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Abstract

Several countries across Europe are experiencing a demographic shift towards an ageing population, bringing several challenges and opportunities. As a social democratic regime, Denmark has a legacy of housing and welfare services designed to meet the changing needs of a growing population of older adults. Participatory policy processes conducted in Copenhagen have identified that an age-friendly urban strategy should promote freedom (Frihed) and community (Fællesskab) for all older adults, identifying active mobility and civic participation as crucial components of ageing well.

A combination of ethnographic participation as a member of a weekly walking group (Caritas Gåklub), semi-structured interviews, and seven-day travel diaries with six participants over three months, provides an innovative methodology for understanding mobility. Through an inter-disciplinary conceptual approach, several theories are mobilised to understand how older adults utilise and exchange personal, social, cultural, economic, and infrastructural resources to optimise their personal mobility and freedom. This study also explores how the exchange of resources influences modal preference, time, and scales of everyday mobility and makes recommendations for how municipal strategies can maintain and create a sense of freedom and community for older adults. This research critically engages with the topic of mobility for older adults as a crucial tenet of age-friendliness, contributing towards debates in the disciplines of transport, urban studies, and environmental gerontology.

Abstrakt

Mehrere Länder in Europa erfahren einen demografischen Wechsel zu einer älter werdenden Bevölkerung, der verschiedene Herausforderungen und Möglichkeiten mit sich bringt. Als sozialdemokratisches Regime verfügt Dänemark über ein historisches Erbe an Wohnungs- und Sozialleistungen, die auf die sich verändernden Bedürfnisse einer wachsenden Bevölkerung älterer Erwachsener zugeschnitten sind. Die in Kopenhagen durchgeführten partizipativen politischen Prozesse haben ergeben, dass eine altersfreundliche städtische Strategie Freiheit (Frihed) und Gemeinschaft (Fællesskab) für alle älteren Erwachsenen fördern sollte, wobei aktive Mobilität und Bürgerbeteiligung als entscheidende Komponenten eines guten Alterns identifiziert wurden.

Eine Kombination aus ethnografischer Teilnahme als Mitglied einer wöchentlichen Wandergruppe (Caritas Gåklub), halbstrukturierten Interviews und siebentägigen Reisetagebüchern mit sechs Teilnehmern über einen Zeitraum von drei Monaten bietet eine innovative Methodologie zum Verständnis von Mobilität. Durch einen interdisziplinären konzeptionellen Ansatz werden verschiedene Theorien benutzt, um zu verstehen, wie ältere Erwachsene persönliche, soziale, kulturelle, wirtschaftliche und infrastrukturelle Ressourcen nutzen und austauschen, um ihre persönliche Mobilität und Freiheit zu optimieren. Die Studie untersucht auch, wie der Austausch von Ressourcen die Verkehrsmittelpreferenz, die Zeit und das Ausmaß der Alltagsmobilität beeinflusst und gibt Empfehlungen, wie städtische Strategien ein Gefühl von Freiheit und Gemeinschaft für ältere Erwachsene schaffen und erhalten können. Die Studie setzt sich kritisch mit dem Thema der Mobilität älterer Menschen als einem entscheidenden Aspekt der Altersfreundlichkeit auseinander und fördert Debatten in den Bereichen Verkehr, Stadtforschung und Umweltgerontologie.

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Contents

Introduction	5
Ageing in Copenhagen: An agenda for Frihed og Fællesskab	6
Literature Review	8
Frihed: Freedom to move around in and enjoy Copenhagen	8
Understanding independent ageing at home and in the city	8
Reviewing Copenhagen's Accessible Mobility Infrastructure	10
Beyond the environment: Negotiating personal and economic resources	12
Personal choice or personal responsibility in the social democratic welfare regime	14
Fællesskab: something to get out of bed for	16
Household community and care	16
Neighbourhood ties	18
Active citizenship in the city	20
Scales of community and scales of mobility	21
Theoretical Framework: Mobility for Frihed og Fællesskab	21
Methodology	25
Research Questions	25
Research Design & Epistemology	26
Participants, Recruitment & Consent	27
Data Collection Methods	30
Ethnography & Informal Interviews	30
Travel Diaries	32
Interviews	34
Positionality and Limitations	36
Data Analysis	38
Results and Discussion	40
How do older adults utilise and exchange individual, environmental, social, cultural, and economic resources to optimise their personal mobility and freedom?	40
<i>"If you get afraid too much you have to sit down and watch TV all day"</i> (Eda, 79)	40
<i>"I miss the freedom in my legs, I feel like it's concrete"</i> (Heidi, 64)	44
<i>"Whatever they say you can feel it in your body as you get older"</i> (Margit, 66)	48
<i>"Most people have tension, but I have too little energy"</i> (Frederik, 61)	48
<i>"The day before I go to Rejseplanen and look up where I want to go"</i> (Eda, 79)	52
How do resources influence modal preference, time, and scales of mobility?	52
<i>"I walk a lot by myself because I live alone."</i> (Zilda, 60)	52
<i>"I don't like to cycle in Copenhagen and I'm afraid"</i> (Eda, 79)	57

<i>"When we moved, we realised we had to use the car."</i> (Agnes, 70)	60
<i>"Very good transport system, every 10 minutes, fantastic, wonderful!"</i> (Eda, 79)	63
How can urban mobility infrastructure contribute towards community for older adults?.....	65
<i>"So you really don't have to spend time outside [cohousing], but I like to."</i> (Agnes, 70)	65
<i>"I found the different churches through Facebook"</i> (Zilda, 60).....	67
<i>"This is simple, so why not? I walk anyway and want to walk with people."</i> (Heidi, 64)	69
Discussion of limitations and suggested future research	73
Conclusion.....	74
References	77
Appendix	87
Appendix A: Example Interview Transcript for Zilda.....	87
Appendix B: Coding Table	96

Introduction

Several countries across Europe are experiencing a demographic shift towards an ageing population, bringing several challenges and opportunities. Evaluations of the current age-friendliness of European cities with high proportions of older adults have identified several domains of urban life which currently create challenges for older adults to live fulfilling and healthy lives, including a lack of mobility and access to critical services. In response to this trend, the World Health Organization (WHO) published a report called *Age-Friendly Cities* in 2007, which defined a political agenda for cities to encourage “active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people age” (World Health Organisation, 2007). The age-friendly communities network identified eight domains that need to be considered when municipalities design and manage cities to accommodate for the need of older adults. Figure 1 shows these interlapping eight domains: outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information and community support and health services (World Health Organisation, 2007).



FIGURE 1: WORLD HEALTH ORGANISATION DOMAINS OF THE AGE-FRIENDLY CITY (ADAPTED FROM WHO, 2007)

One critique of the WHO conceptualisation of age-friendliness is that the multi-domain, multi-sector, interdisciplinarity can be difficult to design for, measure and evaluate. Although certain domains are clearly within the remit of certain policy actors, for example, transportation and housing. Other domains, such as social participation, civic participation and employment and respect and inclusion, are clearly a shared responsibility, bridging cultural, social, and economic policies. Ideally, evaluating age-friendliness requires a means to conceptualise and integrate all of these domains and disciplines holistically. Another critique has recognised that despite more vocal policy discourse about age-

friendliness, older adults are frequently neglected within the processes of urban development and design (Buffel & Phillipson, 2018) and that there has been a lack of critical engagement with the reality of 'age-friendly cities' (van Hoof et al., 2021). This can be seen in the dominance of certain top-down research approaches, including evaluations of age-friendliness through analyses of policy discourse, interviews of policy stakeholders and document analysis (Rémillard-Boilard, 2019) which might provide an inaccurate picture of the lived experience of age-friendliness. Several authors in this space acknowledge that more participatory or bottom-up approaches are needed to bridge policy and practice (van Hoof et al., 2021; Buffel et al., 2012). This thesis seeks to interrogate what an age-friendly city really entails in practice by moving beyond policy discourse to explore the realities of older adults living in cities and identify some of the components necessary to improve quality of life in older age.

Ageing in Copenhagen: An agenda for Frihed og Fællesskab

Denmark has a historical legacy for age-friendly public policy, being the first government to ever establish a Commission on Ageing in 1979 (Ældrekommissionen) to investigate the quality of services available for an increasingly ageing population (García-Lantarón et al., 2022). More recently, the government has outlined a pledge towards active ageing, to "secure old age which involves an increased focus on dementia and to ensure that elder citizens can manage their own life for as long as possible" (Ministry of Health, 2017, p.2). New urban governance systems have been implemented to mainstream ageing across policy domains, including the mandatory establishment of Senior Citizens Committees "to enhance the co-determination and co-responsibility of the citizens in the municipalities and to help ensure a good dialogue and cooperation between elderly people in the concerned municipality and the local council" (Ministry of Health, 2017, p.8).

In 2021 the national government of Denmark released their annual demographic report with the standout message that the percentage of the nationwide population of adults aged 80 and over is due to more than double by 2050 (from 282,000 in 2021 to 617,000 by 2050) (Danmarks Statistik, 2021, p.1). The population of people aged 60 and over is projected to be over 25%, making older adults the majority population group in the country (Danmarks Statistik, 2021), mimicking similar trends across Europe. Copenhagen will see an increase in the number of older adults (aged 60+) living in the municipal area over the next 20 years, increasing from 14.4% in 2022 to 19.09% in 2042 (Danmarks Statistik, 2021). Therefore, an age-friendly policy (ældrepolitik) for Copenhagen was published in 2018 outlining the city's commitments for 2019-2022, co-produced by the Health and Social Care Committee and "citizens of Copenhagen" (Københavns Kommune, 2019, p.3). This strategy focused on promoting the three values of Frihed (Freedom), Tryghed (Comfort and Security) and Fællesskab (Community) across all policy domains, specifically housing, care and welfare services and environmental design.

Freedom is defined within the strategy as the freedom to be self-sufficient and independent, and to have access to services one needs as a means to participate in a lifestyle that is deemed personally fulfilling and valuable. As a result of this, the strategy focuses on encouraging individual self-sufficiency, improving the accessibility of the environment to enable "freedom to move around in and enjoy Copenhagen... and providing flexible services including housing and care to support changing needs of older adults" (Københavns Kommune, 2019, p.16). Comfort and security (Tryghed) are focused on providing health and care services for citizens in their home and in institutions. This value

of age-friendliness is also focused on providing specialised care for older adults with dementia and for caregivers (Københavns Kommune, 2019).

Community is considered one of the most important components of ageing within the strategy: “it is not enough, for example, to be able to get out of bed by yourself. There must also be something to get out of bed for. Being part of a community is important for most people. Too many older people are lonely. We must do better” (Københavns Kommune, 2019, p.4). The strategy provides a very specific definition of community, with a few key components. Firstly, community means giving back: enabling people to contribute their own skills and resources “for the benefit of themselves and others” (Københavns Kommune, 2019, p.27). Secondly, community means ensuring the social inclusion of people who may feel socially isolated and rebuilding their social relationships after life transitions, such as retirement or grieving the loss of a loved one. And finally, community means creating residential and urban environments for intergenerational and diverse communities to meet and form relationships (Københavns Kommune, 2019). The expiration of this strategy in 2022 has prompted calls for research to evaluate the efficacy of the previous strategy and define the priorities for a future ældrepolitik (Werner, 2022).

Within the age-friendly agenda, mobility has attracted a wealth of research, given the interconnectedness with active ageing, wellbeing, and social interaction (Nordbakke & Schwanen, 2015). Mobility encompasses everything from active transport (walking and biking) to the utilisation of public transport and the use of private and shared cars (Nordbakke & Schwanen, 2015). Promoting active mobility for older adults has become a primary goal of age-friendly research and policy. Physical activity (Humpel et al., 2004) and higher walkability rates are associated with lower levels of stress (Walford et al., 2017), reduced social isolation, improved quality of life (Moore et al., 2005) and reduced risk of depression and diabetes for older adults (Ige-Elegbede et al., 2020). Access and use of public and private transport facilitates or inhibits personal freedom, connecting or disconnecting older adults from their families, friends, and communities. A number of factors are recognised as having an influence on the mobility of older adults, including self-perception of health, residential location, social support, and social networks (Nordbakke & Schwanen, 2015).

The mobility of this generation of Danish older adults is particularly interesting and distinctive, as studies suggest that they will be active later in life but are also likely to be more car-dependent than any generation before. Chronic diseases are still going to affect older adults; however, disability rates will be lower, and they will continue leading active lifestyles and have mobility demands for longer than previous generations (Coughlin, 2009). They are also the first generation to have experienced a lifetime of automobility, and this is expected to strongly influence their reliance on cars (Siren and Haustein, 2013). Expectations about how ageing should affect quality of life have also changed. An attitudinal survey conducted in Denmark found that this cohort of older adults wish to maintain continuity in lifestyles, rather than withdrawing from society and reducing their lifestyle which signals a deviation from the expectation of previous generations (Siren and Haustein, 2013). This generation of older adults in Denmark are more “independent, healthy and mobile than previous generations” (Siren and Haustein, 2013, p. 142). Therefore, there is a clear research gap to understand the mobility demands of the current cohort of older adults in Copenhagen and understand how this influences people’s ability to satisfy their values of Frihed (freedom) and Fællesskaber (community).

Literature Review

“You can’t play Electromagnetic Golf according to the rules of Centrifugal Bumble Puppy.” (Huxley, 1932, p. 179)

When it comes to evaluating life in cities, criterion should be situated and context specific. An international age-friendly agenda has emerged out of a co-ordinated and shared recognition that demographic changes will be impacting a large majority of Europe; however, the impacts of this change will be highly differentiated between places, necessitating diverse analysis and evaluation tools. Frihed (freedom) and Fællesskaber (community) provide situated, guiding values to analyse the age-friendliness of Copenhagen. And yet, analyses need to be comprehensive enough to consider experiences across different urban domains: exploring someone’s experience living in cohousing without considering their access to transportation or social participation provides a very limited snapshot of their life. Mobility provides a golden thread to understand how freedom and community are realised across and within all WHO urban domains. Analyses also need to be empirically grounded and yet capable of elevating and contributing towards international and inter-disciplinary theoretical debates. The following literature review will seek to carefully interweave empirical relevance and theoretical reference: introducing Copenhagen as a case study and mobilising relevant theories to lay the theoretical foundations for understanding Frihed, Fællesskaber and mobility for older adults.

Frihed: Freedom to move around in and enjoy Copenhagen

To achieve the goal of Freedom, the age-friendly strategy promotes self-sufficiency and outlines a commitment to improving environmental design and ensuring the supply of flexible infrastructure to facilitate the freedom of movement and choice for older adults (Københavns Kommune, 2019). Achieving these goals requires an understanding of the changing relationship between individual mobility and environments. Environmental gerontology houses inter-disciplinary debates to understand how individuals maintain independence within the home and other environments as their health circumstances and personal resources change during ageing. This field has a normative goal to improve the self-sufficiency of individuals by designing more supportive social and physical environments. This section will review theoretical discussions and empirical research about self-sufficiency and independent mobility for older adults, before critiquing Copenhagen’s strategies to improve freedom of movement through environmental design and investigating how the social democratic welfare regime influences freedom of choice for older adults. Each section will mobilize theories from environmental gerontology and urban studies to review the current state of research about the relationship between freedom and mobility, before identifying research gaps and proposing research questions.

Understanding independent ageing at home and in the city

Psychology has offered several conceptual frameworks for understanding the relationship between individuals and their environment, most notably the ecological theory of ageing and press-competence theories (Carp and Carp, 1984). The press-competence theory provides one explanation for how older adults might experience the same environment differently, and the influence this can

have on perceptions, emotions, and behaviours. The press-competence theory (Lawton, 1983) states that behaviours and affective responses are a function of the relationship between the competence of the individual and environmental press (Lawton, 1983, p. 43). 'Environmental press' describes the demands and stimuli of the environment as a product of multiple environmental features experienced simultaneously and 'competence' is conditional on the characteristics of the individual such as internal (biological health and cognitive and motor skills) resources (Lawton, 1983). Behaviour is considered an outcome of the relationship between environment and personal competence. Behaviour can be considered adaptive or maladaptive, and affective responses positive (enjoyment) or negative (stress, panic).

The press-competence theory was initially developed to understand how the negotiation between environment and personal competence impacted older adults' performance in everyday activities, such as washing and dressing (Lawton, 1983). One example of a situation of high environmental press within the home could be the need to ascend stairs to access sleeping and bathing facilities for an individual who has recently experienced a fall. In this case, high environmental press might overwhelm individual competence leading to the maladaptive behaviour of not going upstairs to bathe or sleep. The theory has since been used to design housing interventions for older adults (Peace and Holland, 2001; Wahl et al., 2004). This theory assumes that an optimum condition exists for each person, and that some demand from environmental press is required for cognitive stimulation and positive affect: People enjoy being challenged by their environment to some degree, providing the environmental challenge does not overwhelm their personal competence (Wahl et al., 2012).

Within the bigger picture, the development of the press-competence theory historically aligned with the social model of disability (Oliver, 1983) which argued that systemic forces create barriers for individuals to perform activities, rather than internal health factors alone. By emphasising how high environmental press can lead to maladaptive behaviours for older adults, the press-competence theory posits that "It is not chronological age per se but constraining environments that can be non-reinforcing or helplessness provoking that lead to age-related loss in physical and mental functioning" (Peace et al., 2004 p. 132). Therefore, the Press-Competence theory (Lawton, 1983) played a formative role in environmental gerontology research and satisfied the call for broader social sciences to begin unpicking the "socio-political and institutional structures of ableism" (Imrie, 1996, p. 402) and focus on understanding how environments oppress individuals, rather than focusing purely on the prevention and treatment of biological and functional impairments to promote independent ageing (Gleeson, 1996). Therefore, interrogating environmental resources and how they facilitate or inhibit freedom is an important component for evaluating intersectional experiences of age-friendly mobility.

Press-competence theories have been applied to understand the mobility behaviours of older adults in several settings outside of the home (Walford et al., 2017; Sugiyama & Thompson, 2007; Brookfield & Tilley, 2016). By isolating the interactions between individuals and their physical environments, studies have attempted to identify how features of the built environment support or inhibit older adults' mobility (Moudon & Lee, 2003; Van Holle et al., 2012; Cerin et al., 2009). Acknowledging the value of walking for producing positive health outcomes, public health studies provide the most extensive examples of studying environmental factors which correlate with physical activity in adults (ibid.,) Public Health Audit tools have been designed and applied to assess the supposed 'walkability' (Michael et al., 2009; Cunningham et al., 2005) of routes by urban planning practitioners in Canada (Chaudhury et al., 2011; Lee & Dean, 2018; Winters et al., 2015), US (Hwang & Ziebarth, 2015; Lane et

al., 2020) and UK cities (Walford et al., 2017) and transport research has recently studied how micro-features of the environment such as sidewalk width, surface type and depth influence walking behaviour (Steinmetz-Wood & Kestens, 2015; Banerjee & Hine, 2014).

Press-competence theory has been particularly useful for understanding how to adapt environments to prevent falls. Older adults experience greater risk of falling (Pérez-Ramírez et al., 2021) and more severe mental and physical health consequences following a fall outdoors (Todd and Skelton, 2004). Several studies have utilised qualitative approaches to identify environmental attributes which present a fall risk for older adults (Nyman et al., 2013; Brookfield et al., 2017). These studies have conferred that quality and level of pavements and surfaces can present the most significant barrier for older adults who have suffered a fall (Curl et al., 2016; Brookfield et al., 2017). Changes in the level of pavements, steps, curbs, cobbled surfaces and uneven and slippery surfaces are perceived as increasing the likelihood of falling, contributing towards higher environmental press (Curl et al., 2016; Baldwin & Stafford, 2019). Spatial analysis confirms that falls are often concentrated in environments where there are junctions, wet surfaces, crowds and uneven or mixed surfaces (Lai et al., 2009). Some older adults develop coping strategies to adapt to this environmental press, for example, using walking aids (Brookfield et al., 2017), or walking a longer route to avoid dynamic obstructions (Curl et al., 2016) but other individuals will exhibit maladaptive behaviour, such as walking in the road, or display avoidance behaviour, such as avoiding certain roads or not walking in certain weather conditions (Hjorthol, 2013).

Transport, public health, and planning disciplines have chosen to focus on interrogating the environment because there is an impact-based advantage associated with changing mobility infrastructure rather than changing the individual, especially where interventions meet the needs of multiple groups (Sugiyama and Thompson, 2007). This field of research has also influenced inclusive design principles, prompting accessibility research identifying common environmental barriers and recommending the removal of these, such as the installation of ramps, lifts, or signage (Muñoz, 2021, p.3). Therefore, an investigation of the environmental design and accessibility of Copenhagen provides a first step towards understanding one of the critical factors influencing mobility.

Reviewing Copenhagen's Accessible Mobility Infrastructure

To prepare for the expected increase in the population of older adults in Copenhagen, the Health, and Care Administration (Sundheds- og Omsorgsforvaltningen) conducted their first study of the city's age-friendliness in collaboration with COUrban in 2019 (Københavns Kommune, 2019). 300 senior citizens were surveyed (through online surveys, telephone interviews and observations) on their opinions about the amenities in the built environment, public transport, and their ability to participate in civic life across the ten administrative districts. The study utilised interviews and a questionnaire to identify different environmental features which presented challenges for older adults living in the city centre.

Notably, the study found that it is important for older adults to have several options for means of transport considering high reliance on public transport and that benches were critical infrastructure for enabling active transport in the city (Københavns Kommune, 2019). This evaluation provided the first broad snapshot of how older adults experience living in Copenhagen, however, despite the initial goal to understand the broader civic participation of older adults the recommendations were almost exclusively related to improving infrastructure.

A quick evaluation of the public transport infrastructure might lead to the assumption that public transport is accessible and enables mobility for older adults when the presence of certain infrastructural components is prioritised (ramps, lifts etc). For older adults with disabilities, Copenhagen's metro stations are all equipped with lifts from the street level to the platform and step-free entry into the train, theoretically providing a very accessible environment. Metro stewards can assist with getting on and off and can be contacted through yellow and green call points on trains and at the platforms. S-Trains have step-free access or elevators; however, manual wheelchair boarding is only available in the front carriage and requires the user to signal to the train driver, tell them about their destination and then the train driver is responsible for helping board and disembark from the train. This process might require some negotiation of individual confidence and social resources. Similarly, Copenhagen's bus accessibility standards have been criticised as bus drivers are not allowed to leave the driving seat to put the ramp down for wheelchair users, meaning other bus passengers must assist with lowering the ramp for wheelchair users (Wheelchair Travelling, 2014). As Din Offentlige Transport describes "The wheelchair user is responsible for getting the wheelchair on and off the bus" (Din Offentlige Transport, 2022).

However, these analyses could be criticised for exhibiting a bias towards prioritising the individual and environmental factors determining mobility (Baldwin & Stafford, 2019) and perpetuating environmental determinism where older adults are perceived as "pawns of their environmental circumstances" (Peace et al., 2007, p. 133). This preoccupation with the scale of individual analysis has neglected to explore how interactions between people influence the use of infrastructure in cities and how "infrastructures are to be enacted as accessible by the everyday methods that people use to navigate social life" (Muñoz, 2021, p.5). Critics argue that instead of focusing purely on environmental design, theories should consider how individuals adapt and optimise their environments or mobilise their own personal resources to compensate for changes in their individual circumstances (Wahl et al., 2012).

Within Copenhagen's age-friendly strategy, self-sufficiency in everyday life is defined as individuals trying to maintain their ability to conduct everyday chores and live an active life. The strategy states "those who can do it themselves, should do it themselves, so that more resources are spent on those most in need" (Københavns Kommune, 2019, p.12). The strategy gives the example of a 93-year-old man who receives support for some household chores within his residential care home, but who still tries to complete certain tasks himself, such as making his bed. His attempts to maintain certain behaviours "gives him both freedom and quality of life" (Københavns Kommune, 2019, p. 13). A study which evaluated Danish older adults' (60-65) expectations for their life at the age of 80, asked about the modes of transport, living locations and level of dependency on others and found that respondents predicted themselves to be living in the same location and managing their daily life without external help (Siren & Haustein, 2013). This attitude towards independent ageing represents more recent theoretical developments in environmental gerontology, moving away from a focus on isolating the relationship between people and their environments, and introducing greater agency by focusing on how people use their resources to develop strategies to overcome obstacles and achieve activities which they perceive to be important and fulfilling (García-Lantarón et al., 2022)

Beyond the environment: Negotiating personal and economic resources

Selective Optimisation and Compensation (SOC) theory (Baltes and Baltes, 1990) provides a suitable alternative to press-competence theory, arguing that ageing involves a selection and modification of personal goals, an optimisation of gains from resources and a compensation for a loss of resources by accessing new ones. This framework is often used to understand adaptive behaviours related to activities within the household in order to understand the types of care support needed for different older adults with physical impairments (Rémillard-Boilard, 2019; Koon et al., 2020). Selection is characterised by either elective selection, which means “an individual elects to pursue a goal or behaviour and devotes available resources to achieving that goal” (Remillard et al., 2019, p. 560), or loss-based selection, which means an individual chooses to reduce the amount they complete a task or stop doing a task altogether. Optimisation refers to when someone tries to maintain their competence to complete a task using their existing resources and compensation refers to using new resources to continue their existing behaviours and activities (Baltes and Baltes, 1990). For example, if an individual still choose to cook for themselves but asks a carer to help them prepare their meal, this is seen as elective selection with compensation because additional social resources are used but individuals are attempting to maintain their competency and control over this task. Whereas if an individual used to cook frequently, and no longer cooks but gives directions for cooking, this is a loss-based selection with compensation as they no longer complete the task, but they still maintain their wellbeing using additional resources (Remillard et al., 2019).

Selective optimisation and compensation theory has been used to understand how older adults adapt to long-term mobility impairments within their essential routines (bathing, toileting), referred to in the literature as Activities of Daily Living (ADLs) in their homes (Remillard et al., 2019). ADLs are a critical behavioural indicator of independence, as many welfare systems use them to evaluate an individual’s self-sufficiency and assess whether someone has additional care needs which should be satisfied by a care provider, family member or migration to a residential care home. Beyond the home, SOC theory has been mobilised to understand the decision-making processes for older adults out-of-home mobility by van Hoven & Meijering (2019) who found that negotiations between personal goals, personal resources and compensations were present in everyday mobility decisions: “older adults attempted to remain in charge of this [active mobility] by adaptation and compensation strategies, including redefinition of attitudes and needs” (p.8).

To investigate an individual’s selection, optimisation, and compensation techniques, one must observe not just their mobility behaviour, but understand and appreciate personal goals, personal resources (social and economic) and how attitudes, expectations and needs can change over the life-course, exploring which types of social and economic resources enable individuals to maintain their own personal mobility and freedom. Doing so provides an illuminating perspective on ageing across the life course which privileges the agency of individuals (García-Lantarón et al., 2022, p. 172).

Several studies have employed this broader interrogation of environmental resources, behaviours, and personal resources to study mobility. Walkability studies have found that behaviour can be determined by several factors including the individual goals and behaviours of individuals (Bösehans and Walker, 2020) weighed against the availability of public transport (Moran et al., 2014), street connectivity and residential density. Varying social and economic resources were found to be a strong determinant of the time geographies of mobility within a study conducted by Berg et al., (2015) who

identified that health status was only one of the factors influencing highly diverse mobility patterns. These studies found that the mode of travel (car, bike, public transport) and the time of travel are strongly impacted by an individual's economic, social, and individual resources (understood as individual health and psychological goals, skills, and expectations), including their care duties, their income, and their gender (Berg et al., 2014).

A study conducted in Denmark suggests similar findings. Siren and Haustein's (2013) telephone survey (conducted in 2009) of Danish Baby Boomers (62 years old and older) measured the mobility behaviours of older adults (N=1772) and identified clusters based on the type of mobility they used (cars, public transport, active mobility and driven by others) and the frequency they travelled. They found that the travel behaviours (modal choice) of older adults were significantly different depending on gender (women used cars less than men), socio-economic background and social context, leading to the identification of three socially distinct groups: Independents, Flexibles and Restricted (Siren and Haustein, 2013). Independents "using primarily individual modes of transport i.e., driving a car, cycling or walking... compared to the other groups, they expected to depend on others to a lesser extent" (ibid., p. 141), characterised by a car-dependence, these individuals tended to have a high income and high education levels. Flexibles "expected to use all modes of transport but the car. They expected to use several services to assist their living" (ibid., p. 141), for example, online banking and delivery services. Flexible mobility behaviour was multi-modal and correlated with average income and high education levels. A cluster of people highly reliant on public transport and others were identified as restricted "in their use of all modes of transport, and especially in car use. They could neither imagine using delivery services nor the internet/telephone for transactions." (ibid., p. 141) and were correlated with a lower education and lower income background.

Of course, this data is highly outdated, as the proliferation of digital technologies since 2009 has transformed experiences for older adults. However, Siren and Haustein's (2013) study produced several key findings: the car was the most popular mode of transport for all activities and public transport as a primary mode of transport was rare. Over 90% of respondents had access to a car (Siren and Haustein, 2013). The primary reason to use public transport was to visit friends or family living far away (Siren and Haustein, 2013). However, this study was also methodologically limited. The authors did not collect information about where the respondents lived, therefore, it is not possible to understand if this car-reliance is due to respondents living in more rural areas where public transport is less available. This study benefited from a nationally representative sample, and therefore provokes the question of whether car-dependence is the reality of Danish older adults in urban locations. One reason that is given to explain this car-dependence is that Baby boomers are the first generation to have benefited from automobility infrastructure, meaning they have higher car usage and access compared to previous cohorts (Siren and Haustein, 2013; Hjorthol, 2013).

Another key finding from this study was the high expectations that older adults had for their future mobility needs: the "expectations of the baby boomers were fairly optimistic and reflected an intention to remain active consumers and users of the transport system...considerable reliance on cars and demands of good public transport services" (Siren and Haustein, 2013, p. 142). This was also reflected in their expectations for their active transport. Walking and cycling was their current most popular mode of transport for going to the post office or bank locally and 41.8% of respondents said it was very likely that they would be cycling and walking at the age of 80 (Siren and Haustein, 2013, p.140). This study prompts an updated exploration to understand the current trends in modal choice,

the factors impacting car-dependency and understand the current role of active transport in everyday mobility.

One hypothesis that emerged when considering how economic resources influence mobility is that cost might be a barrier preventing people using either cars or public transport (Siren and Haustein, 2013). Public Transport is not free for older adults or disabled users in Copenhagen. Din Offentlige Transport provides a Pensioner Card for those aged 66.5 years old (with exceptions made for early retirees) which offers unlimited bus, train, and metro travel outside rush hour for a price between 420-840DKK every 3 months depending on the number of zones accessed (Din Offentlige Transport, 2022). Those who do not want to purchase the Pensioner card receive a 45% discount on all travel when travelling outside of rush hours using their Rejsekort card (Din Offentlige Transport, 2022). Disabled passengers can travel with a 50% discount for themselves and their companions. This clearly warrants an investigation of how economic resources and infrastructure influence the decision-making process of older adults that are heavily reliant on public transport. When we start to look beyond a solely environmental focus and expand our investigation of mobility to include social and economic factors, we must consider the political and social context influence the experience of ageing in Copenhagen.

Personal choice or personal responsibility in the social democratic welfare regime

The age-friendly strategy (ældrepolitik) is only one of the most recent outputs from a pro-active municipality concerned with providing freedom and comfort for ageing populations within a social democratic welfare regime (Esping-Andersen and Korpi, 1987). Denmark's care regime is theoretically characterised by providing care and welfare services through public funding and provision, as opposed to family or market provisions as seen in Mediterranean welfare regimes (Familial) or Anglo-Saxon welfare regimes (Liberal) respectively (Esping-Andersen and Korpi, 1987). The model has been described as "a coordinated and locally provided range of social services that are free, universal and public" (García-Lantarón et al., 2022, p.179). Denmark has one of the oldest age-friendly policies in the domain of housing. The first examples of building housing specifically for older adults began in Denmark in the 1930s (Lindstrøm, 1997) where the goal was to provide decent accommodation specifically for retired members of unions who formed associations (García-Lantarón et al., 2022).

Institutional care models (called nursing homes or residential homes) proliferated throughout Europe in the post-war period but started becoming increasingly less desirable in the Nordic countries in the 1960s (Lindstrøm, 1997). This was due to increased life expectancy altering the average length of institutional residency for older adults, which created a less economically sustainable model, and a less socially desirable one (García-Lantarón et al., 2022). From the late 1980's an at-home care and housing model replaced the focus on institutional care (Lindstrøm, 1997; García-Lantarón et al., 2022), resulting in a new public policy coined by Lindstrøm as "Stay Put!" (1997, p.118). The focus shifted from moving older adults into specific residential properties towards promoting ageing in place, where older adults stay in their homes for as long as they can. This echoed trends across Europe for the implementation of home care as the standard practice for care policy (Houben, 2001).

The social democratic state replaced outdated institutions with new, modern social housing for older adults throughout the 1990s (Lindstrøm, 1997). However, ageing in place requires both a housing stock suited for the needs of the elderly and proficient care services to be dispersed and efficient. By

moving from a model of concentration (institutional care) to dispersal (ageing in place), the challenge with ageing in place is funding and maintaining good quality, affordable care services in homes for an increasing population of older adults. Without both domains of housing and care satisfied, successful ageing in place is inhibited (García-Lantarón et al., 2022). Therefore, between 1990 and 2000, public policy focused on meeting the housing and care needs of a specific segment of the older population; the increasing population of older adults aged 85 and over with more additional needs (specifically with dementia) (Lindstrøm, 1997).

In order to “take into consideration the quality of life from the age of 60 onwards” (Lindstrøm, 1997, p.118), Ældrekommissionen outlined a new strategy for those aged 60-85. This focused on allowing older adults to live “a life of continuity and self-determination, still using and developing their resources, playing an active role in life” (Lindstrøm, 1997, p.118). The current strategy (2018-2022) embodies very similar values to the policy of the 1990s, even using similar language which promotes self-sufficiency: “those who can do it themselves, should do it themselves, so that more resources are spent on those most in need” (Københavns Kommune, 2019, p.12) while maintaining a commitment to provide a range of resources to maintain freedom of choice: “providing flexible services including housing and care to support changing needs of older adults.” (Københavns Kommune, 2019, p.16).

While there are notable similarities in the narratives promoted within the policies, one distinct difference is the recent focus on mobility and civic engagement as important dimensions to support ageing well, moving beyond the focus on housing and care provisions. This means that an evaluation of freedom against the municipalities own strategies must consider how an individual experiences freedom of choice within and between the domains of housing, care, mobility, and civic engagement.

A critical reading of these age-friendly policies in Copenhagen could suggest that the discourse of independence puts the onus on the individual to meet their own needs (personal responsibility), absolving the state of the responsibility for meeting the needs of a growing, ageing population. Such a discourse could be argued as evidence of neoliberalised urbanism (Harvey, 1989; Pinson & Morel Journal, 2016; Peck et al., 2009). In the case of social care and provisions for older adults, Neoliberalisation of services means that everything the state used to provide, including activities such as community clubs, routine and emergency healthcare and food provisions for older adults, are often privatised and sold to suppliers who can offer the cheapest service to the local government whose diminished budget and procurement rules compel them to employ the cheapest provider (Peck et al., 2009), often leading to a lower quality of service provision (Pinson & Morel Journal, 2016).

Within liberal welfare regimes such as the UK and the US, Neoliberalisation has been found to heavily impact the ability of older adults to access the services they need. Klinenberg (2001) first observed this in their observation of mortality within the 1995 Chicago heatwave, finding that Neoliberalisation manifested in public and subsidised housing and home energy policies which created “perverse incentives for agencies to underestimate the costs of services and overestimate their capacity to provide them” (ibid., p. 521-522). This results in the creation of “service delivery programs that demand activist clients” (ibid., p. 523) with “cultural capital and the skills necessary to hurdle complicated bureaucratic obstacles to care, and social capital, in the shape of networks of service providers and social support systems” (ibid., p. 523). Therefore, Neoliberalisation of services propels marginalisation of older adults who might not be engaged or empowered to access the services they need within a system which demands an active and engaged consumer (Scharlach, 2016). Buffel & Phillipson (2016) argue that there might be an inherent tension between global cities and age-friendly

policies as neoliberal urban agendas impact the relative importance of age-friendly policies compared to other policies through austerity and the re-direction of funds towards urban entrepreneurialism.

However, this strategy (Københavns Kommune, 2019) and study is situated within a social democratic regime and not a liberal welfare regime. The commitments of the social democratic regime should theoretically ensure access to care and welfare services are “free, universal and public” (García-Lantarón et al., 2022, p.179), thus supposedly avoiding the pitfalls of the Neoliberalisation of services by providing state-funded alternatives. Therefore, this case study offers an interesting critique and novel contribution towards urban studies literature which has predominantly analysed age-friendly infrastructure in liberal welfare regimes and found urban environments to be distinctly un-friendly for ageing populations (Buffel et al., 2012; Buffel and Phillipson 2016). By exploring how the social democratic welfare regime provides resources (economic, environmental, social) to support older adult’s freedom of movement in and around Copenhagen, this study will investigate age-friendly policy within a novel welfare regime.

Fællesskab: something to get out of bed for

Community is considered a crucial component of Copenhagen’s age-friendly strategy. The policy aims to tackle social exclusion and loneliness in order to realise a sense of community for older adults, recognising that community should be fostered within households, neighbourhoods, and urban spaces (Københavns Kommune, 2019). The broad definition of community embodied within the strategy appears to encompass several different concepts seen within the academic literature, bridging social inclusion, social and cultural resources, and civic engagement and social capital. A wealth of literature explores how each of these concepts can be understood to impact ageing within urban processes, therefore, this chapter will critically explore the relationship between mobility, community, social inclusion, and civic engagement as components of age-friendly cities, before suggesting a means to harmonise the terms and operationalise these concepts within this study of older adults’ mobility in Copenhagen. The term community appears to be used within the policy to try to encompass every type of social relationship an older adult might participate in, from the household to the local community and the wider municipality. Therefore, these scales will be used to structure the following review of prior and existing social policies in Denmark linked with inter-disciplinary theoretical debates about how to promote community for older adults in the home, in the neighbourhood and in the city.

Household community and care

The social democratic care regime has historically prioritised designing spaces to facilitate community within the housing models built specifically for older adults. One example of this is Den Selvejende Institution Frederiksgården, known by residents as Frederiksgården, located in Frederiksberg. Frederiksgården was one of the first housing blocks built following the formation of The Association for the Provision of Housing for the Elderly and Singles in 1954 (frederiksgaarden, 2022). This Association was founded by the Danish Bank Employees’ National Association, the Danish Confederation of Trade Unions, the Danish Nursing Council, the General Danish Medical Association and High School Teachers’ Association (frederiksgaarden, 2022). The residential block is comprised of 305 affordable apartments built to house the elderly and single citizens of Frederiksberg in 1959, with shared facilities such as restaurants, exercise space and leisure rooms. This example perfectly

demonstrates how housing models tend to mediate this balance between autonomy and community by creating self-contained accommodation with certain common facilities and shared activities (Lindstrøm, 1997). The Danish elderly housing model is characterised by a diversity, flexibility, and a prioritisation of shared spaces to prevent social isolation and loneliness (Lindstrøm, 1997). An important distinction with these housing models is that they are not suitable for older adults who need support or care at home, they are focused on promoting residential communities and autonomy for self-sufficient older adults.

More recently, the social democratic welfare regime has identified the need to build housing which can “adapt to the individual changes, as well as to the social and healthcare support of needs derived from the ageing process” (García-Lantarón et al., 2022, p. 174), as represented in the recent recognition for a need to innovate with “flexible living arrangements” (Københavns Kommune, 2019, p. 33) to adapt when people dynamically develop new care needs.

Additional care needs in the household can be very broad ranging, encompassing everything from needing help with grocery shopping, laundry, cooking, bathing, or cleaning to more advanced healthcare-specific needs, such as help with medication and mobility. All households have dynamics of care and household care regimes, for example, the differentiation of care tasks such as cooking or cleaning between the different genders and generations within a household. The right to care is one of the several social rights granted to all citizens of all ages in Denmark, and “universalism in care services include that services are generously offered according to need and not purchasing power” (Rostgaard and Szebehely, 2012, p.101). Municipalities are responsible for offering home help to those that need care and local services are financed through taxes (Lindstrøm, 1997). These local services encompass everything from mobile services which go from house to house to services located in community centres.

The way that the social democratic state supplies the care needs of older adults has been termed a de-familialisation of care (Lister, 1997) as those that need care do not rely on their family and have adequate resources to receive it independently. Compared to other European countries, the majority of families in Denmark prefer to seek formal care for an older or frail parent rather than providing care within the family (Rostgaard and Szebehely, 2012). This trend is attributed to high quality provision and resources for formal care where needed (Rostgaard and Szebehely, 2012). The Danish care model has also been recognised for providing a flexibility and breadth of at-home care services, ranging from personal care (bathing, cooking) to domestic care (cleaning or grocery shopping) (Rostgaard and Szebehely, 2012). Danish older adults needing care of any kind are most likely to receive tax-funded home care than family care. This trend becomes more complicated when discussing older adults who have larger care needs (Rostgaard and Szebehely, 2012). However, studies understanding the care needs as situated within the social democratic welfare regime have not investigated the intra-household dynamics of care, and statistics generated about intra-household dynamics primarily relate to spousal care due to the lack of intergenerational households in Denmark. Therefore, the care regimes of individuals living alone without family or spouses are under investigated (Rostgaard and Szebehely, 2012).

Understanding the current social relationships for older adults living in purpose-built elderly housing in Copenhagen appears to be a worthwhile enterprise. However, as the population of older adults grows and ageing in place remains the policy strategy, it is even more important to understand the experiences of those who live alone or have experienced a change in household composition. An

investigation into the heterogeneous social resources present within older adults' households would be an important way to examine how older adults' relationships change as they age and encourage social re-inclusion after people have left communities (migration or retirement) or lost close relationships (after bereavement). This focus on ensuring a basic level of human connection and relationship for all older adults is a commitment within the strategy: "Older people in Copenhagen must have someone who means something to them and feel that they are important." (Københavns Kommune, 2019, p.4). Identifying the needs and lived experiences of social excluded or isolated people would allow the municipality to develop new methods and services that support a good life in old age, not least for the socially weakest elderly in Copenhagen" (Københavns Kommune, 2019, p.4).

Neighbourhood ties

Debates about whether community has been lost, liberated, or saved within urban environments (Simmel, 1950; Wirth, 1938; Wellman & Leighton, 1979) are particularly salient when studying older adults, as they represent a population group which is likely to reside in one community for a longer time while experiencing significant neighbourhood changes ((Phillipson et al., 2001); Scharf et al., 2002). The municipality strategy is trying to encourage social mix within neighbourhoods by creating spaces and opportunities to build "communities across age and mobility" (Københavns Kommune, 2019, p. 33) and design housing and zoning solutions to join "both the healthy elderly and those who need a helping hand in everyday life" (Københavns Kommune, 2019, p. 33). Specific projects in elderly housing focused on this goal have received international recognition (Grahame, 2018) most notably the Orestad development retirement home, which is subsidised by the municipality and features a combination of public and private spaces to encourage socialising and connection between residents living with dementia (with limited mobility) and the public (Prip, 2015).

This tactic of focusing on encouraging social engagement at the neighbourhood scale can be seen in other projects across Denmark. The municipality of Esbjerg (population of 116,000) has listed its Intergenerational Age-friendly nursing home project, Sirius Seniorbo on the World Health Organisation's database of age-friendly practices (Slaikjaer, 2020). Sirius Seniorbo is a new care centre which will provide residences (104 homes) and amenities for citizens with special care needs (nursing centre) while promoting socialisation and connection within a community centre which will "serve as a meeting place for the surrounding community" (Esbjerg Kommune, 2022).

These strategies echo the focus of age-friendly strategies in the 1990's, where community centres were proposed as an important space for socialising, exercising, and social mix (Lindstrøm, 1997), while now orienting the focus more towards tactical locations for housing alongside social services for other groups. For example, locating a youth centre next to an elderly home and encouraging volunteering. However, the question of whether co-location of services and mixed-use zoning actually promotes meaningful social interactions and social mix between groups is an important assumption to critique.

Strategies such as these which aim to encourage social interaction at the neighbourhood scale can only be evaluated in conjunction with other critical factors impacting modern social relationships, such as the role of technology. The focus on proximity and frequency of social interactions at the neighbourhood scale (Sheldon, 1948; Townsend, 1955; Beck, 2019) as distinctively urban spatial and temporal concepts (Simmel, 1950) provides a particularly valuable contribution to environmental

gerontology at this point in history, where technology has overcome the limits of both time and space (Harvey, 2001) and created an entirely new online space which circumvents the physical restrictions experienced during several national lockdowns during Covid-19. It is often stated that the elderly are less likely to benefit from technological advancements because they are the age group with the least technological literacy and the least mobility (Olson et al., 2011). Thus, research has tended to perpetuate the assumption that proximity and lack of spatial distance to friends and family is still an essential lifeline for the elderly and that “proximity is a life and death matter for some people” (Klinenberg, 2001, p. 513). However, critical evaluation of these assumptions is necessary, as the Covid-19 pandemic proved technology to be an essential lifeline for social inclusion (Varey et al., 2021). The increased prevalence and proliferation of technology stimulates new questions: how important is proximity for social inclusion and social engagement of older adults when the whole world is close?

Early urbanist prophesied their concerns about how modernism and urbanism were transforming the human psyche, with Simmel (1950) predicting that the sheer frequency and multitude of interactions likely within heavily populated cities leads to a blasé attitude at best, and a generalized sentiment of hostility, or demoralization at worst (Park et al., 1925), and Tönnies (1988) first showing concern that the move from the country to the city meant the weakening of social ties. The development of globalisation, migration and an ageing population prompted new prophesies and concerns for the future of global cities in the 1990s: “the age differential between an increasingly older native population in European cities and a younger population of newcomers and immigrants creates two extreme segments of citizens polarized along lines of education, ethnicity, and age simultaneously” (Castells, 1993, p. 255). The complicated relationship between migration and neighbourhood ties was evident in Klineberg’s accounts in Chicago, where racism was not the cause of distrust towards new immigrants, but that residents felt that they just didn’t know new people. Similarly in the UK, a sense of “nostalgia for past community” (Phillipson et al., 2001, p. 325) was found in the accounts of older adults living in Manchester (Savage et al., 2005). A more nuanced account of this relationship between ageing in place and migration concluded that older adults are “staying in one place but experiencing the displacement that global modernity bring them” (Savage et al., 2002; p.146). Another critical contribution has been to consider how older adults with migrant backgrounds navigate accessing economic, social, and cultural resources in their neighbourhoods and across transnational networks (Scharf et al., 2002).

This focus on globalisation has been usurped by broader concerns about how displacement is being driven by new destructive and creative forces (Harvey, 1982) such as gentrification (Young and Willmott, 2007). Changes in external environment, propelled by the shape-shifting force of gentrification, cause new spatial inequalities which can invoke a feeling of being left behind (Savage et al., 2005), prompting a call for research to investigate how the elderly are particularly affected by gentrification (Scharf et al., 2002). Studies have shown that investments in new metro lines and increased transport connectivity have propelled gentrification in Copenhagen (Mulalic and Rouwendal, 2022) and that gentrification processes may appear gentle but actually create direct displacements, neighbourhood resource displacement and social justice (Larsen and Hansen, 2008). One approach to understand how the relationship between people and their neighbourhoods is being affected by global political, economic, technological, and social changes (Savage et al., 2005) is to observe their everyday behaviours and connections with other people and resources in their neighbourhoods (Buffel and Phillipson, 2018). As “Copenhagen is a city where the group of elderly

people is more diverse than in the rest of the country” (Københavns Kommune, 2019, p.5), qualitative analysis can also reveal the diversity of needs for older adults from heterogeneous backgrounds in neighbourhoods, which would help to create varied opportunities for civic engagement and participation “according to their own wishes and needs” (Københavns Kommune, 2010, p.29)

Active citizenship in the city

Civic engagement is given great importance within the municipality’s age-friendly strategy for community. The promotion of “active citizenship” (Københavns Kommune, 2019, p.29) and “volunteer communities” (Københavns Kommune, 2019, p.29) are seen as a means of improving quality of life, strengthening social relationships, imbuing life with meaning and preventing loneliness. Essentially, civic engagement is seen as the ailment for all social ills associated with a growing ageing population. The strategy accommodates for different interpretations of civic engagement whether those be frequent or irregular but identifies that it is the municipality’s role to provide associations which reflect the diversity of communities. This reflects a similar trend within the international age-friendly literature. As social infrastructures within families change, associations and communities in the public realm are becoming increasingly important for shaping the lived experiences of ageing (Botterill et al., 2018; Kallio & Thomas, 2019; Lebedeva & Orlova, 2019). Voluntary spaces of socialising, leisure and physical activities could pose a potential remediation to the "atomisation and loneliness of individuals in large cities" (Jarvis, 2019, p.257) which has stimulated significant research interested in how civic engagement influences social life in cities, and how this has changed over time. Research into civic engagement has become interdisciplinary, with public health studies seeking to understand how civic engagement is linked to the prevalence of loneliness amongst older adults (Moore et al., 2005; Kuhlicke et al., 2011).

An important semantic shift has occurred within literature where civic engagement has become synonymous with social capital and has become a widely operationalised measure to understand the varying degree of social relations within the city. The most widely employed approaches to measure social capital in public health and social science (Moore et al., 2005) are inspired by the work of Putnam (1995). Putnam (1995) defined social capital as “the features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit (p.2). This approach reflects a communitarian ideology which privileges community relationships as a determinant factor as an individual’s social identity. Putnam (1995) claimed that social capital could be measured longitudinally through civic engagement proxies, which involved aggregating data about voter turnout, attendance of town hall meetings, union membership, women’s league, boy’s scouts, and several other traditional civic associations. When measured this way, Putnam (1995) claimed that social capital in America showed clear signs of diminishment, termed social decapitalization: the reduction in the frequency and number of these associations (Putnam, 1995). This method was widely employed and remains the most cited approach (Moore et al., 2005) to studying social capital in public health (Kuhlicke et al., 2011), sociology (Portes, 2003), and environmental gerontology (Musselwhite, 2021). This has influenced public policy, for example, Penn State University developed a Social Capital Index measuring individuals’ associations with civic groups, religious organisations, sports groups, political organisations, and professional organisations (Rupasingha et al., 2006). Many disciplines are interested in understanding how to measure and evaluate social relations and measures of community in cities in order to prevent loneliness and promote social inclusion.

Scales of community and scales of mobility

These place-based considerations of community reaffirm the relevance of considering scale within both community and mobility. Mobility is different within different “nested structures of containers” (Alessandretti et al., 2020, p. 402) roughly corresponding to our understandings of spatial scales, such as homes, neighbourhoods, and cities. Mobility patterns within these scales differ depending on their hierarchy of meaning for each person. Cultural and social factors strongly influence mobility attitudes and behaviours (Wahl et al., 2004; Humpel et al., 2004; Wahl et al., 2012) and mobility infrastructure is not merely physical, but “socially constructed, socially filled out, and socially shaped physical environments” (Wahl et al., 2004).

In one of the most recent studies of older adult’s mobility, Berg et al., (2015) eluded to the importance of the social context around mobility: “In some cases, to travel lies beyond the individual’s own needs and decisions and are determined by other people’s needs (e.g. children and old parents), by the support provided by other people, and by the locations of activities and services... it is clear that the informant’s social context implies new coupling constraints” (ibid., p. 7). Previous studies have shown that participants in some cultures mainly engage in out-of-home activities during the day, from late morning until dusk, while others show a more even spread throughout the day (Mollenkopf et al., 2004; Berg et al., 2015). This highlights the importance of differing time-geographies for care duties and social activities for older adults who wish to socialise within limited hours (Mollenkopf et al., 2004; Meijering & Weitkamp, 2016).

Considerations about community and belonging must become integrated within the age-friendly discourse, as (Phillipson, 2007) argues “Environmental gerontology must, re-discover the community dimension as a key influence on the quality of life and on wellbeing in old age” (p.336). However, the measurement of social relationships, often operationalised as social capital is rife with debate and discussion (Claridge, 2018). This thesis will seek to explore how social and cultural resources and relationships influence mobility behaviours, including modal choice, spatial scale, and time of travel.

Theoretical Framework: Mobility for Frihed og Fællesskab

The novel theoretical contribution of this study will be an integration of psychological theories such as SOC with sociological approaches to consider how social, cultural, and economic factors impact urban ageing. Social capital approaches have provided a valuable and widely applicable way of measuring how social and cultural factors impact individual behaviour and health outcomes. This approach attracted several normative and analytical critiques at the time of its publication. Firstly, for providing a reductionist account which fails to consider the broad range of social relationships and, how macro-social and economic forces impact access to civic organisations (for example, race, income, and ethnicity as barriers to participation) and finally, for perpetuating a western-centric and narrow conceptualisation of community (Naviaux & McGowan, 2000). More recent critiques have focused on how measures of urban civic engagement cannot account for intracommunity inequalities (Lynch et al., 2000; Muntaner et al., 2016) and fail to provide predictability (Kuhlicke et al., 2011).

To address criticisms of the underlying communitarianism, some measures combine data with socio-demographic indicators such as age, gender, and employment (Kuhlicke et al., 2011) to explain inter-

community variations in social capital. These approaches remain dominant because of their potential impact. If accurate, they would allow for the design of effective interventions needed to mediate the relationship between income inequality and mortality and “lessen the impact of income inequality on the health of populations” (Moore et al., 2005, p.1331). While these critiques threaten the reputation of social capital within public health “they may be misplaced: a case of blaming the concept when it is the way that the concept has been translated and operationalized in public health.” (Moore et al., 2005, p.1335). The lack of acknowledgement of external factors impacting social capital also prompted debates about the relative use of measuring social capital in absence of measuring economic capital (Muntaner et al., 2016). Therefore, these critiques have encouraged the revival of a range of alternative concepts and methods of conceptualising social capital, loosely referred to as network approaches (Portes, 2003; Baron et al., 2000).

Network approaches to social capital broadly focus on the types of relations and structuring of relations between individuals and groups and evaluations of the benefits of these relationships for the individual. Bourdieu (1986) looked at complex interplay between economic, cultural, and social capital and their unequal distribution and interchangeability amongst people (Portes, 1998) while Coleman (1988) looked at the degree to which actors within a network are connected. Both Bourdieu (1986) and Coleman (1988) look at how resources are accessed through a person’s social relationships, and both highlight how access to valued social resources is unevenly distributed amongst individuals, thus addressing several of the inequality issues still pervading the communitarian approaches application in public health (Lynch et al., 2000; Muntaner et al., 2016). Bourdieu’s approach is different to Putnam’s in that it is focused on understanding how people mobilise their social and cultural capital for their betterment in society, particularly pertaining to their class position, thus providing a Marxist approach to understanding social relationships: “a quality produced by the totality of the relationships between actors, rather than merely a common quality of the group (Bourdieu, 1986, p.2).

While network approaches have remained “marginalized and fragmented” in their application in research (Moore et al., 2005, p. 1334), they have been employed effectively in previous studies examining the relationship between neighborhood conditions and social capital (Carpiano, 2007). For example, (Wellman and Leighton, 1979) used a network perspective to analyse the importance of neighborhood and non-neighborhood ties. This illustrates an additional advantage to the use of network approaches for their ability to ask whether a “specific social aggregate is a community or not” (Moore et al., 2005) and to critique the spatial dimensions of community within this study. One approach which is inspired by Bourdieu’s (1986) conception of social, cultural, and economic capital is the concept of mobility capital (Musselwhite, 2021). This concept tries to interpret how individuals make decisions about mobility based on the capital or ‘stocks’ available to them. This represents a network approach to mobility capital which investigates the interplay between economic, cultural, and social capital and their unequal distribution and interchangeability amongst people (Portes, 2003).

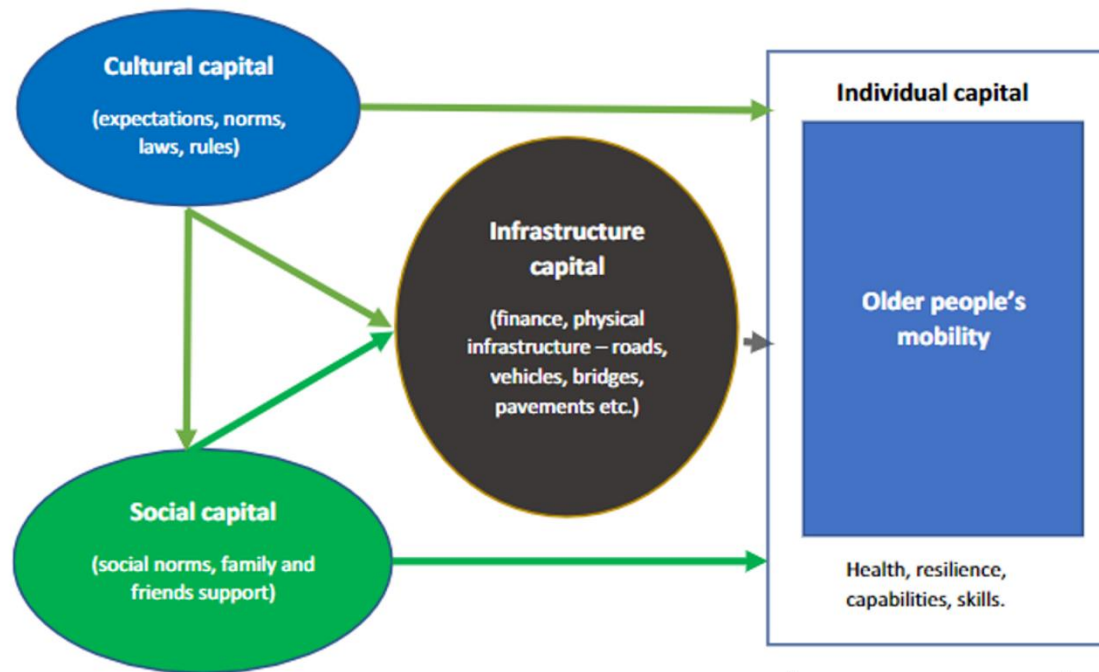


FIGURE 2: MOBILITY CAPITAL FRAMEWORK (ADAPTED FROM MUSSELWHITE, 2021, P.81)

Musselwhite's (2021) framework can be seen in Figure 2, and tries to represent how cultural capital, social capital and 'infrastructure capital' influence older adults mobility behaviours, when negotiated with their health, resilience, capability, and skill. However, this approach could be critiqued for similar reasons to the critiques often levelled against social capital. Primarily, one of the strongest criticisms of social capital is the analogy with economic capital, despite the fact that social capital does not share many of the features of economic capital, particularly the characteristics of being alienable, transferable, and possessed only by individuals (Claridge, 2018). In defence of social capital, some have argued that social capital can be invested with expectation of future returns, is appropriable, convertible and requires maintenance and investment, however, this unfortunate pairing of capital to social relations introduces a conceptual dilemma. Those interested in studying the things often represented by and within the term social capital need to choose to either adopt the term social capital to build on the wealth of literature that exists within transport, public health and environmental gerontology or reject the term despite its cited history (Claridge, 2018).

Given the intended contribution of this study within the discipline of urban studies, and the importance of capital within urban processes, this author would prefer to use the term resources to describe the social and cultural resources often alluded to in studies of social capital, so as to avoid a dilution of the term capital and semantic confusion. An additional argument for the use of the term resources is that previous studies in mobility have also used these terms. Mollenkopf et al (2004) were the first to create a framework to relate mobility decisions to a person's physical, economic, social, and technical resources and the environmental conditions of their area, finding that a "person's physical, economic, social and technical resources as well as the structural resources prevailing in the area in which he or she lives in are decisive preconditions of out-of-home mobility." An additional benefit is that the term 'resources' situates itself within the context of social democratic policy: "the elderly have resources, and they are a resource to society" (Lindstrøm, 1997). Within this thesis, the

term social and cultural resources will be used to offer semantic similarity between the language used in Selection, Optimisation and Compensation theory and to apply an inter-disciplinary theoretical framework to this study of older adults' mobility.

Methodology

Research Questions

The choice of methods was determined by scanning the existing literature in the field of mobility studies. Quantitative methodologies can use surveys to collect data about distances, speed, frequency, and number of places visited during the day which are useful to answer research questions oriented at understanding the broader mobility patterns of older adults versus other age groups, or differences within the older age group (Mollenkopf et al., 2004; Ziegler & Schwanen, 2011; Siren & Haustein, 2013; Coughlin, 2009; Miranda-Moreno & Lee-Gosselin, 2008). Some studies have noted the efficacy of mixed methods approaches, including quantitative data from GPS measurements, to compliment qualitative data (diary and in-depth interview data) (Meijering & Weitkamp, 2016). Work in GPS tracking has been combined with methods such as qualitative GIS, in-depth interviews, walking interviews, travel diaries and participant-led photography (Bell, 2019; Berg et al., 2015). However, all quantitative approaches conclude that mobility decisions are highly influenced by the heterogenous backgrounds of participants without exploring why this is the case (Mollenkopf et al., 2004; Ziegler & Schwanen, 2011; Siren & Haustein, 2013; Miranda-Moreno & Lee-Gosselin, 2008). Therefore, previous international literature makes a clear case for qualitative research to zoom in on this relationship between the intersectional backgrounds of individuals and their social, cultural, environmental, and infrastructural resources.

The following research questions seek to build upon the recommendations and research gaps of previous international literature while also specifically understanding the dynamics of mobility unique to Denmark (Siren and Haustein, 2013). Understanding the contemporary relevance of Siren and Haustein's (2013) three 'types' of older adults, 'Independents, Flexibles and Restricted' and observing how different groups navigate mobility systems is key for understanding how to design effective social and environmental infrastructure to support them. This study will not seek to purposively sample these three 'types' of adults, as this would assume their tangible existence in a different sample of people, disobeying the social constructivist epistemology. However, this study seeks to employ qualitative approaches to understand the mechanisms through which individual factors, socio-economic background, and environmental and economic resources influence SOC mobility strategies:

Research Question 1: How do older adults utilise and exchange individual, environmental, social, cultural, and economic resources to optimise their personal mobility and freedom?

In addition, this research will seek to understand how the times, spatial scales and modal choice for mobility are influenced by social and cultural resources and commitments, such as care duties. And how different cultures engage in different activities at different times of day (Mollenkopf et al., 2004). This builds on the work of Berg et al., (2015) seeking to understand the everyday realities of individuals and how mobility decisions integrate within broader lifestyle choices and expectations for ageing:

Research Question 2: How do resources influence modal preference, time, and scale of mobility?

Finally, this research will seek to explore how people create and maintain a sense of community in older age, through the lens of mobility, involving civic engagement and social resources:

Research Question 3: How can urban mobility infrastructure maintain or create a sense of community for older adults?

Despite the importance of understanding access to health and care services, an evaluation of Tryghed (comfort and security), the third important value within the municipal strategy, is out of the scope of this master's thesis. This decision was made after an evaluation of the logistical and ethical challenges of accessing participants who are receiving or giving care and older adults with dementia.

The intention with this inter-disciplinary theoretical framework is to satisfy a call for research to enrich urban studies and environmental gerontology's methodologies and concepts, expressed eloquently by Buffel and Phillipson (2018) who claim that "Despite the resurgence of interest in environmental issues and aging, limited integration has been achieved with urban geography, sociology, and associated disciplines, notably around research on structural changes affecting urban communities" (ibid., p. 178). Therefore, urban studies can provide timely and critical evaluation tools to research age-friendly cities. The applicability of these assumptions to case studies outside of the UK, Brussels, Canada, or US has been limited (Buffel & Phillipson, 2018) and provides impetus for the consideration of a European case with a different socio-economic context but a similar empirical need to understand the changing dynamics of ageing populations, freedom, and community within the city.

Research Design & Epistemology

This study was carried out in Copenhagen over three months from October to December in 2022. Several methods of sampling were considered, including random sampling of older adults involving conducting interviews around public transport hubs or participatory approaches within activities with older adults in Copenhagen. There were three reasons to justify the latter choice of sampling and data collection. Firstly, the type of data I needed to gather was personal, pertaining to physical and mental health, family, and community. Therefore, I needed to build trust and personal relationships. Secondly, studying in a foreign context requires extra consideration of cultural, social, and political norms to respect and understand the phenomena being studied. Finally, participatory approaches address the shortcomings of existing research in ageing (Buffel & Phillipson, 2018). These often focus on the younger spectrum of the "social-chronological margins" (Hopkins & Pain, 2007, p. 288) and are "conducted, theorised and disseminated by young and middle-aged adults" (Hopkins and Pain, 2007, p. 288). Therefore, active participation and participant observation was chosen as a method to promote "relational knowledge creation" (Hopkins and Pain, 2007, p. 291) and situated knowledge (Rose, 1997).

This research is social constructivist in its epistemological approach by seeking to understand how the multiple constructed types of social, cultural, infrastructure and individual and economic resources contribute towards mobility, freedom, and community. My positionality as a non-disabled, younger adult seeking to understand the experiences of older adults will be inherently flawed, and I am limited by my subjectivity as an individual embedded within historically ageist and ableist conceptualisations of mobility, infrastructure, and urban life. The knowledge gained and presented will be bound by the limitations of my own experiences as any interpretivist epistemology is, as acknowledged by other researchers working in this space (Bell, 2019; Bell & Bush, 2020; Muñoz, 2021). However, this awareness and commitment to criticality informed both the methodology and axiology of the work.

Through purposive sampling of activities for older adults I identified the group Caritas Gåklub (Walking Group) online and contacted their administrator through their website to ask about the details of upcoming trips. It was not clear from their website whether they were a walking group targeting older

adults specifically as the group advertises being open to all ages and abilities. I was directed to the Facebook page where walks are organised and advertised and found photographs of older adults participating in the walks (Ubi Caritas, 2023). Since 2019 there have been walks every Saturday hosted by 1-3 volunteers who have the role of making sure everyone feels part of the group and can take part in conversations. Participants range in age, but most are aged between 55 to 82. Walks normally take place in the centre of Copenhagen although there are also opportunities for volunteers to lead walks in Greater Copenhagen and the rest of Zealand. Caritas provides funding for proposed activities during or after walks, such as visits to Museums or Cultural Centres. Caritas does not provide funding for food and drinks purchased during café trips which often follow a walk (and constitute an important part of the social aspect of the walking group). The length of walks varied greatly (between 3km-9km), depending on the size of the groups and the energy level of participants. The cold, rain or snow was rarely an impediment for the group as one participant explained “there is no bad weather, only bad clothing” (Zilda).

Participants, Recruitment & Consent

Walk Number	Date 2022	Location	Total number of walkers	Number of informal interviews conducted	Number and names of participants recruited for travel diaries
1	24/09	Ørstedsparken (& David's Samling)	4	3	0
2	29/10	Christiania	12	2	2 (Zilda & Heidi)
3	05/11	Assistens Kirkegård	6	2	1 (Agnes)
4	12/11	Rosenborg Slot og Kongens Have	16	3	1 (Margit)
5	19/11	Ballonparken	9	2	0
6	3/12	Gentofte Sø	6	2	0
7	10/12	Dyrehaven & Bakken	14	4	2 (Frederik & Eda)
8	17/12	Lyngby Bondebyen	15	3	0

TABLE 1: DATE AND LOCATION OF ETHNOGRAPHIC OBSERVATIONS AND INFORMAL INTERVIEWS IN COPENHAGEN

The number of people in attendance varied greatly each week as seen in Table 1. Fortunately, the group was very small in my first week which enabled me to make strong connections with two participants who became key gatekeepers, and friends, throughout future walks. I informed these first participants (Zilda and Heidi) about my reason for living in Copenhagen and my interest in active mobility. At first, I was hesitant to explicitly declare that I wanted to focus on studying older adults as I guessed from our conversations that some walkers might not associate with the idea of being ‘older’, however, during our second walk I introduced this topic and several participants discussed that it was interesting to study ‘older adults mobility in Copenhagen’ because compared to the UK (my home country) they felt that older adults were much more active and it could serve as an interesting perspective. Participants had to be older than 60, an age recommended by previous studies to capture those who retire early and considered the beginning of life transitions into the third age (Berg et al., 2016). In addition, participants had to either live in Copenhagen or in the surrounding area and

frequently travel into Copenhagen, recognising that urban mobility infrastructure caters for those who live in surrounding suburbs as well as the city centre.

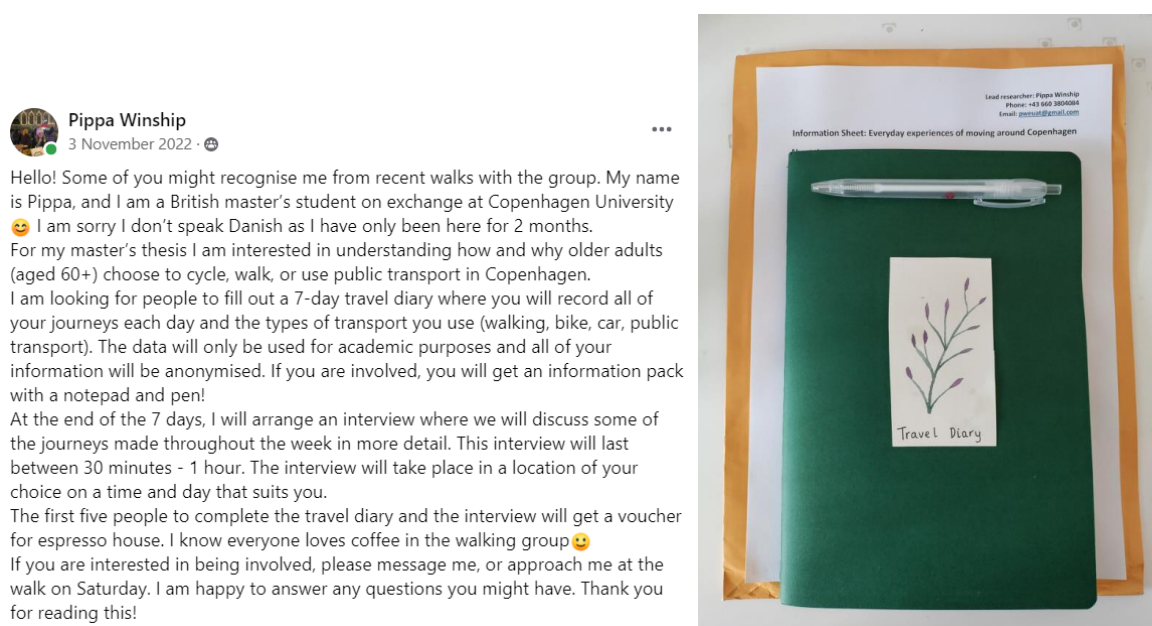


FIGURE 3: FACEBOOK POST RECRUITING PARTICIPANTS FOR THE STUDY, POSTED ON CARITAS GÅKLUB FACEBOOK PAGE ON THE 3RD OF NOVEMBER 2022

After the second walk I decided to explicitly advertise my research project on the Facebook group after gaining consent from the Facebook group administrator. This advertisement is shown in Figure 3. Gaining active and informed consent was one of my principal and ongoing concerns during this research. This was important for several reasons. Firstly, I recognised that as my first-time collecting data through ethnographic observations, I needed to negotiate how to gain consent during informal interviews and during walks. The post on the Facebook group provided most walkers with an awareness of my research background and intentions. In addition, Participants Zilda, and Heidi (the first two to complete the travel diaries and interviews) introduced me as a researcher to other walkers from week 3 onwards. Here, the value of gatekeepers was clearly demonstrated, and their impact on the success of my data collection cannot be understated, as they offered reassurance about my character and intentions to an audience of walkers who were sometimes hesitant or nervous to talk to me for several reasons: I was a new walker, a non-Danish speaker, and the only participant below the age of 50.

Secondly, becoming a walker within Caritas Gåklub meant joining a group which had been organised to meet the needs of people who could be considered socially vulnerable. The group had been created during 2020 in response to the widespread social isolation resulting from Covid pandemic and several of the participants still considered this walking group as their only social activity each week. Therefore, I had to constantly reflect on how my presence within the group was impacting the social dynamics. I was cognizant that several members attend the walks to be surrounded by people but not to talk, and I tried to respect their wishes by not starting conversations, or deliberately ending conversations and

walking in silence if I felt their mood or demeanour had changed, even if I felt they were proceeding in an interesting direction for my research.

This demonstrates the blurry boundaries of consent within ethnographic research. Participants knew my researcher identity and research topic (though the strength of this identity increased more over time), but their participation in the walks was in no way considered as consent to be included in my study.

My recruitment method reflected this awareness of sensitivity and consent. I did not try and recruit participants for the travel diaries or interviews by asking the group as a whole. I chose to privately reach out to people (through Facebook messenger) who I felt had been comfortable during our private conversations on the walks and tell them about the opportunity to participate with the travel diary and interview. This does not mean that all of my participants were necessarily easy to talk to, as several participants were more reserved or shy, but I tried to accurately judge whether someone might feel threatened or uncomfortable by receiving a private message after speaking to me. Whether my recruitment methods did cause discomfort or harm is difficult to judge and suggests one ethical limitation with this kind of immersive research with older adults. As can be seen through the recruitment table (Table 1) this process had a low conversion rate of informal interviewees to 'full' participants (those that completed the travel diary and the follow-up interviews). Reasons expressed for not participating included a lack of time to complete the travel diaries or interviews and discomfort with the idea of writing or talking in English for extended periods of time, introducing the limitation of not speaking the native language in my site of study.

Finally, each participant received a consent form to sign, an information sheet and a physical or virtual travel diary (shown in Figure 3). Consent forms collected the date and name of the participant and assured anonymity within the analysis and final write-up of the data. This anonymity was preserved by assigning each participant a pseudonym, which became their 'name' on their travel diary and the name used to save recorded interviews and transcriptions produced following interviews. Interestingly, participants expressed that full anonymisation was not necessary, and that they consent to their locations, backgrounds and activities being published. Despite this, their names have been pseudonymised as this would risk their safety, but background and activity information has been included where it provides additional detail relevant for analysis. Participants who completed the travel diary and interview were compensated with a 100DKK voucher for Espresso House in exchange for their week-long involvement in the study to address the significant input people gave (Baxter and Eyles, 1997).

Data Collection Methods

Ethnography & Informal Interviews

Justification

Previous studies have used a variety of different qualitative methods to investigate the specific importance of certain individual and environmental factors on mobility decisions. Ethnomethodology has been employed successfully by Muñoz (2021) to study the embodied practices of public transport users in Chile, through a combination of go-along interviews and observations over an 8-month period. Bell & Bush (2020) also used go-along interviews to understand the walking experiences of adults with sight impairments. Therefore, ethnography was chosen as one method to identify how individual, environmental, social, cultural, and economic resources are used to optimise personal mobility and freedom.

Firstly, ethnographic observation helps identify individual health constraints that individuals might be experiencing. Many participants did not declare these until their follow-up interview and so observations were a useful way of identifying changes in health status. For example, one participant appeared to have different difficulties with her knee every week, and I would ask how her pain level was during the walks and if she needed assistance at specific instances (climbing small stairs up to a church) and she would explain the unique circumstances which make her knee better or worse.

These kinds of insights about the specificity of a person's health and psychological condition are only possible by weekly observation and conversations. Other studies have instead tried to gather this information with standardised questionnaires conducted face-to-face to assess the persons "socio-structural, health related, psychological, and social resources" (Mollenkopf et al., 2004, p. 47). One limitation with my method is both my background and the tools I employed to make these evaluations. I did not use official measures of health status although many of these are publicly available, nor do I have the background to accurately evaluate someone's physical and mental health. However, the purpose was not to gain a full and accurate evaluation of their health, but to identify what could be most affecting their social activities, their mobility, and their confidence, with the aim to discuss these in the follow-up interviews.

Design

Ethnographic and participant observations were recorded in a Fieldwork Diary on my personal computer before and after the walk each week. My fieldwork notes stated the weather and my personal feelings before the walk, recognising that my own mood and anxiety would influence the type of data I might collect. After the walk I would note down who had been present (first time walkers or regulars), notes from the conversations I had with individuals (their mood, details about their week, observed physical characteristics e.g. limping), observations about the social dynamics within the group (who would join for a coffee after a walk, who preferred to walk by themselves), notes about the environment we had walked in (whether people had struggled with any environmental features, built versus the natural environment) and my own feelings following the walk, recognising that this was both impacted by, and impacted, the results of my research (Rose, 1997). The data collected during the informal interviews during the walks was very different from the data collected in the travel

diaries and follow-up interviews. The questions tended to focus on the walk itself, the history or environment of the area we were walking in, discussions about Danish culture (specifically during December and the Christmas season) and updates about their families or friends. This ethnographic component of my data collection was one of the most enriching and yet challenging ethical dimensions of my research.

Reflections

The significance of my ethnographic fieldnotes did not reveal itself until I was preparing for the follow-up interviews for my participants who had completed the travel diary. My note taking was rather unstructured and although I knew the focus of the study was mobility, I found myself taking notes about people's families and social activities far more frequently. For example, I would note down how one participant would spend time with a 'surrogate' grandchild (a friend's grandchild) and the different plans she had with him that week. I noticed that remembering this detail and asking about this during the walk in the following week made her fill with pride and happiness, and she would recount all of the stories they had together. Through these stories she revealed that he was the reason she chose to wear a helmet to be a good example. Therefore, fieldwork notes became more than just records of the everyday realities, they became a way to explicitly integrate arguably feminist tools of empathy and connection into the process (Nayak and Jeffrey, 2011). I would not necessarily agree that these are strengths exclusively or predominantly held by all women, however, I would argue that I was very surprised by the extent to which my unconscious emotional processes and social skills influenced my research. Notes from my first walk around Ørstedsparken testify to this.

I had just spent two hours walking with three women, mainly discussing broad topics such as living in Copenhagen and getting around the city. The tone of the conversation had been very light-hearted and humorous. At one point we stopped for a coffee, and I asked one woman about whether she was still working or retired. She told me about how she had retired early due to having mental health issues arising from her career as a social worker, and how she was now trying to rebalance. Without thinking about separating myself from the research 'subject', I exchanged that a close family member had struggled with a similar challenge working in that field, and I detailed their experience and how this had impacted me. At this point, the participant held my hand and started to describe how this experience had impacted her relationships with her family and her friends. At the time, I remember feeling that this exchange had been incredibly personal, and she had seemed very open, but simultaneously vulnerable. My notes after were brief 'Retired early due to mental health' but this exchange provided the basis of what became a very close friendship between this participant and me. This interaction demonstrates how ethnography has the power to "release the research process from the structures of participant and observer, so that, instead, research becomes a shared subjective experience between researcher and researched" (Nayak and Jeffrey, 2011, p.141). This release can feel simultaneously liberating and terrifying. To disclose and reveal so much about yourself as a researcher and collect data in a way which might not fit within your previously conceived conceptions of research design, introduces new challenges and decisions. Building relationships with participants which are not just important for the research, but become important for those participants and yourself, also introduces a new element of risk which cannot be accounted for in an ethics application.

Travel Diaries

Justification

Travel diaries are considered an appropriate method to gather data about modes of mobility, purpose of travel, time-geographies of mobility and the absence and presence of travel companions (Berg et al., 2015). In this way, travel diaries allow us to answer both research question 1 and research question 2: how do resources influence modal preference, time, and scale of mobility? These findings are complimented by in-depth interviews.

Travel diaries asked about the purpose and frequency of travel (social and cultural resources), the mode of transport (environmental, economic, and individual resources), travel companionship (social resources) and the affective responses to travel (individual resources). This data was gathered over seven days to provide information about a vast range of different journeys, which can be considered to be more representative than an account of one or two days as previous studies has measured (Mollenkopf et al., 2004). Travel diaries allow us to ask how and why trade-offs between different resources occur and how these influence the mode, time, and scale of mobility decisions (Berg et al., 2015; Miranda-Moreno and Lee-Gosselin, 2008).

Design

The content of the travel diary was influenced by the work of Berg et al., (2015), however, a conscious decision was made to deviate from their design by not formatting the diary in a table with dedicated columns for each of the desired categories. Instead, the front page of the physical travel diary (used by 4 participants) contained a hand-written guide asking the participants to address 6 different components from their journey within a daily account, as shown in Figure 4.

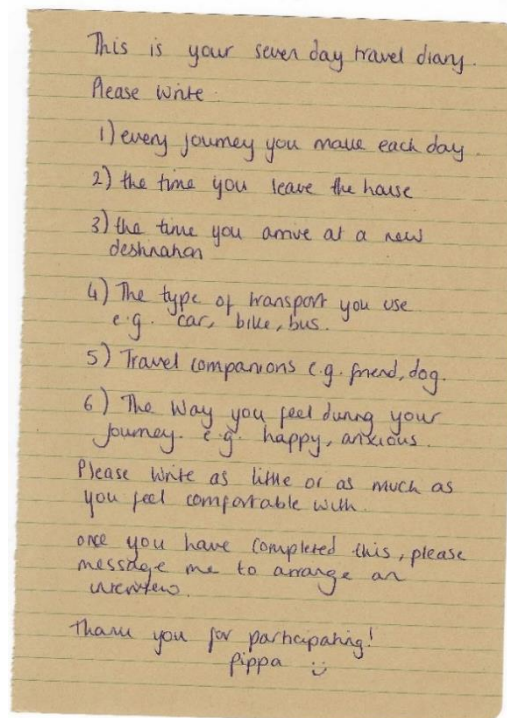
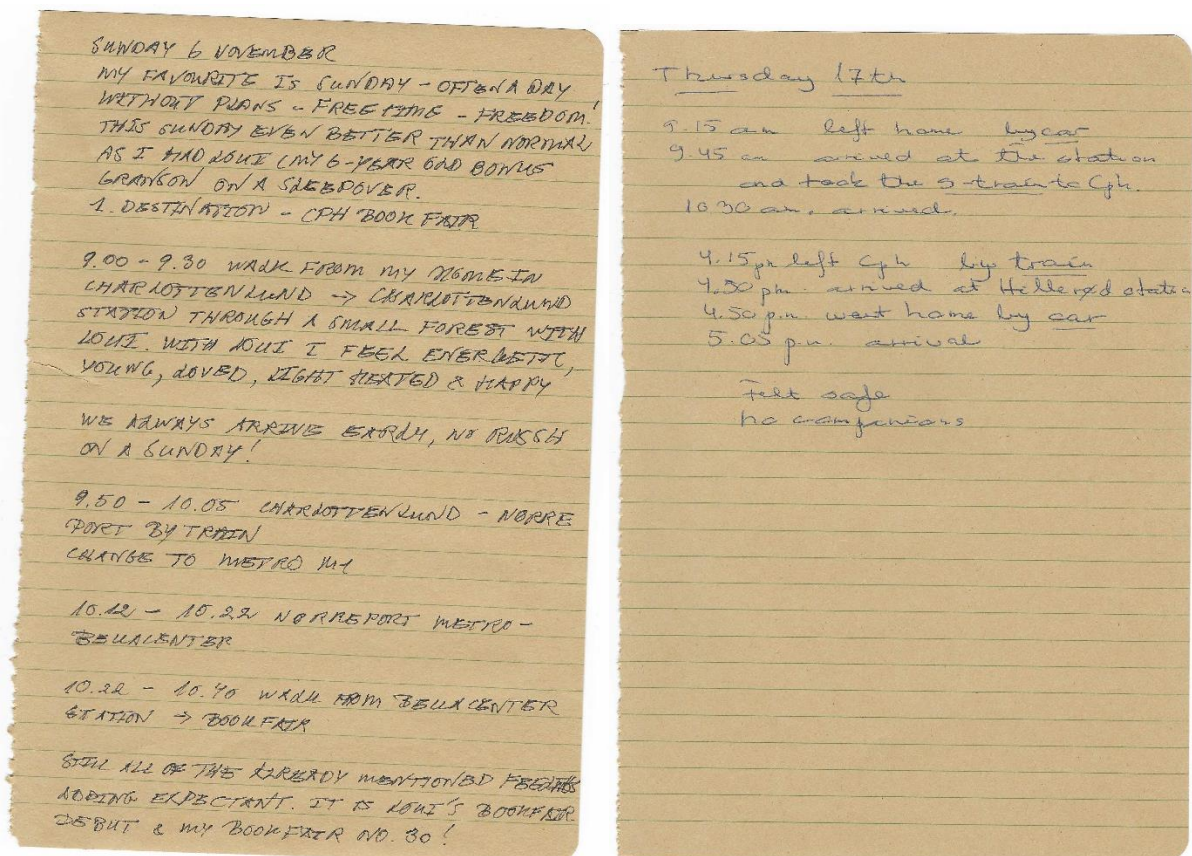


FIGURE 4: THE FRONT HANDWRITTEN GUIDE IN THE TRAVEL DIARY

I chose this format to test how each participant might interpret the brief to write more or less content, given that the notebook had over 40 pages. This produced varying lengths of accounts as expected: some accounts were very extensive and personal (perhaps due to the traditional diary format) and provided very rich detail about emotions and social interactions (providing a more detailed picture of social and cultural resources), while others simply detailed each category to create a half-page account (see Figure 5). None of the participants failed to provide information about the categories because of the less-structured format, which supports the recommendation of this method as an alternative to the table and column format of Berg et al., (2015).

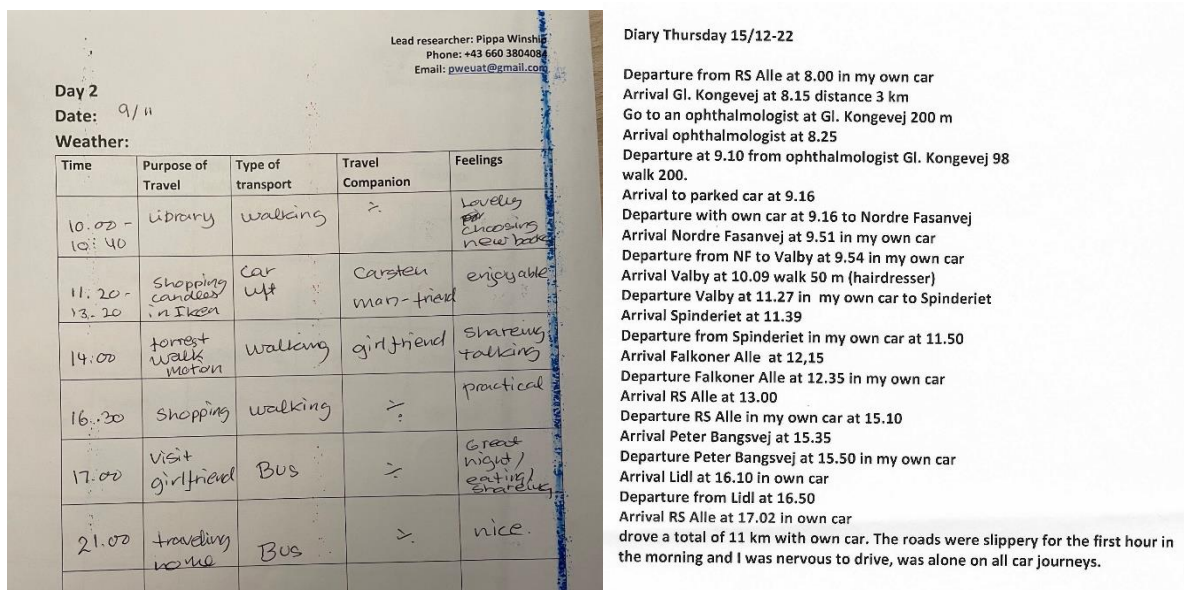


ON THE LEFT: HEIDI'S DIARY ENTRY

ON THE RIGHT: AGNES'S DIARY ENTRY

FIGURE 5: THE UNSTRUCTURED FORMAT ALLOWED FOR DAILY DIARY ENTRIES VARYING IN LENGTH AND DETAIL

Two participants asked for online formats of the travel diary. One participant asked for an email copy of the diary to print at home, and another asked for the physical diary but said she would make notes on her own computer so that she could translate to English more easily. When designing the virtual diary to send by email I chose to use the column method to test how much detail the participant would record. This flexibility in the format of the travel diary was necessary to ensure participants completed the whole week diary. As expected, this online format limited the amount the participant wrote, particularly pertaining to personal and emotional reflections recorded compared to the physical alternative diaries (see Figure 6).



ON THE LEFT: MARGIT'S DIARY ENTRY

ON THE RIGHT: EDA'S DIARY ENTRY

FIGURE 6: ONLINE FORMATS PROVIDED LESS DETAILED DATA ABOUT EMOTIONS AND COMPANIONS

Reflections

One limitation with this method is that travel diaries can be much harder to collect than interviews due to the amount of time they require from participants and the trust needed to gain access to this kind of personal daily data. As a result of this, previous studies with significantly more resources have also exhibited fairly small sample sizes of participants. For example, 9 research assistants and 2 senior researchers gathered diary, GPS, and interview data from 18 older adults in the Netherlands over a period of two months for Meijering & Weitkamp's (2016) study. Some studies have overcome this by collaborating with local associations and employers to recruit participants and build trust (Berg et al., 2015). An alternative to overcome the limitations of travel diaries could be to gather GPS data to record people's mobility decisions without them having to consciously note and assess. This has the added advantage of capturing mundane or routine activities that participants might forget to record or deem insignificant, for example, walking to a post box (Meijering & Weitkamp, 2016). However, this method requires serious considerations and tools to address data protection concerns if location data is monitored. The choice to use travel diaries proved to be appropriate and worthwhile for answering the research question when accompanied by a follow-up interview.

Interviews

Justification

Interviews were chosen as a means of answering all three research questions:

- How do older adults utilise and exchange individual, environmental, social, cultural, and economic resources to optimise their personal mobility and freedom?
- How do resources influence modal preference, time, and scale of mobility

- How can urban mobility infrastructure maintain or create a sense of community for older adults?

Aside from providing a structured and targeted way of exploring all resources and filling the gaps of the travel diaries, narrative interviews contribute towards the construction of individual identity and shared social relations (Fivush, 2019; Somers, 1994) and can be considered an important method when conducted with care and consideration to research older adults. Critical gerontological research reveals that narrative stories can provides opportunities for self-reflection, memory recall and resilience in older age (Lind et al., 2021) and can improve confidence and recreate a feeling of integration and inclusion within society (Myerhoff, 2019).

Design

Interviews were organised in advance through Facebook messenger or WhatsApp. Although I initially wanted participants to choose their location, four participants asked me to find a location. For three interviews (Zilda's, Frederik's & Heidi's) I chose to undertake the research in a café that I worked at, called Mokkaeit, in Copenhagen. The setting was very quiet, and calm (necessary for recording the conversation) and I was able to buy participants cake and coffee. Two interviews took place in participants own homes (at their request) which provided a new dynamic to the interview and one interview took place in a café in central Copenhagen (Mormors Café in Bredgade) for the convenience of a participant travelling. Interviews lasted between 45 minutes to 2 hours, depending on the energy and interest of the participant.

The interviews were structured based on the participants travel diary. Some participants provided their travel diary the day before the interview, which gave me time to highlight and select the most interesting components that I wanted to explore. Other participants brought their travel diary to their interview, and I would briefly scan the travel diary to identify points of interest which would structure our interview. It was challenging to skim the diary so quickly and choose relevant topics, but I found that participants were often patient to wait until I had read their diary. Questions would vary greatly depending on each participant, but I would identify which components of the framework most needed explaining and ask about social resources, cultural activities or communities, personal health and sentiments towards certain journeys and their general reflections on their week of mobility. I would ask participants at the end of their interview whether they would like to keep the travel diary and most asked to keep it, while one participant even noted that the quality of the notebook and the thoughtful handwritten note at the front was a nice feature. Interviews were recorded with the consent of the participant and interview transcripts were recorded and then transcribed clean verbatim (Bryman, 2008) where pauses were not transcribed but words were left unedited (Appendix A).

Reflections

Unexpectedly, the setting of the interview became an important part of the interview in several ways. Firstly, for those participants that came to Mokkaeit, this café soon became a place they frequented in Copenhagen. During my working shifts participants would often visit the café by themselves to talk to me and I have since received messages from participants with photos of walkers all enjoying cake and coffee at Mokkaeit. Secondly, for the participant who was interviewed at Mormors Café in

Bredgade, the nostalgic theme of the café, decorated with Danish homeware and old advertisements, inspired her to reflect and discuss the décor of the café during the casual start to our interview. This setting could serve as a distraction for some participants but helped stimulate conversation between myself and an initially shy participant. In addition, this setting was interesting considering my positionality as a foreign researcher. This participant chose to explain each of the details in the décor and menu and in doing so, grew in confidence and comfort before our interview. Thirdly, for those participants who invited me into their homes, the interior decoration and snacks stimulated conversations and provided a fascinating insight into their personal life. After leaving the home of Eda, I reflected that I wished I had asked to take photographs to capture the many beautiful photos of family and friends and candles around her apartment. These settings are far from neutral backdrops to conversations and interviews but provide a new way of understanding this unique person and their attachments, sentiments, and social and cultural context.

Aside from the more targeted and social and cultural resource-specific questions, another advantage of pairing the travel diary with a follow-up interview is the ability to cross-reference an individual's story. This is not intended to reveal an objective or truthful account of that individual's story, as the social constructivist epistemology proposes that is neither possible nor desirable, but rather to understand how their perception of mobility may differ from their experiences in that week. It was valuable to understand the cultural and social resources around mobility, for example, an individual might say that they bike often, but their travel diary shows a dominance in car or public transport use. This allowed me to probe within the interview to ask about how they feel about their identity as a bike and car user in Denmark, and how this may have changed over time.

Positionality and Limitations

All knowledge is situated, and this research is particularly so. My identity, my personality and my attitude greatly shaped not only the types of data I collected, but the social processes occurring within the phenomenon I studied. There is no possible way to separate the subject and object of research (Rose, 1997), however, following the recommendations of feminist methodologies (Nayak & Jeffrey, 2011) I will seek to describe the particularities of this knowledge production process and explain the personal context within which my research was grounded. This is not to undermine the relevance of the findings of my research study, but to demonstrate this indivisibility of the subject and object throughout my research. There will always be a power relation between researcher and participants. As the person responsible for collecting information, making sense of it, and disseminating that information, I have the power to shape how my participants are represented (Nayak and Jeffrey, 2011).

Although I cannot fully understand how I may have influenced my research, there are certain identities which I clearly possess which may have shaped the research process significantly. My age stands as an important and crucial marker of identity within this research. As Hopkins and Pain (2007) discuss, age is constructed relationally to people, events, and expectations. My presence as the only younger adult at walks often received attention and comments such as *"My knees wouldn't manage it, Pip's young, she can go up the Round Tower and we can catch her up later"* (Heidi). These comments signal two things. Firstly, participants are distinguishing themselves as old in binary opposition to my perceived youth, a distinction which might not have occurred if I was not present. I believe this to be the case as

some of the younger participants (aged 60-70) would sometimes make comments about the older members of the group (aged 70-80) walking too slowly and would relate these to their ages. Secondly, participants may limit their activities due to my presence as a younger person. I know one participant who would have enjoyed challenging themselves to walk up the Round Tower, but potentially would have felt judged or limited by my presence. Clearly, such impacts of my participation within the walks must be addressed if future research recommends intergenerational approaches (Hopkins and Pain, 2007).

My gender and my embodied practices also place a crucial role in influencing research outcomes. As a younger British woman attending the walking groups, I felt that sometimes participants felt intrigued by my presence. Many participants noted my 'posh, British accent', a situation first encountered by Rose (1997). A couple of older male participants seemed particularly interested in talking to me and abandoning their spouses to do so solicited some glances from their spouse towards me on several occasions. Attempting to navigate this scenario was challenging, as I was of course interested in gathering as much data as possible, but I wanted to ensure that my presence did not cause unnecessary harm and I wanted to navigate my own feelings of discomfort. These scenarios have no rulebook and navigating them can make research feel somewhat isolating. When I tried to address these situations by asking their spouse to join our conversation or making a concerted effort by looking at them while asking questions to signal my intention to involve them, my attempts did not always work. These situations made me feel slightly insecure and impacted my confidence to speak to other participants.

This process of feeling sometimes stuck within my own skin as a researcher was a new and challenging position, which became more pronounced as the weeks of attendance continued. During the first few walks I felt I could remain fairly quiet and speak to only a couple of participants when I felt confident and self-assured. However, as the weeks continued and people recognised me and my participants would introduce me to their friends and describe my research, I felt I needed to appear confident and trustworthy, which was challenging when I sometimes felt nervous and out-of-place. During walks where the number of walkers was higher, most participants would speak in Danish rather than English (as my presence was less noteworthy), and this introduced challenges for me interrupting conversations to ask questions or get to know people. The irony of my out-of-place-ness being such an effective instrument for research and yet, such an anxiety-inducing personal state, represents the challenge and reward of qualitative feminist research.

Simultaneously, the rewards of immersive research should also not be understated. Several of my participants became good friends and we exchanged messages over Christmas with photos of families and friends. Aside from these friendships which made me feel welcome and integrated within a new city, I received many kind comments from participants I had interviewed noting that my presence within the group was a lovely addition, and that they enjoyed our follow-up interviews and our conversations very much. An extract from one participant on their final page of their travel diary speaks to these rewards and challenges of feminist research (see Figure 7).

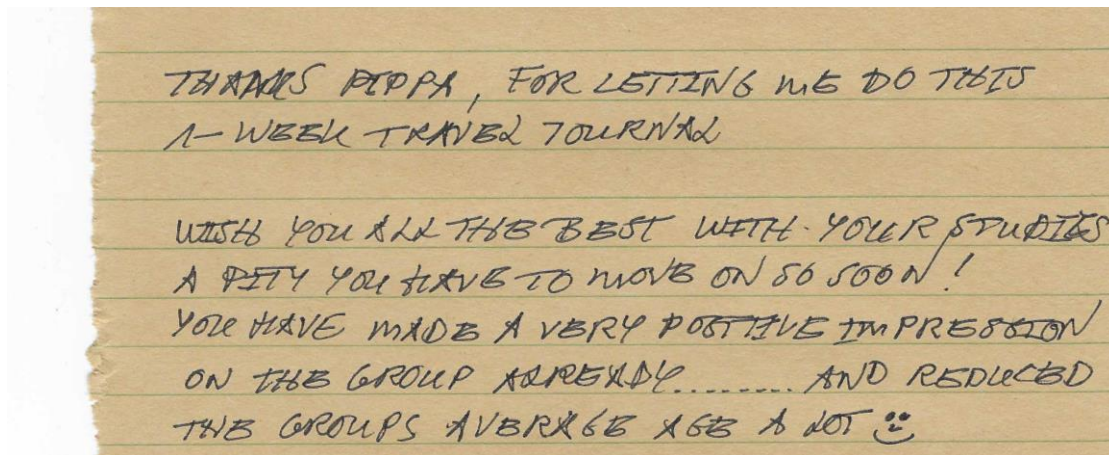


FIGURE 7: A NOTE FROM HEIDI ON THE LAST PAGE OF HER TRAVEL DIARY

Data Analysis

Dependability is an important quality criterion for qualitative research (Baxter and Eyles, 1997, p. 517) and the data analysis aimed to ensure dependability by being as rigorous and transparent as possible. All interviews were transcribed (see Appendix A) and then coded into pre-determined, *a priori* categories which were identified from the literature review. Reference to an individual's social, cultural, environmental, economic, and individual resources were coded. The individual resources were separated into two sub-codes: physical health and selection, optimisation and compensation strategies which encompassed expectations and values and psychological motivations and behaviours. The text that was coded was then copied into a coding table (see Appendix B) for two reasons. Firstly, this addresses critiques that data analysis can be too vague, where the link between case data and emergent themes is unclear (Baxter and Eyles, 1997). Secondly, the use of a coding table allowed constant comparison between cases within a certain theme which provided alternative perspectives on the same issue, for example, cycling as one issue with differing responses (Bryman, 2008). Whereas I have used CAQDAS with previous studies, I felt that it was not appropriate for this study as a small sample of participants, and the various formats of data used for triangulation (for example, scans of travel diaries and field notes) were better suited to manual coding and comparison.

Each participant's coded themes were then compared against their travel diaries. Travel diaries present a mediation between quantitative and qualitative data. Times, frequency, modes of transport, purposes and feelings could all be coded into quantitative categories for analysis to answer the question about the time-geographies and modal split of mobility. However, such quantitative analysis would not be useful for this study with a small sample size. Instead, I chose to visualise the data from the time-geographies manually, similar to previous studies who utilised visualisation software to show the patterns across the week (Berg et al., 2015; Meijering & Weitkamp's, 2016). Graphs were created on PowerPoint using my own design to show modal preference on the y axis, and time of day on the x axis. These graphs help show patterns in the times of travel across the week, the ranges of the lengths in journeys and provide additional qualitative data where participants provided extra information, which contributed towards an understanding of the scales of mobility. After travel diaries were visualised, I identified *a posteriori* codes which had emerged from a comparison of transcripts, travel diaries, and fieldwork notes for participants and for those who were informally interviewed

during the walking group, compiled a list of themes emerging from the data, and systematised these to answer each of the research questions. The culmination of this analysis will be explored within the results and discussion of each research question in the following section.

Results and Discussion

How do older adults utilise and exchange individual, environmental, social, cultural, and economic resources to optimise their personal mobility and freedom?

This study found that all individuals utilised a range of individual, environmental, social, cultural, and economic resources to overcome specific challenges pertaining to individual health, confidence, or infrastructure in order to maintain their personal mobility and freedom. This section will explore how these processes occurred for different people, using selection, optimisation, and compensation theory to understand how resources were negotiated within adaptation and compensation strategies to maintain mobility throughout ageing (van Hoven & Meijering, 2019).

“If you get afraid too much you have to sit down and watch TV all day” (Eda, 79)

Eda was the oldest participant involved in the study (aged 79) and invited me to interview in her ornately decorated home in Frederiksgården. Eda had a very busy social calendar attending exercise classes twice a week, birthday parties of friends and cultural events in the city centre during the week of completing her travel diary. We sat down to share tea and a spread of exotic fruits and biscuits she had thoughtfully prepared for me (Figure 8), on a cold Copenhagen evening, as she told me about some of the challenges she has faced recently.



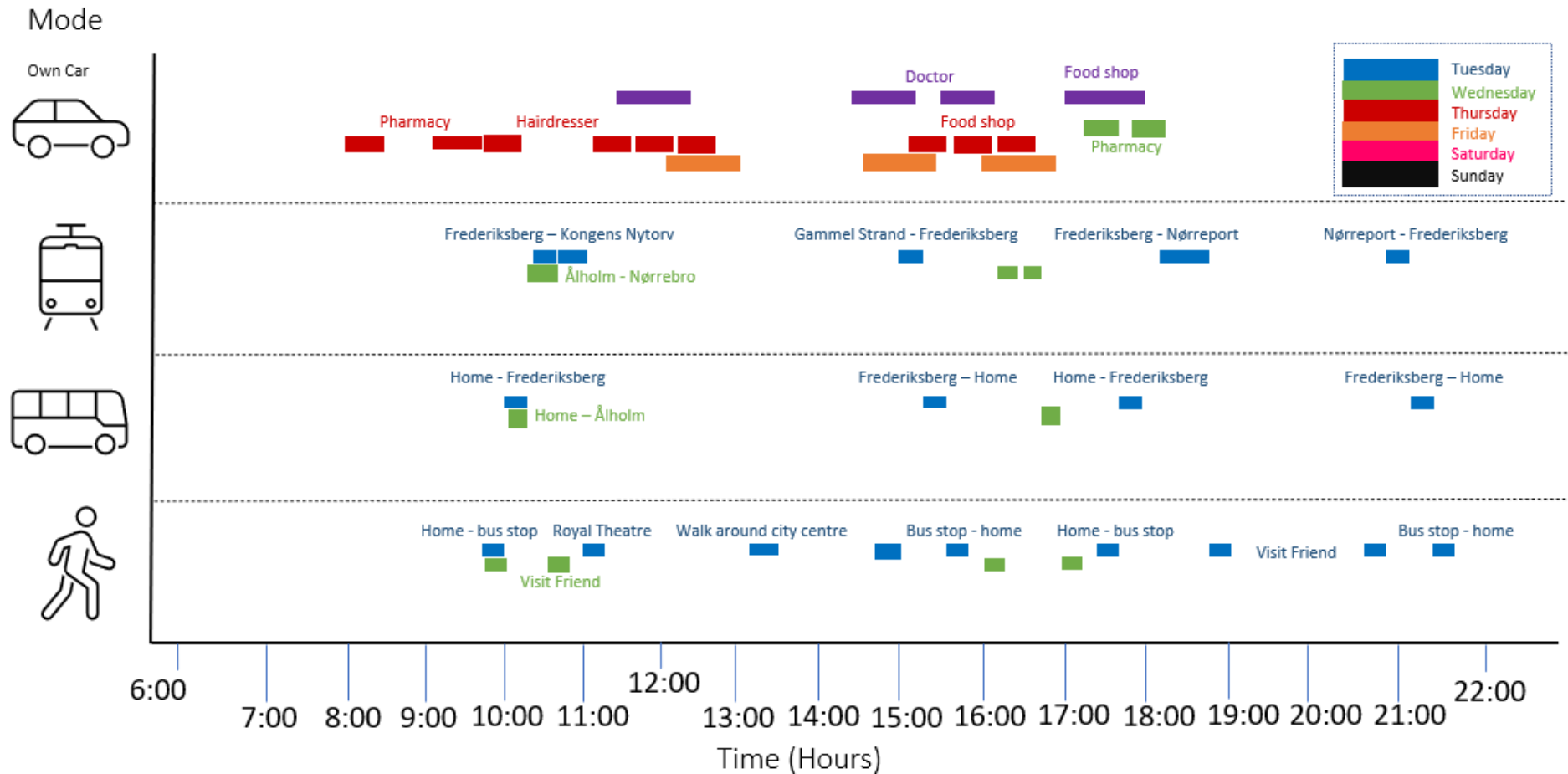
FIGURE 8: AUTHORS PHOTO OF EDA'S WARM HOSTING IN HER HOME (18/12/22)

Eda had been experiencing several falls inside and outside of the home recently: *"I fall down in my dining room alone, and I took the lamp and it smashed and I have so many injuries. I was green and blue. I don't know what happened to me. Sometimes I get a little blackout, and it just comes"*. This influences her mobility decisions as she feels that the blackouts combined with slippery or icy pavements and bad weather present a real risk in Copenhagen in Winter, *"I was nervous in the morning because there is so much snow, if they don't take the snow away I am afraid to fall down"*. In addition, the cold weather makes her bones ache, so she adapts to this by wearing more clothing *"I have some special wool clothes from Finland so sometimes I have 3 pairs of trousers. I need a lot of clothes otherwise I have so much pain in my body"*.

The combination of harsh environmental conditions and her propensity for blackouts has resulted in an increased car-dependency as can be seen in Figure 9. Eda makes lots of multi-modal journeys which require transferring from bus to train. These allow her to go into town for cultural events and visit friends but wants to avoid waiting in the cold, *"It is not so cold on the bus or trains, but it is walking to the bus or trains that is too cold"* and falling when walking on slippery surfaces transferring from buses to trains. As can also be seen from her travel diary, she depends on her car to attend crucial appointments most days of the week, to visit the doctors, the pharmacy and to do a food shop.

When interpreted through SOC theory, we can see that for Eda car-dependency is a form of optimisation, utilising her resources (private car) to allow her to maintain elective behaviours (socialising outside of the home). This strategy does not always pay off, as parking is not always available near to her destination: *"So I thought ah I have to take my car to go to the doctor and there was no parking, so I had to walk"*. Her choice to utilise her own resources (private car) only partially reduces the incidence of risk of experiencing a fall, *"I was quite near the car, 2m before and I fell down alone, there came a man who was very nice but he was homeless but he was so nice and said 'you have blood' [laughing], but it was worse to look at than it felt but he was scared for me and said 'can I help'. I could drive after, so I had to drive home, and I don't understand what happened so I'm a little bit afraid for the darkness and going alone"*. This complies with previous research that also found that certain individuals adopted loss-based selection, choosing not to travel at certain times of day (Hjorthol, 2013). Eda did not seem to think that driving the car could exacerbate the risk to her health if she experiences a blackout while driving, and chose instead to focus on changing the time she can travel so that she can see the environment more clearly, and people can see her if she falls: *"I am not happy to go in the night-time, I was in Copenhagen at 20:45 and it was the latest I would go in Copenhagen, I would be afraid if I come home too late, because it is dark and I have fallen down 4 times this last 4 months."* This can be seen in her travel diary (Figure 9) which also shows she does not travel in the morning when it can also be dark. Eda identified that other pedestrians and people can be a crucial resource to help her if she experiences a fall, demonstrating her trust in other people and the perceived usefulness of social resources for ageing. However, her compensation strategies seemed to be intricately linked to her motivations and fears about successful ageing: *"I have said to myself, so long as I can, I have to go out, because if you get afraid too much you have to sit down and watch TV all day, but I must go out and see something"*.

FIGURE 9: EDA'S TRAVEL DIARY SHOWING MODE AND TIME OF TRAVEL (12.12.22-16.12.22)



NOTES TO READ THE GRAPH: THE KEY AT THE TOP RIGHT SHOWS THE DAY THE TRAVEL DIARY COMMENCED AND ENDED FOR THIS PARTICIPANT. THE SAME TIME SCALE WAS USED FOR ALL PARTICIPANTS TO ALLOW COMPARISON. DETAILS ABOUT ACTIVITIES AND LOCATIONS HAVE BEEN KEPT IN FOR PARTICIPANTS WHO CONSENTED TO SHARE THIS INFORMATION.

This utilisation of existing resources to navigate challenging environmental conditions was one of the implicit functions and processes demonstrated by every individual, and in the group dynamics within the walking group. A walk around Bakken demonstrated this well, with some walkers using their mobility aids and others holding hands to navigate the slippery surfaces (Figure 10). Several walkers nearly fell over, but the light-hearted humour and conversation simulated a supportive social environment which reduced the stigma from falling.



FIGURE 10: AUTHORS PHOTO OF THE WALKING GROUP NAVIGATING ICE TO ENTER BAKKEN FROM DYREHAVEN
(10/12/22)

Eda's account introduces several important considerations. Firstly, her behavioural adaptation focused on changing the time and mode of travel, rather than addressing an underlying health condition or seeking welfare support. Eda did not mention about speaking to a healthcare professional or care organisation to mention her blackouts, or her need to be accompanied in the car, and appeared to see such a move as unnecessary as she perceived the problem to be environmental and seasonal. Secondly, her choice to favour driving rather than using public transport introduced economic constraints, as parking in town was difficult and expensive "only the parking will be 100DKK", which introduced a conflict between her needs and economic costs of infrastructure.

Therefore, this account of an older adult who experiences falls frequently is an important one. Environmental gerontology has continued to identify how environmental features present physical and psychological barriers for mobility for older adults (Curl et al., 2016, Brookfield et al., 2017; Todd and Skelton, 2004), and how some older adults choose to compensate with mobility aids (Brookfield et al., 2017). However, this account would suggest that transport infrastructure could be adapted to provide solutions which acknowledge and address the psychological stress of mobility for individuals

who have experienced a fall, for example, providing assisted travel in a mode which suits personal preferences between homes and public transport to provide new social resources. This could look like walking buddies during wintertime, or an alert system for older adults travelling at night times. These social resources differ from environmentally focused accessibility strategies currently favoured by the municipality, to acknowledge how “infrastructures are to be enacted as accessible by the everyday methods that people use to navigate social life” (Muñoz, 2021, p.5).

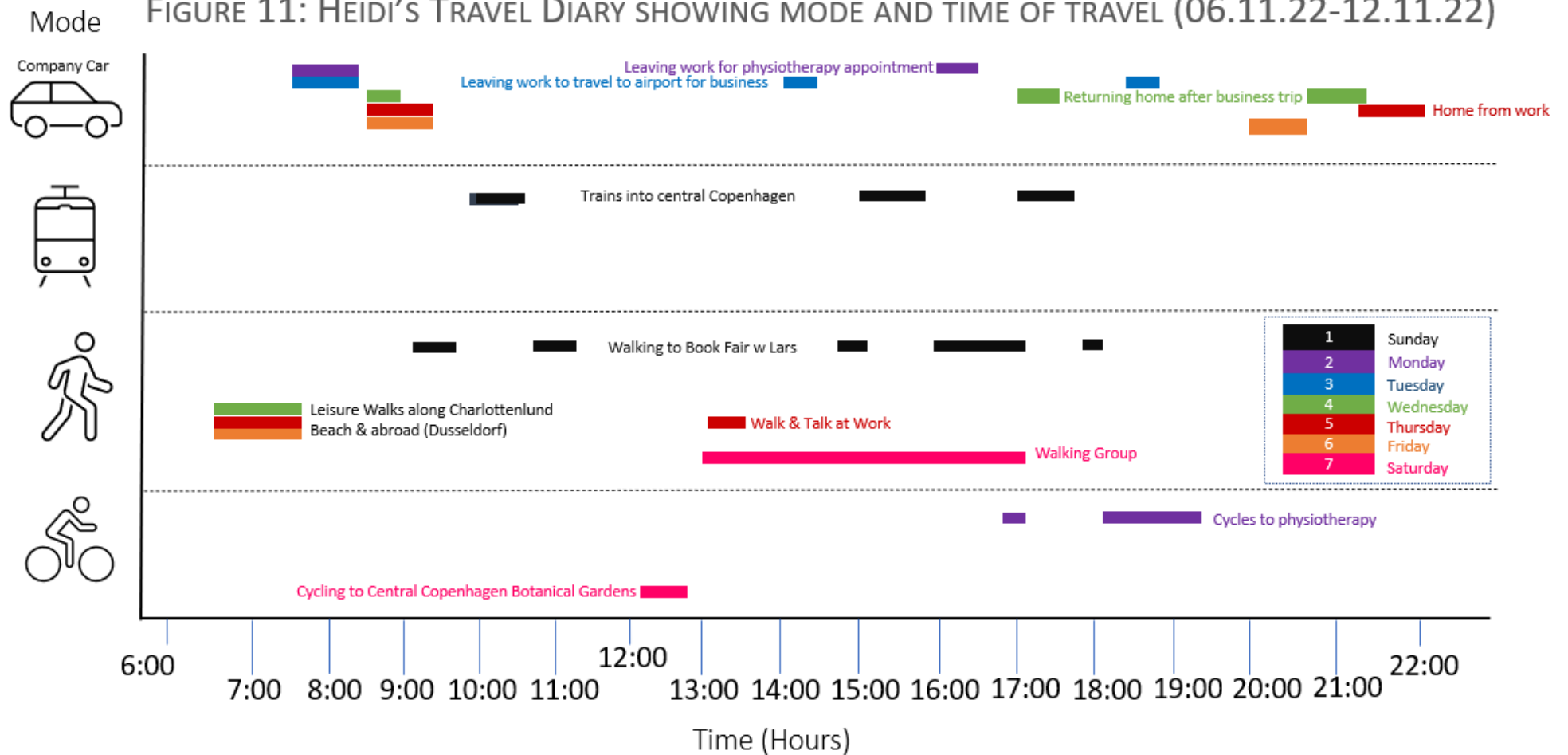
“I miss the freedom in my legs, I feel like it’s concrete” (Heidi, 64)

Heidi (aged 64) played a leadership role within Caritas Gåklubb: she decided the routes for walking, posted updates on the Facebook page and adapted the routes to meet the dynamic needs of each group. Heidi had previously been a professional footballer but now worked in Sales, utilising her education in chemical engineering within her role for an international food manufacturer. She loved working and had no plans to retire soon, stating that she enjoyed the challenge and had become accustomed to an expensive lifestyle. Heidi had experienced several issues with arthritis in her knee following her career as a sportswoman and would update me weekly about how the pain had changed, and which knee was causing the most issue: *“the good one is now the bad one, so it’s worse now. The left is the football knee, and the right one I destroyed in Madeira.”* Heidi’s care duties to her ‘grandson,’ Lars motivates her to maintain her active mobility despite the pain. Lars is the grand child of one of her best friends and she sees him once every two weeks, although it used to be more frequent when he was younger.

Figure 11 shows that Heidi has a multi-modal split and uses her company car and public transport to travel across the city but walks and cycles locally using her electric bike. Heidi cycles with Lars or uses trains or buses to visit events in the city with him, having recently attended a bookfair. Her weekly updates always started with a happy anecdote about Lars, and she cherished the time she would spend with him, intent on being a fun and active ‘grandma’. Heidi also used her car very frequently, and attributed her car-dependence to her job as her company was not located near a station so they provided her with a company car. She only uses her car on weekdays as shown in her travel diary, *“When I come home Friday night, especially in the summertime, I will never use my car until Monday morning”*, and in summer she replaces her car with her electric bike to cycle to work with the journey taking between 30 minutes to 1 hour. Heidi claims that she will get rid of her car when she retires but our interview revealed that she also uses her car for travelling frequently and considers it a tool for maintaining her independence: *“When I’m in my car I’m free, nobody can touch me”*.

Heidi’s approach to optimising her mobility despite her arthritis focused on compensating using a combination of alternative medicine, technological and economic resources: *“when it’s too severe or too hard I take painkillers, until it’s good again. I don’t take any medication for arthritis or anything, I just train. I mean exercise is the only thing you can do. Less walking more biking.”* Rather than taking arthritis medication, Heidi hired a physiotherapist to help her improve the strength in her knees with an exercise training plan, *“I did 6 weeks of very intensive biking to help me get better, between 35-70km a day”*, regularly visits a practitioner of Chinese medicine and bought an expensive electric bike so that she can continue cycling *“that was my 60th birthday present for myself. Very expensive, very nice, German, so good quality. It looks good, it looks like a bicycle Mercedes.”*

FIGURE 11: HEIDI'S TRAVEL DIARY SHOWING MODE AND TIME OF TRAVEL (06.11.22-12.11.22)



Heidi said she had become accustomed to feeling pain while moving, *“It hurts when I’m bicycling”*, but missed the freedom of moving her body without pain *“I miss the freedom in my legs, I feel like it’s concrete. I feel like a lump of clay, when I go down, I cannot bend, I don’t miss playing football, but I miss being free to do whatever I want with my legs.”* Her health status is highly dynamic and so are her compensation strategies, as shown in Figure 12 and 13. As an elective selection strategy, the electric bike appeared to play a role in not only allowing her to compensate for her physical condition, but also to maintain her identity as an active person: *“Very sporty, looks solid, it’s white and black. I love it. All modes and then you have a little bicycle guy. I try to do as little help as possible from the little guy and then do sports mode as part of my training. I do 26km/hour which is quite fast”*. Her job often interfered with her pain management plans as she regularly sat at the office desk for long hours even though *“sitting still is the worst thing you can do”*, so she adapted her schedule: *“I can go for a walk and talk to help the pain in my knees when I’m working.”*

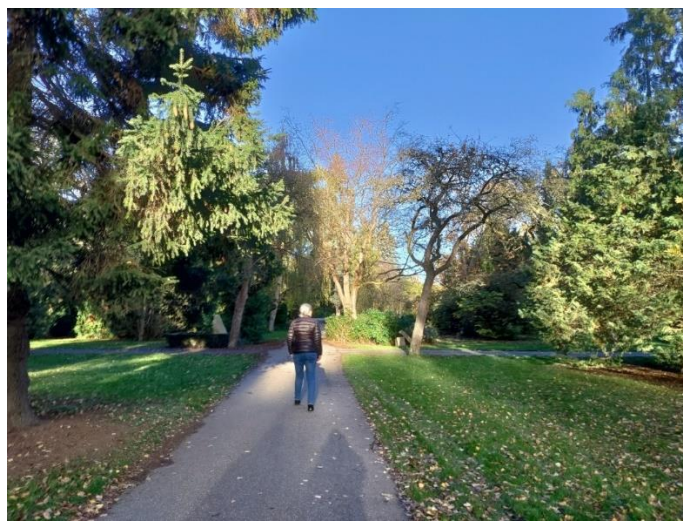


FIGURE 12: AUTHORS PHOTO OF HEIDI WALKING WITHOUT HER LEG BRACE IN ASSISTENS KIRKEGÅRD (05/11/22)



FIGURE 13: AUTHORS PHOTO OF HEIDI IN LYNGBY USING HER LEG BRACE TO RELIEVE HER KNEE (17/12/22)

Despite all of these adaptation strategies to maintain her personal mobility and independence, Heidi did not maintain her participation in team sports such as football because of her perception of herself being too old, *“I don’t like old people playing, I want to be the best. I haven’t run or played football since 1995.”* Comparison to a younger self seems to be an important component in re-defining personal mobility goals and perceptions of independence while ageing, contributing towards Van Hoven and Meijering’s (2019) “redefinition of attitudes and needs” (p.8). This construction of active ageing by comparison with active youth could be interpreted within the relational theory of ageing which asks us to “think about and work with age as being produced in the interactions between different people” (Hopkins and Pain, 2007, p. 288).

Heidi’s role as a leader within the walking group influenced her experience of independence (Figure 14). In this way, the process of ageing is highly intersectional and dynamic, influenced by different “markers of identity” (Hopkins and Pain, 2007, p. 290) and following different rhythms and life courses. Departing from a purely biological definition, the relational experience of ageing is influenced by the expectations and roles we play within our families, our communities, and our societies. Different cultures “decide which identities, ages or generations are prominent in structuring people’s experiences” (Hopkins and Pain, 2007, p.292) and influence how ageing is constructed. The relational theory of ageing would theorise that personal mobility and independence is perceived in relation to the mobility and independence of other social relations such as friends and family, but this study would also suggest that previous physical ability contributes towards perceptions of active ageing.



FIGURE 14: AUTHORS PHOTO OF HEIDI GUIDING THE GROUP AROUND ROSENBORG SLOT (12/11/22)

“Whatever they say you can feel it in your body as you get older” (Margit, 66)

Margit (aged 66) had only attended one of the Caritas walks, but prided herself on being active: biking, walking, and using public transport to attend various social and cultural events. However, she was also hesitant to use active transport during winter because of the environmental conditions. Similar to Heidi, she also constructed her perceptions of personal mobility and independence in relation to her past self: *“because of my age I don’t want to get any trouble with slippery surfaces...when we had more snow and then on the cycle lanes and it gets warmer and frosty again then you can fall over, when I was younger, up again but I don’t want that now”*. This highlights the importance of perceptions of mobility influencing the fear of falling as well as lived experience of falling similar to Eda’s. Margit said that she didn’t trust people who said that age didn’t have to impact mobility: *“whatever they say you can feel it in your body as you get older, so I’m less secure now.”*

This fear of falling is also influenced by her perceived resilience and fitness now compared to when she was younger: *“I was a great runner, I did orienteering for years... I was 7 months pregnant when I won my first competition for orienteering”*. However, when I asked about how she felt about her future mobility and independence, she was optimistic *“I come from a good family, my dad is 90 and he is playing ping pong 3 times a week and he plays bridge, he is going for dance every Saturday, so we are a very active family”*. This again demonstrates ageing as a relational process, which one perceives in relation to other elderly family members. However, Margit recognises that even though ageing introduces new perceived challenges for mobility, her freedom is in some ways much more expansive, *“Now I’ve got the age where I’m enjoying, I don’t have to do anything I just do what I want to do...I’m a pensioner!”*. This quote represents how freedom is the result of not only individual, but social, cultural, and economic resources. Margit and Heidi’s accounts are both accounts of individuals who have high economic capital. Margit spoke extensively about her current travels and how she had lived across the world with her late husband, a professor of politics, while Heidi clearly stated *“I’m well paid, I’ve always been well paid. I’m in the highest 2% in Denmark in women.”* Economic resources provide options for Heidi to compensate for mobility with her electric vehicle and physiotherapy, and for Margit to travel to escape Copenhagen and the challenges navigating limited environmental resources over the winter. An alternative lived experience should be considered to evaluate how low economic and social resource impacts personal freedom and mobility.

“Most people have tension, but I have too little energy” (Frederik, 61)

I first met Frederik on a walk around Gentofte Sø on the 3rd of December within a smaller walking group (6 in total) and noted in my fieldnotes how he often walked alone and rarely spoke to anyone. His twin brother attended the walk and had a more conversational and sociable nature, and Frederik revealed within our interview that his brother had introduced him to the walking group and Gentofte Sø was his first experience. During our first walk Frederik was very quiet, even when I approached him, and seemed to feel awkward in my presence. I tried to speak to Frederik during the next week’s walk around Dyrehaven and Bakken, which was a particularly festive walk because of the Christmas decorations and carol singing in Bakken and the light snow falling as we walked (see Figure 15).



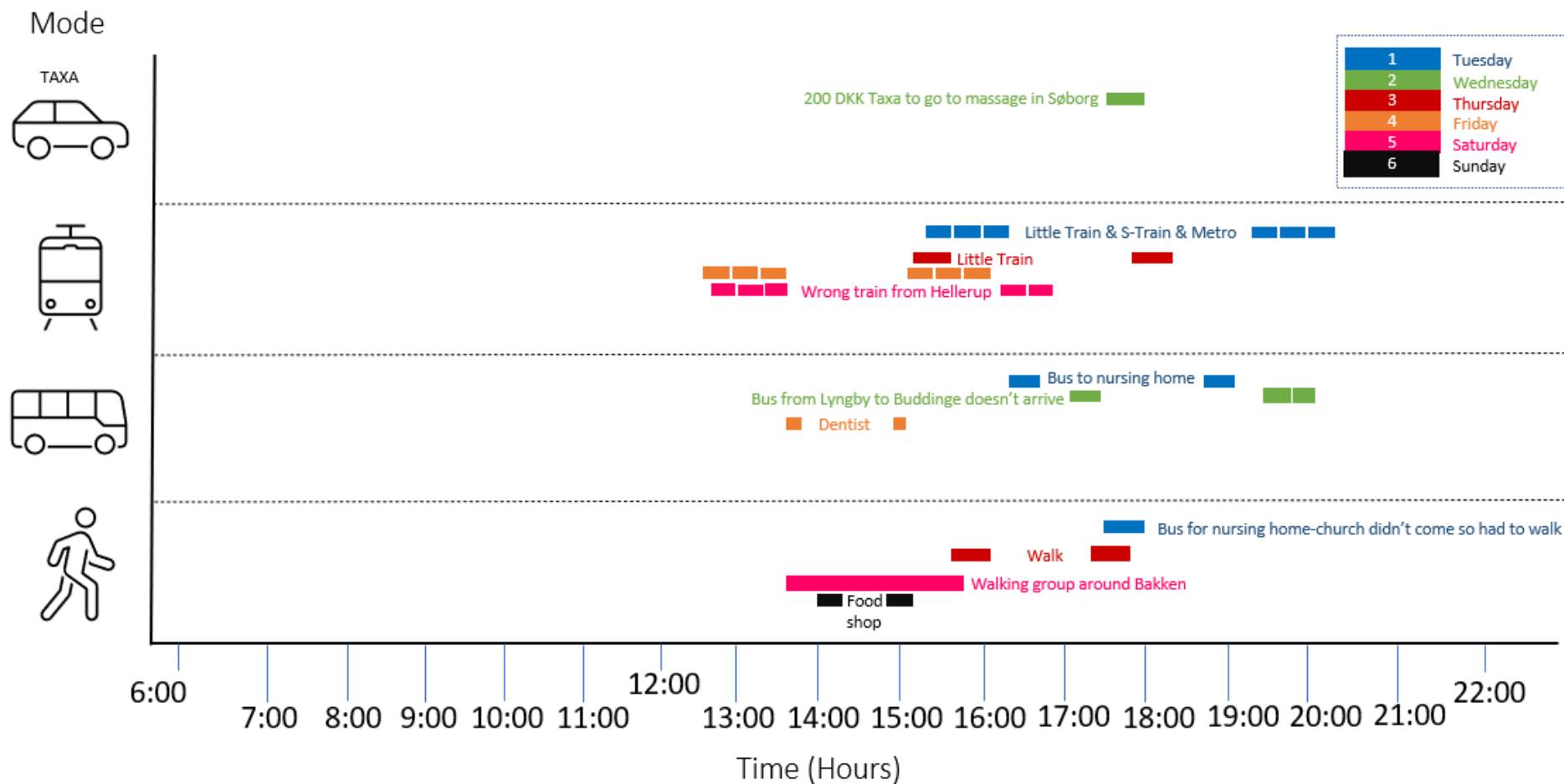
FIGURE 15: AUTHORS OWN PHOTO OF THE FESTIVE, SNOW-COVERED THEME PARK OF BAKKEN
(10/12/2022)

I asked him about his plans for his Christmas, and he replied that he would spend it alone. When I responded to ask if he would spend it with his brother, he said his brother would spend it with his family (wife and children) but that he would not join him. I followed up by asking if he would commemorate the day by making himself a nice meal, and he said he used to, but gave up on doing that in recent years. His tone and manner appeared to be slightly sad, and this interaction gave me the impression that he was lonely and perhaps socially isolated. When I explained the study to him, Frederik seemed wary but intrigued, and was excited to learn that we would have his post-travel diary interview in the café I worked in.

Frederik was one of the youngest participants in the stud (aged 60) but had a pensionskort which he had been given at the age of 23 when he began claiming disability pension. A disability pension is granted to individuals whose “capacity for work is permanently and substantially reduced in such a degree that you will never be able to provide for yourself by working” (European Commission, 2022) Although it is unclear what Frederik’s disability was and I did not feel comfortable asking, disability pension is granted based on an evaluation of education, work experience and health. Frederik stated that he had never learned to drive and had only attended school for one year to study hospitality, having worked as a newspaper delivery boy aged 16 and a gardener when he was 22.

Frederik’s travel diary (Figure 16) shows he uses a combination of trains (S-Trains, ‘Little Trains’ and metro) and buses almost every day. His reliance on trains and buses is a source of dissatisfaction as he states that buses are infrequent or late and this causes issues as his main appointments (health massages, dentists) and social engagements are located far away, in Amager. His reliance on public transport is also challenging as he plans journeys in advance on his computer using the website Rejseplanen and had only a basic smartphone so would not be able to access apps (e.g., Google maps) to replan journeys on his mobile if a bus or train was delayed. He accidentally got on the wrong train when he was meeting the walking group and reported feeling stressed, annoyed, or bored on every journey he took each day.

FIGURE 16: FREDERIK'S TRAVEL DIARY SHOWING MODE AND TIME OF TRAVEL (06.12.22-11.12.22)



Frederik's economic resources dictate lots of his decisions in his life, for example, he does not have as many massages as he needs for his health because he cannot afford them, he does not buy newspapers and only reads free ones despite his love for national and international politics, and he uses a dentist in Amager because they are more affordable than any local dentist. This low economic resource and lack of technology to reroute his travel impacts his mobility decisions, as he expressed frustration and concern at the cost of a taxi (200DKK) he had to take to replace a cancelled bus to get to his health appointment on time. Frederik exhibits several of the characteristics of the 'Restricted' archetype identified by Siren and Haustein (2013): he is highly reliant on public transport, has limited access to technological tools which can assist him (no smartphone) and has a lower education and income than other participants. Yet, Frederik enjoyed and cherished opportunities to walk, stating that he had always loved walking, and used to travel to do walks in other countries, and was glad to have found the walking group to find others to walk with. Active transport clearly plays a critical role in allowing him to maintain freedom and independence, even though public transport sometimes inhibits this. His experiences provide a valuable insight into the factors impacting his mobility, and how his mobility impacts his relationships and ability to maintain freedom, independence, and community while ageing.



FIGURE 17: FREDERIK POINTED OUT HIS LOCAL 'LITTLE TRAIN' DURING OUR WALK AROUND LYNGBY (17/12/22)

“The day before I go to Rejseplanen and look up where I want to go” (Eda, 79)

Technological resources assisted the mobility of every single participant involved in the study and ethnographic observations throughout the weekly walks revealed that people used their phones for wayfinding, communicating with other walkers, and planning their journeys. However, certain people used their phones more than others and the differentiated utilisation of technology results in different reliance and flexibility. Similar to Frederik, Eda also uses Rejseplanen to plan her journey the day before: *“the day before I go to Rejseplanen and look up where I want to go and what time so everything is planned the day before, and I write down in on a piece of paper what time the train is going and where I have to change so I can be there the right time. I have only a little paper but after the travel I put it in the bin, I don’t keep them.”* In addition to this, Eda uses Google Maps as she completes her journey, *“when you put it in the telephone it can show you how many stations until you need to change, very good! I don’t know how they do it because I am not very clever, but I can see I need to wait 4 stations... isn’t that fantastic!”* which can be distracting as she cannot read or do any other tasks while tracking her journey.

Other uses of technology are focused on optimising mobility and freedom, either through discovering new activities or places or utilising wearable technologies to track mobility. Margit uses Google Maps to navigate and discover new events and activities across the city: *“I use Google Maps, and then I see a lot of art things so I go if there’s a free ballet outside, I will ask a girlfriend and we will make an adventure out of it”*. Heidi and Margit use smart watches to track their physical activity, *“I got rid of my apple and got a sports one because I like looking at the computer to see what I have been doing but it’s not notifying me all the time”* (Margit) and set new goals for physical fitness *“I follow my goal every month and I follow whatever it is, could be a number of minutes. It could be kilometres it can be number of activity minutes”* (Heidi). Although this can create high expectations for personal fitness which are opposed to the dynamic and changing experiences of health conditions such as arthritis: *“[apple watch] if I’m really active my goal next month is really high and I’m like no I’m not that active all the time. Because it keeps increasing and I cannot follow”* (Heidi).

How do resources influence modal preference, time, and scales of mobility?

“I walk a lot by myself because I live alone.” (Zilda, 60)

All participants in this study shared two key attributes. Firstly, they all loved walking, which is unsurprising given their involvement in a walking group. Secondly, they all lived alone, having either never married (Heidi, Frederik) or been widowed (Zilda, Eda, Agnes, Margit). When the topic of travelling alone and unaccompanied came up, only Frederik and Eda expressed dissatisfaction and concern about this. Frederik noted how boring journeys were when he was alone, and Eda expressed that it was normally completely fine apart from her concerns about falling alone. Another participant Agnes joked *“When I wrote down ‘no companion, no companion’, I thought well I look rather lonely now [laughing]!”* This lack of spouse or travel companion on most journeys did not appear to deter

any of the participants from walking or influence modal choice, and in many cases, it encouraged people to take their time walking or biking to enjoy and explore new and familiar areas.

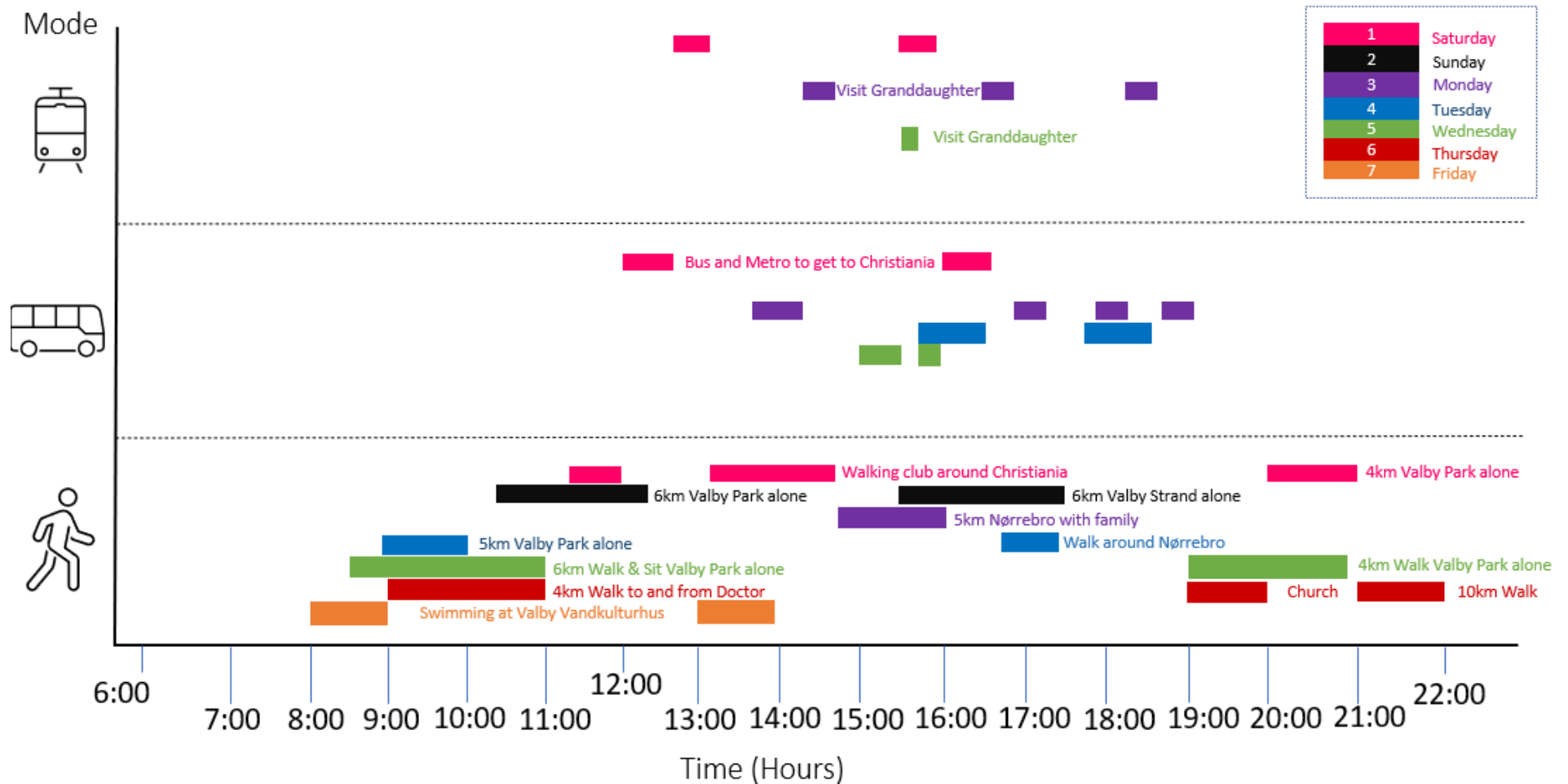
Zilda was one of the youngest members of the walking group at the age of 60 and had been attending the walking group for over a year. She was widowed several years back and had one daughter who also lived in Copenhagen and had recently had her first child. Zilda immigrated to Copenhagen 25 years ago from Brazil after meeting her Danish partner. She used to work as a social worker before leaving the occupation due to a mental health condition. Zilda identified as a curious, confident, and fearless person, and regularly lead the group walks (Figure 18). She attributed her fearlessness to her occupational experiences and her confidence and sociability to her Brazilian heritage and upbringing.



FIGURE 18: AUTHORS PHOTO OF ZILDA EMBRACING THE SNOW DURING OUR WALK IN BAKKEN (10/12/22)

Throughout her interview, Zilda constructed a narrative of herself as being different to other old people in many ways. Firstly, she was confident going out at night whereas *“many old people are afraid to go out they go out in the morning or in the afternoon and stay home for the rest of the day”*. Secondly, she took pride in the fact that she enjoyed living alone and walking and traveling by herself: *“I walk a lot by myself because I live alone. Yeah. And I walk a lot. I do everything by myself. Well, not everything. I like to be with people. I like to be in a group like that. But not. Not in stopping me to do something because I don’t have company.”* Thirdly, Zilda noted that her social calendar was probably much busier than other peoples, and that the week of completing her travel diary was a *“less social week”* than normal, where she would normally go to the cinema, theatre, yoga, swims and sings in several choirs. Her identity as a physically and socially older adult was a clear source of pride and happiness which dominated conversation during her interview and our weekly conversations.

FIGURE 19: ZILDA'S TRAVEL DIARY SHOWING MODE AND TIME OF TRAVEL (29.10.22-04.11.22)



As shown in Figure 19, Zilda's travel diary shows that her most popular mode of transport (within the studied week) was walking, and the modal split is between walking, metro, and bus. Her travel diaries documented between 5km-10km walked each day and the majority of these walks took place locally, around Valby Park. Her primary purpose for walking was exercise and relaxation, and her interviews revealed that she often takes pictures (Figure 20) while walking *"My phone is almost out of space because I take a lot of pictures!"* and sometimes listens to healing music to meditate, but often she just likes to look at the colours of nature around her *"I don't do anything. I just look around. Yesterday, there was this very nice colour red colour"*.



FIGURE 20: ZILDA'S PICTURE OF A BEAUTIFUL SUNSET DURING OUR BAKKEN WALK (10/12/2022)

Familiarity and proximity play an important role in Zilda's mobility. I asked whether she tracks her walking distances because she has specific fitness goals, but she said she doesn't care about how long she walks but she does like to be able to share her updates with her daughter and friends (Figure 21).

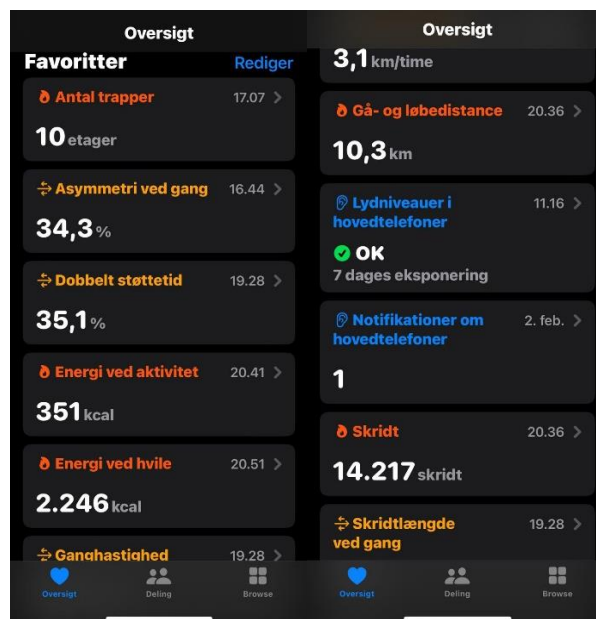


FIGURE 21: ZILDA'S DAILY MOVEMENT RECORDED ON HER PHONE (WALKING SPEED, DISTANCE AND STEP COUNT)

Figure 19 shows that on three out of seven days, Zilda stayed local and walked to access the doctors, the gym (to go swimming) and her local church. The neighbourhood scale appears to be most important for her mobility and she feels she can access most of the amenities she needs by foot. Certain local spots have particular significance for her to connect to nature and to relax, most notably, both Valby Park and Valby Strand: *“my place is Valby strand, they made a little beach, a fake Beach, it's not a real one but it's nice because I could feel the warmth of the wind when you see a lot of movements and the nature is there, it's very nice.”* This connection with nature and frequent walking was one part of Zilda's focus on improving her mental health, following a mental health condition she experienced following a stressful career that she had retired early from.

This love and appreciation of nature appeared to be a common theme amongst all participants (Figure 22). Environmental resources such as a nearby blue or green space played a crucial role in promoting active mobility (walking and cycling) and producing positive mental, as well as physical, health outcomes. Agnes loved Esrum Lake for the nature and the woods, Eda loved to cycle around Damhussøen in Summer and Frederik liked Lygnby *“there is a lot of nature so I like walking”*. Similarly to Zilda, several participants walked around their local nature spot frequently. Margit (aged 66) enjoyed walks in Virum Forest nearby, *“I see a lot of animals because I walk alone [in the forest], I see the fox, the woodpecker and small red robins”* and Heidi loved the beach along Charlottenlund: *“I like to go to the water everyday just to sit on the bench, feel my heart beating.”* Clearly, local environmental resources such as green and blue spaces are important, but the question of what kind of qualities these spaces need, and how they interact with individual and social resources is worth exploring. The positive psychological effects of nature in the city are thoroughly documented (Thompson, 2011). However, understanding how nature can specifically counter-act psychological stresses from urban settings is an area of focus for environmental psychology ever since (Ulrich et al., 1991) first explored how exposure to green spaces assisted the recovery of older adults in care homes following illness. Attention Restoration Theory (Kaplan, 1995) suggests that nature can help people recover from stress and fatigue. The theory states that built environments and everyday tasks often demand us to maintain directed attention which can produce fatigue, and natural environments demand a different type of attention, an effortless one termed fascination (Kaplan, 1995).



FIGURE 22: HEIDI'S PHOTOS OF RESTORATIVE NATURE DURING OUR WALK IN ASSISTENS KIRKEGÅRD (05/11/2022)

Natural settings can therefore be restorative settings, providing they are compatible with an individual's inclinations, for example, someone scared of the sea will not feel relaxed from being near a sea. Attention Restoration Theory has been proven in experimental settings (Martínez-Soto et al., 2013) and in urban settings with older adults (Neale et al., 2019). Electroencephalogram (EEG) studies in Edinburgh showed that moving from a busy urban space into a green space produces relaxation, and that natural settings with colourful nature and wildlife, coupled with a personal familiarity or connection and occasional social contact and interaction during a walk were the most beneficial for mental health (Neale et al., 2020). Margit stated that her walks in Virum forest are nice because she sees the same people often, which provides a feeling of safety for her and them. The findings from this study provide evidence to support attention restoration theory, and to suggest that high quality, local environmental resources might be a crucial driver of active mobility for those living alone and suffering from mental health conditions.

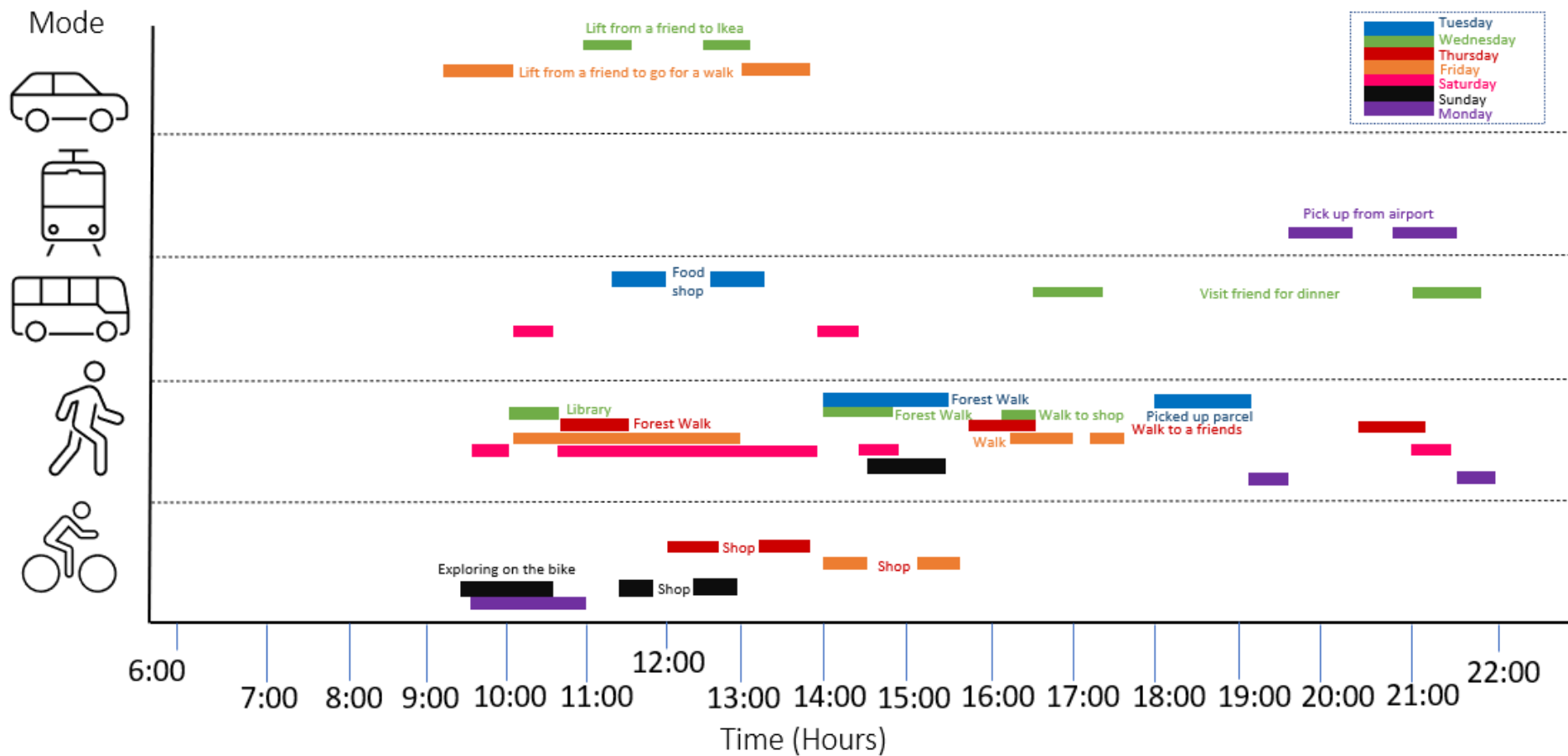
"I don't like to cycle in Copenhagen and I'm afraid" (Eda, 79)

Cycling only featured in Margit and Heidi's weekly travel diaries, although Eda and Agnes said they cycled normally in Summer but not in Winter. Cycling was the mode of transport that stimulated the most debate and discussion during interviews with all participants regarding the topic of safety, comfort, and freedom. Two key themes emerged from the investigation of how resources influence the choice to cycle and the time and spatial geographies of cycling. Firstly, participants who had moved from living in the city centre to a more suburban area noted how there had been a change in the spatial patterns, function, and scale of cycling as a form of active mobility. Secondly, participants who still cycled regularly chose to compensate with new resources to alleviate safety concerns, influenced by care duties and social and cultural resources.

The changing function and spatial patterns of cycling in everyday life were revealed in the accounts of Margit, Agnes, Zilda, and Eda. Margit moved to live in Virum from Østerbro when her husband passed away to be near her daughter, and she liked the local area because there were lots of supermarkets and the nearby forest for walks.

Margit's travel diary (Figure 23) shows that she still uses her bike often to access services locally, *"for shopping, to go to the swimming pool"* and to discover new areas around Virum *"I use my bike for long trips, I leave at 8 o'clock in the morning and then I seek new areas for the whole day, and suddenly I learn something new."* However, she doesn't like to use her bike in Copenhagen because of how busy it is in comparison to Virum: *"I would never bike in Copenhagen now, I find it totally stressful because there's so many bikes. When you're not a young fearless person and not living in Copenhagen, when you start living in an area like I do it's like wow, bicycling with 100 others is hard. Out here is safe for me."* When I probed as to whether it was because the cycling infrastructure was better in Virum than Copenhagen, she said that it was only because of how many cyclists there are and how aggressive they could be. Eda also expressed concern about how busy the cycling paths in the city centre were (being located in Frederiksberg herself): *"I don't like to cycle in Copenhagen and I'm afraid, because when you have bad knees and you have to go up and off quickly, you're not so sure."* She found it especially stressful when compared to her hometown of Bornholm where she learned to cycle.

FIGURE 23: MARGIT'S TRAVEL DIARY SHOWING MODE AND TIME OF TRAVEL (08.11.22-14.11.22)



This dichotomous comparison between ‘busy Copenhagen’ and ‘quiet suburbs and rural’ areas is an interesting finding. Migration from busy urban settings to quieter rural settings clearly impacts continuity in cycling and the ability to stay connected to the city without using a private car or public transport. This could increase the demand for public transport into the city centre from the suburbs as the population of older adults grows and create a perception of Copenhagen as a hostile urban setting for older adults to cycle, fuelling further suburbanisation of ageing. However, this relationship is complicated.

Agnes (aged 70) lived in Nødebo, in the municipality of Hillerød but had lived in Copenhagen (near the Lakes) until 10 years prior when she moved to Egebakken senior cohousing with her late husband. Agnes stated that she preferred cycling in Copenhagen because of how quick and easy journeys were, whereas cycling in Nødebo is not as easy as the distances are so large: *“it is a bit more primitive out there.”* These findings reveal that there are a variety of factors which impact cycling choice, including speed and length of journeys, the population, and behaviours of other cyclists (cultural factors) and personal health. These cannot be accounted for by purely improving environmental cycling infrastructure. Zilda also expressed that the busyness of the cycling paths was very scary and she tried to improve her confidence cycling several years ago by attending a course with the Red Cross near Assistens Kirkegård. After the course, she felt more comfortable cycling but only in her local area *“I am not so good to bike from my place to town but I like to bike close to my place, Valby park.”*

Although both Margit and Heidi still cycle, their interpretation and perception of risk has changed. Margit has adapted her cycling behaviour over the years in two ways. Firstly, she does not cycle when it is snowy, dark (see Figure 24), or icy (loss-based selection) because *“You can fall over, when I was younger, up again but I don’t want that now”* and secondly, she compensated by buying one of the Høvdning neck airbags as a helmet. She begrudgingly sees it as an inevitable accessory for ageing: *“I hate the helmet, we never had anything and I have been falling out and over and bicycling in the forest forever but when you get older you get safer”*.



FIGURE 24: AUTHORS PHOTO OF THE DARKNESS AT 4PM ARRIVING IN VIRUM TO INTERVIEW MARGIT (09/12/22)

Whereas Heidi doesn't worry about falling over, *"I have a lot of bike injuries but I don't think about it, I always live with pain. I had my first accident when I was 15 and I rode directly into the back of a car on my bike"*. However, she does wear a helmet now to set a good example to her surrogate grandchild, Lars, *"I walked into a bicycle shop and asked 'really do I really need one, I mean I'm 56 at this time, do I really need this helmet? And he said, 'I can ask you one question: do you have somebody that loves you?'. That got me"*. Setting a good example also helps her stay in favour with Lars' parents and she uses her active mobility as a defining feature within her role as a care-provider, taking him cycling when his parents are busy and sending them updates: *"We've got plenty of selfies when we are wearing them [helmets]"*. While Heidi's electric bike is an adaptive strategy for her changing health condition and allows her to be a care-provider, Agnes perceives electric bikes as being an inappropriate option for older adults: *"I remembered having read that most accidents with electric bikes involve elderly people, because they don't react quickly enough."*

Understanding how perceptions of busyness, safety and risk influence the spatial scales and functions of cycling in everyday life would be an important avenue for further research, especially considering the optimistic forecasts for active mobility that Siren and Haustein (2013) predicted. If 41.7% (p.140) of Danish older adults want to still be cycling and walking at the age of 80, the cultural and social resources for cycling need to be adapted to create more inclusive infrastructure, whether that be providing more resources to increase feelings of safety or changing 'younger' cyclists' behaviour. Improvements in the built infrastructure alone will likely only improve the cycling experience for those who already feel confident and comfortable cycling and can compensate with additional economic and technological resources, such as Heidi riding her electric bike *"We have these super-cycling paths, all over Denmark. They say Super C and that means a straight through cycle path and you will go through faster. I love it!"*.

"When we moved, we realised we had to use the car." (Agnes, 70)

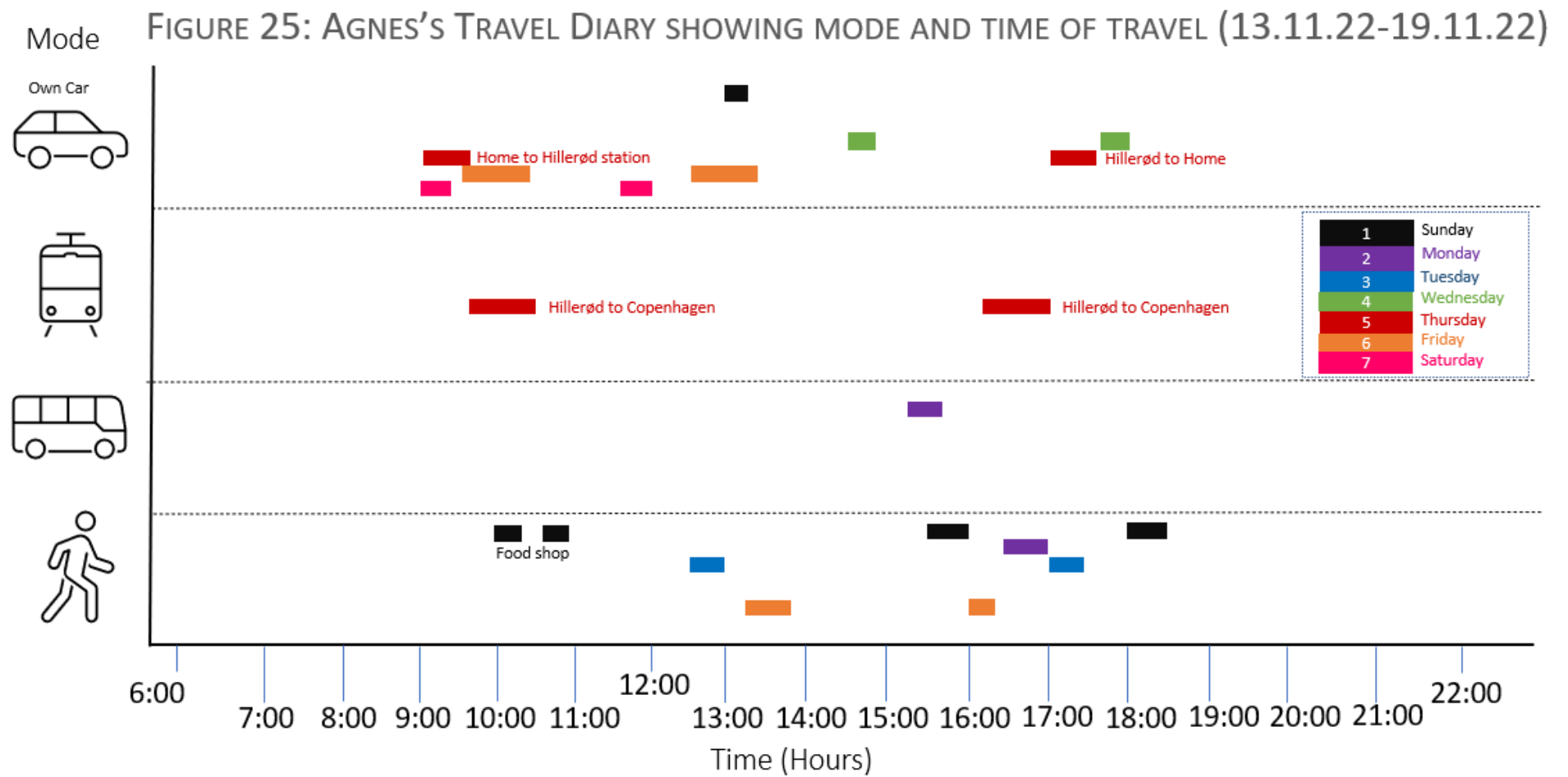
Eda, Heidi, and Agnes were the only participants with access to a personal car, and each utilised their cars for very different functions. Heidi had a company car; Eda used her car to overcome her health concerns and Agnes used her car for more everyday mobility. Their accounts of car-dependency and car use provide interesting and complimentary findings to explore previous trends of car-dependency found within a representative sample of older adults in Denmark (Siren and Haustein, 2013).

Agnes lived in Nødebo within the Egebakken elderly cohousing development, consisting of 29 homes for people aged 50 and older who lived without children. She had moved with her late husband to seek a new lifestyle: *"We moved because we wanted to get old in a quieter place, pollution free...away from the sirens"*. She told me that this anti-urban migration was uncharacteristic of older adults in Copenhagen, *"that's not what people do... most people live in the suburbs and outside of Copenhagen when they have small children, and then when they get older, they move into the city to benefit from all"*, giving the example of her older sister who lived near Rosenborg Slot. Her and her husband decided to move as they found they began craving nature and spending more time at their second home in Jutland: *"I like it very much, also now that I am a widow, I like it there [Jutland], but that is where we found the silence and the nature"*.

Agnes enjoys the sense of community she gains from her neighbourhood, however, she is disappointed with the lack of public transport infrastructure and surprised at how she has become so reliant on her car: *“we had a car but it was unused for 6 weeks because it was much easier to walk, take the bike or use public transport...but when we moved we realised we had to use the car because public transportation outside Copenhagen isn’t very good”*. She said public transport is infrequent (1 every hour) and stops running in the evenings, meaning that it doesn’t allow her to attend cultural or social events in the nearby town of Hillerød: *“the bus stops early (9pm) so it is not good for going to cinema and back”*. When she moved, she had hoped she would not have to keep driving because of the cost, but when we spoke, she had bought a new car last month *“when you live in Copenhagen it is not necessary but when you live outside it is”*.

Agnes revealed that the process of writing a travel diary confronted her with her car dependency: *“I used to think I use public transport rather often, but I didn’t”*. Figure 25 shows that she drives to Hillerød several times a week to catch trains into Copenhagen and to volunteer in the clothing shop, Mødrehjælpen, which she got involved in following her husband’s death. During my time in the walking group, I got to know Agnes well and we shared different cultural activities as part of the walking group, including a walk around Christiania and Rosenborg Slot. She loved art and culture, specifically the work of Hammershøi which she had a private tour of in the Statens Museum for Kunst. Agnes regularly visits Copenhagen to see her sister or go to galleries or social events, especially in December which she said was a socially packed month *“lots of dinners and coffees and Gløgg ... because it is so dark and cold”*, but she never drives into the city centre because of the cost of parking. Instead, she drives to Hillerød station and parks before getting the S-Train into the city centre. This rhythm of mobility is restricted by the cost of travel at different times of day: *“You cannot travel between 7 and 9 in the morning”* and her fear of coming back to her car in a quiet and dark parking area at Hillerød station late at night, meaning she only leaves the house between 9am and 6:30pm.

Agnes’ experiences reflect the experiences of many older adults in Europe who choose to stay at home in the morning and evenings (Bromley et al., 2000; Mollenkopf et al., 2004; Berg et al., 2015). These behaviours are not necessarily an issue, but their driving factors are important to consider, as these can result in cultural and social exclusion and provide a barrier to accessing urban services ranging from healthcare to theatres and cinemas (Eldridge and Roberts, 2022). One example is the popular Kulturnatten which takes place in Winter every year in Copenhagen, providing access to a range of museums and shows for reduced or free prices between 6pm – 12 pm (midnight). If cultural events take place at times which are considered inappropriate (financially or for safety reasons) for older adults, events will become inaccessible to older adults. When I asked whether Agnes missed living in the city centre, she said she missed having access to all of the cultural resources and had missed the hustle and bustle more since her husband had passed: *“You could hear the people around you, all the time. In a way I liked that, and the shops.”*. Interestingly, she also felt safer when she lived in the city *“I felt safe living in Copenhagen but there wasn’t as many people as possible [back then], and there were rather many policemen. We lived near a police station so that makes a difference of course. I feel there are not so many anymore.”*



Siren and Haustein (2013) hypothesised that car-reliance could be attributed to certain cultural values, including this generation being the first to experience lifetime automobility. Heidi and Agnes' attitudes reflect that car-dependency is important for economic responsibilities (jobs and volunteering contributions) and is also attached to certain cultural values such as a freedom and autonomy. However, although having a private car does offer freedom to Agnes, it also compounds a financial burden and introduces time restraints for her mobility, therefore, limiting her ability to attend social and cultural activities. Similarly, Eda experiences a confined mobility schedule because of her car-dependency coupled with challenging environmental resources. Improved public transport infrastructure could address these issues, while also alleviating the concerns about how highly car-dependent groups, called Independents, might encounter future challenges following driving cessation (Siren and Haustein, 2013). The small and female-centric sample does not allow us to infer any gender differences regarding car-dependency, however, Heidi's travel with Lars demonstrates "informal mobility caregiving" (Berg et al., 2015, p. 143) using public transport, rather than a private car. As the municipalities strategy is to improve the accessibility of services which support the changing needs of older adults and provide continuity in later life (Københavns Kommune, 2019), strategies which provide more dynamic pricing of parking (for Eda) and decentralise cultural activities, adjust the timings of events or provide transport for those concerned with safety travelling alone at night, would increase the inclusivity of mobility and cultural infrastructure.



FIGURE 26: AUTHORS PHOTOS FROM THE GROUP TOUR OF ROSENBORG SLOT OG KONGENS HAVE (12/11/22)

"Very good transport system, every 10 minutes, fantastic, wonderful!" (Eda, 79)

Most participants in the study frequently utilised and praised the public transport system in Copenhagen, espousing its reliability *"Here we have very good transport system, every 10 minutes, fantastic, wonderful!"* (Eda), convenience and comfort *"I like to take the public train or bus and metro, it is much easier and you can relax"* (Eda). The affordability of public transport was more debatable, with those aged 65 and over feeling that it was very cheap such as Margit, *"For public transport I put 500 DKK in each month and I'm using the public transport which I find fantastic"*, Eda *"public transport is very cheap here in Denmark, often I only pay 12DKK for a journey so it is so easy"* and Agnes, *"An ordinary ticket costs 45 DKK but I have bought a card for 3 months and when you are 65+ it costs 900 DKK, and that is fine with me"*. However, Zilda found the monthly ticket cost too much: *"I pay every*

time but I could. I had a month ticket but it was too expensive, I changed again." Zilda's account demonstrates how cultural and social resources influence the modal choice, scale, and time of travel of her travel.

Zilda's time geographies are influenced by her care duties to her daughter and granddaughter, and I knew from separate conversations that the recent birth of her granddaughter meant her daughter often needed assistance and the timings of these caused some complications for Zilda. Public transport was the primary mode of travel between her home in Valby and her family living in Nørrebro. She once needed to travel to her granddaughter late at night and her reliance on public (rather than private) transport meant she had to travel alone and was slightly worried. She optimised her resources using technology (location sharing) to reassure her daughter and mitigate her safety concerns. Secondly, as shown in her travel diary, she often travels on public transport at peak times to see her daughter. This means that Zilda will not receive the off-peak public transport discounts when she is over 65, which she identified as a flaw in the transport system for older adults providing care for family and reflects a societal tendency to assume that mobility centres around leisure for older adults.

Zilda's account supports Berg et al., (2015) assertion that older adults travel is often influenced by the needs of children, grandchildren, and older parents, which can create "coupling constraints" (p.7) between a person, and their relatives. When we conceive of mobility as a means for Zilda to travel to see her daughter to provide care, and we couple their mobility patterns we can envision a very different time-geography and scale of mobility. Furthermore, these coupling constraints to younger and older family members are rarely accounted for when considering household care regimes, where heteronormative spousal relationships are assumed to be the main composition of care networks.

Similarly, Frederik's reliance on public transport and low economic resource is challenging when coupled with his social commitments to his family in Amager. He visits his dad in a nursing home in Amagerbrogade once a week with his mum and brother, and then travels to a church 1km away from the nursing home with his mother and aunt for an affordable dinner. The church serves a meal for *"only 20 DKK, very cheap and we get food, a drink, soda or a beer or red wine and after that some dessert. You cannot do it at home for that money."* This social occasion is a significant event in his week, but he stated that the bus between the church and the nursing home didn't arrive in the week prior, and he had to walk while his mum and aunt cycled. This meant he was late for his dinner, which was distressing and annoying, particularly as he wishes he could spend more time with his family, *"they are far away so I cannot see them as much"*. Frederik's reliance on public transport provokes several considerations. Firstly, it signals the need to consider inclusive communications and signage around public transport infrastructure. Frederik plans his journey in advance so cannot replan the route dynamically on his phone, which makes it harder to adapt when changes happen. He did not appear to be confident communicating to strangers to ask for help, compared to Zilda who would easily ask for directions or advice, *"I use my phone I use the people. I ask a lot because I am very good at communicate with people."* Frederik was excited about the opening of the Light Rail (letbanebyggeriet) from Lundtofte to Ishøj because it will connect Lyngby more reliably than buses, therefore, the design of this network should consider inclusive signage for accessibility.

Secondly, this finding shows the intersection between housing, care, and mobility domains. The nursing home of his father being located on the other side of the city prevents interaction between Frederik and his parents. The municipality should consider the care regimes of older adults living in nursing homes to provide solutions, whether they be nearby housing or mobility solutions (like a

specific bus serving the nursing home), to ensure that social resources are not spatially fragmented by the rise of specialised care infrastructures (Københavns Kommune, 2019).

Regarding the range and accessibility of services, Margit expressed that she felt confident that public transport would adapt to meet her changing needs as she ages *“I feel I can go for the next 30 years with everything, and it can actually adapt to if I’m in a wheelchair, its adapting to what kind of lifestyle I have you just have to let them know”*. She told a story of a friend’s mum who navigated Copenhagen in her wheelchair using the flextransport service, and although the service sounded convenient and affordable, she reiterated that it would rely on communication and co-ordination, highlighting how personal confidence is crucially important to maintain independence and personal freedom in old age.

These findings suggest that mobility is strongly influenced by economic, social, cultural, and individual resources when negotiated with environmental resources. Particularly for the most economically and socially disconnected people, mobility is a crucial component maintaining their connection to social networks and their personal freedom. For those with care duties, mobility is not only a means to travel to and from their dependents, but active mobility defines their identity and role within these care regimes. Economic resources can still be a highly limiting factor for mobility and independence. This provides an interesting perspective within a social democratic welfare regime which attempts to provide universal access to certain services (discounted travel, pension, and disability benefits), but experiences technological and social marginalisation affecting independent mobility and freedom.

How can urban mobility infrastructure contribute towards community for older adults?

Community was constructed at multiple scales and within various spaces for participants in the study. For some, family were a primary source of social resources. For others, their housing arrangement provided several cultural and social resources that they needed to feel a sense of community. Civic engagement within various institutions also created a sense of belonging within the urban community. All participants constructed communities at both local and city scales and these demands for mobility to facilitate community within proximity and distance will be explored. Discussions about how older adults construct community are considered particularly relevant for this sample of older adults, as all participants live alone, having been widowed or never married. Therefore, this sample provides an alternative contribution to existing studies, which have been critiqued for biasing “Barbie and Ken ageing” (Siren and Haustein, 2013, p. 137), described as a tendency to study heteronormative, middle-class, married older adults.

“So you really don’t have to spend time outside [cohousing], but I like to.” (Agnes, 70)

Two participants lived within specifically designed cohousing for older adults. Agnes lived within Egebakken (Nødebo) while Eda lived in Frederiksgården. Agnes accessed the majority of her social and cultural resources within Egebakken, noting the frequency of activities: *“On Monday we have dinner club [in communal kitchen], Tuesday we have gym, Wednesday we have cinema, Thursday we have a*

group walk in the woods.” Agnes liked the design of the cohousing because it caters to residents’ cultural needs, as well as their physical and social needs: *“a library, a cinema, a literary club, lectures from the university of Aarhus”*. Contrarily, Eda found that Frederiksgården did not provide many social or cultural resources for her. Frederiksgården was one of the first housing models built specifically to provide affordable accommodation for self-sufficient older adults. Den Selvejende Institution (self-owned institution) is considered a legacy institution designed in the 1950’s to promote Fællesskab within housing through the provision of leisure, restaurant, and exercise spaces (frederiksgaarden, 2022). A large proportion of the population of Frederiksgården are students (primarily situated in Block C), due to the affordable and small size of the apartments. Eda lived in Block B, dominated by two-room apartments, with access to shared facilities such as a restaurant, exercise centre and laundry. The housing block had a communal restaurant where all residents can eat and socialise, however, if residents want to abstain from eating at the restaurant, they still have to pay some fees. Eda found this model of socialising quite limiting. Firstly, Eda liked to cook and entertain guests but the kitchen in her apartment was too small *“everything is so small, the toilet and the kitchen, and I have a little bedroom here, such a little bedroom.”* Secondly, if she wanted to have guests join her in the restaurant downstairs, she had to know far in advance: *“I can invite people down there if they tell me they come 3 days before”*. Finally, she expressed dissatisfaction at the exercise and leisure classes offered: *“Mondays there is a singing evening, gymnastics for old people [shows some chair yoga positions] and I think it’s so good for them but I don’t do that [laughing]. I realise I am old when I do that.”* Eda sometimes uses the exercise bike in the gym, but she travels into town to go to swimming and dancing classes and have dinner with friends.

The cohousing inhabited by Eda and Agnes lays testament to the collaborations formed between the Social Democratic Party and the city council in the 1920’s (Kvorning, 2002) and the later focus on housing as the primary urban planning domain during the inter-war period (Kvorning, 2002). These rational ideas of modernist planning could be influencing how appropriate these spaces are for their residents today. These two varied accounts suggest that the design of elderly cohousing needs to be well suited to the individual social and cultural preferences of older adults. Therefore, even when cohousing provisions are well suited to the needs of residents, most residents will still need good mobility infrastructure to access the city centre as a means to maintain their own social networks and satisfy their desire for diverse cultural resources and not just ‘old people activities’ like chair yoga.

Another motivator for leaving the local area is the desire to contribute to society through volunteering. Agnes noted that because of Egebakken’s provisions, *“you really don’t have to spend time outside, but I like to.”* Agnes is a volunteer within an organisation called Mødrehjælpen [Mothers Help]: *“we have a second-hand shop, and usually (but not this week) I am there once a week and I take the bus to and from, and that is in Hillerød”*. Agnes’ involvement in Mothers Help started when she was widowed: *“Shortly after my husband died, I saw a notice in the local paper that Mothers Help was opening in Hillerød. I wanted to have some fun, see children who were happy.”* When I asked Agnes about whether it was annoying to get the bus, she said she didn’t mind because she co-ordinated with the other volunteers the day before to plan her journey and be flexible around the needs of the shop, *“it’s like a job so you do what needs to be done - making families happy”*.

These findings have implications for debates about the desirability of bringing opportunities for civic engagement in closer proximity to older adults housing. Solutions across Copenhagen and Denmark are focused on providing mixed-use zoning to bring older adults close to other populations who “need

a helping hand in everyday life” (Københavns Kommune, 2019, p. 33), such as the Orestad development (Prip, 2015) and Sirius Seniorbo (Esbjerg Kommune, 2022). However, Agnes’ account suggests that the act of commuting to a space for activities or volunteering might provide a greater sense of purpose, contribution, and inclusion within society, mimicking a commute to work. This type of mobility-related continuity could also be important for contributing towards a sense of belonging within society and building a sense of community similar to a ‘workforce’. Agnes’ account is not purely anecdotal, it represents a trend seen where newly widowed or widower individuals tend to increase their reliance and dependence on volunteer activities to cope with bereavement (Li, 2007; Donnelly & Hinterlong, 2009). Civic engagement enhances their self-worth and reduces depressive symptoms, providing participation is reliable and consistent over several years (ibid.,). The municipality has signalled a clear strategy to promote more “active citizenship” (Københavns Kommune, 2019, p.29) and “volunteer communities” (Københavns Kommune, 2019, p.29). Therefore, the priority for the municipality should be to support and sustain existing institutions which have a large workforce of older adults and identify solutions to any problems they might experience with maintaining their participation as their physical health, economic or social resources change over time.

“I found the different churches through Facebook” (Zilda, 60)

Zilda moved from Nørrebro to Sydhavn one year ago and had previously moved from Odense to Copenhagen a year prior to that. She described how she had not struggled to build new social connections in Copenhagen because of her connection with the church. When I asked about whether she missed Odense, she said that COVID had fractured her social networks in Odense before her move *“COVID came in 2020 and my friends disappeared I was alone and just walk and walk”*, and she had found it easy to build new friendships and find new social activities due to existing cultural resources. When she arrived in Sydhavn her first attempt to meet neighbours was through her local church. She attends Sydhavnskirke weekly but was disappointed by their lack of choir. She sang in a choir for 20 years while living in Odense and so decided to compensate by finding churches across Copenhagen on Facebook and attending a number of masses, and open evenings (homeless kitchens) in different churches (Domkirke and Helligenskirke) to cook, eat and sing with other people: *“I was singing in my church in South harbor. Yeah. Sydhavnskirke. And Frederikskongenskirke. Yeah. They have sing along, once in a month, the last Wednesday in the month... We sing four or five songs and eat together.”*



FIGURE 27: AUTHORS PHOTO OF A CHOIR PERFORMING DURING OUR BAKKEN WALK (10/12/22)

The church also plays a crucial role in Frederik's weekly dinner routine with his mum and aunt and Agnes also expressed that she loved the churches in Copenhagen and frequently visited with her sister, leaving our interview to attend a mass at Marmorkirken in the city centre. This trend of religious affiliation could be attributed to the fact that Caritas Gåklub is organised by Caritas which has links to the Catholic church (Ubi Caritas, 2023). Margit mentioned that this put her off participating *"I don't love the connection between the walking group and the catholic church, and I'm not too happy about that"*. Although there are no explicitly religious practices in the walking group, I often found myself (an atheist) discussing religious and spiritual topics with various members, especially when we visited churches during the walks (Figure 28). Caritas Gåklub receives funding from the Danish Palaces and Culture Agency which is housed under the Danish Ministry of Culture (Kulturministerie) (Ubi Caritas, 2023) and this funding allows free entrance to various exhibitions and cultural institutions for attendees. Therefore, this presents an interesting potential avenue of exclusion as participants who do not feel comfortable being affiliated with a religious organisation cannot benefit from the free access to cultural resources through Caritas. This posits an important avenue for future research which age-friendly studies have not yet identified: to what extent do religious institutions provide cultural and social resources for older adults, and therefore, what is the role of religion within age-friendly practices in a social democratic welfare regime?



FIGURE 28: AUTHORS PHOTO INSIDE LYNGBY CHURCH DURING THE WALK AROUND LYNGBY (17/12/22)

“This is simple, so why not? I walk anyway and want to walk with people.” (Heidi, 64)

Although religious affiliation was one motivation, and deterrent, for participation in the walking group, there appeared to be several others. Weekly participation revealed four key individual and social benefits that participants gained. Firstly, the walking group provided an opportunity to meet new people and walk with company. There were very few members who attended every week (2 or 3) but most only attended 1 or 2 walks during my time, and the frequent members and walk leaders (Heidi and Agnes) were welcoming and inclusive to new members so the walking group did not feel like a close friendship circle, but more of an ephemeral walking and socialising experience. Due to this dynamic of transient members, conversations each week were dominated by observations, noting and story-sharing about the environments we walked in, rather than updates about current events.

Therefore, the second motivation for participating was the opportunity to share and recall personal stories. For example, during one walk around Ballonparken, a participant called Alma spotted a treehouse (Figure 29) which prompted a long story about how she had adored playing in a treehouse as a child with her brother, and how surprised she was to see one being used now because parents were so wary about safety nowadays. This suggests that the walking group provides a valuable opportunity for narrative storytelling, an activity which has attracted significant interest in age-friendly policies internationally. Narratives and stories contribute towards the construction of individual identity and shared social relations (Fivush, 2019; Somers, 1994) providing opportunities for self-reflection, memory recall and resilience in older age (Lind et al., 2021). Casual sharing of stories may feel mundane and arbitrary to those who frequently socialise, but opportunities to share and recall memories and stories are not always available to those who live alone (Myerhoff, 2019).



FIGURE 29: AUTHORS PHOTO OF A TREEHOUSE IN BALLONPARKEN (19/11/22)

Thirdly, many of the locations for walks were sites of cultural or natural significance, therefore, walks were often about appreciating nature, architecture, and archaeology and also sharing knowledge about these subjects. Participants relished the opportunity to re-visit Copenhagen's monumental buildings and squares spanning centuries of architectural history (Larsson and Thomassen, 2003). One member of the group, Goda, was very passionate about trees and plants and enjoyed educating the group about the local species. After a walk around Assistens Kirkegård, she uploaded a photo to the Facebook group (Figure 30) of the species we had spotted with the caption: *"A sunny and beautiful day. Had to skip the coffee at Mokkaeriet afterwards but hope the rest of you enjoyed a good coffee and cake. The amazing and peculiar trunk Pippa is investigating is called a Tibetan Cherry tree."*



FIGURE 30: PHOTO UPLOADED BY GODA OF THE AUTHOR ADMIRING A TIBETAN CHERRY TREE (05/11/22)

This echoes findings in the literature. In her extensive ethnographic research conducted in a post-industrial semi-rural village in South Yorkshire (in the UK), Degnen (2016) found that older adults who had lived in the village exhibited a rich, detailed, and highly comprehensive knowledge about historical social, cultural and landscape heritage which was unparalleled by any archival history. This opportunity to share expertise and knowledge can improve confidence and recreate a feeling of integration and inclusion within society and community (Myerhoff, 2019). In addition, this example demonstrates the complementary value of social media and online spaces for strengthening the benefits of civic engagement and community. The Facebook group contains thousands of photographs, observations and well-wishes shared by members, detailing the extensive experiences and knowledge shared over the years. The urban history shared with me by participants during the walks was as extensive as academic accounts that had accompanied our studies in Copenhagen (Larsson and Thomassen, 2003).

However, storytelling is never a neutral or non-conflictual process. People assign different attachments and values to different locations, and certain walks revealed the differing attitudes towards sites of historical or cultural significance. For example, a walk around Christiania stimulated lots of debates and revealed different members views towards drugs (Figure 31). This walk ended at Vor Frelsers Kirke (Church of our Saviour) where one member recalled an urban myth about the architect killing themselves, which another member quickly rebuked.



FIGURE 31: AUTHORS PHOTO OF CHRISTIANIA ART GALLERY AND VOR FRELSERS KIRKE (29/10/22)

Finally, the process of walking around familiar locations provides a feeling of comfort and belonging. The locations for walks were chosen by the walk leaders but Heidi explained that they repeated the same locations most years, alternating only when a new member wants to share a specific place. This could be argued to strengthen place attachment, defined as “a collective, relational and embodied process, caught up and experienced via social memory practices and sensorial, bodily knowledge” (Degnen, 2016, p.1645). For example, as we walked and noticed the sounds and sights, participants would share about how they had noticed neighbourhoods change over the years: several participants talked about the noticeable change of Nørrebro after the *tabula rasa* urban renewal strategy employed in the 1980’s (Kvorning, 2002). Therefore, walking groups can be considered one way of mapping the noticeable changes in urban landscape emerging from gentrification and urban renewal: a way of acknowledging how older adults experience urban change when ageing in place (Savage et al., 2002).

Certain aspects of the walking group suggest it could be categorised as one of Putnam’s (1995) examples of civic engagement: “the features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit (p.2). However, association with the walking group is neither explicit nor regular. The only membership required is to join the Facebook group and indicate your attendance at a walk. The walking group was not a defining feature of any

members identity: it did not dominate interviews or conversations with participants. Juxtaposed against Agnes' association with Mothers Help or Zilda's with the church, the walking group might be viewed superficially as an exercise class, rather than a social or cultural resource or an example of civic engagement by Putnam's definition. However, weekly observations and ethnography revealed that the walking group served a plethora of functions, providing some opportunities for community that the municipality had sought to focus on addressing (Københavns Kommune, 2019): reducing loneliness by providing company (Frederik) and providing opportunities for social interaction for those undergoing life transitions, such as the newly retired (Zilda, Margit) or those suffering bereavement (Margit, Agnes, Zilda).

Additionally, the walking group also represents an under-exploited opportunity for the municipality to satisfy its tertiary goal of providing spaces for intergenerational and diverse social interactions. Caritas Gåklub could aim to attract a more diverse audience, and several participants noted that they wished I would bring my international friends along to the walks. While sharing social histories benefits older adults to bind "people together and creates (for some) a sense of belonging" (Degnen, 2016, p.1662), this process of knowledge exchange, storytelling and noting changes in the urban fabric can also provide an enriching and enlightening experience for newcomers in the city seeking to understand the palimpsests of Copenhagen through the perspective of personal geographies. Given the plethora of benefits experienced by attendants of the walking group, it would be worthwhile investigating any exclusionary barriers which might prevent participation. The comment of one participant suggested that the association with the catholic church might present a significant exclusionary barrier, a comment that Heidi was surprised to hear when I discussed this with her at a later walk. Therefore, a survey on the Facebook group or from the municipality could seek to understand barriers for inclusion. Additionally, the municipality should evaluate the feasibility of supporting a range of walking groups offering secular and religiously affiliated communities to cater to the diverse needs of those seeking community in Copenhagen.



FIGURE 32: AUTHORS PHOTO OF THE GROUP DURING THE WALK AROUND BALLONPARKEN (19/11/22)

Discussion of limitations and suggested future research

The methodological and conceptual limitations of this research provide a wealth of potential avenues for future research. Methodologically, this study did not seek to find a representative sample but sought to find a wide range of perspectives through sampling. The most obvious limitation with this sample was that all older adults were fairly active and independent, capable of walking for long periods of time. In addition, this thesis did not include anyone over the age of 79 in the study. This is an important limitation which limits the applicability of these findings to the whole population of older adults and suggests a critical next step for future studies. Additionally, this study paints a fairly optimistic picture of life after bereavement, where individuals seek out new opportunities for re-integrating and forming and building new social networks, which cannot be representative of every individual's experience. Seeking out and understanding how less active and more socially isolated older adults navigate mobility could be best achieved (feasibly and ethically) through research coordinated with social or health services (Buffel et al., 2012). Even within this sample of older adults, most participants had sufficient access to high quality environmental resources (lakes and parks) and felt confident walking alone. It would be interesting to study if walking is correlated with proximity to green and blue spaces given that people mentioned this was one of their main motivators for walking.

The findings of this study would have been enriched by longer participation within the walking group, with some studies noting that a year is the appropriate amount for ethnography conducted overseas (Manning, 1997). However, it is difficult to measure how immersed one really is within the field. Eight Saturdays were spent walking and talking with participants, some walks provided fruitful data about mobility which were scribbled in my notebook, others were merely pleasant and peaceful walks with friends. All of these interactions in the physical space, and the monitoring of the Facebook group, contributed towards my interpretations of the data. Therefore, acknowledging this study as being limited due to the length of immersion feels arbitrary. However, the findings would have been significantly enhanced by a comparison of the same participations across seasons, as this appeared to be a strong determinant of modal choice.

The choice to use thick descriptions of each participant, setting, walk and theme studied aimed to bolster the transferability of the findings from this study (Baxter and Eyles, 1997). Thick descriptions aimed to situate this knowledge, within a particular place, group of people, season (Winter) and socio-political context (social democratic welfare regime). However, the choice to present results as thick descriptions introduces an additional ethical concern. Providing detailed accounts of individual experiences is a powerful method for communicating how differing individual and structural resources have tangible impacts on quality of life. This type of description demonstrates how certain inequalities can be compounded. However, every analysis requires synthesis and distillation, which means that the final results inevitably represent only a fragment of this individual's life story. This presents a challenge when considering how to ensure credibility, considered one of the core quality criteria for qualitative research. Instead of seeing accuracy as the positivist research paradigm subscribes to, interpretivist research should seek to ensure that "the degree to which a description of human experience is such that those having the experience would recognise it immediately and those outside the experience can understand it" (Baxter and Eyles, 1997, p.513). One potential avenue for ensuring credibility is to allow participants to read the final work, however, when work interprets an individual's account as that of someone who is lonely or isolated, would a participant really want to recognise

themselves in this work? This limitation proliferates qualitative research which examines the experiences of marginalised groups (Scharf et al., 2002).

Despite these methodological limitations, one of the biggest strengths of this study was the triangulation and ability to compare different data and interpretations across each other. In several instances, this reduced the risk of misinterpretation due to my lack of local knowledge, as I could ask for clarification within the interview following the travel diary and revisit the travel diary during transcription of the interview to clarify and understand complex mobility journeys. This combination of methods has proven to bolster transferability and would be particularly important for studies interested in understanding the multi-modal journeys of more 'flexible' or 'restricted' travellers.

Conclusion

Reconceptualizing mobility through the values of freedom and community provided a more holistic and situated understanding of the diverse needs and expectations of older adults in Copenhagen. In comparison to approaches which focus solely on interrogating the relationship between environmental and individual resources, this approach integrated a consideration of structural factors impacting individual decision-making processes. In doing so, several significant and novel findings emerged.

Firstly, this study did find the relationship between environmental resources and individual resources to be an important determinant of mobility behaviour. Selection optimisation theory (Baltes and Baltes, 1990) was a valuable theoretical lens through which to understand this, proving that SOC theory can be applied to understand different behavioural strategies of older adults, and not restricted to the study of household activities (van Hoven & Meijering, 2019). Thinking about the selection of personal goals and tasks as being entangled within personal and societal norms and expectations for ageing provides a more situated understanding of the needs of a current cohort of older adults, while being cognizant that these will change. However, both environmental and individual resources were highly dynamic, especially compared to other resources such as cultural or economic resources. 'Supportive' environments (Brookfield and Tilley, 2016) can quickly become dangerous with changing weather in Winter (Hjorthol, 2013) and the physical and mental health of an individual can change within a split second (for example, after experiencing a fall). Therefore, planning interventions which focus on improving environmental infrastructure are perhaps misguided. Given the dynamism of environmental conditions and health, it might be more effective to think about providing social resources to support individuals with optimising their own independence and mobility. Social resources could manifest in a range of solutions, including a mobile alarm for those driving in dark or icy conditions, or a buddy system within cohousing to allow people to walk together to a nearby bus stop in wet or icy conditions.

Secondly, considering how mobility occurs across different modes, different spatial scales and different temporal rhythms revealed cultural and social exclusion. Older adults are drawn towards living in cities for the same reasons as urban residents of every age: to benefit from a rich and diverse range of cultural, social, and environmental resources. Participants in this study relished the museums, parks, markets, stations, and palaces which make Copenhagen famous. Kvorning argued that those

who live in the suburbs of Copenhagen and come to visit the city centre consume the city in the same way as a tourist, “for most of the population it is a cultural compression chamber” (Kvorning, 2002, p. 135). This thesis has proved that reality is much muddier. Indeed, the city centre serves as an “art event city. One goes to town on a Saturday to experience, to be part of city life” (Kvorning, 2002, p. 135). However, this thesis has illuminated the everyday reality of ageing in the suburbs, that which “constitute[s] the experiential world of most Copenhageners” (p. 135), finding that freedom and community are constructed within these spaces and connected to other scales including the city scale. Accessibility and circulation between the city centre and the suburbs facilitate the process of reproducing and contesting place attachments and shared histories, connecting sites for knowledge exchange and embodied practices of remembering and exchanging.

However, environmental, and economic resources sometimes hinder their ability to participate in the rich urban life within the city centre. Cycling was found to be both a culturally significant activity and a strategy for pain management in older age (lower impact than walking). However, older adults’ continuity of cycling in this study was highly localised and seasonal because of the perception of the city centre as too busy and too scary for older adults. The timings of discounts on public transport and city-centre cultural events could produce exclusionary practices, creating a differentiated experience of city life. In addition, this study showed that there was an appetite and mutual benefit derived from intergenerational interactions, which are not currently being realised to their full potential. A focus on not only providing new social and cultural resources which encourage intergenerational interactions but promoting current resources to a wider audience (considering timings and accessibility) would promote wide-ranging social inclusion.

Finally, freedom of choice for how to move around the city and how to construct a sense of community appears to be highly influenced by economic resources. And when people do not have sufficient economic resources, coupled with limited social resources to compensate, freedom of choice is limited. Comparing the accounts of Zilda, Frederik and Heidi reveals that their participation within familial and non-familial care duties is influenced by their economic and technological resources. Heidi can be adaptable to look after Lars, biking, walking, and taking the train and bus with him. Zilda can travel at difficult times of day to help her daughter with her new grandchild because she uses location services on her phone to address her safety concerns. However, Frederik sometimes struggles to see his family for his one weekly social appointment because he is delayed or cut off by unreliable or cancelled buses and trains. This study shows that ageing in place can be a marginalising and isolating experience even within a social democratic regime.

The qualitative, ethnographic, and participatory approach utilised in this study has moved beyond Siren and Haustein’s (2013) quantitative categorisations of ‘archetypes’ of older adults to demonstrate not only the patterns of mobility, but the impacts of mobility on quality of life. Mobility is not just the choices one has to move between different places, it can be the difference between maintaining or losing physical independence, connection or disconnection from family and friends and inclusion or isolation from communities and wider society. The novel methodology employed within this study proved the capability and willingness of older adults to record and document their daily activities. This methodology could inform healthcare interventions focused on understanding how physical and mental capabilities change over time, and identify triggers for specific health conditions, for example, blackouts. This finding demonstrates that age-friendly urban interventions will need to be coordinated by a range of actors from different sectors. Solutions to facilitate mobility for older adults must be

developed by housing, healthcare, social and transport providers working together and must focus on looking at factors beyond individual health, confidence, and infrastructure.

Using mobility as a golden thread to weave together the domains of urban services and structures outlined by WHO provided a way of understanding how the values of freedom and community are embedded within age-friendliness in Copenhagen. This interdisciplinary approach resulted in findings and policy recommendations which can be easily re-categorised, actioned, and positioned within the World Health Organisation's (2007) age-friendly city agenda as summarised in Figure 33.



FIGURE 33: RECOMMENDATIONS OF THIS STUDY ORGANISED WITHIN THE WHO AGE-FRIENDLY CITY FRAMEWORK

This demonstrates the possibility to evaluate and design age-friendly urban strategies situated within and suited to the needs and values of older adults in a specific context. This process of reconceptualization and analysis provides recommendations which will allow the municipality to build on their previous strategy and protect and provide the services and resources which are important for older adults' sense of Frihed (freedom) and Fællesskab (community). Neglected from this analysis is an understanding of how older adults experience the third pillar of the municipality's strategy: Tryghed (comfort and security). This is a critical factor of age-friendliness, encompassing health and care services. This presents an opportunity for future interdisciplinary research and collaboration between the municipality and health, care, and housing sectors to understand how care needs can be better catered for and integrated with these recommendations for age-friendly urban design.

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Appendix

Appendix A: Example Interview Transcript for Zilda

Transcript for Zilda

Participant Z [49:17]

Recorded on 5th November 2022 in Møkkareit following walk around Assistens Kirkegaard

Transcribed on Mon, Jan 09, 2023

Pippa: What I thought is, we can talk about what you wrote in your diary. And then I take a photo I take photos of these, but then you can keep and then use it later because that's why I thought it was better to buy nice ones.

Z: It's very nice. I don't know if you understand my writing. Try to read that because if you can understand that I don't know what

Pippa: No, I can. It's good, it's the Danish place names that I might because I didn't know how to name.

Z: Yeah, should not translate names. First rule of translation.

Pippa: Yeah. You do translations, right?

Z: you still don't, you'll never translate name. names or names.

Pippa: [Reading the diary] Nice. Okay, perfect. Right. Wow, two hours walking by yourself in Valby park?

Z: I walk a lot by myself because I live alone. Yeah. And I walk a lot. I do everything by myself. Well, not everything. I like to be with people. I like to be in a group like that. But not. Not in stopping me to do something because I don't have company. Yeah, I do, though. I do go to... But this week, it was a very low social week, because I used to go to the cinema to the theatre, I sing in three different choirs. And I just find a group and I went and asked the position the leader, if they will, if I could join them and I start to sing with them.

Pippa: Amazing

Z: I sing in Domkirke. How would you say that English English? I sing there, is a kind of voluntary because they have a nice church, they are open from 7pm until 10pm. And then they read something from the Bible, a little piece. And then we sing and everybody who comes from the streets can come and sing it together. And I liked that because it's, it's a lot of homeless people who come in, or drug addicts or the prostitutes who works in the downtown. Then I like it, the idea that it's open to everybody it's open at night and one of the churches Helligenskirke, the Holy Spirit, church. It's a big one as well. And they are open on Friday, twice in a month in this in the same way, seven to 10pm. And there's a lot of alcoholics or people on the street who come from outside. So it's a nice place for everyone. I think the idea that Jesus did that. He was with these amazing people who were outsiders.

And I like the idea to do something and invite people inside God's house. so I do that I do that twice in our late church if you want to, and twice in the Holy Spirit church. [Something smashes in the café].

Pippa: No one is working.

Z: The young lady with a nice dress, she went downstairs.

Pippa: Let me see if I can quickly, I will come back. [Goes to kitchen to help clear up].
Dramatic. So did you do sing last week then?

Z: I did this last week. I was in the church last Friday. Okay. This week, we don't have anything and then we will come again next week. **Last week. It was twice because it was on Thursday and Thursday, we'll learn songs to the Sunday.** Okay. I should sing this Thursday, but it was a week in advance. So I was thinking maybe I was thinking Thursday and Friday. Okay twice last week. And the week before I was singing Thursday and Sunday.

Pippa: Okay. Wow. All the singing.

Z: All the singing again. **I was singing in my church in South harbor. Yeah. Sydhavnskirke. And Frederikskongenskirke. Yeah. They have sing along, once in a month, the last Wednesday in the month.** So actually, last week, I was singing Wednesday and Sunday. And then this week. I was singing Thursday and Friday. And this week, I'm free. Because tomorrow, Sunday, no Monday, I go to South harbor church and we will sing. **They have something called the lights. Gospel. You can go inside the church and take a candle. Light a candle. Yeah. And then we sing four or five songs and eat together.** Oh, and I am a volunteer there because I help, er, they have a chef for making food. But we help to the people coming to the church.

Pippa: And is it always the same people that come to the church that you meet?

Z: No, different people.

P: Is that nice?

Z: It's very, very nice. Very nice. Well, some of the people are the same because they live in South harbor, sydhavn, and they participate in the church service. Say that. And some others come sometimes. Not every month, but sometimes they feel that they wish to go to eat with someone.

Pippa: It's lovely.

Z: I love church.

Pippa: How long have you been going to the churches in Copenhagen?

Z: **Since I moved to Copenhagen because I was I was living in Odense. Yeah. So my church was there.**

And then I moved to Copenhagen, I start to go to South harbour, sydhavnschurch, because I want to meet people from my neighborhood. But I I missed the songs. And I went to different churches. I found the different churches through Facebook online. And then I started to sing. I don't have a choir just now I don't. I used to sing in a choir for 20 years.

Yeah. And now I don't have any choir here. So I just go to the church to sing with people from the streets.

Pippa: You found a bicycle group through Facebook as well. No?

Z: No. This was my daughter.

Pippa: Okay, but the Caritas was Facebook.

Z: Caritas was Facebook. Yes. But my daughter was a volunteer at Red Cross for four years. So she knew the group and we passed by and she said Mother this group is the bike one. And I said well I want to join that and then I actually found them on Facebook because I didn't know. So she see point that and I a very curious person. So I just went I contacted them I sent the email and then asked me when I could join just like that.

Pippa: And you did the eight week course? And it was on the weekends and you said it was in March

Z: Sunday starts on Sunday and I think I started in September and I was doing this until last November because then the weather gets cold and then we don't do that anymore.

Pippa: Did it make you feel like you could use the bike more?

Z: Yes, yeah. And I borrowed my daughter's bike when she was traveling during the course as well I borrowed her bike and I was biking near the Kirkegaard (the cemetery). Yeah, so I used to bike to the cemetery and home again and around the lakes. I used to live close to the lakes Yes, but I don't start, I am not so good to bike from my place to town but I like to bike close to my place, Valby park. I walk a lot to Valby park because it's a big park

Pippa: How do you monitor how long you walk?

Z: My iphone counts my steps.

Pippa: Do you try to walk a certain amount every day or you just look?

Z: No because sometimes I don't have my telephone but I know that the trip is almost the same today yesterday the day before yesterday. Sometimes I take a picture and send to my daughter

Pippa: Have you always taken photos when you walk?

Z: Yes, I do. I do I take a lot of pictures and my phone is almost out of space because I take a lot of pictures, it's stupid. but like from yesterday [shows photo of pink sunset].

Pippa: I was on I was on a boat yesterday when it was like this. I got the boat from the Black Diamond you go down to South harbour

Z Shows her phone saying she walked 14km

Pippa: Oh my gosh, in one day, 14km, that's a lot Do you ever feel like tired at the end of the day or the next day

Z: Yesterday I was very tired but usually I feel a lot more energy. I am injured. I don't, my knees. I had a knee operation?

Pippa: Oh. When did you have a knee operation?

Z: Yeah, six years ago, but I was walking a lot as well.

Pippa: On both knees or just one knee?

Z: Both knees. I just kept walking because I was training because I have to do my training I have to do the walk, maybe I feel tired but I still want to use my legs.

Pippa: Did they say after the operation you have to walk a certain amount every day?

Z: No no no no no I was training before the operation because it, I couldn't go, I couldn't walk too much. And then after just kept walking because I don't bike that much but I like to see things. I'm very, visual

Pippa: Do you ever listen to music? Or are you listening to everything while you're walking as well?

Z: Sometimes I meditate sometimes I listen to new age music, when I walk in the park two hours by myself I used to have some meditations, some new waves new way,

Pippa: Is it like new alpha waves?

Z: No, healing healing healing Music. I could show you. I have a lot.

Z shows Pippa Youtube video of healing music

Z: It's the frequency is a different frequency that goes in your brain waves and do something with your health and your relaxing or relaxing or just.

Pippa: How long are the meditation music, like for the whole two hours

Z: Sometimes it's only 15 minutes and then another one or sometimes I speak to my daughter in between the music she calls sometimes I don't do anything I just look around yesterday, there was this very nice color red color. I don't want to listen to anything I just want to see colors

Pippa: and how is it when it's raining in the park would you still walk around the park?

Z: Yeah, I have a rain coat or in and I have special boots and then I like to go close to the water because we have to, my place is Valby strand, they made a little beach, a fake Beach, it's not a real one but it's nice because I could feel the warmth of the wind when you see a lot of movements and the nature is there, it's very nice.

Pippa: I need to go there

Z speaks to waitress in Danish. Pippa reads the travel diary while they talk.

Pippa: and you do a lot of bus and metro, do you know all the routes off by heart?

Z: I'm still learning and sometimes it's quite difficult last time when we should go to this Christianshavn and the trains stop then I have to find out how to get that there so I am better

Pippa: so if you need to go on a new bus, a new train Do you just use your phone and look up?

Z: I use my phone I use the people. I ask a lot because I am very good at communicate with people. I can speak to everyone in the street, and if in a bus if someone wants to speak to me, I speak as well. I want to talk to people.

Pippa: Smiley face, always!

Z: And children are nice because they are very curious and they don't have this. They are not ashamed. They asked you when they speak to you so it's nice.

Pippa: I feel like on the public transport it's quite friendly.

Z: Yes.

Pippa: In London it's not friendly. You sit with your head down and you should not speak you should not speak yeah yeah, yeah, true. In Singapore too.

Z: I am Brazilian in Brazil. We speak to everyone and everywhere, everywhere.

Pippa: So, like I have never got a taxi in Copenhagen. How would you? Have you ever had a taxi? Yeah. Because what if you need to go really far?

Z: To take a taxi to take a taxi from airports to my place. It will cost 400 [DKK].

Pippa: Oh my gosh. Would you ever use one of these? Hire a car service? You know you can share now. Right?

Z: Gomore Yeah, yeah, I was using that before COVID but not after COVID but before COVID I used to take Gomore here to here, because I was visiting my daughter and I would come off my work. Whenever I finish at work and when I had a dinner.

Pippa: Why would you guys prefer to use Gomore rather than the metro?

Z: I like to share we are four people in a car. And because I didn't have baggage I had only my small bag. And I want to make a quick trip because I just want to visit my daughter have a dinner with her and come home again. So I didn't need baggage and that was the cheapest and the most convenient but sharing I like the idea to share. We don't need to travel by car by your own Yeah, if you have a place for four people?

Pippa: Does it not scare you about being with strangers in a car?

Z: I am quite fearless. I am never afraid of anything because they want to do something. I travel a lot at night. I come late at night, my place my home. I don't fear anything. Never. I was working at night at night shift. Yeah, my place.

Pippa: What time did you use to finish a night shift? *[notable sense of lower energy in the conversation than before]*

Z: The COVID was very hard because then I finished at 11 But sometimes the train wasn't running and I, it took me two hours to reach my place in a bus public bus because this was a long time, Waiting time. Otherwise it should take 20 minutes for my place to my work. And I was finished at 11 23 and I was home at midnight. I was at home at midnight. My place beside my home.

Pippa: Yeah. What about say you use public transport? How expensive Do you find it to use public transport?

Z: Orange is a cheaper train DSB, it's a cheap ticket that you have to buy in advance and they don't, you have, you have to be flexible because they don't have all the time. You have to go very early in the morning or late in the evening.

Pippa: Okay. Orange Friday Interesting.

Z: Yeah, I use that as well. Because it's cheaper.

Pippa: Nice DSB orange. This is useful.

Z: Yes and then for example when I travel here to my place in Frederikshavn. I have to go almost 1000DKK if I take a train, but this Kombardo is 150. I travel with DSB orange as well but I have to leave at 11pm at night from here and I arrive in Frederikshavn at 5am in the morning. It doesn't matter because I am a night person, I don't feel tired. It's not too bad.

Pippa: And how with the metro and the buses here and things do you have an annual ticket or a three month ticket or do you just pay it every time?

Z: I pay every time but I could. I had a month ticket but it was too expensive, I changed again. You must be retired and over 65.

Pippa: Okay,

Z: Because if you are not retired you don't have this, it doesn't count. No. For me doesn't. Yeah. I think I am quite using it, almost the same as if I had a period card. Because now I'm traveling quite a lot with my my daughter.

Pippa: Yeah.

Z: But I used to work from my home. I work a little bit. I work from home.

Pippa: Are you still doing the translation?

Z: Yes I still do the translation as freelance. Yeah. It's nice because I do a whole country with the visual or the text is a good thing with COVID because people are used to being visual online.

Pippa: With tools like zoom.

Z looks at phone and shows the DSB app

Z: Yes in order to find prices if you take this thing okay so you can see a lot how it works

P: Amazing thank you this is so helpful understanding all of it because it's yeah very different

Z: I don't know if if we have this different. They did, they did that with the Reijeskort that retired people had could pay less if they use the off spot in the middle of the day okay but that doesn't apply for me because I don't like to use it the transport in the middle of the day I want to use when I have when I need to use, yeah which is in the evening, I like to go out in the evening. Many old people are afraid to go out they go out in the morning or in the afternoon and stay home for the rest of the day.

Pippa: yeah

Z: I'm quite an outsider, in this concern because I I move a lot I move a lot.

Pippa: But not in rush hour, ahh.

Z: not in rush hour in the middle of the day because they are old and you will be able to use it in the middle of the day and then you get discount but I don't

Pippa: because if you see your daughter as well that will be is that in the evening or in like

Z: no no then it is the middle of the day of course now the child is in the middle of the day but when I go to sing in the church is so that's nice yeah yeah so my social life is from five to 10 or 11 at night

Pippa: Is it ever scary, you said you're not like scared easily but in the stations or on the buses is it ever scary?

Z: I was twice, I was with my daughter sleeping there and then I took the Metro at 5 in the morning and I was scared to be the only one in this coupe, the cart. Yeah. Or in this station. So when I have to take a lift down I was a little concerned but then I thought well there is a lot of cameras and I used my phone to say to my daughter I am this way now, I am home. I have a program which shares, so you can see where I am.

Pippa: Find my friends yes yeah. Do you do you do use it all the time or just whenever she.

Z: No No. Just once no.

Pippa: Yeah. Yeah. Interesting. Amazing. Trying to think what else?

Z: Yes. I don't know what else. I am new in town. Yeah.

Pippa: When did you move?

Z: Last year to Sydhavn and then I moved again because I was living in my apartment. I had to make some steps in the apartment and I moved to here. I used to live close to the lakes. I used to live close to Elmegade.

Pippa: This is my problem with the Danish, knowing The Danish names. Do you feel like you're well connected in Sydhaven, is it easy to get in?

Z: Yes. I live in a very nice place people talk to each other. I talk to everybody and I start to go to this church and meet some people and I go to the swimming to the swimming swimming pool swimming.

Z appears very distracted +/- tired, looks at phone

Z: This is the street, Guldbergsgade. And the end of the street is called Elmesgade. So I used to live half year in this address until my apartment was finished it and I could move to my apartment in Sydhavn. So yes I am still new in town because I was living for 35 years so all my family yeah, my friends are there.

Pippa: Yeah.

Z: But I am doing quite well, I am doing quite well here.

Pippa: Do you miss Odense?

Z: No. Yes, I could move back if it was nice but COVID came in 2020 and my friends disappeared I was alone and just walk and walk no no. I just got to work and walk alone by my own so in a way I was already moving away from my friends.

Pippa: So what made you decide to move to Copenhagen, for your daughter?

Z: So she moved into her new apartment so then I could move to her little apartment. Okay, that that's what happened. It wasn't any other reason it wasn't because of her because I was living quite well in my place [cough] but I could get into her apartment it is in the main floor. I was living on the second floor and I wanted to move down and I was waiting wait wait for one apartment I liked and then I said to her I could move here, in a very nice apartment I like this place and then she wants to sell her place because she wanted her own apartment. But this was her own apartment worked out very well.

Pippa: Yay.

Z: Yay! yeah. And now she's very happy that I'm here. I am very happy that I am here as well.

Pippa: And now you have [newly born grandchild name].

Z: Yeah, I got my little

Z gets out photos of grandchild and daughter. Stopped transcribing at 42 minutes.

Z: I didn't write anything about what I do in my free time, this yoga is twice and then water gym is twice, and I walk a lot.

Appendix B: Coding Table

Participant and age	Other	Social	Cultural	Environmental	Economic	Individual: Physical health	Individual: Selection, Optimisation and Compensation strategies
H (64)	Louis doesn't like the car because he has to sit in the back seat (too young) so we like buses and trains when we are together	"I do mindfulness. [holiday this year in Maderia] it was a mindful trip. It was a mindful walk, we walked a lot in the mountains."	Work- "So so there's a lot of car driving because my company is not conveniently located near to a station. That's a bit too far away. In summer, I will use my bicycle as much as possible. It takes the same time as riding in a car. 19km it is, so takes between 30-1hour. So so there's a lot of car driving because my company is not conveniently located near to a station. That's a bit too far away. In summer, I will use my bicycle as much as possible. It takes the same time as riding in a car." "When I come home Friday night, especially in the summer time, I will never use my car until Monday morning"	"[buses] For me they are too crowded, people are too annoying and can stand in the middle. Yeah. For me it's too crowded. I like S-Trains."	"[electric bike] that was my 60 th birthday present for myself. Very expensive, very nice, german, so good quality. It looks good, it looks like a bicycle Mercedes. Very sporty, looks solid, it's white and black. I love it. All modes and then you have a little bicycle guy. I try to do as little help as possible from the little guy and then do sports mode as part of my training. I do 26km/hour which is quite fast. When I have my high speed its 46km downhill"	Still experiences pain from whiplash she experienced from a car accident in 2002 and everytime too stressed it comes up again	You don't play football anymore? H: No, I don't like old people playing, I want to be the best. I haven't run or play football since 1995 .
	Lots of friends across the city- Skateboard shop owner Bunny "she was on the national team, excellent professional footballer, a good friend of mine"	Helmet because of caring responsibilities of non-familial boy "Pippa: when did you start wearing a helmet? H: when Louis got born. I never wore one and they said, "why don't you wear a helmet what will you do when Louis starts biking." "I walked into a bicycle shop and asked 'really do I really need one, I mean I'm 56 at this time, do I really need this helmet? And he said 'I can ask you one question: do you have somebody that loves you'." "I always wear one when I'm biking I want to be a good example to Louis" "We've got	Active culture at work- "I mean, in your lunchtime or around lunchtime. On Wednesday, we have active Wednesdays. And you have to invite a colleague that you normally don't work close with and do a walk and talk."	Aesthetics & amenities "It's an old station building looks amazing from the old times, like the castle more of less. The other ones just like, you know, you walk under walk up only to what you call the tracks. And the other one is bigger and there's a bakery, get a big coffee and pick up a piece of bread."	High economic capital- "[helmet] I bought an expensive one, 150 euros, so nothing will happen to my head" "I will not do camping, I will do glamping" "while my friends are outdoors, I will be in a castle" "I like good things, good stays"	"[walking in madeira] really steep, I had to give up walking, we lived 600m above the ground. It was so steep we could only go by taxi. I hurt my knee there because it was so steep."	High expectations for self - "[apple watch] if I'm really active my goal next month is really high and I'm like no I'm not that active all the time. Because it keeps increasing and I cannot follow, I don't have the kind of time to train every day" .. H "[apple watch always wearing] H: Yep. I follow my goal every month and I fall for whatever it is, could be a number of minutes. It could be kilo meters, it can be number of activity minutes."

		plenty of selfies when we are wearing them"					
	Current job "I started this job 2 and a half years ago" "had one job from 1995-2002, 7 and a half years. And then 10 years from 2008-2018 and then in between 2018-2020 I wanted to figure out what I wanted to do, I wasn't really happy."	"I don't need a lot of friends I just like smaller groups because I have so many different groups of friends, I go out, I don't plan"	Highly educated- trained as an engineer, travelled around world for jobs (Switzerland, Germany), "500 engineers, 3 women" In 1989	"I'm well payed, I've always been well payed. I'm in the highest 2% in Denmark in women, which doesn't mean anything compared to the guys. You don't find a lot of sales women in my position."		Knee injury "the good one is now the bad one, so it's worse now. The left is the football knee, and the right one I destroyed in Madeira. I was on a painkiller cocktail for three days, that helped a bit. Something broke off one of my knees, something broke off the bone, I can feel it." Pippa: can you put a band on? H: "I can but I don't want to, it's just annoying."	Works hard "I get 6 weeks of holiday but I never take them, last week I took 12"
	About the walking group: I wanted to do something that was for someone else but me, and I looked at volunteer jobs. Dk and I just looked through and I thought I could go back and teach football and I found Caritas and they wanted to start a walking group and I thought this is simple so why not, cause I walk anyway and want to walk with people	About Louis- as he has grown up - now every 3 weeks, used to be every Tuesday when he was younger. He has a really big family and they are 40 people or 45 and they meet a lot.	"I like to work from 4-10pm when everyone else has left, until 10 and until 8. I will do whatever I can to go for a walk and talk to help the pain in my knees when I'm working."	We have these super-cycling paths, all over Denmark. They say Super C and that means a straight through cycle path and you will go through faster. I love it!		Painkillers and walking > biking to adapt to injury "when it's too severe or too hard I take painkillers, until it's good again. I don't take any medication for arthritis or anything, I just train. I mean exercise is the only thing you can do. Less walking more biking.""I did 6 weeks of very intensive biking to help me get better, between 35-70km a day"	Freedom from the car- [going to Budapest for mindfulness course] "It's a road trip. When I'm in my car I'm free, nobody can touch me"
	About a busy walking group: "I don't like when			If I take my electric bike to the city, it will be stolen, so I use the grandma bike		"I have a lot of bike injuries but I don't think about it, I always live with pain. I had	

	we are that many. I like to keep order, and I don't feel the others are able to keep order. "Its difficult to say whether it will be more walk and less talk, it's just at the beginning of the walk we decide. If Larry is there [hes American from new York] but he is standing still and then when he is walking he cannot stop so I change the pace of the group for him. Some of the group need a hand on stairs, it should be possible for everyone to participate but we have never had anyone with a wheelchair.					my first accident when I was 15 and I rode directly into the back of a car on my bike." "I miss the freedom in my legs, I feel like it's concrete. I feel like a lump of clay, when I go down, I cannot bend, I don't miss playing football but I miss being free to do whatever I want with my legs." "It hurts when im bicycling, sitting still is the worst thing you can do"	
				"Loves walking by the seaside, I like to go to the water everyday just to sit on the bench, feel my heart beating."		Travelling "I travelled since I was four with my parents. Since I graduated in 89 as an engineer I travelled the world" "more than 1 thousand flights in my life"	"going home from work is always, I mean going to work is always pre stressed because I know what it waiting, I have a team of 5 directed to me and I get stressed when I can't support my team, I like to talk to them"
				H "where I live, I live in Charlottenlund. I live, I'm between two S-Train stations. So it's like 878 meters to the one on the right, and 1.1 km to		Self-defined character "[About working at Swedish company] Swedish people are too soft, and it takes too long because they want to	

				the other one. I always take the longest one, because it's a nicer station. But you have to wait more."		have everybody involved. The German's are too strict."	
Z (60)		Choirs & singing "But this week, it was a very low social week, because I used to go to the cinema to the theatre, I sing in three different choirs. And I just find a group and I went and asked the position the leader, if they will, if I could join them and I start to sing with them"	Domkirche and Helliienkirche- "I sing there, is a kind of voluntary because they have a nice church, they are open from 7pm until 10pm. And then they read something from the Bible, a little piece. And then we sing and everybody who comes from the streets can come and sing it together." [also same for Helliienkirche]	More comfortable with biking locally than busy city centre areas "Yeah, so I used to bike to the cemetery and home again and around the lakes. I used to live close to the lakes Yes, but I don't start, I am not so good to bike from my place to town but I like to bike close to my place, Valby park."	Less economic capital so has to compromise with flexible timings Z: Yes and then for example when I travel here to my place in Frederikshavn. I have to go almost 1000DKK if I take a train, but this Kombardo is 150. I travel with DSB orange as well but I have to leave at 11pm at night from here and I arrive in Frederikshavn at 5am in the morning. It doesn't matter because I am a night person, I don't feel tired. It's not too bad.	Self-identified characteristics: "[About red cross bike club] So she see point that and I a very curious person. So I just went I contacted them I sent the email and then asked me when I could join just like that."	Lack of social capital doesn't stop walking - "I walk a lot by myself because I live alone. Yeah. And I walk alot. I do everything by myself. Well, not everything. i like to be with people. I like to be in a group like that. But not. Not in stopping me to do something because I don't have company."
		Frequency of interactions with lots of different churches- "Last week. It was twice because it was on Thursday and Thursday, we'll learn songs to the Sunday." "I was singing in my church in South harbor. Yeah. Sydhavnkirche. And Frederikskongenskirche. Yeah. They have sing along, once in a month, the last Wednesday in the month."	Migrating from another city-church is a first social place "Since I moved to Copenhagen because I was I was living in Odense. Yeah. So my church was there. And then I moved to Copenhagen, I start to go to South harbour, sydhavenschurch, because I want to meet people from my neighborhood. But I missed the songs. And I went to different churches. I found the different churches through Facebook online. And then I started to sing. I don't have a choir just now I don't. I used to sing in a choir for 20 years. Yeah. And now I don't have any choir here. So I just go to the church to sing with people from the streets."		Monthly tickets too expensive when you are not + 65 "Z: I pay every time but I could. I had a month ticket but it was too expensive, I changed again."	Pippa: Oh my gosh, in one day, 14km, that's a lot Do you ever feel like tired at the end of the day or the next day. Z: Yesterday I was very tired but usually I feel a lot more energy. I am injured. I don't, my knees. I had a knee operation? – 6 years ago.	"Pippa: How do you monitor how long you walk? Z: My iphone counts my steps. Pippa: Do you try to walk a certain amount every day or you just look? Z: No because sometimes I don't have my telephone but I know that the trip is almost the same today yesterday the day before yesterday."
		Volunteering "[Sydhavenkirche]. They have something called the	Cultural capital allowed her to make friends quickly when she	Aesthetic - "Z: Yes, I do. I do I take a lot of pictures and my		Exercise for mental health and relaxation Z: Sometimes	Walking group as optimisation strategy rather

		lights. Gospel. You can you can go inside the church and take a candle. Light a candle. Yeah. And then we sing four or five songs and eat together."	moved: Z: Last year to Sydhavn and then I moved again because I was living in my apartment. I had to make some steps in the apartment and I moved to here. I used to live close to the lakes. I used to live close to Elmegade.	phone is almost out of space because I take a lot of pictures"		I meditate sometimes I listen to new age music, when I walk in the park two hours by myself I used to have some meditations,	than biking Z: couldn't walk too much. And then after just kept walking because I don't bike that much but I like to see things."
		Daughter signalled bike mobility "But my daughter was a volunteer at Red Cross for four years. So she knew the group and we passed by and she said Mother this group is the bike one. And I said well I want to join that and then I actually found them on Facebook because I didn't know"		Clothes for walking and embracing nature e.g. beach Z: Yeah, I have a rain coat or in and I have special boots and then I like to go close to the water because we have to, my place is Valby strand, they made a little beach, a fake Beach, it's not a real one but it's nice because I could feel the warmth of the wind when you see a lot of movements and the nature is there, it's very nice.		Doesn't rely so heavily on public transport communication- relies on social skills and confidence "Pippa: so if you need to go on a new bus, a new train Do you just use your phone and look up? Z: I use my phone I use the people. I ask a lot because I am very good at communicate with people. I can speak to everyone in the street, and if in a bus if someone wants to speak to me, I speak as well. I want to talk to people."	Uses location sharing and social capital to mitigate fear or insecurity Z: I was twice, I was with my daughter sleeping there and then I took the Metro at 5 in the morning and I was scared to be the only one in this coupe, the cart. Yeah. Or in this station. So when I have to take a lift down I was a little concerned but then I thought well there is a lot of cameras and I used my phone to say to my daughter I am this way now, I am home. I have a program which shares, so you can see where I am.
		Z Walking provides opportunity to catch up with daughter - sometimes I speak to my daughter in between the music she calls sometimes I don't do anything I just look around yesterday, there was this very nice color red color. I don't want to listen to anything I just want to see colors				Z Does a lot of physical activity Z: I didn't write anything about what I do in my free time, this yoga is twice and then water gym is twice, and I walk a lot.	"Z: I am quite fearless. I am never afraid of anything because they want to do something. I travel a lot at night. I come late at night, my place my home. I don't fear anything. Never. I was working at night at night shift. Yeah, my place."
		Defines the niceness of a place by the sociability Z: Yes. I live in a very nice place people talk to each other. I talk to everybody and I start to go to this church and meet some people and I go to the swimming to the		Absence of taxis – people confident with car sharing app = using GoMore "Z: Gomore Yeah, yeah, I was using that before COVID but not after COVID but before COVID I used to take Gomore here to here, because I was visiting my			Wants to differentiate herself from other 'old' people - Z: I don't know if we have this different. They did, they did that with the Reijeskort that retired people had could pay less if they use the off spot in the

		swimming swimming pool swimming		daughter and I would come off my work. Whenever I finish at work and when I had a dinner"			middle of the day okay but that doesn't apply for me because I don't like to use it the transport in the middle of the day I want to use when I have when I need to use, yeah which is in the evening, I like to go out in the evening. Many old people are afraid to go out they go out in the morning or in the afternoon and stay home for the rest of the day.
		Recently moved but felt disconnected from old community before that: Pippa: Do you miss Odense? Z: No. Yes, I could move back if it was nice but COVID came in 2020 and my friends disappeared I was alone and just walk and walk no no. I just got to work and walk alone by my own so in a way I was already moving away from my friends.		To travel out of Copenhagen-use public transport Z: Flixbus as well, and Kombardo I have a friend in Frederikshavn, several hours from here, and this Kombardo is a company to have a very cheap ticket.			
				Plans all of his trips on the DSB app L: Okay, you can find everything on the DSB? I will send you the link.	Public transport is cheap for +65 L: To go to the office every day, then it's worth it. But you have to choose which zone (3 or 4 or 5). 3 is the cheapest, 4 is a little more, and then you get up to 9. If you are more than 65 then you can get nine zones for three months for 900[DKK].		
A (70)	You cannot travel between 7 and 9 in the morning, but that's not a problem because I don't work any longer.	Widowed - when I wrote down 'no companion, no companion, I thought well I look rather lonely now!	We moved because we wanted to get old in a more quiet place, pollution free	I used to think I use public transport rather often, but I didn't and also	P: Is the S-Train expensive? A: No. An ordinary ticket costs 45 DKK but I have bought a card for 3 months and when you are 65+ it costs 900 DKK, and that is fine with me. You can get it cheaper if you live nearer but this covers all the zones in the area.	When I have the possibility, I walk instead of taking the car.	I think this week was abit unusual because normally I go to Copenhagen more and I go to Hillerod more.

	A: [Copenhagen] for dentists, doctors, opticians and cultural offers (concerts etc)	Lives within Egebakken senior cohousing (29 homes for 50+ people) in Nødebo. A lot of my time I spend there because I have a library, a cinema, a literary club, lectures from the university of Aarhus. So a lot of things are going on there.	We often read about people who don't feel comfortable taking the s-train late in the evening, because there are not so many people around.	I used to live in central Copenhagen (12 years ago) and we always used public transport and walked, we had a car but it was unused for 6 weeks because it was much easier to walk, take the bike or use public transport.	Bought a new car last month when you live in Copenhagen it is not necessary but when you live outside the public transport is just not good, from Hill to Nødebo, but 1 every hour, but it stops at 9:30 in the evening so you can go to the cinema and rush back	Heurist risks of electric bikes: I had a friend who had an accident and when I saw her I said no you are not going to buy an electric bike. She had a concussion and a broken arm and when I saw her I remembered having read that most accidents with electric bikes involves elderly people, because they don't react quickly enough	Walking group I have been a volunteer with Caritas for 8/9 years. We started the walking group 18 months ago during corona
	I do lots of walks in the neighbourhood to the book club or other activities. I haven't mentioned that because it's a walk of 5 minutes [and travel diaries specified 15 minutes +]. In a way it's not a journey.	Busy social calendar On Monday we have dinner club [in communal kitchen], Tuesday we have gym, Wednesday we have cinema, Thursday we have a group walk in the woods. So you really don't have to spend time outside, but I like to.	Offered a guided tour at Statens Museum for Kunst [Christmas gift] for Hammershoi but it is not very often I am offered that. If you get closer to the picture you maybe have a magnifier you can see the colours, reds, yellows, he mixes. I was told that of course [from private tour].	Safety from proximity to police P: Do you feel safe living in your neighbourhood? Safer than when you lived in central Copenhagen? A: No, I felt safe living in Copenhagen but there wasn't as many people, and there were rather many policemen. We lived near a police station so that makes a difference of course. I feel there are not so many any more.	Second home in Jutland [northeast of Aarhus] for summer and winter holidays and I like it very much, also now that I am a widow I like it there, but that is where we found the silence and the nature.	Cycling for exercise in summer	Do you have a bike? P: Yes I do. That's the most easy way to get around, is by bike.
		Other residents don't tend to go to Copenhagen – so many activities in the area and Hillerød that doesn't need to come in	December [most sociable time of the year], the calendar is usually very packed, lots of dinners and coffees and Glug, and I think that the reason that we have so many get together in December is because it is so dark and cold.			I have the nature, and the woods, and the lake [Esrum Lake]	Not common to move out of city centre to get old [did it opposite way around] Most people live in the suburbs and outside of Copenhagen when they have small children, and then when they get older they move into the city to benefit from all the activities here.
	Doesn't go into Copenhagen in the evenings because doesn't like to park at Hillerød station and come back to get the car late at	I am a volunteer within an organisation called Mothers Help, and we have a second hand shop, and usually (but not this week) I am there once a week and I take the bus to and from, and that is in Hillerød	About living outside of Copenhagen now. You could hear the people around you, all the time. In a way I liked that, and the shops.	But when we moved we realised we had to use the car because public transportation outside Copenhagen isn't very good.		We did the opposite of what most people do. Wanted to get away from the sirens, and away from the pollution, but that's not what people do	

	night (quiet around tation)						
		We make excursions, and we go to the centre or to the cinema, or whatever. We go with the families. For instance, we go to the Royal Theatre... we always take the train when we go to Copenhagen.	We are going to a mass in the Catholic church [with sister]	Public transport is infrequent- In the city, the bus comes every 4-5 minutes, but outside Copenhagen, it's not that good		How often spend time in second home?] All holidays, Winter, Christmas, Summer, Easter. And at least once a month, we spend a few days there. We loved it. We liked the contrast. And the contrast isn't that big any longer now I live outside Copenhagen. So I spend the summer there but only the summer. There's a lovely beach.	
		Widowed and found volunteering for wellbeing I had a husband who died seven years ago. And that's why I can spend so much time on mothers help (laughs). Shortly after my husband died I saw a notice in the local paper that mothers help was opening in Hillerod. I wanted to have some fun, see children who were happy. P: challenging to use public transport to get to the shop? "it's like a job so you do what needs to be done - making families happy"		I never take the car [into copenhagen], I take the s-train (from hillerod), its convenient and you don't have to look for a parking space			
		Public transport between nodebo and hillerod infrequent and stops early (9pm) not good for going to cinema and back		S-Train is very clean and nice compared to London: I have been to London many times but I don't feel safe in the subways, I don't know why because there are a lot of people and that's why I feel safe here. There are many nationalities more than Denmark, and you don't know are they friendly or not?			
		[spending Christmas with family]. They're not my biological children, I have them through friendship.		Did you ever cycle in Copenhagen? A: I did. I enjoyed it. It was fast and convenient. I still cycle in			

				summer, not in Winter. We used to cycle all year around in Copenhagen but it is abit more primitive out there. The distances are so short (easy to walk) to everything.			
		I have a sister in law and I spend a lot of time with her. I am going to meet her actually. [sees her often]		Missings shops from city centre – Irma and Specialist food shops, clothes shops, art galleries			
F (61)	Plans journeys in advance “When I travelling on bus and train I write it down first” and plans online with Rejseplanen	Has a brother who is a writer in English, who told him about the walking group	“Sometimes I write something in English on Facebook, and there is a girl I know who I write to from Kenya”	“I went on a historic walk around Lyngby and after that we got cocoa”	Gets a free paper on the weekdays but has to pay on the weekends, and doesn’t like that	P: How was it to write in the travel diary? F: It took a long time because sometimes I am not so good in English	I like the small nature in Lyngby
	Lives in Lyngby Used to live in Odense Likes the city Aarhus more (more nature)	Travels a lot by charter by himself. When he was younger (26) went to India. Cheap (2100 DKK) for 3 weeks in Lanzarote (Jan-Feb), then March (Madeira)- 2 weeks 1200 DKK, December (Tenerife)- 2 weeks for 1500 DKK	Interested in politics and the results of the recent elections (“a middle coalition”) and knows a lot of British politics	Used to live close to Møkkareit (many years ago)	Received one year of education about hospitality (food, waiter, baking)	“High school is for different things, not for real education”	
	Pensionskort “2 hours in the morning I cannot use it”	Mum lives ½ km away from dad and F visits dad in nursing home in Amagerbrogade occasionally. They go to church for a cheap meal after. Been 3 or 4 times by self and 2 or 3 times with Aunt and last time was with Mum. Brother doesn’t come for food.		“When I am on holiday I like most nature and walking”	Used to work as a gardener when he was 22 and deliver newspapers when he was 16	Used to live in Odense and lived 5km from the water used to like walking along the water	

	6 supermarkets in Lyngby and he lives 300m away from a big one	Sometimes visit mum after dentist but wishes he could see mum and aunt more "they are far away so I cannot see them as much".		Currently uses little train (Klampenborg station?)	Meal at church once a week with mum "only 20 DKK, very cheap and we get food, a drink, soda or a beer or red wine and after that some dessert".	Asked for clarification for English words he didn't understand	
		Has a mobile home in Helsingør which he wished he had used more "I wanted to have more friends but I don't have many friends to come"		Pensionskort "it will cost extra if I use it on the metro"	"I use the dentist because it was the cheapest place for implants, I looked at 6 places"	Not so much here but where I live in Lyngby there is a lot of nature so I like walking	
		"I will go for Glugg now in Frederiksberg although I think it is better in Kongens Nytorv"		Excited for the introduction of the, Light Rail, from Lundtofte to Ishøj which will also connect Lyngby (currently trams in Aarhus and Odense) because buses are infrequent and unreliable currently	Mobile home in Helsingør – cannot afford anymore because of cost of electricity – had it for 2 years and bought it for 48,000DKK and sold it for 42,000DKK	Found it boring and annoying when the buses did not arrive	
				I like the train the most, it is much better. Does not like metro so much, uses s-trains and buses		Had to sleep in hostels when travelling and hated it	
						Receives a health-related massage once a week- "it is soft and gentle massage on the front because most people have tension, but I have too little energy"	

						If it is light enough, he will walk for 40 minutes	
M (66)	Placed it by the front door on the side to remember to fill it in	"I have so many guests at the moment, my American girlfriend wanted to go to Lyngby and shopping and everything"	"I lived in Australia for half a year, and lived with my girlfriends family around Yorkshire. And I lived in New Zealand too and then Zealand. I lived in [Giligili]"	"I have the forest just along the street here (Virum)"	"I travel more than 7 times a year, I love places that are totally different where there are reindeer and snow"	Takes a lot of pride in her home "I don't put the heating on, I buy candles" s	"I'll teach myself till the end of the world when I die"
		"My boyfriend is from Ireland and he is coming later" met when walking in Tenerife and sailing and met the captain. "I have said to him im not going to marry again, I have so many good friends I want to see so we have a good time. We love each other in a good way. My kids were like mum you're not moving to Ireland?"	"I don't love the connection between the walking group and the catholic church, and I'm not too happy about that because my mum was in a nun's school and they didn't treat her well so I made a decision not to attend"	"either use the bike or walk depending on how much I will shop"	"I was teaching in the university for many years. Before that I was investment manager for people wanting a relaxed way of investing. What I did was trying to make safe investments"	"I am used to walking trips across Europe" e.g. Ireland, Lisboa	"Now I've got the age where I'm enjoying, I don't have to do anything I just do what I want to do" "I'm a pensioner, I started to be a pensioner from the 1st December [this year]"
		Widowed, husband died several years ago. Husband was a professor	"I want to go and see Rome and then go for a walk in the canary islands in January"	"normally I use my bike for long trips, I leave at 8 oclock in the morning and then I seek new areas for the whole day, and suddenly I learn something new"	"I had my kids in Copenhagen, then I moved to Australia, then New Zealand, I was living on Gillje which is a fishermans town and we had a lovely place but I had to sell it"	"I can take Denmark until Christmas but after that I become depressed so I go for walks somewhere warm in January"	"I've only been involved in the walking group once, but I saw your advert on facebook and because I have worked in the university before I thought if I can help you I would like to"
		Has to collect all the parcels for her daughter "My daughter is living close by" and she says "mum you are not going to travel for more than 3 weeks" sees her every other day. We eat together on Thursday and enjoy a nice meal. "We spend 1 hour together	"I have always a lot of guests from abroad"	Biking "I buy the best bike and I bought a helmet around the neck and I do a lot of biking to discover new areas, for shopping, to the swimming pool"	Worked in the university organising summer schools and did lots of travels and would travel with husband who was a professor	"I have this adventure in my blood" "I have my cosy home, and I can leave and live cheap but fine and places where I can cook"	Feels that she is a local in the forest she walks in, "when I see people they can say I've seen her before so I feel safe"

		and that's enough...I hate people that need 4 hours together"					
		"When I bike to new areas I see new people, I meet new people"	Proud of German and English level - Husband was German "Yeah but if I go to the city and I see somebody not finding the way I will help them because I speak German, Danish, English"	Uses the helmet hood- "I bought the third version so it doesn't activate accidentally". "I hate the helmet, we never had anything and I have been falling out and over and bicycling in the forest but when you get older you get more safe"	Was a part time artist too and has her art across her house	"When you meet people like that [clients] they are mixed married like French- Danish"	Never feels unsafe walking in the forest "because I am a strong woman and I've been through things in life where I've been attacked or whatever"
		"This area is safe, is good, and my daughter lives close to here and my son (29) is a city boy now, he is in Copenhagen city"	Loves art, went to the ballet yesterday and saw Shakespeare, "A midsummer night's dream, and it was done so funny, we were laughing. And then we went to Norreport and Kongens Nytorv and I got a little rum."	Apple watch "after that I bought a sports one which I have now. I like technology and use it a lot and I've been helping a lot of old people" "I got rid of my apple and got a sports one because I like looking at the computer to see what I have been doing but its not notifying me all the time"	"For public transport I put 500 DKK in each month and I'm using the public transport which I find fantastic"	"I see a lot of animals because I walk alone [forest], I see the fox, the woodpecker, small red robins"	"I come from a good family, my dad is 90 and he is playing ping pong 3 times a week and he plays bridge, he is going for dance every Saturday so we are a very active family"
		"I have a lot of friends living in the area but I have a friend who lives 2 hours from me but we will find a new area to see what is happening in Copenhagen and we will go for a walk for 3-4 hours"		"I would never bike in Copenhagen now, I find it totally stressful because there's so many bikes. When you're not a young fearless person and not living in Copenhagen, when you start living in an area like I do it's like wow, bicycling with 100 others is hard. Out here is safe for me."		"I was a great runner, orienteering for years" "I never use sports centres, I like being outdoors" "I was 7 months pregnant when I won my first competition for orienteering"	SOC active transport in Winter "because of my age I don't want to get any trouble with slippery and whatever they say you can feel it in your body as you get older, so I'm less secure now. I like walking" P; do you worry about slippery when you're walking?" "No because I have my walking boots" "when we had more snow and then on the cycle lanes and it gets warmer and frosty again then you can fall over, when I was younger, up again but I don't want that now"

		[Daughter (32) calls] "she misses her mum when I'm busy she said mum you're always so busy"		[public transport reliable and good] "of course there can be some problems with things not working but I think we are so spoiled here because all the time everything is working"			"I feel I can go for the next 30 years with everything, and it can actually adapt to if I'm in a wheelchair, its adapting to what kind of lifestyle I have you just have to let them know"
		Sociable with strangers "I always start talking to people, and I met an Erasmus student on the train on culture night and we started talking and I took her to Helsingor and we had a beautiful day and she ate with me one night and her mum and dad have been writing to me."		Friends mum is in a wheelchair and took flextransport "which you can buy for nothing. she gets driven down with her wheelchair [to louisiana] and I get the train and we meet there. So whatever age, whatever abilities you have you can go and meet people"			
				"I use Google Maps, and then I see a lot of art things so I go if there's a free ballet outside I will ask a girlfriend and we will make an adventure out of it"			
E (79)	"I was a little bit unsure of what you wanted me to write because there are so many things every day."	Found hard to arrange to participate because too many social events (Dance on Monday, dinner on Tuesday, Swimming on Wednesday, and 2 birthday parties!)	Listen to Swedish radio when I drive – "I like to listen to the swedish language because I want to speak swedish, but I am so interested in the swedish politics so my car radio is always on PE Sweden"	"I have to go to a lot of things, difficult places where there is not bus and train so I have to take my car.". "it is only when I have lots of different things to do that it is worth taking my car" ... "if place are not near the station"	Parking cost is a huge deterrent of using car in inner city – "when you use public transport it is so cheap and parking is so expensive in Copenhagen" "only the parking will be 100DKK"	P: How do you feel about travelling in Kongens Nytorv? E: "I am not happy to go in the nighttime, I was in Copenhagen at 20:45 and it was the latest I would go in Copenhagen, I would be afraid if I come home too late, because it is dark and I have fallen down 4 times this last 4 months."	"I have to take a lot of clothes on me, I have some special wool clothes from Finland so sometimes I have 3 pairs of trousers. I need a lot of clothes otherwise I have so much pain in my body"

	I was so busy and I nearly lost the notepad because I had to write everything down so I put down everything in my telephone for the exact times	"Most of my travel is alone because I have no husband and my children are not here"	P: Do you often go for plays and theatre in town? "Concerts, I have been to many concerts, I have been in Domkirche to Mesias and Holmeskirche near Christiansborg (very nice church) and I was there with my friend"	"On one day I had to take my car for repairs so the day looks very silent because I had to wait for my car."	"public transport is very cheap here in denmark, often I only pay 12DKK for a journey so it is so easy"	"I fall down in my dining room alone, and I took the lamp and it smashed and I have so many injuries. I was green and blue. I don't know what happened to me. Sometimes I get a little blackout, and it just comes."	"It is not so cold on the bus or trains but it is walking to the bus or trains that is too cold" Snow impacts use of public transport "I was nervous in the morning because there is so much snow, if they don't take the snow away I am afraid to fall down, so I thought ah I have to take my car to go to the doctor and there was no parking so I had to walk but it was okay"
	P: How do you plan your journeys? "the day before I go to Rejseplanen and look up where I want to go and what time so everything is planned the day before, and I write down in on a piece of paper what time the train is going and where I have to change so I can be there the right time. I have only a little paper but after the travel I put it in the bin, I don't keep them."	"I have family in the north of Sweden but I don't want to go there because its too cold"	"I am from Bornholme, a little island, so I think Frederiskberg in Copenhagen is wonderful because my childhood was without car and it was much more dark in the countryside, we had cows and no toilet in the house." "I came here when I was 19/20 years old so I had a bicycle from the beginning."	Uses car to escape the cold – "today it was too cold so I took the car"		Optimism "it is very dark and the day is very short but after 24th December it will get more light."	Bravery despite fear, because wants an active lifestyle. Risk of travelling alone – "I was quite near the car, 2m before and I fell down alone, there came a man who was very nice but he was homeless but he was so nice and said 'you have blood' [laughing], but it was worse to look at then it felt but he was scared for me and said 'can I help'. I could drive after so I had to drive home, and I don't understand what happened so I'm a little bit afraid for the darkness and going alone but I have said to myself, so long time I can I have to go out because if you get afraid too much you have to sit down and watch TV all day but I must go out and see something"

	"My hairdresser is a study school because I take the most cheap haircut that's why it is far away"	"Tomorrow I am invited to a lunch and I have to write Christmas cards to the people coming"	"In Sweden I like to cycle because there is a river I like to cycle there"	I like to take the public train or bus and metro, it is much easier and you can relax. I love it, but it is hard when I have special things to do		"I don't like to drive in the dark"	"But I will not use public transport late in the evening because if you have to go to <i>Alholm</i> station I do not want to go there, it is dark and dirty but I often take the bus number 7 because there is a driver and people"
	"you are so welcome to use my name, I have nothing to hide!"	About living in Den Selvejende Institution "everything is so small, the toilet and the kitchen, and I have a little bedroom here, such a little bedroom. But downstairs we have a restaurant and I can invite people down there if they tell me they come 3 days before, we pay for it, and there are hotel rooms and fitness rooms and it is free because we pay in the rent. But the restaurant we pay a special price for. Mondays there is a singing evening, gymnastics for old people '[shows chair yoga]' and I think its so good for them but I don't do that. I realise I am old when I do that."		Googlemaps – "when you put it in the telephone it can show you how many stations until you need to change, very good! I don't know how they do it because I am not very clever but I can see I need to wait 4 stations... isn't that fantastic!" so "I'm not reading something on public transport, often I read what I have on my email and write short messages to people but short because I have to look at where to get out"		"[on public transport]I like to look at people, are they sweet are they bad, are they dangerous, so Im looking at people but I think people are very nice for the most time. Often I ask "I'm not sure which way to take the train and people are so kind to help me"	"I've heard about things, we hear about old people having their bags and money taken, so you must be careful. I was in Norreport yesterday but I was not nervous because it was daytime, but the station is dirty and there is graffiti so I don't think I would go at 11 oclock in the evening . because it is too late for an old lady, it is not too good after 9 oclock or 10 oclock."
				"Here we have very good transport system, every 10 minutes, fantastic, wonderful!, whereas there would be 2 buses a day in Bornholme, so you need a car."		"I like to cycle but I cant do it in the winter because I am so afraid. I have a bike and I like to cycle around Damhussoen and theres no traffic, only walkers and cyclists."	"but I think it was very special for old people to write all their things down because many people are not so active if they sit down in their chair"
						"I don't like to cycle in Copenhagen and Im afraid, because when you have bad knees and you have to go up and off you're not so sure. But when I was young I cycled every day in copenhagen"	Uses the balcony as a fridge for cold drinks

						"I like to cycle on the training bicycle [in the fitness room]. I cycle 5km it is so good, good for my knees, when you walk a lot your body is too heavy for your knees and you get pain but if you use the bicycle it is better for the knees. So I am training because my doctor says I have to do that".	
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