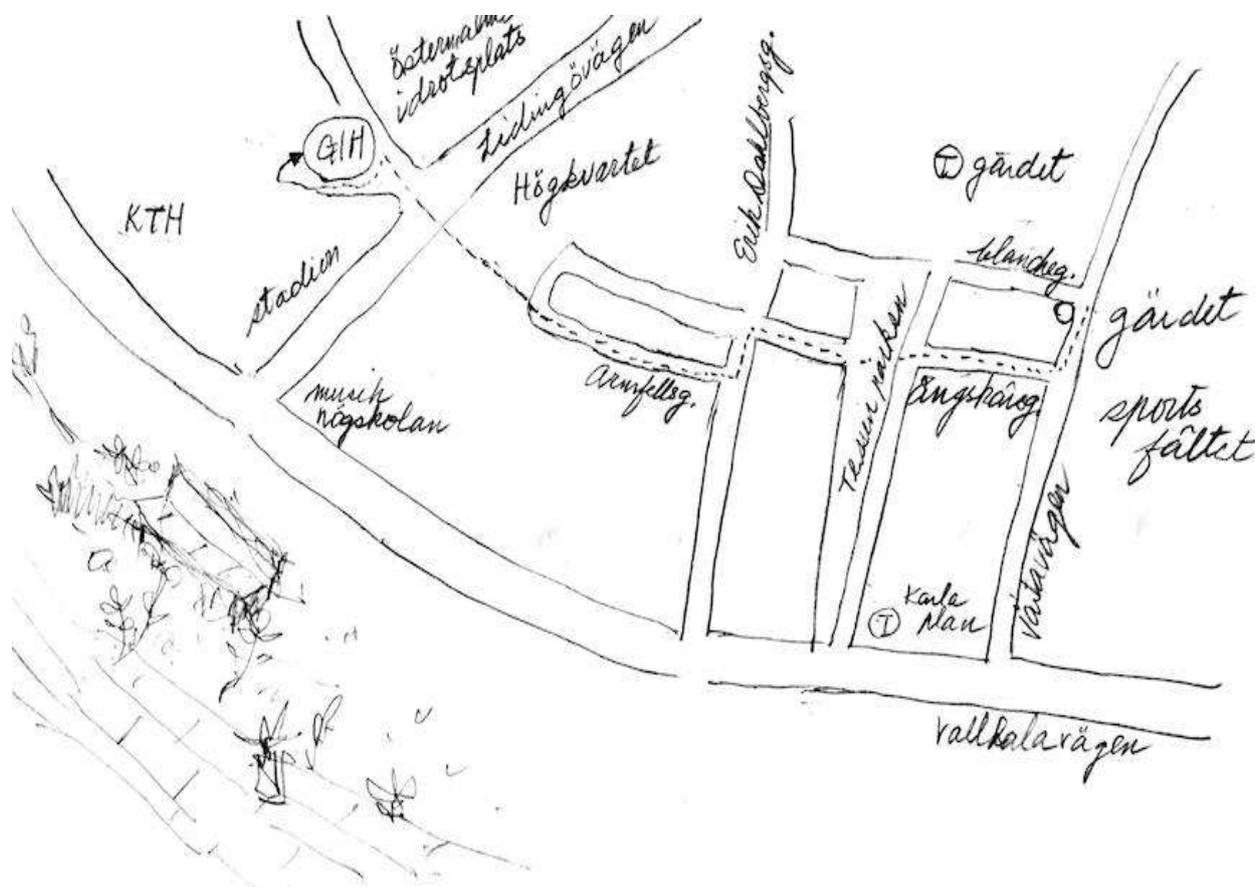


Figure 8: Östermalm resident's mental map of route to the gym at GIH

However, one respondent (Östermalm resident aged 77) differentiated between the upper and lower parts of Tessinparken and associated the lower end, seen in figure 9, with less favourable attributes describing it as having:

*“No flowers, no lawn. Only single chairs are set up, which makes it difficult to contact anyone. A meeting place for alcoholics. Impersonal and unfriendly” (Östermalm resident aged 77).*



*Figure 9: Östermalm resident's photo of the lower end of Tessinparken. Particular attention drawn to the inward facing benches in the foreground and the single seats in the background as poorly designed features undermining the conviviality of the space.*

The above quote highlights the link made by the respondent between the landscaping and park furniture and the social activities that take place in the park. These design features and activities are further linked to the perception of the space. Not only is the presence of features, such as flowers and benches, valued and appreciated, the lack of them contributes to the area feeling unfriendly and uninviting. This finding was striking because the same respondent had previously talked about the other side of the park in almost diametrically opposed terms. These responses also relate to Mitchell's (1995) assessment of public spaces and the possible conflicts that may arise when certain groups claim spaces for their exclusive use, such as drinking alcohol. Issues of both design and management in these more programmed shared spaces that attract a large number of users were therefore brought up as important when attempting to plan for 'Age-Friendliness'.

From these two examples of local green spaces discussed by respondents, several commonalities can be found. Features such as access to sunlight, reduced noise and traffic and opportunities for physical and leisure activities were all cited as reasons to visit these spaces. Similarly, interactions with natural features, regardless of how planned and landscaped these features are, were deemed valuable. This can be further illustrated by another Östermalm resident's (aged 79) appreciation for the presence of domesticated animals such as horses and cattle in the nearby Kungliga Nationalstadsparken. However, some differences did emerge with Östermalm residents more likely to

refer to consumption opportunities and potential social interactions as attractors to outdoor green spaces than respondents from Kärrtorp. These features, although appealing to some, may pose barriers to other more vulnerable populations and may undermine the publicness of these spaces (Amin, 2008; Madanipour, 2010). As a respondent from Kärrtorp (aged 77) highlighted, the local square in the centre of the suburb does not offer them opportunities for such unplanned interactions. The reason offered for this was that their daily routines and social networks differ markedly from those of commuters or parents of children attending the local school that pass through the square regularly. This further illustrates the ways in which daily rhythms and activities play a part in animating public spaces but may exclude those that do not follow such rhythms. In subsequent discussions with Kärrtorp residents, there was a perception that residents in the inner city are more likely to follow the rhythms of working life. The suggestion was that the suburbs offered better opportunities for a slower pace of life less constrained by the patterns of working life. Furthermore, the local square was not seen as a potential meeting spot with residents highlighting the limited time across the year where the weather allowed for outdoor interactions. These limited opportunities are further reduced as locals were characterised as either going on holiday or visiting the nearby nature reserve instead of the local square during the summer. This highlighted the differing role of public spaces in the two study areas and the sense that social interactions were easier to initiate and maintain in outdoor green spaces than in other public spaces.

As highlighted above, the two methods drew attention to different places and indicated the various scales at which the lives of the elderly play out. Figures 10 and 11 show two mental maps drawn by a Kärrtorp resident (aged 78) and an Östermalm resident (aged 79) respectively. Both maps show circular routes and are described in terms of the ability to experience nature easily from their places of residence as well as the distance and time that the routes take. The routes were both between 3.5 and 4.5 km and described as a 45-minute walk suggesting that this distance is a manageable route for daily activity. This further illustrates the importance of incorporating natural features, such as planters, parks and trees throughout urban neighbourhoods and not simply relying on dedicated parks and nature reserves to provide these amenities within daily walking distances. Interestingly, both maps followed similar minimalistic conventions with little detail and lots of open space left unmapped, suggesting that these spaces are natural and may lack easily recognisable landmarks. This contrasts starkly with the map in figure 8 above which depicts a dense urban street network.



Figure 10: Kärrtorp resident's mental map of a walk in the nearby forest

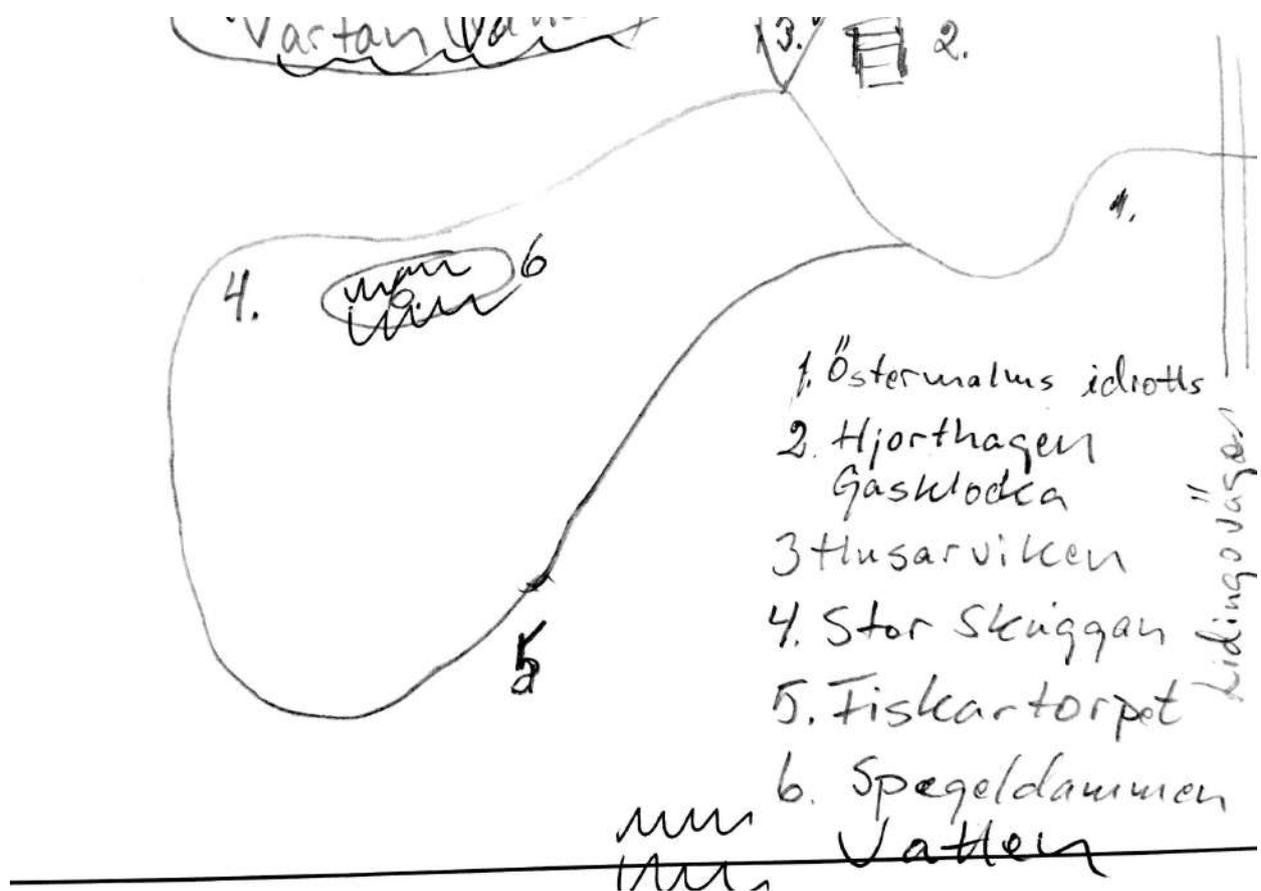


Figure 11: Östermalm resident's mental map of a walk in the Kunglia Nationalstadsparken

The case of two Kärrtorp residents (aged 65 and 69) further illustrates the value of a comprehensive, diverse and dispersed network of open green spaces. The first respondent drew attention in a photograph seen in figures 12 to the importance of the Skarpnäck Koloniområde for providing community gardens and a café within walking distance of their home and offering social and physical infrastructure for gardening and meeting other local residents. The second respondent discussed in a follow up focus group the important role of spaces, known as Hemgården, for community groups that curate and preserve local histories through various societies. In Kärrtorp these buildings themselves were heavily tied to the rural history of the area as they are often linked to farmsteads which themselves lend their names to neighbourhoods across the adjacent suburbs. Once again, social interactions, physical activity, opportunities for consumption and connections to local identity and history are all provided by these spaces that remain highly prized local resources. Several respondents in Kärrtorp proudly listed their membership to various societies including gardening clubs, bird watching groups and local history societies. These groups were not only seen as important locally but were recognised as being part of a national network of such groups across Sweden and providing important contributions to Swedish identity.



*Figure 12: Kärrtorp resident's photograph of Skarpnäcks Koloniområde*

It is striking that the social infrastructure mentioned by Kärrtorp residents combined environmental features and nature-based organised activities. The role of these spaces is of particular importance as Chaudhury et al. (2016) note that elderly residents are more likely to achieve the recommended levels of physical activity if they undertake activities with friends or as part of a dedicated activity programme. Spaces such as the ones described above are therefore crucial in combining social and physical resources that contribute to health and wellbeing across the city. However, the responses of one Östermalm resident (aged 79) expressing a dislike for newly installed gardening plots overlooked by their apartment reiterates the difficulty of generalising these findings. In subsequent discussions, the respondent explained that they

preferred flexible green spaces that can accommodate a range of activities and that the new use of the space results in increased noise. Regardless of these shortcomings, discussions suggest that despite the apparent differences between the more centrally located Östermalm residents and the suburban Kärrtorp respondents, many of the reasons for going to outdoor green spaces remain the same. These include the possibility for social interactions, physical exercise, leisure activities, contact with nature, respite from noise and pollution and strengthening personal connection to local neighbourhoods, landscapes and identities.

### ***Transport Infrastructure***

Various types of transport infrastructure were also frequently brought up in relation to feelings of unsafety and discomfort. The most commonly referenced spaces were metro stations, encompassing their entrances, escalators and platforms. Discussions in Kärrtorp brought up several grievances with accounts of one respondent recently being knocked over by someone running for the metro (Kärrtorp resident aged 76). The fear of falling was shared by several respondents with both the increased pace and large number of people walking in the stations making them unappealing. One respondent (Kärrtorp resident aged 71) referred to both the stress and noise of those on the metro and mentioned the narrow platforms with little seating as an aspect that further undermined their comfort. An Östermalm resident (aged 79) further expressed dissatisfaction with the entrance to Karlaplan metro station, seen in figure 13.

Citing the lack of planters for flowers and the poor lighting, the respondent suggested that these design features could make the experience of using this station feel more pleasant and safe. Another respondent (Kärrtorp resident aged 77) characterised their experience of using the metro in terms of being confronted with a faster pace of life which was at odds with all other parts of their day. Age-unfriendliness was therefore characterised both in terms of the behaviours of other public transport users as well as the design of transit nodes which may in some instances contribute to these behaviours. Despite the misgivings expressed by many respondents about the feelings of discomfort on public transport, the system was nonetheless widely used and praised for making most destinations in the city accessible. Residents in Kärrtorp in particular were quick to point out the ease with which they could access the central city or other important suburbs to the south of the city such as Farsta and Skarpnäck. These journeys were characterised by the desire to access services, retail spaces, activities and cultural venues that could not be found in the local area. It is perhaps in part due to the frequent use of these infrastructures and the centrality of them to their access to everything the city has to offer that so many respondents chose to discuss these spaces when asked about places they did not feel comfortable in. Respondents frequently expressed difficulty thinking about public spaces that made them feel uneasy or unwelcome and suggested that public transport infrastructure, although valuable and important to them, could better accommodate their needs.



*Figure 13: Poor lighting, gravel paths and lack of landscaping mentioned as unappealing features of Karlaplan metro station by one Östermalm resident*

The concerns raised by respondents coalesced around trepidation at the projected growth of the city with fears raised at the prospect of an increasingly busy public transit system as neighbourhoods across the city densify and new ones are built. The sense of fast-paced growth and change was further expressed in concerns around the perceived increase in traffic along major roads. Sockenvägen was highlighted by several Kärrtorp residents (aged 69 and 77) as being particularly busy with fast moving traffic. Pictured in figure 14, respondents spoke of acquaintances being hit by cars along this road as well as the increased noise created by the traffic. Increased crossing points or traffic lights were suggested as possible solutions to deal with these challenges. The risks presented by these busy roads is further exacerbated in

winter when snow clearance efforts prioritise road traffic at the expense of pedestrian paths resulting in some respondents frequently having to walk on the road rather than the pavement to avoid the risk of falling (Kärrtorp resident aged 77). These concerns are well justified as data by Buffel et al. (2012) emphasises the increased risk of traffic related fatalities for elderly pedestrians. Furthermore, busy roads are often depicted as the borders of the mental maps respondents produced, as seen in figures 8 and 15, suggesting that they may act as barriers. An Östermalm resident (aged 79) suggested that Valhallavägen, a busy and heavily trafficked street, offered the fastest and easiest route to many of their daily destinations but that they avoided it if possible because of the discomfort caused by the noise, air pollution and speed at which the cars travel, preferring detours along quieter streets and parks. This finding relates to Borst et al.'s (2009) study on the walking behaviours of elderly urban residents which suggested that only 20% of actual walking routes were the shortest possible option for getting to the intended destination. However, the study also found that streets containing shops, services, active frontages and access to public transport across long axes with few crossings were the most used by the elderly (Borst et al., 2009). Borst et al. (2009) draw attention to the tension between the place value and functional value of streets with streets that are perceived as nicer or quieter not necessarily being used more for travel. The present study found several contradictory findings of respondents explicitly stating that they planned their routes according to the environmental features encountered on the route, the

likelihood of spontaneously meeting an acquaintance or the desire to exercise (Kärrtorp residents aged 77 and 78 and Östermalm resident aged 79).



*Figure 14: Kärrtorp resident's photo of Sockenvägen, a street with increased traffic volume*

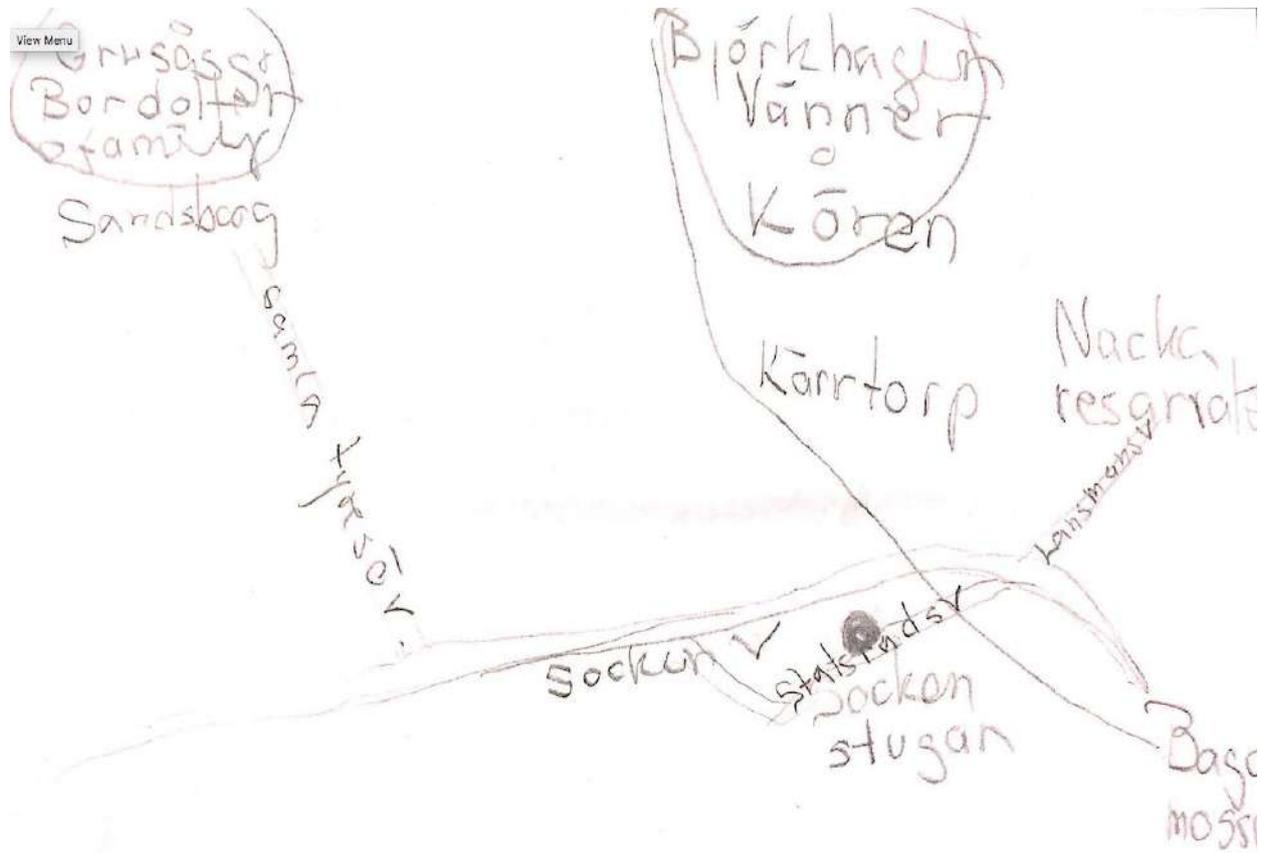


Figure 15: Kärntorp residents' mental map with Gamla Tyresövägen and Sockenvägen acting as borders of the map

Across these varied infrastructures, respondents often positioned themselves as pedestrians in relation to faster individuals, either walking faster, cycling or driving. These interactions were not only seen as unpleasant but as potentially dangerous. Issues of noise and pollution were also discussed as was the need for design and wider behavioural changes to address these issues. No one reported changing or limiting their travel behaviours because of the identified features suggesting that age-unfriendliness in urban public spaces is not limited to just barriers that limit access to spaces but to the feelings engendered by these spaces. Interestingly, many of the natural and designed features respondents noted as attractive in outdoor green spaces, such as greenery, benches and quiet spaces, were mentioned as lacking in these purely

functional spaces suggesting that these features and amenities have value beyond the opportunities they offer for leisure or physical activity and are also appreciated for their aesthetic and atmospheric appeal (Gehl, 2011). This can be understood in terms of Andrews et al.'s (2014) assertion that everyday interactions or affective responses to environmental features can act as the sites at which wellbeing is experienced.

### ***Urban Development and Growth***

Photographs of new buildings and the development and growth taking place in both neighbourhoods were also common. These images were related to discussions around the changes in each area as well as places respondents either did or did not feel comfortable or welcome in. The types of developments mentioned ranged from single residential or civic buildings to whole new districts or public spaces. Consequently, attitudes and perceptions of urban development differed markedly between respondents. These issues resulted in debates around the ways in which Stockholm is growing and developing and the impact these changes will have on the quality of life for current and future elderly residents.

Two new developments in Östermalm were mentioned by respondents in broadly positive terms. The first of these is the new Kungliga Musik Högskolan (Royal College of Music) campus opened in 2016 on Valhallavägen and the second of these is 79 & Park, the new housing complex designed by BIG

architects and opened in 2018. Both sites are pictured in figures 16 and 17 respectively. Both developments were noted for their architectural merit with particular emphasis on the modern aesthetic and the high quality of the design and building materials used (two Östermalm residents, both aged 79). The Royal College of Music sits on the site of a former horse riding school and connects to a new housing development at the former artillery barracks. The development was praised for the ways in which features of the past land uses were incorporated into the current design with old stables forming part of the new campus' library. Although built to house a higher education institution, the development was also praised for offering accessible open spaces for local residents. Respondents recognised the better use of centrally located and underused land which had previously been a parking lot. The development was characterised as a positive addition to the local neighbourhood and the city as a whole despite the loss of spaces characterised as being almost rural. These findings suggest that well designed developments that offer accessible, open and bright spaces for all can improve the urban experience of the elderly. This is further emphasised by the responses of one participant (Östermalm resident aged 79) referring to 79 & Park as their favourite place to walk to in the early evenings to catch the sunset while looking out to the new development, which is made up of striking glass fronted stacked apartments, with the Kaknästornet in the background. The development is characterised as a new attraction in the neighbourhood encouraging the respondent to include the site in their daily evening walks. This illustrates the ways in which new developments can act as

a resource for the wider area. One of the possible benefits from developing and building striking flagship buildings is that they can become landmarks punctuating the city.



*Figure 16: Östermalm resident's photo of the Royal College of Music*



*Figure 17: Östermalm resident's photo of 79 & Park in the distance with the Kaknästornet visible in background*

However, these perceived benefits were undercut by a recognition that these developments are intrinsically linked to a housing affordability crisis currently afflicting the city. The housing adjacent to the Royal College of Music was mentioned in particular for the high cost of the apartments being sold on the site with one respondent (Östermalm resident aged 77) quoting a figure of 17 Million Kronor for an apartment in the Svea Torn tower at the heart of the development, seen in figure 18. These sentiments were captured by one respondent (Östermalm resident aged 78) claiming that these new dwellings “aren’t for us” before expressing a concern that future generations of elderly residents would be priced out of the neighbourhood. The overriding emotion

expressed with these issues in mind was sadness at the increasing inaccessibility of the area. These findings stress the ways in which affective and emotional responses to public spaces stem from issues beyond their design and aesthetics to encompass the broader political economic shifts these spaces may represent. Feelings of discomfort and a sense of alienation in public space may therefore stem from the exclusive marketing and branding of neighbourhoods. Exclusion from public places and barriers to their full use can therefore be linked to non-physical features. This was further illustrated by a respondent in Kärrtorp (aged 65) suggesting that the presence of a beggar at the entrance to the metro station served as a poignant reminder of the inequality and inadequacies of the social welfare state. These issues relate to Mitchell (1995) and Amin's (2008) assertion of the powerful symbolic role of public spaces and the importance of assessing who is seen in public space and how the publics of public spaces may change over time. The political significance of public spaces was therefore emphasised by respondents.

Several respondents further commented on the ways in which new structures change the public realm and the ways public spaces are shaped and framed (Gehl, 2011). These issues were mostly discussed in Kärrtorp where they were linked to the rapid growth and densification of suburban areas and the concomitant loss of green open space to new developments. One of the consequences of this strategy, already mentioned above, is the increased traffic along main roads across the suburb. Increased house building has been

characterised by one respondent (aged 69) as resulting in both more traffic jams and faster, more reckless driving. Another respondent (aged 77) noted that this had pushed some neighbouring residents to install wooden panels in front of their front gardens in an attempt to manage and reduce the noise from the traffic. These panels, seen in figure 19, were mentioned by the respondent as features that reduced the appeal of walking down these streets and the vibrancy of the public realm. This concern was raised in relation to plans for urban densification that result in new buildings increasingly being built along busier streets and nearer to infrastructure such as the metro lines. The apprehension expressed by the respondent reveals an uneasiness at the potential reduction in the quality of life for those that would move to the neighbourhood and for those already living there. These impacts were further emphasised in relation to the loss of open green spaces between the various suburbs. The accounts of one respondent (Kärrtorp resident aged 77) regularly getting off at an earlier metro station to be able to walk through a green space currently planned for new housing developments suggest that these new developments will have an impact on the daily lives of current residents. Similarly, the loss of pine trees for another housing development was also mentioned as detrimental to the local area. The respondent's prevailing attitude was summarised thusly:

*“[The municipality are] trying to make it look like [the] city, but that does not work in a suburb planned after other ideals”.*



*Figure 18: Photo taken by an Östermalm resident of the Svea Torn at the heart of the housing development in the former artillery barracks.*



*Figure 19: Kärrtorp resident's photograph of wooden panels installed to limit noise pollution from the road*

These issues were further compounded by the perceived lack of quality of some of the new developments occurring in the neighbourhood. Particular grievances were expressed around the ways in which many of the new buildings appear out of context with the existing neighbourhood. Figure 20, taken by a Kärrtorp resident (aged 77) depicts one of these developments. Described deridingly as “grey boxes” that do not fit into the colour scheme, scale or building materials of the surrounding area, the respondent experiences irritation every time they encounter the buildings. The importance of preserving and being sensitive to the local identity of the area when adding new buildings was further illustrated by another set of houses, shown in figure 21, which were similarly questioned for their choice of colour and style, supposedly modelled on English townhouses, which were deemed out of place in Kärrtorp. Furthermore, these designs were criticised by elderly residents for lacking lifts and engendered feelings similar to the ones expressed by Östermalm residents above about the new developments not being accessible to them. Another instance of a design being criticised by residents occurred in Kärrtorp where residents were critical of plans for redesigning the main square in the suburb. The current square and the plans for the redevelopment can be seen in figures 22 and 23. The choice to repave the square with cobblestones, a move understood by participants as a return to the materials and designs of the past, was particularly critiqued as a decision that would render it harder to walk and increase tripping hazards and discomfort. Furthermore, the addition of multi-family housing in such proximity to the metro station as well as the

projected desire to make the square a meeting space were both viewed with scepticism. All the respondents were informed and opinionated about the development with many formally expressing dissatisfaction with the municipality.



*Figure 20: Kärrtorp resident's photograph of the "grey boxes" in the background*



Figure 21: Kärrtorp resident's photo of so-called 'English' townhouses



Figure 22: Current image of Kärrtorp Centrum



Figure 23: Rendering of the plans for the square, image by Nyréns Arkitektkontor.  
<https://xn--vxe-loa.stockholm/globalassets/projekt/skarnack-sdo/karrtorp/karrtorps-centrum/gestaltningprogram-karrtorps-centrum-16-03-29.pdf>

Across these varied responses to the development and growth of the city, the concerns raised by respondents were relatively consistent. The issue of local history, accessibility, quality of life and the rate and scale of change were all brought up. As predicted in the literature review, the respondents made it apparent that they were very aware of their local history and were strongly attached to their neighbourhoods. One respondent (Kärrtorp resident aged 76) illustrated the long term stakes residents may have in their neighbourhood by explaining that they still walked the path they had travelled daily during their working life. The local neighbourhood can in some cases be intrinsically tied to the life histories of elderly residents. Although changes were indeed keenly felt,

there was however an appreciation for designs that incorporated past features and offered public resources such as squares and open spaces. The opposite is also true as respondents were unhappy with designs and changes that were both out of context and were plainly not available to them or other elderly residents. These discussions relate to the sense of belonging that residents experience in their neighbourhoods. These considerations were articulated by Kärntorp residents feeling as though the suburban character of their neighbourhood was being replaced by urban features that were understood as clashing with the local aesthetic and threatening the amenities and resources that residents value most. This contrasts with Östermalm residents who interpreted similar development and growth in terms of affordable housing loss and a change of the local character as the age profile of the area changes. These fears may be vindicated by the demographic projections for the area highlighted in Chapter 1 suggesting that the area would experience the lowest growth in the over 65-year-old population despite a number of large scale new developments in the area. This implies that many of the new housing units may not be accessible to elderly residents. This analysis suggests some of the considerations urban planners and developers need to have in mind when densifying neighbourhoods and providing much needed new housing across the city in order to ensure these changes comply with a shared vision of age-friendliness.



# Chapter Six

## Discussion

## ***Value of Visual Methods***

The use of photo elicitation and mental mapping generated a large amount of participant produced data detailing insights into the daily lives, aspirations and values of the respondents. As mentioned in the chapter above, the mental mapping was particularly useful in identifying local landmarks and public spaces that residents use regularly because all the participants used their home as the starting point for the map and related their surroundings according to that point. Furthermore, most respondents decided to map features that differ from the places they photographed offering insight into a range of places and the various reasons for visiting them. These patterns were useful because some participants chose to photograph features from much further afield, such as Slussen, which featured in several respondents' photographs. These responses suggested both the satisfaction people felt with their local neighbourhoods and the extent to which elderly residents in the city are not necessarily as confined to their local surroundings as previous research has suggested. The scale of these answers was unanticipated but revealing, suggesting as they do that the impact of certain planning and design decisions will be felt far beyond their direct vicinity. The loss of easy access to these central spaces, even temporarily, was keenly felt. This reinforces the theoretical understandings of public spaces playing an important role in the identity formation of citizens through the symbolic values attached to them (Varna & Tiesdell, 2010). Interestingly, many of the places that people photographed as attractive public spaces were notable for the absence of other people in them.

This may not be surprising given the climate and the time of year these photos were taken but it illustrates the ways in which the photographs themselves may be of secondary importance compared to the feelings and associations people attach to them. The photographs are therefore not acting as evidence for what respondents are saying when emphasising the attraction of social interactions in public spaces. Finally, the use of photography to draw attention to the changing character of a neighbourhood undergoing rapid redevelopment with the associated rise in luxury apartments and unaffordable housing that accompanies this investment was unanticipated. This case can be seen as evidence of the value of the methods in providing the anticipated ‘unknown unknowns’ they were selected for and giving an unmediated voice to respondents. Furthermore, the ability of the method to capture non-visual atmospheres was valuable and served to answer the research questions tackling issues of age-unfriendliness that extend beyond the physical design of public spaces. The methods were therefore adept at offering surprising insights into the daily lives of elderly residents and the features they are drawn to in public spaces.

Despite the success of the methods in providing a voice to the participants and giving them the chance to shape this research, there were several limitations. As predicted, the method proved time consuming with several instances of participants unable to, or only partially, completing the tasks set out for them. The sample size is therefore smaller than would have been hoped

for. Furthermore, the insights expressed by respondents cannot be expected to reflect the diversity of the ageing experience in Stockholm. All the respondents have lived in Stockholm for upwards of 27 years, with most having lived in the city considerably longer, meaning that the experiences of recent migrants are not captured by the current study. Similarly, despite not consistently collecting data on all the participants' socio-economic background, many had professional backgrounds with several teachers, a doctor and an academic among the respondents. Any further study using the same methods should collect this data and could seek to address the experiences of groups overlooked by this study. The responses that were returned included often thoughtful and creative answers to the questions set out. However, the framing of the question attempting to uncover barriers in public spaces was repeatedly singled out for being difficult to answer. This suggests that the question could have been better phrased to answer the research questions. This may explain why respondents could refer to the public transport system as a space they feel unsafe and uncomfortable in while simultaneously praising the accessibility to the rest of the city it offers. Similarly, the discomfort expressed at the rate of change in surrounding neighbourhoods, particular those in Kärrtorp, was never interpreted as something that would stop respondents from performing their daily activities but rather as a process that would remove resources and undermine local quality of life. In contrast to the identification of attractors, which was more successfully achieved in this project, barriers to the use of public spaces by the elderly were not so readily captured.

### ***What does age-(un)friendliness look like?***

One of the most striking findings from these results was the almost unanimous satisfaction with the local and accessible opportunities for outdoor nature based activities across the two study areas. The number of physical activities mentioned, from daily walks and bicycle rides to seasonally dependent leisure activities such as outdoor swimming or ice skating, reflect the ways in which a number of outdoor public spaces can support 'Active Ageing'. Many green spaces were mentioned for their importance beyond their enabling role in facilitating physical activity and instead valued for their connection to a recent shared history, wider urban biodiversity or simply as an aesthetic feature within the built environment. Outdoor spaces were therefore not understood purely in functional or utilitarian terms but rather as features with intrinsic value. For example, pine trees that had recently been cut down in Kärrtorp were missed as something simply to look at and smell when walking by rather than for the ecosystem services they provide in terms of shading or potential air cooling (Kärrtorp resident aged 77). Consequently, the absence of natural features was most often mentioned as the reasons for not finding a space comfortable or appealing. Based on these findings, a systematic re-greening of the city would address some of the concerns raised by respondents. Most notably, metro stations and their entrances as well as urban public squares were suggested as places that would benefit from increased landscaping as well as the addition of seating to encourage people to use these spaces more (Östermalm

residents aged 77 and 79 and Kärrtorp resident aged 69). Benches were preferred to individual seats, allowing as they do the chance to sit next to someone and interact socially. These possible solutions were further framed in relation to feelings of safety in at least one case where the addition of such features was suggested as a way of reclaiming part of Tessinparken for a range of different uses instead of just as a place for alcohol consumption. Trees and benches are often conceptualised as 'Age-Friendly' features that support outdoor activity but the current findings suggest that they play a social role as well, further contributing to wellbeing and increasing their importance.

Furthermore, features such as roadside trees and benches can effectively be used to slow pedestrian and car traffic rendering the experience of walking along these streets both more pleasant and safer (Speck, 2012). An 'Age-Friendly' city is therefore a green city with accessible, dispersed and plentiful environmental features. Such a structure would have myriad benefits for the city as a whole from air cooling and carbon sequestration to providing spaces and opportunities for leisure activities and enhancing urban biodiversity.

Crucially, the current findings suggest that this would also attract people to use public spaces and enjoy their experiences of these places which would further render them more conducive to spontaneous and planned social interactions.

In this study, age-unfriendliness emerged as a term characterised by inaccessibility and the exclusion of elderly residents from resources in the city, such as affordable and adapted housing, or from the processes that shape

urban development. Some respondents expressed satisfaction that their daily lives were the subject of interest from an urban planning student. This suggested that they harboured grievances with the ways in which they were habitually consulted or engaged with for matters concerning the urban development and growth of the city. These consultations were cynically viewed as unable to truly exercise power or influence in the planning of the city, instead limiting their input to reactionary responses to plans rather than constructive input into these plans in the first place. Similarly, issues such as the loss of outdoor green space and the densification of neighbourhoods were highlighted as both an aspect of age-unfriendliness and a symptom of a wider loss of power on the part of elderly residents in the face of these pressures. These understandings align with the notion of 'Active Ageing', suggesting as they do that limited participation and security were detrimental to the everyday lives of the elderly whereas opportunities to maintain good mental and physical health and wellbeing were highly valued by respondents. Improving the feelings of security in public spaces was conceived in terms of limiting the risks and impacts of transport infrastructure and improving the possibility for conviviality in public space. The importance of feeling able to use public space comfortably was a recurring theme. Furthermore, as with green spaces, dispersal and decentralisation were valued as 'Age-Friendly' features more generally. Therefore, ensuring that quieter roads complement busy streets and that services and amenities such as shops, community spaces and cinemas can be found across the city within easy access to a large number of people

were highly valued goals.

### ***Lessons for Stockholm and Next Steps***

Stockholm municipality, with its extensive public transport system, widely enforced universal design standards in new buildings and dispersed network of dedicated meeting points for elderly residents, was often praised in this study as a good place to grow old in. The goal of the city to promote a holistic understanding of health, extending beyond disease prevention to incorporate social and mental health and wellbeing, resonated with the experiences described by residents. However, differences did emerge between the two neighbourhoods studied. Public spaces in the centrally located Östermalm district were praised for their conviviality and the opportunities for social activity as well as the connection between consumption and leisure in public spaces. These characteristics were less valued in the public spaces discussed by Kärrtorp residents who instead valued natural landscapes ahead of what could be considered urban features such as parks or public squares.

Furthermore, the public realm in the suburban district extended to discussions around pavements, streets, roads and nature reserves as opposed to civic spaces. Public space was therefore understood in terms of daily experiences of outdoor environments to encompass a far larger set of spaces rather than purely as destinations in and of themselves. As suggested in the literature review, public spaces and the outdoor built environment do play a fundamental role in the everyday lives of elderly Stockholm residents. However, the value

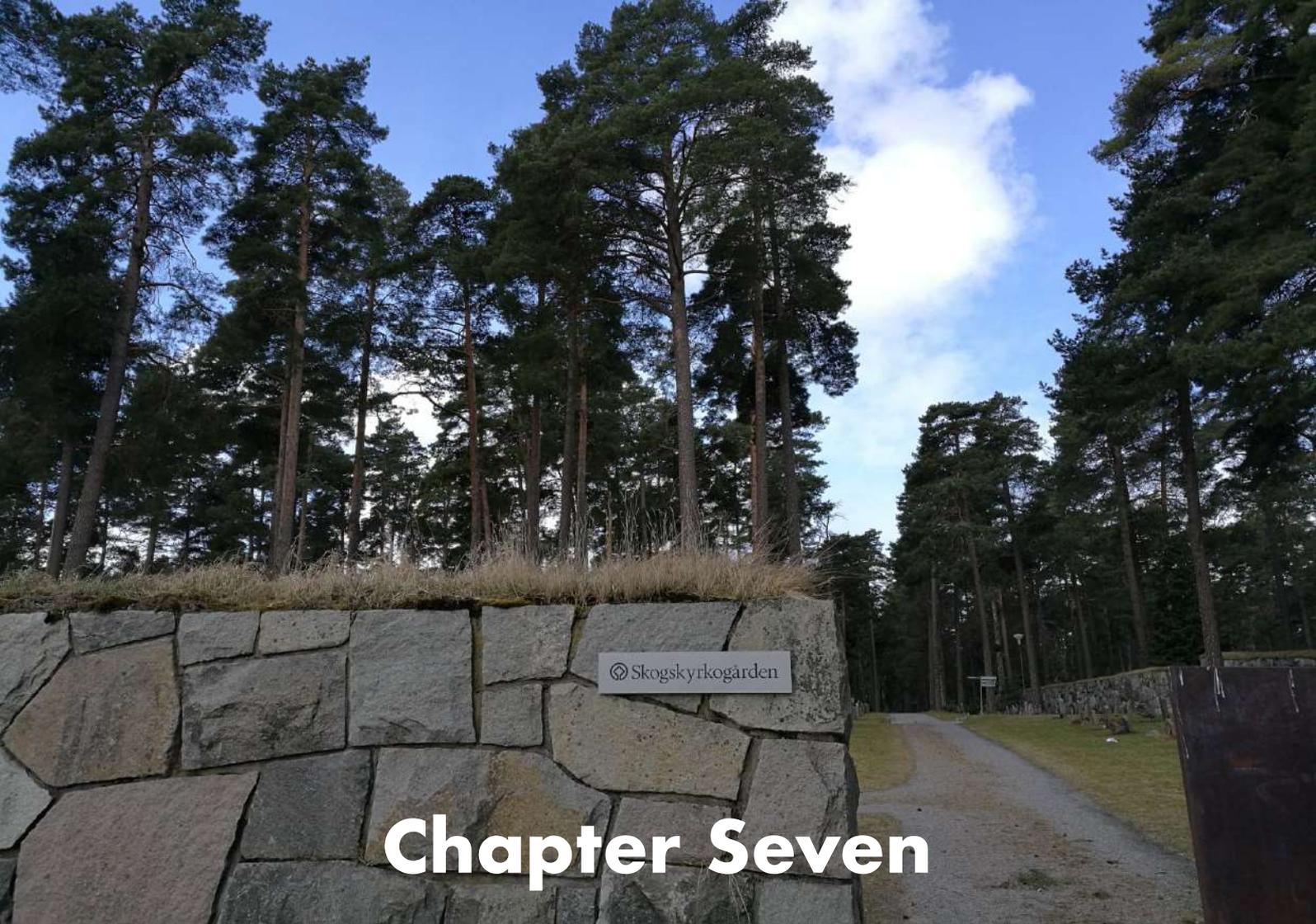
and impact of these local spaces on individual wellbeing and sense of belonging is varied and may change depending on specific neighbourhood characteristics.

The theorised and observed amplification of impacts for elderly residents, although often conceived as a risk to health and wellbeing in public spaces, offers the opportunity to invest in small scale urban details to improve elderly experiences in public spaces. Focusing on these smaller issues and lessons is a luxury that the city can afford given the high quality of life it already provides to most of its citizens. One particular conversation with an Östermalm resident was particularly striking in its unequivocal praise for the city, powerfully demonstrating the overall satisfaction with the built environment in four words:

*“Don’t change anything here!”*

Despite calls such as these, the overall findings offer a more nuanced portrait of ageing in the city and an acceptance that places are constantly changing. In the best of cases, these changes can provide new attractions, public spaces and reasons to be active in outdoor shared spaces. Alternatively, as the study demonstrated, some developments can render elderly residents alienated, uncomfortable and longing for a lost identity. These issues will increasingly need to be taken into account as the city grows and develops. Issues beyond

the design of new developments will be of critical importance. Some of these issues, such as the consultation process behind a project, the impact on the character and demographics of a neighbourhood or the management of these spaces once they are built, have been highlighted as being particularly pressing concerns for the elderly. Age-friendliness is therefore conceived as a model that should be incorporated into all new developments as well as driving specific dedicated changes to the built environment.



Skogskyrkogården

# Chapter Seven

# Conclusion

As cities grow and age simultaneously, the maintenance, enhancement and adaptation of the built environment to accommodate changing needs will increasingly determine the quality of life of a growing cohort of residents. The findings of this study suggest that outdoor public spaces do contribute in significant ways to the health behaviours, sense of belonging and wellbeing of elderly residents in Stockholm. According to respondents, desirable 'Age-Friendly' characteristics include green spaces, features that promote continuity and connection to local histories and spaces that allow for and encourage social interactions. Conversely, the loss of identity or character and buildings that are out of context with their surroundings as well as inaccessible, poorly lit areas were all deemed unappealing and were related to feelings of discomfort in the urban realm. The scale and scope of the research was far larger than anticipated and the issues of interest and importance to respondents were far more varied than expected. Similarly, the notion of age-unfriendliness was expressed by participants in a broader sense than simply as barriers suggesting that the emphasis on the non-physical aspects of public spaces and their importance to quality of life and wellbeing which informs this thesis is justified and may warrant further investigation. Finally, visual methods were deemed valuable tools for answering these experiential questions relating to everyday urban lives of specific groups. Although limited, these results suggest that future studies assessing elderly perceptions of public spaces in different cities could utilise similar methods to answer questions that may otherwise prove difficult to address with other qualitative methods. One of the key

lessons from this research is the importance of addressing age-friendliness across all aspects of the built environment to encompass both existing and future developments as well as the role of infrastructure, social policies, urban design and the processes that shape these decisions in excluding or empowering elderly residents. Rather than considering these issues separately, truly 'Age-Friendly' cities will need to address a holistic and comprehensive strategy for engaging with elderly residents and the issues that matter to them to empower them.

## ***Appendix 1: Informationsblad för forskning***

### **Om mig:**

Mitt namn är Daniel Blyth och jag gör för närvarande ett examensarbete vid KTH Skolan för arkitektur och samhällsbyggnad.

Projektet syftar till att utvärdera åldersvänlighet på offentliga platser i Stockholm. Specifikt är jag intresserad av de hinder och attraktioner som formar användningen av offentliga platser för äldre.

Tveka inte att kontakta mig med några frågor. Du kan nå mig via e-post [Blyth@kth.se](mailto:Blyth@kth.se) eller på telefon 079-335-94-53.

### **Om forskningen:**

Själva forskningen har tre delar:

Den första delen frågar efter vissa grundläggande information om dig själv.

Den andra delen frågar efter minst 3 fotografier och en kort text för att motivera och förklara fotografierna. Varje fotografi besvarar en fråga som anges nedan.

Den sista delen frågar efter en skissad karta över en promenad du gillar att göra i ditt närområde tillsammans med en kort beskrivning av skissen.

### **Del 1: Enkät**

Denna del frågar fyra frågor. Informationen kommer att användas för att ansluta de bilder du tar till områden i Stockholm och se till att rätt fotografier tillskrivs rätt person. I min forskning, kommer du inte att namnges och i stället refereras till i förhållande till den stadsdel du bor i och din ålder.

**Fråga 1:** Vilket grannskap bor du i?

**Fråga 2:** Hur gammal är du?

**Fråga 3:** Hur många år har du bott i Stockholm?

**Fråga 4:** Är det okej att använda dina fotografier och kartor i alla publikationer, affischer eller presentationer som jag producerar, som en del av min forskning?

(Ringa in lämpligt svar)

Ja / Nej

## **Del 2: Fotografi**

I detta avsnitt finns det tre frågor nedan. För varje fråga kan du ta så många fotografier som du vill. För varje fotografi du tar, finns det ett antal frågor om vad som fotograferas och varför.

### **Foto 1:**

Kan du ta ett fotografi av en allmän plats utomhus (till exempel en park, gata, trädgård, fyrkant, marknaden...) i ditt område där du går på fritiden och där du trivs samt känner dig glad och säker.

**Fråga 1:** Vad fotograferade du?

**Fråga 2:** Vilka egenskaper i detta utrymme gör att du känner dig bekväm?

**Fråga 3:** Vad gör du på det här stället?

**Foto 2:**

Kan du fotografera en offentlig plats utomhus i ditt område ((t.ex. en park, gata, trädgård, fyrkant, marknaden...)) där du inte känner dig bekväm, säker och välkommen.

**Fråga 1:** Vad fotograferade du?

**Fråga 2:** Vilka egenskaper i detta utrymme gör att du känner dig obekvämt?

**Fråga 3:** Hur skulle du beskriva detta utrymme?

**Foto 3:**

Kan du fotografera en offentlig plats utomhus som har förändrats eller där dina erfarenheter kring platsen har förändrats till det bättre eller sämre under de senaste tio åren.

**Fråga 1:** Vad fotograferade du?

**Fråga 2:** Vad har förändrats på platsen? Är det bättre eller sämre än tidigare?

**Fråga 3:** Hur har din upplevelse av denna plats förändrats?

### **Del 3: Mental kartskiss**

Kan du skissa en konceptuell karta i rutan under över en rutt som du tycker om att gå ofta i din lokala stadsdel.

Kartan behöver inte vara korrekt och kan innehålla namn på platser, funktioner som vägar, byggnader, parker eller något annat som hjälper dig både navigera och hitta vägen.



**Fråga 1:** Vad är det för rutt som du har kartlagt?

**Fråga 2:** Vilka egenskaper gör rutten trivsamt?

## ***Reference List***

Allen, L. (2011) 'Picture this: using photo-methods in research on sexualities and schooling' *Qualitative research*, 11 (5), pp. 487-504.

Amin, A. (2008) 'Collective culture and urban public space'. *City*, 12 (1), pp. 5-24.

Andrews, G. (2001) 'Promoting health and function in an ageing populations' *British Medical Journal*, 322 (7288), pp. 728–729.

Andrews, G. J. Evans, J. & Wiles, J. L. (2013) 'Re-spacing and re-placing gerontology: relationality and affect' *Ageing & Society*, 33 (8), pp. 1339-1373.

Andrews, G. J. Chen, S. & Myers, S. (2014) 'The 'taking place' of health and wellbeing: Towards non-representational theory' *Social Science & Medicine*, 108, pp. 210-222.

Annear, M. J. Cushman, G. & Gidlow, B. (2009) 'Leisure time physical activity differences among older adults from diverse socioeconomic neighbourhoods' *Health & Place*, 15, pp. 482–490.

ARUP (2015) *Shaping Ageing Cities: 10 European Case Studies*

<https://www.arup.com/perspectives/publications/research/section/shaping-ageing-cities>

Last Accessed on 04/03/2019

Baker, R. & Ferry, M. (2006) *Regional Strategies and Demographic Ageing: Age Proofing Toolkit*

[https://cor.europa.eu/en/engage/brochures/Documents/regional-strategies-demographic-ageing/regional-strategies-demographic-ageing\\_English.pdf](https://cor.europa.eu/en/engage/brochures/Documents/regional-strategies-demographic-ageing/regional-strategies-demographic-ageing_English.pdf)

Last Accessed 12/02/2019

Ball, S. & Petsimeris, P. (2010) 'Mapping urban social divisions' *Forum*

*Qualitative: Qualitative Social Research*, 11 (2), pp. 37-52.

Bedney, B. J. Goldberg, R. B. & Josephson, K. (2010) 'Aging in place in naturally occurring retirement communities: Transforming aging through supportive service programs' *Journal of Housing for the Elderly*, 24 (3-4), pp. 304-321.

Bookman, A. (2008) 'Innovative models of aging in place: Transforming our communities for an aging population' *Community, Work & Family*, 11 (4), pp. 419-438.

Borst, H. C. de Vries, S. I. Graham, J. M. A. van Dongen, J. E. F. Bakker, I. & Miedema H. M. E. (2009) 'Influence of environmental street characteristics on walking route choice of elderly people' *Journal of Environmental Psychology*, 29, pp. 477-484.

Bowling, A. (2008) 'Enhancing later life: How older people perceive active ageing?' *Aging and Mental Health*, 12 (3), pp. 293-301.

Buffel, T. Phillipson, C. & Scharf, T. (2012) 'Ageing in Urban Environments: Developing "Age-Friendly" Cities' *Critical Social Policy*, 32 (4), pp. 597-617.

Buffel, T. McGarry, P. Phillipson, C. De Donder, L. Dury, S. De Witte, N. & Verté, D. (2014) 'Developing age-friendly cities: Case studies from Brussels and Manchester and implications for policy and practice' *Journal of Aging & Social Policy*, 26 (1-2), pp. 52-72.

Chaudhury, H. Campo, M. Michael, Y. & Mahmood, A. (2016) 'Neighbourhood environment and physical activity in older adults' *Social Science & Medicine*, 149, pp. 104-113.

Chaudhury, H. Mahmood, A. Michael, Y. L. Campo, M. & Hay, K. (2012) 'The influence of neighbourhood residential density, physical and social environments on older adults' physical activity: An exploratory study in two metropolitan areas' *Journal of Aging Studies*, 26, pp. 35-43.

Collier, J. & Collier, M. (1986) *Visual Anthropology: Photography as a Research Method*. Albuquerque: New Mexico University Press.

Cope, M. (2014) 'Researching' in Lee, R. Castree, N. Kitchin, R. Lawson, V. Paasi, A. Philo, C. Radcliffe, S. Roberts, S. M. & Withers, C. W. J. (eds) *The SAGE Handbook of Human Geography*. Second Edition. London: Sage, pp. 316-342.

Cummins, S. Curtis, S. Diez-Roux, A. V. & Macintyre, S. (2007) 'Understanding

and representing 'place' in health research: A relational approach' *Social Science & Medicine*, 65, pp. 1825-1838.

Elbert, K. B. & Neufeld, P. S. (2010) 'Indicators of a successful naturally occurring retirement community: A case study' *Journal of Housing for the Elderly*, 24 (3-4), pp. 322-334.

European Commission (2014) Active Ageing Index for 28 European Union Countries

[https://www.unece.org/fileadmin/DAM/pau/age/WG7/Documents/Policy\\_Brief\\_AAI\\_for\\_EG\\_v2.pdf](https://www.unece.org/fileadmin/DAM/pau/age/WG7/Documents/Policy_Brief_AAI_for_EG_v2.pdf)

Last Accessed 05/03/2019

Fitzgerald, G. & Caro, F. (2014) 'An Overview of Age-Friendly Cities and Communities Around the World' *Journal of Aging & Social Policy*, 26 (1-2), pp. 1-18.

Giesecking, J. J. (2013) 'Where we go from here: The mental sketch mapping method and its analytic components' *Qualitative Inquiry*, 19 (9), pp. 712-724.

Gehl, J. (2011) *Life Between Buildings: Using Public Space*. London: Island Press.

Green, G. (2013) 'Age-friendly cities of Europe' *Journal of Urban Health*, 90 (1), pp. 116-128.

Guillemin, M. & Drew, S. (2010) 'Questions of process in participant-generated visual methodologies' *Visual studies*, 25 (2), pp. 175-188.

Handler (2014a) *An Alternative Age-Friendly Handbook for the Socially Engaged Urban Practitioner*. Manchester: University of Manchester Library

Handler (2014b) *A Research and Education Framework for Age-Friendly Cities*. Manchester: UK Ageing Consortium.

Harley, J. B. (1988) 'Silences and secrecy: The hidden agenda of cartography in early modern Europe' *Imago Mundi*, 40 (1), pp. 57-76.

Harper, D. (2002) 'Talking About Pictures: A Case for Photo Elicitation' *Visual Studies*, 17 (1), pp. 13-26.

Horgas, A. L. Wilms, H. U. & Baltes, M. M. (1998) 'Daily life in very old age: Everyday activities as expression of successful living' *The Gerontologist*, 38 (5), pp. 556-568.

Inclusive Design for Getting Outdoors (I'DGO) (2012) *Why Does the Outdoor Environment Matter?*

[https://www.idgo.ac.uk/useful\\_resources/publications.htm](https://www.idgo.ac.uk/useful_resources/publications.htm)

Last Accessed On 04/03/2019

Iveson, K. (1998) 'Putting the public back into public space'. *Urban Policy and Research*, 16 (1), pp. 21-33.

Kearns, R. & Moon, G. (2002) 'From medical to health geography: novelty, place and theory after a decade of change' *Progress in Human Geography*, 26 (5), pp. 605-625.

Kindon, S. Pain, R. & Kesby, M. (2007) 'Participatory Action Research: Origins, Approaches and Methods' in Kindon, S. Pain, R. & Kesby, M. (eds) *Participatory Action Research Approaches and Methods: Connecting People, Participation and Place*. Abingdon: Routledge.

Klein, N. (2000) *No Logo*. London: Fourth Estate.

Klinenberg, E. (2001) 'Dying Alone: The Social Production of Urban Isolation' *Ethnography*, 2 (4), pp. 501-531.

Lefebvre, H. (1991) *The Production of Space*. Oxford: Blackwell Publishers.

Lynch, K. (1960) *The Image of the City*. Cambridge: MIT Press.

Low, S. (2003) 'Embodied Space(s): Anthropological Theories of Body, Space, and Culture' *Space & Culture*, 6 (1), pp. 9-18.

Low, S. (2017) 'Public space and the public sphere: The legacy of Neil Smith' *Antipode*, 49, pp. 153-170.

Lui, C. W. Everingham, J. A. Warburton, J. Cuthill, M. & Bartlett, H. (2009) 'What Makes a Community Age Friendly: A Review of International Literature' *Australasian journal on ageing*, 28 (3), pp. 116-121.

Madanipour, A. (1998) 'Social Exclusion and Space' in Madanipour, A. Cars, G. & Allen, J. (eds) *Social Exclusion in European Cities: Processes, Experiences, and Responses*. 1st Edition, London: Routledge, pp. 65-80.

Madanipour, A. (2010) 'Introduction' in Madanipour, A. (ed) *Whose Public Space? International Case Studies in Urban Design and Development*. Abingdon: Routledge, pp. 1-17.

Mehta, V. (2014) 'Evaluating Public Space'. *Journal of Urban Design*, 19 (1), pp. 53-88.

Menec, V. H. Means, R. Keating, N. Parkhurst, G. & Eales, J. (2011) 'Conceptualising Age-Friendly Communities' *Canadian Journal on Aging/La Revue Canadienne du Vieillissement*, 30 (3), pp. 479-493.

Mitchell, D. (1995) 'The End of Public Space? People's Park, Definitions of the Public, and Democracy' *Annals of the Association of American Geographers*, 85 (1), pp. 108-133.

Mitchell, D. (2003) *Right to the City: Social Justice and the Fight for Public Space*. New York: Guildford Press.

Mitchell, L. & Burton, E. (2006) 'Neighbourhoods for Life: Designing Dementia-Friendly Outdoor Environments' *Quality in Ageing and Older Adults*, 7 (1), pp. 26-33.

National Planning Policy Framework (2019)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/779764/NPPF\\_Feb\\_2019\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf)

Last Accessed on 18/03/2019

O'Campo, P. Wheaton, B. Nisenbaum, R. Glazier, R. H. Dunn, J. R. & Chambers, C. (2015) 'The Neighbourhood Effects on Health and Well-being (NEHW) study' *Health & Place*, 31, pp. 65-74.

Packard, J. (2008) 'I'm gonna show you what it's really like out here': the power and limitation of participatory visual methods' *Visual Studies*, 23 (1), pp. 63-77.

Phillipson, C. & Scharf (2004) *The Impact of Government Policy on Social Exclusion Among Older People*. London: Office of the Deputy Prime Minister.  
[https://aran.library.nuigalway.ie/bitstream/handle/10379/3208/impact\\_of\\_govt\\_policy\\_on\\_social\\_exclusion.pdf?sequence=1&isAllowed=y](https://aran.library.nuigalway.ie/bitstream/handle/10379/3208/impact_of_govt_policy_on_social_exclusion.pdf?sequence=1&isAllowed=y)

Last Accessed on 18/03/2019

Phillipson, C. White, S. & Aftab, F. (2013) *Old Moat: Age-friendly Research and Evaluation Toolkit* Manchester: Southway Housing Trust

Plouffe, L. & Kalache, A. (2010) 'Towards Global Age-Friendly Cities: Determining Urban Features that Promote Active Ageing' *Journal of urban health*, 87 (5), pp. 733-739.

Rooke, A. & Wuerfel, G. (2007) *Mobilising Knowledge: Solving the Interaction*

Gap between Older People, Planners, Experts and General Citizens within the Thames Gateway

<https://www.gold.ac.uk/media/documents-by-section/departments/research-centres-and-units/research-centres/centre-for-urban-and-comm/mobilizing-knowledge.pdf>

Last Accessed 01/02/2019

RIBA (2013) *Silver Linings: The Active Third Age and the City*

<https://www.architecture.com/-/media/gathercontent/silver-linings/additional-documents/silverliningstheactivethirdageandthecitypdf.pdf>

Last Accessed 01/02/2019

Rose, G. (2014) 'On the relation between visual research methods and contemporary visual culture' *The Sociological Review*, 62 (1), pp. 24-46.

Rose, G. (2016) *Visual Methodologies: An Introduction to Researching with Visual Materials*. London: Sage. Fourth Edition.

Shaw, B. A. Fors, S. Fritzell, J. Lennartsoon, C. & Agahi, N. (2018) 'Who Lives Alone During Old Age? Trends in the Social and Functional Disadvantages of Sweden's Solitary Living Older Adults' *Research on Aging*, 40 (9), pp. 815-838.

Simpson, D. (2015) *Young-Old: Urban Utopias of an Aging Society*. Copenhagen: Lars Müller Publishers.

Smith, N. & Low, S. (2006) 'Introduction: The Imperative of Public Space' in

Smith, N. & Low, S. (eds) *The Politics of Public Space*. New York: Routledge, pp. 1-17.

Steels, S. (2015) 'Key Characteristics of Age-Friendly Cities and Communities: A Review' *Cities*, 47, pp.45-52.

Stockholms Stad (2017) Stockholm Äldreombudsmans Rapport

Stockholms Stad (2017) Strategi för Äldrevänlig Stad

<http://www.stockholm.se/aldrevanligstad>

Last Accessed 01/02/2019

United Nations (2019) World Urbanisation Prospects: The 2018 Revisions

<https://population.un.org/wup/Publications/Files/WUP2018-KeyFacts.pdf>

Last Accessed 14/05/2019

Varna, G. & Tiesdell, S. (2010) 'Assessing the Publicness of Public Space: The Star Model of Publicness'. *Journal of Urban Design*, 15 (4), pp. 575-598.

Vladeck, F. Segel, R. Oberlink, M. Gursen, M. D. & Rudin, D. (2010) 'Health indicators: A proactive and systematic approach to healthy aging' *Cityscape*, pp. 67-84.

Watson, S. (2006) *City publics: the (dis)enchantments of urban encounters. Questioning Cities*. London: Routledge.

Wen, C. Albert, C. & Von Haaren, C. (2018) 'The elderly in green spaces:

Exploring requirements and preferences concerning nature-based recreation’  
*Sustainable Cities and Society*, 38, pp. 582-593.

Wiles, J. L. Leibing, A. Guberman, N. Reeve, J. & Allen, R. E. S. (2012) ‘The  
Meaning of “Aging in Place” to Older People’ *The Gerontologist*, 52 (3), pp.  
357–366.

Wolfe, C. R. (2016) *Seeing the Better City: How to Explore, Observe, and  
Improve Urban Space*. London: Island Press.

World Health Organisation (2007) *Global Age-Friendly Cities: A Guide*  
[https://www.who.int/ageing/publications/Global\\_age\\_friendly\\_cities\\_Guide\\_English.pdf](https://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf)

Last Accessed 01/02/2019

World Health Organisation (2015) *Measuring the Age-Friendliness of Cities: A  
Guide to Using Core Indicators*  
[https://www.housinglin.org.uk/\\_assets/Resources/Housing/OtherOrganisation/  
Measuring\\_the\\_Age\\_Friendliness\\_of\\_Cities.pdf](https://www.housinglin.org.uk/_assets/Resources/Housing/OtherOrganisation/Measuring_the_Age_Friendliness_of_Cities.pdf)

Last Accessed 12/02/2019

Young, I. M. (1990) *Justice and the Politics of Difference*. Princeton: Princeton  
University Press.

Zhai, Y. Li, K. & Liu, J. (2018) ‘A conceptual guideline to age-friendly outdoor  
space development in China: How do Chinese seniors use the urban

comprehensive park? A focus on time, place, and activities' *Sustainability*, 10  
(10), pp. 3678-3691.