# AGEING AND URBAN PLANNING


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EDITED BY MATTHIAS DRILLING, PAMELA SUERO, HIND AL-SHOUBAKI AND FABIAN NEUHAUS

ROUTLEDGE

# Ageing and Urban Planning

*Ageing and Urban Planning* provides a critical analysis of urban planning in the face of demographic change. It emphasises the importance of international approaches and practices to address age-friendly planning. This process requires collaboration between professionals and the community, going beyond mere functionality to connect the micro and macro scales at the city, region, nation, and the global level.

With an interdisciplinary and intersectional approach, the book draws on analytical lenses from architecture, gerontology, geography, sociology, and social and urban planning. It offers a thorough critique of popular narratives surrounding ageing and urban planning while presenting diverse case studies on a variety of spatial scales. The volume also covers the history of urban design for ageing and inclusivity in planning governance, as well as a critical look at the concept of "ageing in place" from the perspective of urban planning. The book offers a comprehensive selection of in-depth photos and figures from urban design studios, planning processes, and real-life scenarios. This collection provides a unique network of inspiring ideas. The book ultimately seeks to supplement the debate and promote a broader reflection about the transformations required in urban planning, given the opportunities and challenges related to a world with increased longevity.

This valuable resource is recommended for advanced students, researchers, and policymakers in the fields of urban planning, age-related disciplines and professions, and social policy.

**Matthias Drilling** is a social geographer, spatial planner, licensed consultant at the German Sustainable Building Council, and full professor at the Department of Social Work, Zurich University of Applied Sciences in Switzerland.

**Pamela Suero** is a PhD researcher at the Society and Ageing Research Lab from the Vrije Universiteit Brussel.

**Hind Al-Shoubaki** is an architect who holds a PhD in urban planning and is a senior researcher at the Institute for Social Planning, Organisational Change, and Urban Development at the University of Applied Sciences and Arts Northwestern Switzerland.

**Fabian Neuhaus** is an associate professor at the School of Architecture, Planning and Landscape at the University of Calgary in Canada.

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# Contributors

**Yoshihiko Baba** is a consultant holding a Ph.D., he is planner, and designer for the super-aged society. He is currently work at Tokyo Metropolitan Institute of Geriatrics and Gerontology.

**Tzu-Yuan Stessa Chao** is a professor and head of the Department of Urban Planning at National Cheng Kung University, Taiwan.

**Pascal De Decker** is a professor of sociology and urban planning in the Department of Architecture at KU Leuven in Belgium.

**Jenna Dutton** is a senior urban planner specialising in equity and gender inclusion and a doctoral researcher at the University of the West of England in the United Kingdom.

**Anastasia Emelyanova** is a postdoctoral researcher at the Thule Institute, University of Oulu/University of the Arctic in Finland.

**Feng Gequn** is an associate professor in the Department of Geography and Spatial Information at Ningbo University in China.

**Elena Golubeva** is a professor of gerontology in the Department of Social Work and Social Security at the Northern Arctic Federal University in Russia.

**Mrudhula Koshy** is an assistant professor in the Urban Ecological Planning Group in the Department of Architecture and Planning at the Norwegian University of Science and Technology in Norway.

**Thaís Debli Libardoni** is an architect, urban planner, and researcher in LIBARDONI, arquitetura, engenharia e consultorias in Brazil.

**Yu Liqiong** is a senior research fellow with the leading real estate companies in the Yangtze River Delta Region of China.

**Fred Moonga** is a lecturer on social protection and social welfare at the Faculty of Social Sciences at the University of Eswatini in Eswatini.

**Chika Ooyama** is a physician, a certified rehabilitation doctor, a certified dementia doctor, and a researcher at Tohoku Medical and Pharmaceutical University in Japan.

**Santiago Quesada-García** is an associate professor in the Department of Architectural Design at the School of Architecture of Seville in Spain. The Head of the Healthy Architecture & City research group.

**Yi Sun** is an assistant professor in the Department of Building and Real Estate at the Hong Kong Polytechnic University in China.

**Chiara Tomaselli** is an urban planning and resilience specialist, currently working as a consultant for the private sector.

# Preface and acknowledgements

The relationship between urban planning and age-friendliness can be described as ambivalent. While urban planning views the city as responsible for meeting the needs of people of all ages and life situations, "age-friendliness" places a specific demographic group at the forefront, envisioning the city from their perspective. However, urban planning also has a tradition of incorporating residents' voices and advocating for individual needs. Moreover, urban planning has social origins rooted in the spatial inequalities resulting from a country's political, economic, and social developments.

This book addresses the role of planning in an ageing urban society. It deliberately transcends European boundaries, collecting contributions from around the world, as the influential concept of "age-friendly cities" formulated by the WHO asserts a global claim. Country examples are framed by more fundamental considerations, such as how urban planning and age-friendliness can collaboratively contribute, the implications of derived principles for urban development policy, and how planning can critically align with the ageing urban society without neglecting other needs.

This book has come to fruition thanks to the contributions of many colleagues. As scholarly publishing largely occurs outside of paid work today, we extend our heartfelt gratitude to all colleagues for their excellent and intellectually enriching chapters. In addition to the support of the publisher and the editors' efforts, we would like to extend special thanks to Jassie Kehal, SAPL GAR, who managed the various individual contributions. We also thank the creators of the numerous images and photographs in the book for their contributions as they visualise inspiring planning practices.

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Basel, July 2024. The Editors

# Acronyms and abbreviations

| | |
|---|---|
| AAL | Ambient or Active Assisted Living |
| AARP | American Association of Retired Persons |
| ADLs | Activities of Daily Living |
| AFC | Age-Friendly Cities |
| AFCC | Age-Friendly Cities and Communities |
| AFRRCI | Age-Friendly Rural/Remote Communities Initiative |
| AIDS | Acquired Immunodeficiency Syndrome |
| AiP | Ageing in Place |
| AmI | Ambient Intelligence |
| CBD | Central Business District |
| CBSIs | Community-Based Social Innovations |
| CCC | Comprehensive Community Care |
| CCSC | Community Council of Senior Citizens |
| CIAM | Congrès Internationaux d'Architecture Moderne |
| CIIPE | Cinerator, Integration, Information, and Preparation for Ageing Center |
| CO2 | Carbon Dioxide |
| COVID-19 | Coronavirus disease 2019 |
| DAAs | Daily Activities Areas |
| EG | Environmental Gerontology |
| EU | European Union |
| FMC | 15-Minute City |
| GAFA | Google, Apple, Facebook, and Amazon |
| GATE | Gender and the Economy |
| GCR | Global Compact on Refugees |
| GDP | Gross Domestic Product |
| GNAFCC | Global Network for Age-friendly Cities and Communities |
| GP | General Practitioner |
| GPS | Global Positioning System |
| HIV | Human Immunodeficiency Virus |
| IADL | Instrumental Activities of Daily Living |
| ICTs | Information and communication technologies |
| IDMC | Internal Displacement Monitoring Centre |

| | |
|---|---|
| IDP | Internally Displaced Person |
| IoT | Internet of Things |
| IQ | Informant Questionnaire |
| ISEE | Integrated Spatial Equity Evaluation |
| IT | Information Technology |
| ITC | Information Technology and Communication |
| LGBTQIA | Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual |
| MIT | Massachusetts Institute of Technology |
| MiT | Moving in Time |
| NG | New Gerontologists |
| NGO | Non-governmental Organisation |
| OECD | Organisation for Economic Co-operation and Development |
| OHCHR | Office of the United Nations High Commissioner for Human Rights |
| PAR4POA | Participation for Policy for Older Adults |
| RAFC | Random Age-Friendly Communities Board |
| SCoT | Smart Connected Things |
| SDGs | Sustainable Development Goals |
| SSA | Sub-Saharan African |
| TGNC | Transgender and Gender Nonconforming |
| TOD | Transit-Oriented Development |
| UN | United Nations |
| UNDESA | United Nations Department of Economic and Social Affairs |
| UN-Habitat | United Nations Human Settlements Programme |
| UNHCR | United Nations High Commissioner for Refugees |
| UNICEF | United Nations International Children's Emergency Fund |
| UPL | Urban Planning Law |
| UPND | United Party for National Development |
| URDPFI | Urban and Regional Development Plan Formulation and Implementation Guidelines |
| WHO | World Health Organization |

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# Part 1
# Introduction

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# 1 Exploring the phenomenology of ageing and urban planning

*Matthias Drilling, Hind Al-Shoubaki, Pamela Suero, and Fabian Neuhaus*

## Introduction

As our population continues to age, it is important to examine how this demographic shift intersects with the urban environment and the ways in which we experience time within it. Factors such as access to resources, social isolation, and physical limitations can significantly impact the experiences of ageing individuals within cities. Furthermore, the pace and rhythms of urban life may not always align with the needs and preferences of older adults, highlighting the need for more inclusive and flexible urban design. Overall, understanding how urban planning intersects with ageing science and analysing the impact of ageing on urban temporalities is critical for building equitable and sustainable cities for all.

The concepts of ageing, space, time, and change are deeply intertwined and integral to our overall experience of existence. As we journey through life, our perception of time and our spatial awareness may evolve, while external factors such as politics, environment, economy, and culture influence our ageing process. Moreover, our perspective on the world and our experience of ageing are moulded by our perception of time and space. These interconnected aspects of our existence are complex and multifaceted, but they ultimately shape our understanding of ourselves and the world we inhabit.

The process of ageing refers to living in a world that constantly undergoes physical and social changes. Baars (2009, p. 90) defines it as "living in a changing bodily-social-personal world." The changes that come with ageing are distinct and can be attributed to the ageing process, which includes alterations in physical and mental conditions that may be temporary or long-lasting and can impact one's abilities.

Ageing also entails changes in socio-economic status, such as retirement, a significant event in a person's life that is often regulated by state guidelines and entitlements. These age-related changes essentially affect an individual's living environment due to changes in their household, loss of a partner, or diminished financial resources or bodily abilities. It may involve relocating to a smaller apartment, seeking assisted living services or a nursing home, or moving closer to relatives or significant others in response to increased care requirements (Gabauer, 2022).

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Ageing as a phenomenon and urban planning as a practice are two complex and multifaceted topics that warrant a closer examination. Ageing is an inevitable process that involves physical and psychological changes as individuals age and can significantly affect their quality of life, especially in the absence of physical and social environments that enable and support the ageing experience. Urban planning, on the other hand, involves designing, developing, and managing communities with the goal of creating safe, healthy, and sustainable environments while considering economic, social, and environmental factors. Therefore, it is vital to consider the specific needs of ageing populations when designing urban spaces to achieve sustainable and liveable cities for all.

## The expectations and reality of urban planning

Urban planning is a Global North concept (Watson, 2009) and has historically been regarded as the process of physical planning and designing of human settlements for centuries (Taylor, 1998). During the earliest times, the focus of planning theory was on visionary planning and design, with the goal of showcasing how an ideal city should be spatially organised. This approach was centred on physicality and design and involved creating master plans and blueprints to clearly outline the desired end-state of land use. In the late 1800s, the notion of urban planning dedicated to public health was commonly referred to as the sanitary movement (Hennock, 2000). While the movement did not delve into urban design or the concept of a model city, it fostered a sense of "townsite consciousness" focused on the importance of cities in preventing disease and adhering to specific principles. These principles encompassed an open and green environment, free from overcrowding and congestion, access to clean air, water, and opportunities for exercise, and the absence of dark, poorly ventilated buildings or polluting industries in urban areas (Peterson & Row, 1979).

At the start of the 1900s, cities were perceived as mechanical entities that could be regulated through rigid, authoritarian, top-down strategies. Modernist planners sought to improve the dismal living conditions of the previous century's industrial cities, prioritising beautification efforts such as the City Beautiful movement, which emerged as a progressive social reform movement in North America led by the upper-middle class, who were concerned about the poor living conditions in major cities (Caves, 2004). This philosophy's proponents believed beautifying cities could foster a harmonious social order, leading to an improved quality of life (Bluestone, 1988).

During the second half of the 20th century, it became widely recognised that urban areas are complex systems that require a comprehensive approach to planning and management. As post-industrial issues emerged, solutions were proposed to address them. However, the lack of community engagement and political processes often prevented these solutions from being implemented promptly. As a result, by the time the solutions were finally implemented, the problem itself may have evolved into something different (Hall, 2003).

Urban theorists such as Jacobs (1961), Berry (1964), and Chadwick (1971) emphasised the importance of considering the interdependent and interconnected

elements that make up a city, including its physical layout, social dynamics, and economic development. Motivated by these critical positions, many planners faced a "gap" in their strategic planning capacity. The "gap" resulted from various factors, including inadequate resources, frameworks, and tools to efficiently manage these changes and uncertainties (Albrecht, 2010). One of the most significant challenges for planners was the swift pace of urbanisation that caused the fragmentation of cities and regions (Binns et al., 2003; Todes, 2012). This made it difficult to create comprehensive plans to address these areas' complex, interdependent issues effectively.

As we move further into the 21st century, technological advancements, demographic changes, and environmental concerns are some of the primary factors shaping the development of the global urban landscape. One of the most notable trends in urban development is the increasing emphasis on sustainability. Urban planners are considering environmental challenges by designing sustainable cities that incorporate eco-friendly practices such as green technology, renewable energy, eco-forward architecture, efficient public transportation, urban farming, and ample parkland. By doing so, they aim to minimise air pollution and carbon dioxide (CO2) emissions, enhance air quality, and conserve natural resources (The World Bank, 2023). This requires a more targeted approach to planning that considers the requirements of each community and location, while also incorporating perspectives with regard to the broader context in which global transformations take place.

## Planning meets ageing societies

Demographic ageing is the 21st century's dominant demographic phenomenon (Bloom & Luca, 2016) and can have significant implications for urban planning and service provision. Additionally, population ageing and urbanisation are two global trends that together comprise major forces shaping the 21st century. At the same time, as cities grow, their share of residents aged 60 years and older is increasing (WHO, 2007, p. 1).

The World Bank (2021) highlights that these factors can positively and negatively impact urban growth trajectories, depending on how they are managed and addressed. The challenge is to create an urban environment that can accommodate diversity while promoting social welfare. To address this challenge, various models of human-centred approaches have been developed. Age-friendly (WHO, 2007), child-friendly (UNICEF, 2018), and women-friendly cities (United Nations, 2014) are designed to create environments that are conducive to social inclusion and well-being for a diversity of citizens, prioritising the needs of specific groups. These approaches challenge urban planners to reconsider who the city is traditionally planned for, taking more into account the plurality of urban residents, especially groups who have not typically been incorporated as stakeholders or beneficiaries of planning outcomes.

Despite the emergence of significant urban planning ideologies – sustainable urbanism, new urbanism, and smart growth – since the 1980s, they have not adequately addressed the challenges posed by an ageing population. However, each

ideology does incorporate specific guidelines that can be deemed age-friendly in nature. Sustainable urbanism, for instance, places emphasis on the necessity of creating communities that are compact, mixed-use, and walkable, thereby reducing the need for long-distance travel (Berke, 2002; Kenworthy, 2006). Meanwhile, new urbanism prioritises the development of mixed-use spaces, pedestrian-friendly public areas, and transportation options accessible to all ages (Grant, 2010). On the other hand, smart growth underscores the significance of building communities that are compact, accessible, connected, and inclusive for residents of all backgrounds (Hoehner et al., 2005). As mentioned by Bosch-Meda (2021), the American Planning Association has coined the term "multigenerational planning" to refer to the application of smart growth principles that cater to the needs of both older individuals and children. This approach promotes inclusivity, social participation, and security (Warner & Zhang, 2019), making it the most advanced attempt to create an age-friendly urban planning theory. Multigenerational planning involves the implementation of Transit-Oriented Development (TOD) and inclusionary zoning at a technical level. Thus, urban planning ideologies have the potential to create age-friendly environments. However, a more comprehensive, integrated, and human-centred approach is necessary to address the unique needs of older adults in urban settings. This can lead to better social outcomes, such as improved health and well-being, greater social cohesion, and stronger communities.

As discussed previously, the discipline of urban planning has undergone a transformation wherein its focus now encompasses the needs and perspectives of a diverse range of stakeholders, including residents, businesses, community groups, and government agencies. Despite this evolution, many urban planning systems across the globe remain inadequately equipped for the challenges of the 21st century, which include global environmental concerns, habitat loss and fragmentation, natural disasters, inequitable distribution of resources and services, unsustainable urban forms, and socio-economic segregation (Galantini & Tezer, 2018). These complexities have given rise to vulnerable and insecure communities and spatial structures in urban areas.

In sum, planning involves not only predicting potential future scenarios but also exploring and analysing a wide range of options to encourage integration, adaptability, inclusivity, and interdependence. This makes planning an essential practice for individuals and communities alike, as it helps to ensure that everyone's needs are taken into account and that decisions are made with the best interests of all stakeholders in mind. Planning is crucial in shaping our future and leveraging our resources, particularly land. However, it also has significant physical implications for ageing.

Developing residential structures for older persons has been a critical area of focus for planners. However, it has been unable to fulfil its own conceptual framework of "design for all." This highlights the complex interrelationships between planning and social change. While planning lays the foundation for architectural possibilities, architecture has the potential to materialise segregation, loneliness, and exclusion. It is, therefore, crucial that planners strive to achieve a balance between fulfilling human needs and accommodating future transformations. That

is, planning is called to become more comprehensive and integrative of spatial and social aspects, incorporating strategies that respond to the plurality of people and places shaping one another in a co-constitutive relationship. A broader and more transformative perspective of planners can ensure that planning continues to play a positive and impactful role in our communities. For instance, planners should prioritise creating a built environment that is responsive to the needs of all members of society, including older persons, as longevity becomes a more predominant trait in urban societies across the world. The built environment should also be designed to foster social interaction among people from different generations and inclusivity rather than isolation and exclusion.

Furthermore, planners must recognise that the needs of different communities are constantly evolving, and planning must be adaptable to these changes. This requires a deep understanding of the social, environmental, and economic factors that underpin planning decisions. Through engagement with stakeholders and the wider community, planners can develop a nuanced understanding of the complex issues that need to be addressed.

## Age, time, space, and planning

A simple chronological definition of age fails to acknowledge the diverse dimensions of the ageing process. Critical social gerontology approaches recognise the relational nature of ageing (Van Dyk, 2014). Ageing is viewed as a process shaped by our personal life course and wider social and cultural context. Throughout history, the topic of ageing has been of great interest to scientists and philosophers (da Costa et al., 2016). According to Greek philosophy, those who lived longer gained a deeper understanding of mortal life, which led to their desire to comprehend everlasting ideas and truths beyond the mortal world (Baars, 2012). They believed that obtaining wisdom and true conviction, even in old age, was a great fortune (Pearson, 2006). Eastern views of ageing have traditionally privileged those in old age, as have many indigenous communities around the world where "Elders" have been esteemed and valued as knowledge holders, keepers, teachers, or healers who promote community cohesion and deeper understanding of traditional wisdom (Nelson & Rosenberg, 2022). However, these ideas have been evolving due to the influence of social and economic changes, globalisation, and colonisation (Lewis & Heinonen, 2023).

Age is a phenomenon that is inherently ordinal, as it is determined by the intersection of time and the event of birth. A group of individuals born within a specific period is called a cohort. The defining feature of a cohort is the lived time, or age, which determines the difference in age between individuals. Age strata, regardless of their definition, are thus composed of a continuous succession of living cohorts observed at a specific point in time (Dannefer, 2003). In a society, the importance of age can shift greatly based on changes in social structure. This is particularly evident in the transition to modernity, which led to the establishment of age-based hierarchies corresponding to newly defined life stages, an emphasis on age as an eligibility criterion for legal and bureaucratic processes, and an increase in age awareness (Chudacoff, 1992).

As a result, the life course became institutionalised (Kohli & Meyer, 1986). When viewed as a snapshot of contemporary society, this phenomenon involves the institutionalisation of age-based hierarchies that systematically shape the experiences of different age groups through legal, governmental, and corporate policies and broader social practices that are explicitly age-based. In age-based societies like modern welfare states, membership in these hierarchies strongly predicts one's level of social engagement and perceived importance (Uhlenberg, 1988). Understanding the difference between normative age-graded roles and human nature is crucial to avoid confusion. Riley's age stratification perspective highlights the concept of structural lag, which refers to society failing to provide meaningful roles for all ages (Riley & Riley, 1994). This is relevant in the context of increasing longevity and late-life vitality among the ageing population, challenging ageist beliefs. Disordered age structures can lead to exclusion from social participation and are costly for both individuals and society. Waring's concept of disordered cohort flow is vital to understanding these issues (Waring, 1975).

According to Dowd (1975), as we age, our dependence on others increases, making it necessary to submit to their will more frequently because we have fewer ways of compelling others to submit to us. Relationships are based on mutual exchanges, and as older people become less able to exchange resources, their social circles may shrink (Diggs, 2008). To avoid being cast aside, they may need to engage in resource management, such as maintaining a large inheritance or participating in social exchange systems.

However, some criticise this theory for placing too much emphasis on material exchange and undervaluing nonmaterial assets such as love, belonging, and friendship, as it assumes individuals always follow rational behaviour. Thus, the age stratification perspective suggests that society can be stratified based on age, with social resources and expected roles differing among age groups (Riley et al., 1972). Behavioural age norms shape these roles and are unique to each age group.

An intersectional perspective enables us to understand the ageing experience from multiple identity positions, recognising that what ageing means for each individual is influenced by various social categories, spatial characteristics, and identity markers. As ageing occurs within a time-space frame, for this reason, we need to expand our conception of the ageing process to encompass this idea. According to Gabauer (2022), it is important to broaden our understanding of time in relation to spatial experiences of ageing. Additionally, it is important to recognise that time and place are social constructs and can be experienced differently by individuals, as explained by Besedovsky et al. (2019). This leads us to focus on the urban temporalities of the ageing population. According to the OXFORD dictionary (2023), temporality refers to how people subjectively perceive a sequence of events or history rather than the objective and measured concepts of time and chronology. This means that time is not viewed as a passive element but rather as something influenced by societal customs and behaviours (Darvill, 2007).

According to May and Thrift (2003), time and space are not separate entities but rather a combined process. Barnett (2006) explains that poststructuralists view temporality as a succession of unpredictable moments linked only by a convention

or an act of will. A broader perspective of this idea pertains to the adjustments and transformations that older persons experience in their interactions with their surroundings, which impede their assimilation into their environment. These modifications can be prolonged, such as decreased capabilities, or daily, such as fluctuations in health and mood. These challenging circumstances may lead to efforts focused on achieving a re-integration between people and their places (Cutchin, 2003).

**Making age, politics, and place relevant**

The United Nations (UN) has predicted that the ageing of the global population will be one of the most significant societal transformations of the 21st century. The demographic shift is expected to profoundly impact various sectors, including labour, finance, housing, transportation, and social welfare. The ageing population will alter the workforce as older workers become more prevalent and the retirement age increases (UN, 2023). The UN has recognised the critical importance of these challenges and has called for concerted efforts to mitigate their impact on society by developing comprehensive policies and strategies to address the challenges posed by ageing populations, considering the changes required in policies related to healthcare, social welfare, and economic sustainability.

To address these issues, the First World Assembly on Ageing convened in 1982 by the General Assembly resulted in the Vienna International Plan of Action on Ageing, which consisted of 62 points and emphasised the need for specific and focused actions on a range of issues, including health and nutrition, protection of older people, consumers, housing and environment, family, social welfare, income security, and employment (Oellers-Frahm & Zimmermann, 2001). In 1991, the UN General Assembly adopted the Principles for Older Persons, a comprehensive document that lists 18 entitlements addressing older individuals. These entitlements cover a wide range of areas, including independence, participation in society, adequate care, self-fulfilment, and dignity (OHCHR, 1991). The Principles for Older Persons aim to ensure that older individuals are treated fairly and with respect, and that they have access to the resources they need to live a fulfilling life. The document serves as a reminder to governments and societies of their obligations to protect and promote older people's rights, ensuring that they are not discriminated against or excluded from society.

The subsequent year saw the convening of the International Conference on Ageing in order to continue the momentum of the Plan of Action. The Conference proceeded to endorse a Proclamation on Ageing. In line with the recommendations of the Conference, the UN General Assembly declared 1999 to be the International Year of Older Persons. The International Day of Older Persons is now observed annually on October 1 (UN, 1992). In 2002, a significant step was taken for the welfare of the older population when the Second World Assembly on Ageing was held in Madrid. Its goal was to establish international policies for ageing in the 21st century and to achieve this, a political declaration and the Madrid International Plan of Action on Ageing (MIPAA) were adopted. The Plan of Action emphasised the need for changes in attitudes, policies, and practices at all levels to unlock the

enormous potential of ageing in the 21st century. More than 20 years ago, this Plan outlined a commitment towards building a *society for all ages*, establishing specific recommendations to prioritise the well-being of older persons, promote development, improve health standards, create enabling and supportive environments, and help states and societies in developing policies to enable older persons to continue contributing to society based on their abilities (UN, 2002).

More recently, other international policy instruments, such as the World Health Organization's (WHO) Guide to Age-Friendly Cities and Communities, the 2030 Agenda for Sustainable Development, the WHO's Global Strategy and Action Plan on Ageing, and the UN Decade of Healthy Ageing (2021–2030) have reinforced the call to action to foster physical, social, and economic environments that allow all people to maximise their abilities across the life-course, improving the experience of ageing and the opportunities ageing offers.

Thus, in general, ageing has become an increasingly relevant international concern since 1982, with medical advancements, demographic shifts, and changing social norms contributing to its growing attention worldwide. The implications of ageing are wide-reaching and multifaceted, affecting healthcare, social security, economic productivity, and intergenerational relations. As a result, politics has played an instrumental role in addressing these challenges, with political entities actively developing strategies and policies to address the diverse implications of ageing. To meet the needs of an increasingly older population, new concepts emerged to frame the ideals and goals for policies and care services, such as the pursuit of healthy, successful, productive, and active ageing, or the four pillars of ageing, as regarded by some scholars (Lin et al., 2016; Dizon et al., 2020; Matz et al., 2020).

The concept of "healthy ageing" can be defined as the process of developing and maintaining functional ability, which is essential for overall well-being in later life (WHO, 2015). More specifically, healthy ageing involves maintaining good health and independence in older age, both physically and mentally (Oxley, 2009). However, it also encompasses broader lifestyle factors, such as dietary habits, which can help enhance overall health (Reed et al., 1998; WHO, 2015). The idea of healthy ageing aligns with policies aimed at improving the quality of life for older persons, as promoted by the WHO (WHO, 2002). The attainment of "successful ageing" is a complex process involving the realisation of personal life goals, the preservation of a sense of purpose and significance, and the effective management of the challenges and transformations accompanying age progression. In order to gauge the degree of successful ageing, an exhaustive assessment of various domains of individuals' personal lives is essential (Bowling, 2008). Similarly, Hsu (2007) measures successful ageing using variables such as physical health, independence, living without chronic diseases, living with family, and receiving emotional care. Depp and Jeste (2006) adopt physical and psychological health, satisfaction, and social factors as essential criteria to test the extent of successful ageing.

The concept of "productive ageing" is centred around the idea of making meaningful contributions to society through work, volunteering, or other activities. Such

activities can include formal or informal post-retirement employment opportunities or other productive endeavours across various fields, such as the industrial and agricultural sectors (Windsor et al., 2008). These contributions can be made in various ways, such as serving the community at large, volunteering for families, or working in the service sector. By engaging in productive ageing, individuals can remain active and maintain a sense of purpose in their later years. The concept of productive ageing pertains to the involvement of older individuals in diverse work endeavours, producing essential goods and services for everyday life (Morrow-Howell et al., 2001).

Finally, "active ageing" encompasses the ability to engage in social, cultural, and leisure activities that enhance one's life and foster social connections. Originally coined by the WHO in the late 1990s, the term was defined as the involvement of older persons in activities that contribute to their well-being and quality of life. Building upon this definition, Walker (2002) argued that active ageing also encompasses older adults' participation in societal activities. Consequently, active ageing policies should incorporate two distinct policy approaches: one that prioritises older adults' economic contributions to the workforce and another that emphasises their involvement in broader societal activities. This understanding of active ageing underscores its potential for promoting social inclusion – or exclusion.

The context of these pillars that became political ideals implies that healthy, successful, productive, or active ageing stresses the importance of health and exercise. Still, social cooperation in various organisations is not emphasised. Moreover, these ideals often place too much emphasis on individual responsibility and choice for one's life outcomes in old age, while insufficient consideration may be given to the broader life course and contextual factors that determine the experience of ageing and its heterogeneity. Thus, any discussion related to the goals of policies to address ageing should go beyond health and nursing to social support and environments that enable older persons' agency and well-being in the context of other ageing ideals.

In contemporary research and policymaking, it has become increasingly apparent that age and place are crucial variables that must be integrated into the design and implementation of ideals, interventions, and programmes. By considering age and place as key variables, policymakers can develop interventions and programmes that are tailored to the unique needs of different age groups and cities. It is important to note that designing interventions and programmes that cater to different age groups and cities requires a nuanced and detailed understanding of each group and city's specific needs and challenges. For instance, policymakers must consider the physical and social environment of a city, such as its walkability, accessibility, and social support systems, when designing interventions and programmes for different age groups. Moreover, by considering age and place as critical variables, policymakers can identify any disparities and inequities in the design of policies and programmes. This allows the development of policies and programmes that prioritise equity and ensure that all individuals, regardless of age or place, have access to the resources they need to thrive.

**Ageing and place: when science defines needs**

Prior to the inclusion of the older population's requirements in urban planning theory, various social science fields formulated perspectives on the connection between the built environment and older people. These perspectives constitute the foundational theories behind age-friendly urban planning.

The significance of space and place perspectives for ageing appears to be on the rise in gerontology (Rowles & Bernard, 2013; Wahl et al., 2012). The field of environmental gerontology investigates the correlation between older individuals and their physical and social surroundings to enhance their quality of life and promote healthy ageing (Wahl & Weisman, 2003). This area of study encompasses various subdomains of gerontology, such as physiology, psycho-gerontology, behavioural gerontology, biogerontology, geroscience, sociogerontology, eco-gerontology, geo-gerontology, financial gerontology, and geriatrics (Wahl & Weisman, 2003). Each subdomain of ageing investigates the impact of the environment differently. In the field of biogerontology, certain environmental factors like temperature, food availability, and stress play a crucial role in determining lifespan (Austad, 2009). Epigenetics has brought about a deeper understanding of how genes and the environment interact. It sheds light on how family dynamics and economic circumstances can impact gene expression and the potential for risk (Campisi, 2005). As per geropsychology, the environment is perceived and processed by ageing individuals to take appropriate action. In geropsychology, environmental features are studied as "interference" through experimental research; during information-processing tasks, older adults may struggle to filter out "less important" environmental input, resulting in slower and less accurate cognitive processing. (Lindenberger & Ghisletta, 2009). Cognitive-ageing literature has also delved into the subject of the environment. A study by Hertzog et al. (2008) explored how workplace environments can affect cognitive trajectories through exposure to various cognitive stimuli and challenges; individuals can benefit from differential cognitive stimulation in different environments. From a psychological standpoint, the environment can serve as a stimulus for enhancing ageing and unleashing untapped potential (Colcombe & Kramer, 2003). The term "enriched environments" is often used to emphasise their significance in unlocking the latent reserves of older individuals. Additionally, environmental stress is a significant factor in geropsychology and may impact negative affect experiences (Chui et al., 2012). Social gerontology has studied how the environment affects social relationships (Antonucci et al., 2009).

Recently, the field of environmental gerontology has been placing more emphasis on the importance of the environment itself. Researchers are becoming more aware of how physical spaces impact the health and well-being of older adults. As a result, they are closely studying how built environments can create a more supportive and age-friendly living environment. Furthermore, geographical gerontology considers place as a process, that is, place as non-static or a simple "background" to events, but an essential part of social relations (Wiles, 2005). As such, they regard a mutually constitutive relationship between society and place, where societies shape

the spaces and places in which they live, those spaces and places shape societies. From this perspective, geographical gerontology emphasises the spatial and environmental contexts of ageing, seeking to underpin the ways in which ageing affects specific places and spaces and the influence that specific contexts have on the experience of ageing (Andrews et al., 2007; Wiles, 2005).

**When place is in danger: exclusion as a key concept for planning**

In our prior discussion, we delved into the perceptions and understandings of the environment and how this relates to urban planning and the physical built environment. This is an essential and crucial topic for urban planners as it is intricately linked to the configuration and management of physical space, significantly impacting older citizens' overall well-being and quality of life. The spatiotemporal patterns of older persons are a crucial area of study for planners. It is equally important to consider the significance of place for this demographic.

Let's trace the word "place" back to its Latin origin, "Loc," which means location or site. In ancient Greece, the idea of place held significant philosophical importance (Salowey, 2015). Plato was the first to introduce the concept, viewing it as a container for objects, while Aristotle believed it consisted of elements, images, emotions, and time. Aristotle saw the place as more of a content than a substance and that it was determined by the existence of objects it contained (Lewis, 1995). The integration of person and place dissolves traditional dualisms, such as those separating idea and object, self and others, inner consciousness, and the external world (jaPaik, 2002, p. 22). As a result, the concept of "place" is a combination of physical, psychological, historical, cultural, and somatic forces (jaPaik, 2002). In essence, the home space is more than just a physical location for older individuals. It's a way for them to preserve their life history's meanings and maintain their social identity, even when they become chronically ill or disabled. The home is an extension of oneself, promoting individualisation, preserving integrity, and promoting a sense of personhood. (Lecovich, 2014; Gitlin, 2003).

Thus, being excluded from a place fundamentally involves a multifaceted exclusion. Place enters the exclusion debate in two ways: as a collection of individual resources and as a stage on which collective exclusion processes become visible. As noted by the Social Exclusion Task Force, founded in the United Kingdom (UK) in 1997 as one of the first investigation groups on exclusion in Europe, both aspects are intertwined. They describe social exclusion as "a shorthand label for what can happen when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health, and family breakdown" (Social Exclusion Unit, 2001, p. 10). Burchardt et al. (1999) identify four dimensions of exclusion: (1) the impossibility of buying goods and services, (2) the lack of opportunities to participate in economic and social activities, (3) the absence of involvement in local and national decision-making processes, and (4) the absence of integration opportunities within the community. Studies focusing on the living conditions of older persons highlight that processes of exclusion in old age are primarily associated with a loss of

independence and freedom. By leaving the labour market, which also involves the freedom to choose a workplace, older people often have to rely on standardised services, primarily determined by the state: transfers (especially pensions and additional benefits), public transportation, housing, and living environments (Barnes et al., 2006). These effects are amplified when the neighbourhood in which these people live is also considered disadvantaged (Miranti & Yu, 2015, p. 121).

Thus, the living environment is considered particularly important for older people to avoid exclusion and maintain participation in societal and economic processes as they age (Burns et al., 2012). With increasing frailty, a person's range of action decreases; thus, their dependence and expectation of security and stability increase. Therefore, changes in the living environment's demographic composition are often interpreted as a risk of exclusion in later life, as are urban revitalisation activities. Buffel et al. (2013) identified four predictors of exclusion risks in old age on the scale of a place: (1) the duration of residence in the neighbourhood and in the home since retirement, (2) trust in supportive neighbourhood relationships, (3) the frequency of moving throughout one's life, (4) emotional connections to the neighbourhood. In this sense, exclusion processes have direct (e.g., moving due to displacement, lack of a sense of security) or indirect (withdrawal from one's home) socio-spatial effects (Forrest, 2008; Scharf et al., 2005).

As we outlined earlier, a place is never just a measurable extension (e.g., neighbourhood, housing estate, apartment) in which older people live with their individual or household-related characteristics and can be mapped according to distributions ("space"). Place is also a process of place-making, which is formed and shaped through perceptions and attributions, filled with meanings that can run counter to objective concepts like living conditions, environments, or age groups (Andrews et al., 2007). "Places are the context in which we live, settings to which we feel attached, but which also shape our experience of social processes, such as the provision of healthcare, the process of ageing, or social and economic restructuring" (Wiles, 2005, p. 101). Wiles (2003) points out in an earlier study that the loss of a long-inhabited home can lead to inner withdrawal in older people because important memories are lost with the change of residence, which older people need as anchors in their current environment.

This concept of place as a simultaneity of material, social, and symbolic is also emphasised in the social philosophy of critical urbanism, especially as represented by Henri Lefebvre. In Lefebvre's view, cities or neighbourhoods are understood as constantly changing relational structures regulated by political, social, and economic relationships (Lefebvre, 1991) and a product of dynamic relationships between materialisation, conceptions, and experiences.

Empirically, Petersen and Minnery (2013) examined this relationship using the example of retirement communities in Southeast Queensland, Australia. This specific form of hybrid space (several hectares in size, fenced, and equipped with all the necessary infrastructure for ageing) is considered a future concept of urban ageing in Australia. The authors were interested in the influence of such complexes on the perception of ageing and the development of stereotypes about older people among the residents. Drawing on the work of Lefebvre, they conclude that

each resident in these retirement communities constructs their own approach to the situation, depending on how older people can categorise the settlement. Based on Edwards's discursive concept of linguistics (1991), categorisation is the production of action-relevant explanations in the act of speaking, as seen in interviews. Belonging and distinction are created through categorisation, serving as a construction aid for explaining reality. "Spatial practices for some older people were problematic to establish and maintain – they were contextualised by a sense of loss in relation to home, space, and occupation" (Petersen & Minnery, 2013, p. 832). While some use the category "loss," others argue with the categorisation "independence," speaking of it being "just like home," thus emphasising the positive, supportive aspects, even though dependence on care always carries the aspect of dependency. These different negotiations lead to the realisation that housing is primarily socially constructed: "The application of the theory of social space provides illuminating perspectives of how daily life is practised by older people as well as the meaning the space represents" (ibid., 837).

According to the authors, it is important to analyse these findings from the perspective of an understanding of exclusion because it encompasses not only separation and loneliness but also the limitations placed on participants' spatial practices. The place itself represents a change or loss of spatial practice. Petersen and Minnery (2013) refer to these complexes as places of segregation and ageism. They attribute this mainly to the fact that such complexes are exclusively a "management strategy for meeting their (= the older people) expected care and support need" (ibid., 61) and do not take into account the actual preference for ageing in a familiar environment. Their study focused on how professional stakeholders conceive of representations of space in the planning process of such complexes. They found that the ageing person (1) is constructed based on their need for assistance, (2) does not appear in the planning process, (3) favours living alone, (4) markets old age, and (5) is homogenised through the absence of differentiations. "Although many professional stakeholders show respect for older people, their work knowledge is made up of assumptions, generalisations, and commonplace euphemisms" (Petersen & Warburton, 2012, p. 80).

In this context, Rudzitis (1984) speaks of the emergence of "geriatric ghettos" in cities. His guiding question of "how and why society and its institutions are organised in the way they are" led him to the thesis that the formation of these ghettos was primarily driven by the construction of inner-city nursing homes and social housing, resulting in older people being left behind. These spatial concentrations of older people, mostly disguised as voluntary decisions, especially among the older African American population, are nothing more than a perfidious form of exclusion. Limited mobility, as the few existing social infrastructures on-site, fear of crime, and low social capital in the neighbourhoods would perpetuate the segregation processes.

In the context of urban research, while Lefebvre primarily politicises the contradictions between everyday life and conceptual space from a critical perspective, Edmund Soja develops a theory of spatial injustice from a broader geographical viewpoint. Soja suggests a triadic understanding involving "the social/societal, the

temporal/historical, and the spatial/geographical" (Soja, 2010, p. 70). This "triple dialectic" needs to be reconfigured given the existing ontological distortion where the social and historical aspects dominate over the spatial. Soja's central thesis is rooted in an insight from the Chicago School, which emphasises that any change results in inequalities and that no social process distributes evenly in space. According to Soja, changes and processes generate further changes and processes in an already altered space, creating places that are unique in terms of spatial and social conditions. These places are socially, historically, and spatially organised and are assigned a function within the community (politics). When differentiation markers like gender or age overlap in such places, exclusionary effects occur. Soja unequivocally asserts that, due to this triadic dialectic, every social and historical exclusion goes hand in hand with spatial exclusion.

## Planning and ageism

Drawing upon all the findings mentioned earlier, it becomes evident that planning for older people and their spatial associations must be complemented by research into the foundational assumptions of the paradigm of "living (in) an ageing society." Housing should not be limited solely to its functional character of providing overnight accommodation. Instead, the attributions of meaning to living within the context of individual and collective perceptions and expectations, as well as the generated significance of these within the framework of intergenerational relationships and specific artefacts of housing (nursing homes, residential neighbourhoods, communities), must be distinguished to identify inclusive and exclusive effects of political measures.

Andrews et al. (2007, p. 159f.) refer to numerous studies showing how a research focus on the life world helps clarify that "older people do not necessarily subscribe to 'standardised' constructs of illness, disability, or infirmity" (ibid., 158). Health is predominantly subjectively defined through meaningful activities, and the interpretation of physical limitations varies depending on social and cultural backgrounds and specific situational experiences (at home, on a bus, among friends, etc.). Activities designed as health-promoting interventions, such as urban gardening, are then planned as "inclusionary spaces" and, when combined with other age-sensitive offerings, create a form of a "Therapeutic Landscape" (Milligan et al., 2004). This image of ageing aligns with the notion of successful ageing, which implies active engagement with one's environment, productivity, and contribution to society. Those who do not wish to or cannot participate in this process contradict this image of ageing and become socially marginalised, seen as passive and unsuccessful.

With reference to Mansvelt (1997), Andrews et al. (2007) illustrate the pressure among older individuals to engage in a post-retirement phase that can be compared to the job market, with expectations of productivity and time sensitivity. McHugh and Larson-Keagy (2005) show how the narratives of successful ageing have led to the fragmentation of the neighbourhood identity in an urban neighbourhood. On one side are those older individuals who engage, are active, and are publicly

visible, thus considered "successful." On the other hand, older individuals who do not participate in these activities become an increasingly invisible "gated community" within the public space.

Wiles et al. (2012) demonstrate the contradictory nature of the everyday lives of older individuals and concepts like ageing in place. The older individuals they interviewed found little resonance with the concept and its goals; instead, they sought choices that empowered them to make decisions. They view any representation of their living environment critically and expect policymakers and urban planners to develop "insider" perspectives and establish conceptual links, such as between the home as a "refuge" and the neighbourhood as a "resource." Schwanen et al. (2012) argue that this necessitates a fundamental shift towards more flexible planning and a more open approach to designing for ageing. For instance, they argue that "for many people, ageing and old age entails shorter or longer periods of more-or-less ill-health and dependency on some form of healthcare, the experience of which is shaped by wider dynamics in landscapes of care" (ibid., p. 1292).

In a similar dynamic direction, Oswald et al. (2010) explore whether ageing in place represents an asset or a risk for successful ageing. They also identify significant differences in the perception and use of the living environment based on age groups. For those aged 65–79, variables like "housing size," "perceived quality of the living environment," and "specific neighbourhood amenities" statistically explain their quality of life. For those over 80, it's especially variables like "neighbourhood quality" and "perceived quality of the living environment." Due to the numerous differences in the needs related to different life stages, the authors recommend a "conceptual differentiation of physical and social person-environment related resources and risks as part of a comprehensive understanding of ageing in place, including the home and the neighbourhood" within the framework of age-friendliness (Oswald et al., 2010, p. 249). They find it insufficient to reduce age-friendliness to accessibility or to dissolve the category of age in favour of a public space designed purely for aesthetic reasons. However, locating the processes of exclusion solely on the side of professionals and the spatial representations would be too one-sided.

While research into the effects of age-related ageism within the group of older people is still poorly structured, studies reveal interesting findings. Linderberg and Westendorp (2015) interviewed 54 older individuals in a neighbourhood designed according to the principles of age-friendly cities in a Dutch City, inquiring about their expectations for life in old age. Their specific example aimed to explore why age-friendly areas or living environments fulfil many of the living and environmental wishes older individuals articulate while, at the same time, they are not considered attractive places to live. A contradiction is identified here: "Old-age friendliness undermines age-friendliness" (ibid., 94). To make a space age-friendly, adjustments must be made that culminate in a spatial representation emphasising advanced age and, thus, frailty. "Therefore, producing space also means producing a certain existence, creating spatial practices that are simultaneously representational of space" (ibid., 95). In the redesigned neighbourhood, the involvement of older individuals led to increased consideration of the wishes expressed by the

oldest old, resulting in the departure of existing facilities and services that catered to other age groups. Some older individuals did not want to be in a neighbourhood primarily designed from the perspective of "old age," which, in turn, made it less attractive to families and younger people. However, those in their "second age" also did not feel adequately represented in the neighbourhood. They perceived it as a paradox – a "wish for an age-friendly, but not old-age friendly space" (ibid., 95).

To prevent such downsizing processes, which share processual similarities with gentrification, the authors advocate for intergenerational planning and avoiding terms like "age-friendly neighbourhood." Because "being old is not a desired social identity, and therefore these homes reproduce social relations and significations that are unattractive" (ibid., 96). Stereotype research can be helpful in this context. Stereotypes are understood in psychology as cognitive schemas that people use to process information about others (Hilton & Hippel, 1996). They not only reflect ideas about the characteristics typical of a group member but also include information about the distribution and manifestation of selected traits within that group (Dovidio et al., 2010).

Consequently, stereotypes encompass descriptive and explanatory statements about ageing and contain evaluative and normative elements. Stereotypes are anchored in attributes like clothing, language, social background, gender, or age. This is problematic because it establishes differentiation mechanisms and hierarchies. Stereotypes systematically structure how people perceive information about group members, process it, and respond to it. Stereotypes, whether positive or negative, can be discriminatory (Kelchner, 2000) and exclude older people from societal participation. Although stereotypes can also benefit older individuals (Ayalon et al., 2017), negative stereotypes and their consequences outweigh the positives (Abrams & Swift, 2012, p. 4).

## Ageing in a place – a planner's narrative

In light of stereotypes and ageism in the context of "age-friendliness" or "successful ageing," planning disciplines have recently started to untether age from urban development. Besides the "age-friendly city and communities" model (WHO) or concepts of "elder-friendly communities" (the University of Calgary, Canada/The AdvantAge Initiative, USA), age-neutral concepts like "Lifetime neighbourhood" (UK), "Livable community" (American Association of Retired Persons), or "Livable community" (National Association of Area Agencies on Ageing, USA) are emerging. Lui et al. (2009) have acknowledged this expansion in a review article, stating that "senior-friendly urban planning has moved beyond healthcare considerations to include neighbourhood design and increasingly sophisticated conceptions of place" (Lui et al., 2009, p. 116). Alongside the specific concerns of target groups, such planning now places greater emphasis on fundamental aspects of physical infrastructure (land use, zoning, mobility, communication tools, etc.) and the social environment (civil engagement, community work, political education, etc.) in planning goals and processes. In this regard, these extensions are compatible with more fundamental ideals such as "Design for All," or "Society for All,"

"Accessibility for All," or "Opportunity for All." These approaches emphasise the importance of focusing on the accessibility of the built environment, arguing that, for instance, "to ensure equal chances of participation in social and economic activities, everyone of any age, with or without any disability, must be able to enter and use any part of the built environment as independently as possible" (Wijk, 1996, p. 7). By shifting planning strategies from limitations in mobility (e.g., due to disability or frailty) to an insufficiently built environment accessible to all people equally, they claim to adopt an inclusive understanding. "They offer an indirect demarcation, mostly by referring to the rights of social citizenship: The extent of social exclusion calls on society's responsibility to ensure equal opportunities for all. This includes equal access to the labour market, to education, to health care, to the judicial system, to rights and decision-making and participation" (Saraceno, 2001, cited in Jehoel-Gijsbers & Vrooman, 2008, p. 3). Similar to this perspective, political actors like the European Institute for Design and Disability promote "design for human diversity, social inclusion, and equality." Authors like Lui et al. (2009) point out that all these concepts primarily describe a desired state, with less focus on scientifically grounded concept development: "However, there has been limited documentation of the effectiveness of specific approaches or evaluation of specific processes or outcomes on older people's lives" (Lui et al., 2009, p. 119).

In their critique of universal approaches, Persson et al. (2015) contend that all these approaches inherently seek a concept of normality, but "normality is not a neutral concept, but one that is inseparable from societal, structural power" (ibid., p. 521). Urban development policy based on inclusive thinking primarily involves continuously accommodating deviations from the concept of normality. This is not possible without a broad, publicly conducted debate, as urban development policy always responds to the public interest. Through this continuous and publicly conducted discourse of deviation, the issues of normality, belonging, and divergence transform into questions of identity. Older people ask themselves, "Who am I?" and discuss questions like "What role do I play in the societal context?" less frequently. Ultimately, "For-All" approaches counteract the right of every person to individuality and uniqueness.

The WHO's definition of active ageing does not directly mention the crucial role that urban planning plays in enhancing the living conditions of older persons. However, concerning urban planning, according to the WHO's definition of active ageing from 2002, it is the process of optimising opportunities for health, participation, and security to enhance the quality of life as people age. This is where the role of an urban planner comes in, but before answering what makes a city age-friendly, it is essential to understand the requirements of an age-friendly urban space. In this domain, Scott et al. (2021) provide valuable insights into the importance of urban planning by emphasising the need to consider both the physical and sociopolitical dimensions of place-making. This involves addressing physical domains such as housing, transportation, and outdoor spaces such as public areas and green spaces, as well as sociopolitical aspects like civic participation, social networks, inclusion, and respect (Bosch-Meda, 2021). By providing both physical and social infrastructure, cities can leverage synergies to create a dynamic and sustainable

environment that supports economic development and social welfare (Trisciuoglio et al., 2021). Creating a more compact and concentrated urban environment can result in increasing connectivity in urban spaces (Handy et al., 2002; Saelens et al., 2003) and reducing car use and the associated noise and air pollution, leading to healthier urban environments and improved quality of life for residents (Gray et al., 2010; D'Onofrio et al., 2018).

That leads to another essential construct for the macro-environment: walkability, which refers to the extent to which amenities are conveniently accessible on foot (Dovey & Pafka, 2020). A high score or index for walkability can suggest an ideal blend of constructed elements that, when maximised, can lead to a neighbourhood that is easily traversed by foot. As per Darling (2016), this refers to how conducive the constructed surroundings are to the presence of individuals who reside, shop, visit, indulge, or pass the time in a specific area. On the other hand, an area's walkability is influenced by the five D's of the built environment – density, diversity, design, destination accessibility, and distance to transit – as discussed by Ewing and Cervero (2010). An individual's decision to walk is affected by a combination of these factors, according to Wang Ke (2013). Peace et al. (2007) highlight that older individuals tend to exhibit a greater inclination towards local services, such as grocery stores or health centres that are proximate to their abodes. To cater to this requirement of convenience, the concept of a "15-minute neighbourhood" has been proposed (Moreno et al., 2021).

By doing so, the 15-minute neighbourhood can effectively address the accessibility issue for the older population. However, it's important to note that this average demographic may not represent the entire population. For instance, the British government recommends a 10-minute walking distance to infrastructure and amenities, based on the assumption that young individuals can walk 800 meters within that time (Mitchell et al., 2003). This assumption may not consider the needs of people in later life, who may have different walking capabilities and requirements. According to Mitchell et al. (2003), the average person aged 70 and above requires 10–20 minutes to walk 400–500 meters. Additionally, they may be unable to walk for more than 10 minutes without resting. This highlights the need for infrastructure and amenities to be designed, considering all demographics' needs and diverse abilities.

In addition, age-friendly communities have been identified as having significant shortcomings in preparing for unprecedented events, such as pandemics. The global Covid-19 crisis presented an unprecedented opportunity to gain a more profound understanding of how to design communities that are age-friendly and to reassess the true impact of weaknesses in urban planning strategies. The pandemic has exposed several challenges that older adults experience, such as loneliness, social disconnection, and limited access to health and social services (Scott et al., 2021), as well as the prevalence of widespread ageism in society. The advice to stay at home and the restrictions placed on social gatherings have reduced social connections among older individuals and heightened feelings of loneliness (Finlay et al., 2022), depression, and decreased quality of life (Lebrasseur et al., 2021). The Covid-19 pandemic also revealed that society has often

adopted a solution for an ageing population: segregation by default, which is reflected in the establishment of residential care units, retirement villages, and nursing homes (Scott et al., 2020). On the other hand, the pandemic has highlighted the importance of outdoor spaces, such as parks and walking trails, in promoting physical activity, reducing social isolation, and improving mental health among older adults (Tabrizi et al., 2023).

As we age, we go through various disruptions and face conflicting cultural and moral expectations, according to Katz and Nowak (2018). This results in a fragmented experience of ageing involving resistance, acceptance, denial, and recreation (ibid.). To cope with these challenges, we adapt our interactions with our surroundings, the people we encounter, and the places we inhabit (Gabauer, 2022). As we age, it becomes increasingly important to maintain a sense of connection and integration within our communities. One approach to fostering this connection is through mixed living arrangements that unite older individuals and younger generations. Such arrangements serve the dual purpose of facilitating successful ageing and reintegrating older individuals into the natural course of ageing. Unfortunately, our current societal norms have often led to the isolation of older people and the perception of them as a separate and distinct group. This has resulted in a lack of support and resources for older persons, even though life expectancies are increasing and the need for assistance is growing. It is becoming imperative for planners to explore innovative solutions that can support older persons in their daily lives.

## Conclusion

The concept of ageing in place is highly complex and multifaceted and cannot be approached as a one-size-fits-all solution (Vasunilashorn et al., 2012). It requires a comprehensive and individualised approach that considers various factors such as the individual's physical, cognitive, and emotional needs, their social support network, the accessibility and safety of their living environment, their financial resources, and their cultural and personal preferences. Furthermore, it is important to recognise that ageing in place is not a static phenomenon and that the needs and circumstances of individuals may evolve over time, necessitating ongoing reassessment and adjustments to ensure their health, well-being, and autonomy. There are a multitude of factors influencing ageing in place among different populations, including a range of preferences and access to services based on factors such as the rural-urban divide (Thomas & Blanchard, 2009), socio-economic status (Steptoe & Zaninotto, 2020), sexual orientation (King & Dabelko-Schoeny, 2009), specialised needs (e.g., intellectual disabilities) (Brown, 1993), unique circumstances (e.g., caring for children with developmental disorders) (Liu et al., 2019), cultural differences in views on ageing in place (Fung, 2013), and international variations in required support and services (Phillips et al., 2010).

This sameness or differences in the ageing phenomenon necessitates a paradigm shift in urban planning. It calls for re-evaluating how we approach the

development of age-friendly cities. Such a shift is imperative to ensure that an ageing population's needs and requirements are met comprehensively. As our society grows older, adopting a thoughtful approach that acknowledges the distinct difficulties that older individuals encounter in urban environments is becoming increasingly important. The older person often faces challenges such as limited mobility, social isolation, and inadequate access to public services. To address these issues, it is crucial to foster their welfare and standard of living in a sustainable manner by involving older people and empowering them through participatory planning methods.

One way we can achieve this is by arranging processes to solicit their input and envision their ideas for urban initiatives. This approach can lead to increased social interaction and a sense of purpose. By involving older persons in the planning process, planners can gain valuable insights into their needs and preferences and use this information to co-create urban spaces that are more accessible and inclusive. Careful reflection must take place about the principles and narratives underlying the planning process, especially the constructions of ageing and old age that are involved. Likewise, planning is challenged to evaluate the extent to which these narratives are ageist and whether current urban development strategies are contributing to perpetuating patterns of social and spatial exclusion affecting the experience of ageing.

Nowadays, ageing is a key component of the planning approach. However, as mentioned before, planning is not exclusively reserved for the needs of older persons. Thus, planning has to strengthen its role in advocating for promoting spatial frameworks of physical, social, and mental well-being "for all," accompanied by strong participation and community engagement principles. By incorporating these elements into our urban initiatives, we can help create environments that support the health and well-being of older people. In conclusion, by adopting a thoughtful and inclusive approach to urban planning that involves older people, we can help reimagine the urban landscape to better serve their needs. Such an approach will not only improve the quality of life for persons in later life but also benefit society by creating more sustainable and liveable communities.

## Structure of the book

Part 2 of this book is thoughtfully divided into eight distinct chapters, each of which provides valuable insights into ageing and urban life in different regions of the world. These chapters introduce various paradigms pertinent to the topic, providing a comprehensive understanding of the subject matter.

In their chapter, "Planning for Age-Friendly Cities and Communities in East Asia: The Oriental Paradigm," Chao and Sun discuss the interpretation of the age-friendly cities and communities (AFCC) movement in the East Asian context. They argue that this region's unique cultural characteristics and urban context create a distinct paradigm for delivering age-friendly environments. They present two case studies from different spatial levels in Taiwan, which was the first official East Asian political body to adopt the AFCC in 2010. The case studies showcase a

collective point of view for the oriental AFCC movement paradigm, including the community, individual, and institutional levels.

In "A Recipe for Disaster? The Consequences of Planned Sprawl for the Non-urban Ageing Population: The Case of Belgium," De Decker discusses the challenges faced by the ageing society in Belgium. Where the Flemish government policy approach to ageing in place fails to consider the location-specific nature of service and care provision, which could lead to underserviced care and loneliness for non-urban ageing populations in Belgium. In his work, he argues that the "ageing in place" policy in a sprawled environment ignores the unique characteristics of the places where most older people live. This could lead to underserviced care and mass loneliness, which may have disastrous consequences for non-urban ageing populations in Belgium.

Baba and Ooyama present in "Comprehensive Community Care in Japan" a model to deal with the challenges faced by super-ageing societies. Particularly in Japan, where the proportion of older adults is the highest globally. In this chapter, the authors explore sustainable practices that can benefit young and old adults, irrespective of their health status. The authors analyse two cases from metropolitan areas: Minami-ku in Nagoya and Adachi in Tokyo and one from a regional city, Unnan in Shimane. Baba and Ooyama conclude that municipal authorities should involve all residents in co-productive approaches. They also highlight the importance of incorporating a structured education programme on ageing and dementia for students in schools, which may be essential to encouraging innovation in the future.

In "Ageing and Ambient Assisted Living: New Landscapes of Dwelling," Quesada-García explores the potential for technology to enhance personalised adaptation and improve quality of life. Integrating emerging technologies in architecture and city planning could result in more efficient, balanced, and well-managed smart cities. AAL, or Ambient or Active Assisted Living, is a new paradigm aimed at improving the quality of life for older individuals. By creating assisted spaces that promote personal autonomy and provide a healthier, safer, and more comfortable environment, older individuals can stay in their homes for longer. However, the challenge lies in building this exo-brain environment and assessing its impact on city planning.

In the chapter, "Settlement Planning in Russian Policy and Practice: Is Ageing in the Focus?" Golubeva and Emelyanova delve into the Russian government's concerns regarding population ageing and explore the characteristics of age-friendly settlements. Their analysis evaluates whether urban programmes implemented by the government address the needs of older individuals and those with limited mobility, and whether they promote healthy ageing in Russian settlements. The authors conclude that the country must emphasise creating safe spaces for older adults and prioritise settlement planning.

Moonga's chapter on "Ageing and Urbanisation in Zambia: The Need for 'Age-Friendly Cities and Communities'" delves into the complexities of urbanisation in sub-Saharan Africa, exploring the impact of ageing populations. It sheds light on the challenges and opportunities that arise from this phenomenon and

examines the role of policy in addressing these issues. Furthermore, the chapter investigates the reasons behind the limited adoption of the "ageing-friendly cities and communities" initiative.

In "Ageing in Place with Chinese Characteristics: A Case Study of Wangnong Shequ in Ningbo City," Gequn and Liqiong analysis the effects of China's ageing population on the country's urban environment. Specifically, their chapter delves into the daily habits of older residents living in neighbourhoods and the challenges they face related to ageing. The researchers examine the perspectives of older individuals, their typical routines, and the approaches taken by local authorities to meet their needs. This data-driven investigation provides valuable insights into the development of age-friendly cities in China's urban areas.

Dutton, Koshy, and Tomaselli delve in "Ageing and Gender: An Intersectional Lens for Inclusive City Building Practices in the Global North and Global South" into city-building practices through intersectionality and gender mainstreaming, identifying gaps in age and gender-appropriate urban elements. They explore the successes and shortcomings of global cities, highlighting patriarchal standards in urban design. They suggest reconfiguring cities for inclusive environments and integrating gender mainstreaming with the ethics of care for equitable, age-friendly spaces.

Part 3, *Materialisations of Ageing and Urban Planning*, offers planning practitioners a wealth of valuable insights on constructing environments that cater to the needs and preferences of older citizens. Libardoni and Drilling have devoted years to compiling this comprehensive resource, utilising a meticulous approach that involved on-site visits, thorough research, and detailed analyses of relevant case studies and projects. The outcome is a nuanced and critical examination of each example, presented with precision and depth, from expansive regional maps to intricate building components. Rather than simply providing a set of standardised examples, this chapter aims to inspire practitioners with tangible ideas for advancing and refining their work.

Part 4 is on *Challenges to a Transformative Application of Age-Friendly Programmes around the World*, penned by Suero and Al-Shoubaki; it sheds light on the hurdles encountered worldwide when implementing revolutionary age-friendly initiatives. By scrutinising diverse social, cultural, institutional, economic, and political circumstances, the writers have gleaned significant perspectives that can guide urban planning and policymaking towards creating a substantial impact in our societies. These perspectives are thematically organised, interweaving pivotal lessons learned from the cases expounded in this publication.

In the final chapter, "Ageing in a Transforming City: The Challenges and Opportunities for Urban Planning," Drilling, Suero, Al-Shoubaki, and Neuhaus delve into the intricate issues and possibilities that urban planning encounters amidst changing societal patterns. To efficiently manage the challenges and coexistence of urban growth and ageing populations, urban planning must reassess its core values and reform its customary approaches. The chapter provides valuable perspectives on the vital actions required to accomplish this objective.

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# Part 2

# Global perspectives on ageing and place

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# 2 Planning for age-friendly cities and communities in East Asia

## The oriental paradigm

*Tzu-Yuan Stessa Chao and Yi Sun*

### Introduction

Since the 1950s, the number of people aged 60 and over has tripled. The global ageing population reached 600 million in 2000, surpassed 700 million in 2006, and is predicted to reach 2.1 billion by 2050. There is consensus that a rapid increase in the ageing population has become a global phenomenon. It is also concerning that over 211 million older adults (65+), accounting for approximately 36% of the global ageing population, resided in East Asia and the Pacific area in 2010, according to the World Bank (2016). Cities and communities in East Asia share similar experiences with those elsewhere in the world. However, with the rapidly ageing population increasing by 22% every five years, the pressure is higher than in other cities in the world. Take Taiwan, for example; due to longer life expectancy and lower fertility rates, Taiwan's accelerated rate of ageing is more than twice that of European countries and the United States, and it will take only seven years for Taiwan to become a super-aged society (20% of the population aged over 65), whereas it will take over 70 years in most Western countries (Lin & Huang, 2016). Compared to many Western cities, the rapid increase in the number of older adults, higher density urban contexts, and the distinct cultural characteristics of East Asian societies make implementing age-friendly strategies urgent but challenging for many East Asian cities and communities (Sun et al., 2020).

In response to this ageing trend, since the 1960s, the concepts of "successful ageing," "productive ageing," and "active ageing" have been proposed to illustrate the ideal well-being status of older people (Havighurst, 1963; Kerschner & Pegues, 1998; World Health Organization, 2001). Such concepts all emphasise that, with a longer and healthier life expectancy, older adults should maintain both psychological and physical well-being in order to make social and economic contributions to both themselves and society. At the same time, older adults should gain more social support to maintain an independent lifestyle and ensure safety, health, and social involvement in later life (Walker, 2016). Also, all of the above concepts indicate that the quality of the built environment is an essential factor associated with active ageing. Based on the above concepts, while picturing an ideal living situation in old age, the World Health Organization (WHO) has promoted the age-friendly cities and communities (AFCC) guide since 2007 as a prompt action to create a friendly environment for older people.

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This initiative expects the development of positive local approaches to help construct a liveable environment that will contribute to the well-being of older adults. As of January 2021, 1,114 cities and communities in 44 countries, covering over 262 million people worldwide, had joined the WHO Global Network for Age-Friendly Cities and Communities (GNAFCC). Surprisingly, of these 1,114 cities and communities, less than 6% (only 66) are East Asian cities, including 19 from China (including all 18 districts of Hong Kong/HK), 24 from Japan, and 23 from South Korea. Several possible reasons for the slow response to the AFCC movement among East Asian cities have been pointed out: Distinct cultural characteristics and high-density urban development mode require a contextualised guide and additional time to adapt the eight domains mentioned in the WHO Global Network for Age-friendly Cities and Communities (GNAFCC) approach to planning practices and policy initiatives in the East Asian society (Chao & Huang, 2016; Tan et al., 2019; WHO, 2007).

Hence, this chapter discusses how to interpret the age-friendly movement in the East Asian context. It argues that the distinct cultural characteristics and urban context present the need for a unique paradigm to deliver age-friendly environments. Taiwan was the first East Asian political body to officially adopt the AFCC in 2010 as an important national policy to address the challenges associated with its ageing population. Two case studies in Taiwan are examined across various spatial levels – community, individual, and institutional – to present a comprehensive perspective for developing an Eastern paradigm for the AFCC movement. This chapter concludes by showing that in the East Asian context, the built environment is more than a collection of physical elements. Rather, it comprises local culture and meaningful lifestyles that are conducive to the well-being of older adults.

## Ageing society challenges and policies in the global and local context

### *The global context*

Generally, population ageing is assumed to have multiple impacts on economic growth, savings, investment, consumption, the labour market, pensions, taxes, and intergenerational transfer (Bloom et al., 2010; Tang & MacLeod, 2006). It will affect society as a whole, including changes in family structure, living arrangements, housing needs, migration trends, epidemics, and needs related to health services (Waite, 2009). Despite these apparent challenges, a report by the Organisation for Economic Co-operation and Development (OECD), titled Ageing in Cities-Policy Highlights, clearly identifies that there are many new opportunities for society to take on, such as integrating innovative technologies and approaches in the health sector and acknowledging the possible contributions that the new older population can provide (see Table 2.1).

Since the 1990s, several global policies and actions have been proposed for ageing societies. The United Nations (UN) Principles for Older Persons, which were grouped under five themes, including independence, participation, care, self-fulfilment, and dignity, were adopted by the UN General Assembly in 1991 to establish an age-friendly environment. In 2007, the WHO developed the Global

*Table 2.1* Challenges and opportunities in ageing societies.

| *Challenges* | *Opportunities* |
|---|---|
| Change in local revenue. | New innovation and technologies could be harnessed to maintain the autonomy of older adults. |
| Ageing labour force, leading to a decrease in the labour supply. | New business models and investment strategies could be explored to bring innovative technologies to the market. |
| Increase in public spending for health and social care. | The need for remodelling the existing housing stock could stimulate the housing market. |
| Infrastructure and urban form need to be redesigned to increase the attractiveness of and well-being in cities | The integration of information communication technologies (ICT) could be pursued in various policy fields, in particular, in health sector |
| Social isolation resulting from a reduced social network. | Older adults could be encouraged to fill a gap in voluntary works in their communities. |
| Access to services and jobs will become more difficult for older adults. | The demographic transition could influence public trust in government and citizen's engagement. |
| Housing affordability poses challenges for the quality of life for all generations. | |

*Source:* Data from (OECD, 2015).

Age-Friendly Cities Project and established the Global AFCC Network to foster the exchange of experiences between different cities and communities worldwide. The guide for the global AFCC project encourages a bottom-up approach aimed at providing practical guidance for cities and communities to explore and identify the local issues thereby delivering contextualised strategies to build an age-friendly environment (WHO, 2007). Local communities can select the most relevant domains from the eight AFCC domains proposed by the WHO based on the needs of their local seniors. Cross-departmental partnerships are strongly advocated to provide overarching urban policies for an age-friendly environment (Figure 2.1).

***The local context***

As in many East Asian countries, Taiwan will encounter enormous challenges in the areas of productivity and competitiveness, with the projection of an average fertility rate no higher than 1.5% in women of childbearing age by 2040. The census from the Ministry of the Interior (MOI) in Taiwan indicates that the fertility rate has been continuing to drop since 1981, and the old-age dependency ratio (population aged 65 and over to population aged 15–64) has tripled at the same time (see Figure 2.2). The MOI also reported that as of 2020, the total population in Taiwan had decreased for the first time, by 41,885 people (0.18%).

With the fertility rate dropping and the population ageing, by 2025, one in five citizens in Taiwan will be above the age of 65. This change in the demographic structure of Taiwan has raised public awareness of whether the current healthcare and social welfare systems and built environment fit this ageing society (Chao, 2015). In addition, with the ageing trend, the decrease in household size from the

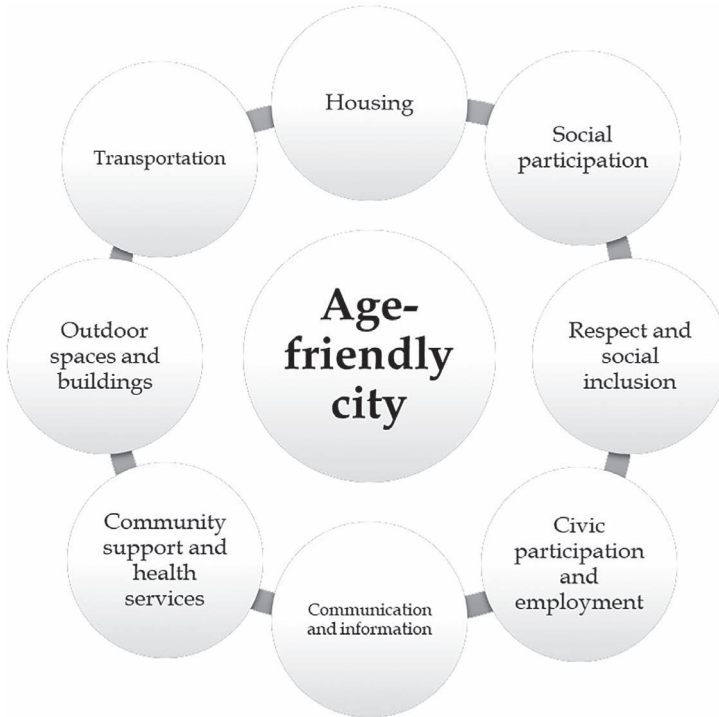


*Figure 2.1* The domains of the AFCC.

*Source:* By the authors from (WHO, 2007).

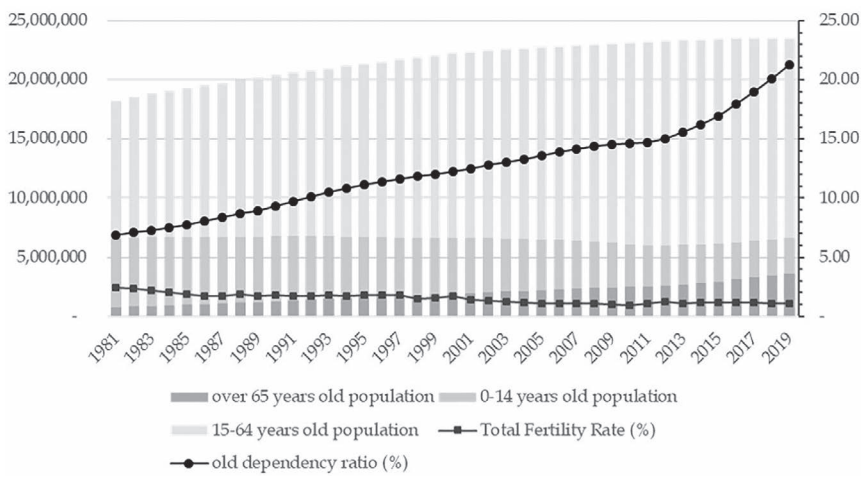


*Figure 2.2* Ageing trend in Taiwan from 1981 to 2019.

*Source:* The Ministry of the Interior, Taiwan (2021).

three-generation household with an average of six people per household in the 1970s to an average of 2.7 in 2020 in Taiwan makes it challenging for families to maintain family support for older adults. Hence, older adults will have to rely on the government to address their increasing needs in relation to health and social care in the near future (Fann & Hsu, 2010; Chen & Wu, 2019).

To better prepare for the ageing society in Taiwan, three key policies have been announced to facilitate a more supportive environment to address these challenges, including the restructuring of long-term care services, providing sufficient affordable housing units, and upgrading the physical environment through urban planning and design regulations. First, the central government approved the "National Ten-Year Long-Term Care Plan 2.0" (LTC Plan 2.0) in December 2016, with the aim of prolonging healthy life expectancy, maintaining life functions, and improving quality of life. To promote the policy goal of "ageing in place," a community-based three-tier system, including integrated service centres, combined service centres, and long-term care stations, was established to deliver care services close to home (see Figure 2.3). Besides, in January 2017, the Long-Term Care Services Act was

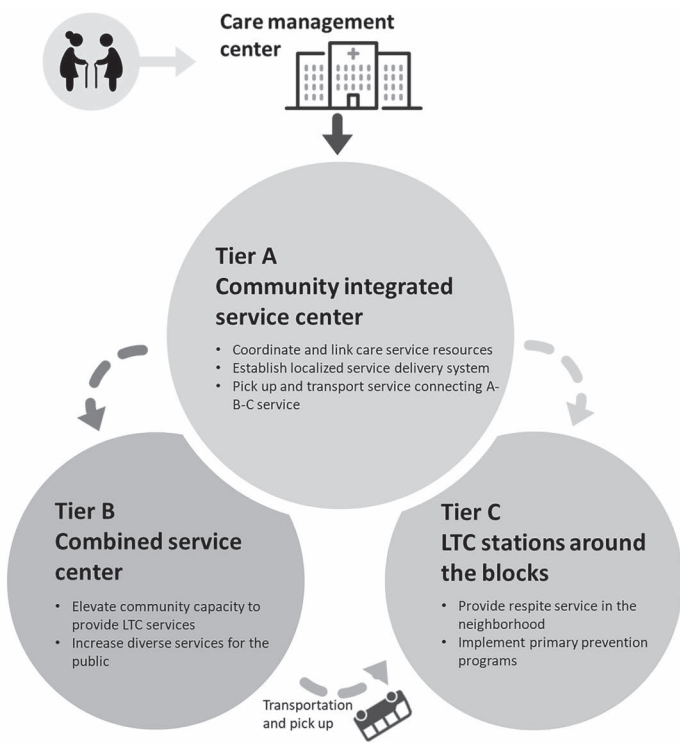


*Figure 2.3* Long-Term Care 2.0 in Taiwan.

*Source:* (MHW, 2016).

amended with articles that list additional funding sources for LTC services, including an earmarked tax of 10% of the estate and gift tax and the tobacco and alcohol tax (Yeh, 2020). In four years, the total government budget for LTC increased more than eightfold, from 5,000 to 40,000 million NT dollars (MOI, 2020).

In terms of facilitating a supportive environment for older adults, Taiwan's government introduced AFCC in 2010 and initiated the National Social Housing Programme (NSHP) 2017–2024. Out of the total of 120,000 new units the NSHP plans to deliver, 20% of the flat units will be prioritised for vulnerable groups, including older adults living alone (MOI, 2017). According to the census, the actual number of older adults living alone was over 477,000 as of 2021, and adopting the AFCC to deliver ageing-in-place seems to be an effective approach. The responsibility for the implementation of the AFCC falls on the Health Promotion Administration, Ministry of Health and Welfare (MHW), at the central government level. Accordingly, as soon as the AFCC began to be promoted, Taiwan took a top-down approach, unlike the bottom-up approach recommended by the WHO. By 2015, all 22 cities and counties in Taiwan had officially committed to the AFCC, and the health departments led all the projects. Hence, other departments in charge of the physical environment, such as the urban planning and construction divisions, provide supporting roles. Chao and Huang (2014), based on the experience of the national AFCC 2010–2012 project, proposed an eight-step top-down AFCC model in Taiwan following the WHO's AFCC concept, which considers the ageing trend and local policy contexts (see Figure 2.4).

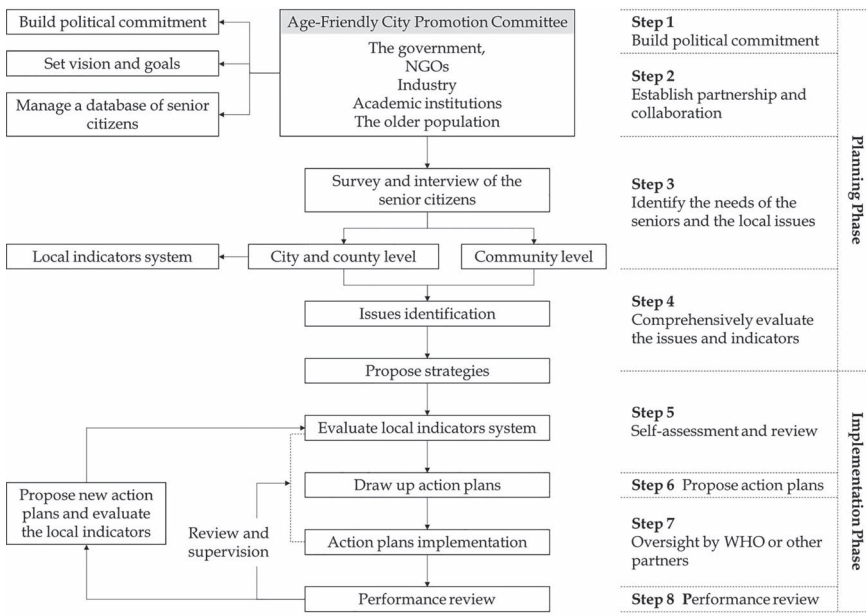


*Figure 2.4* The top-down approach process of the age-friendly cities project in Taiwan.
*Source:* (Chao & Huang, 2014).

**Difference between the West (mostly Europe and the United States) and the East Asian (Taiwan) AFCC implementation experience**

As mentioned in the Introduction, we can further explore the local interpretations of the AFCC in East Asian cities from two crucial perspectives: bureaucracy and local culture (Grossmann et al., 2012; Chen et al., 2015). There are two distinct differences between the Taiwan model and most Western AFCC projects from the perspective of the bureaucracy. First, a strong political commitment from the mayor is the crucial factor for successful cross-departmental collaboration within City Hall. Second, quantitative local indicators were established to evaluate and monitor the outcome of the AFCC at a very early stage, whereas the WHO did not establish these core indicators until eight years after the initial promotion of the AFCC (WHO, 2015). This reflects an institutionalised governance framework with hierarchical coordination between state bureaucracies and horizontal exchange of information and resources between Taiwan's state and non-state sectors (Sun et al., 2017). Chao and Huang (2016) also confirmed the "high-power distance" phenomenon associated with the promotion of AFCC projects at the institutional level in Taiwan. The level of commitment from political leaders significantly impacts the public's perception of policies. The AFCC project promotion has adopted a top-down rather than a bottom-up approach in order to employ the traditional East Asian cultural practice that suggests obedience to authority. It has been confirmed that only when the government expresses its determination and commitment is it easier for community leaders to become motivated to draw up AFCC action plans. Take the Jinhwa community in Tainan City as an example; a survey of 997 older residents indicated that most older adults in Taiwan are unwilling to challenge authorities, including community leaders, and are unaware of their right to challenge authority (Chao & Chen, 2019). Hence, such characteristics indicate the importance of an informative leader and highly interdepartmental collaboration in East Asian AFCC promotional activities.

Regarding the distinct cultural characteristics of East Asian cities, according to related studies, the hybrid culture mixing Taoism, Buddhism, and Confucianism formulates a special sense of "eudaimonic well-being" among older adults in Taiwan (Liu, 2016; Chao & Huang, 2016; Chen et al., 2015; Lin et al., 2015). They tend to seek a tranquil life and avoid possible conflicts during old age. These cultural characteristics are the main factors that guide the global AFCC model in the local Taiwanese context. Chao and Huang further indicate that a difference can be observed at the individual and community levels. At the individual level, it is essential to investigate the needs of older adults in communities, as illustrated in step 4 of the operation process, shown in Figure 2.3 (identification of issues), suggested by the WHO. To collect opinions of local older adults, focus group discussions are usually conducted in the West. However, in Taiwan, due to the strong influence of collectivism in East Asian cultures and peer pressure, most interviewees tend to avoid expressing their actual needs and opinions. Also, due to the emphasis on filial piety in East Asian culture, older adults usually provide neutral answers to avoid any potential embarrassment (Chao & Huang, 2016). It is shameful for older adults to admit that their family cannot meet their needs. As a result, it is difficult to

obtain the direct opinions and genuine feelings of older adults through focus group discussions in Taiwan. Insufficient information could also mislead policymakers which may hide older adults' actual needs.

In addition, at the community level, in most ageing communities in Taiwan, older adults usually have a strong emotional commitment to their communities throughout their lives. These lifelong residents of the communities also consider ageing-in-place a virtue and develop strong place dependence on the community environment (Butcher & Breheny, 2016). Due to this emotional place attachment, older adults will be more likely to react strongly to changes in the physical environment proposed in the AFCC action plans (Sun et al., 2020). Regarding implementing the AFCC through spatial planning tools, Taiwan's AFCC experience provides a comprehensive point of view to illustrate the practical issues at different spatial scales, exemplifying how the bureaucracy and local Eastern culture influence the decision-making process.

## Individual and community level – the daily lifestyle and self-rated health of the older adults in community-based AFCC contexts

### *The urban-rural gap in AFCC projects*

Spatial inequality refers to the government distributing public resources differently among regions and areas, which results in an urban-rural gap in both the quantity and quality of public infrastructures and services (Potrafke & Roesel, 2020). In Taiwan, only 13% of the total land, 480,186 hectares, comprises urban areas, with 414 statutory urban (zoning) plans, and 78% comprises rural areas with only building codes applied. Due to the urbanisation trend, a considerable proportion of the youth labour force in rural areas has moved to the cities, which has resulted in a severe ageing phenomenon in rural areas for decades (Figure 2.5a). As of the end of 2019, Taiwan's population in urban areas was 18,669,744. With 79% of the total population becoming urban dwellers, one-third of the ageing population (approximately 780,000 older adults) live in rural areas (Figure 2.5b). These rural older adults tend to be more socio-economically vulnerable and have lower educational levels, lower household incomes, and fewer public resources. In rural areas, the population tends to be older. Moreover, according to the National Health Interview Survey Report conducted by MHW, in 2013, the self-rated health of older adults in rural areas is significantly poorer than that in urban areas (Figure 2.6).

Canada's federal government was the first to advocate that the AFCC schemes should differ in rural areas. The *Age-Friendly Rural and Remote Communities: A Guide* indicates that older adults who wish to "age in place" in rural communities may face barriers to remaining in their homes and staying active in their communities due to limited transportation and medical services (Canada Federal/Provincial/Territorial Ministers Responsible for Seniors, 2011). In Taiwan, the limitations are similar. There is an urban-rural gap in the AFCC projects, especially in Taiwan's top-down model. Mayors in the six affluent metropolitan areas, such as Taipei City and Kaohsiung City, are motivated to invest more resources in the AFCC, whereas

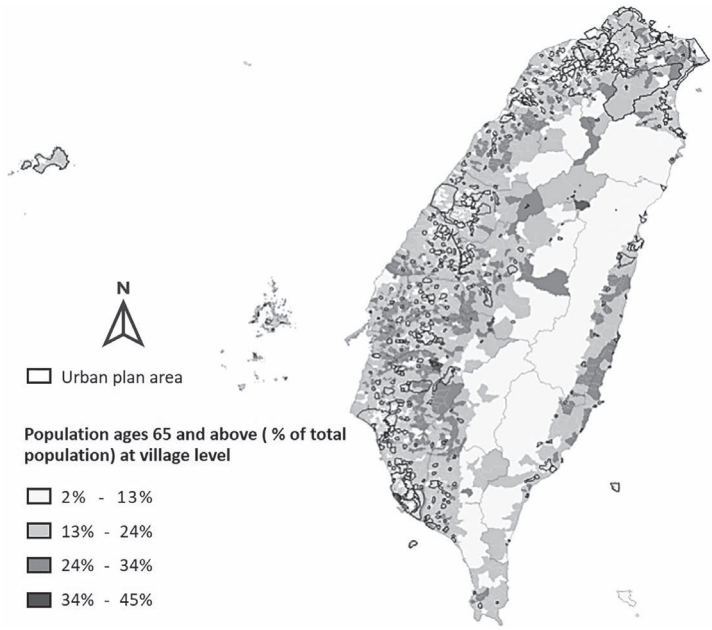


*Figure 2.5a* Ageing population distribution.

*Source:* The authors (2022).


*Figure 2.5b* Urban and rural areas in Taiwan.

*Source:* The authors (2022).

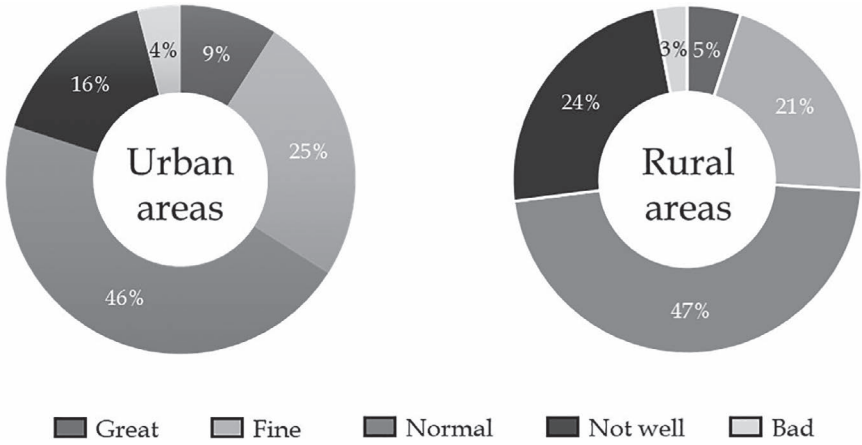


*Figure 2.6* The self-rated health status of the older adults in rural and urban areas.
*Source:* (MHW, 2013).

many rural villages in financially disadvantaged counties do not even have any care facilities due to their small population size and poor financial conditions.

Nevertheless, the ageing trend in rural areas reflects the fact that more older adults live alone or only with their spouses (Pleschberger et al., 2019). They rely more on the government-led care system and community members, especially if most of their children are living in the cities (York Cornwell & Cagney, 2014). The idea of community-based support systems was introduced in Japan because of cultural considerations and the increasing risk of rapid health deterioration among older adults (Lin et al., 2015). Although studies indicate an urgent need for more resources in rural areas of ageing societies, there is a lack of evidence-based information or databases about rural older adults' lifestyles and living conditions, which makes it challenging to develop action plans that meet their actual demands. To gain insight into the daily life and self-rated health of older adults living in rural areas in Taiwan, Chao et al. (2021) conducted a cross-disciplinary study using mixed methods, including a space-time path research method, Global Positioning System (GPS) tracking technology and the Short Form-36 (SF-36) evaluation of conscious health scale. The research investigated the older villagers' daily mobility, lifestyle, and self-rated health in Xishi Village, Pingtung County, one of the oldest counties in Taiwan.

***Case study: older residents' daily life in rural areas where there is a lack of social resources***

Xishi Village in Pingtung County, a typical rural village without any statutory zoning plan to provide compulsory public infrastructures, was selected for the case study Chao et al. (2021). The population of Xishi Village reached 2,796 in

August 2018, among which the older population aged 65+ comprised 19.59% (547 people). The surrounding urban areas are all developed alongside the Taiwan Provincial Highway, with Xishi Village located on the west side of the urban development axis. Without sufficient public infrastructure provided by statutory zoning plans, the Xishi villagers have to travel to the nearby Neipu urban planning area or further to urbanised areas such as the Pingtung, Zhutian, and Chaozhou townships to access better medical or public services (see Figures 2.7–2.8).

In this study, 20 older residents were selected and provided with GPS Tracker Watches, which captured their daily GPS locations at 5-minute intervals over a week. The tracking results for these 20 older adults were divided into three types based on whether the path was within the village or township. For the first type,

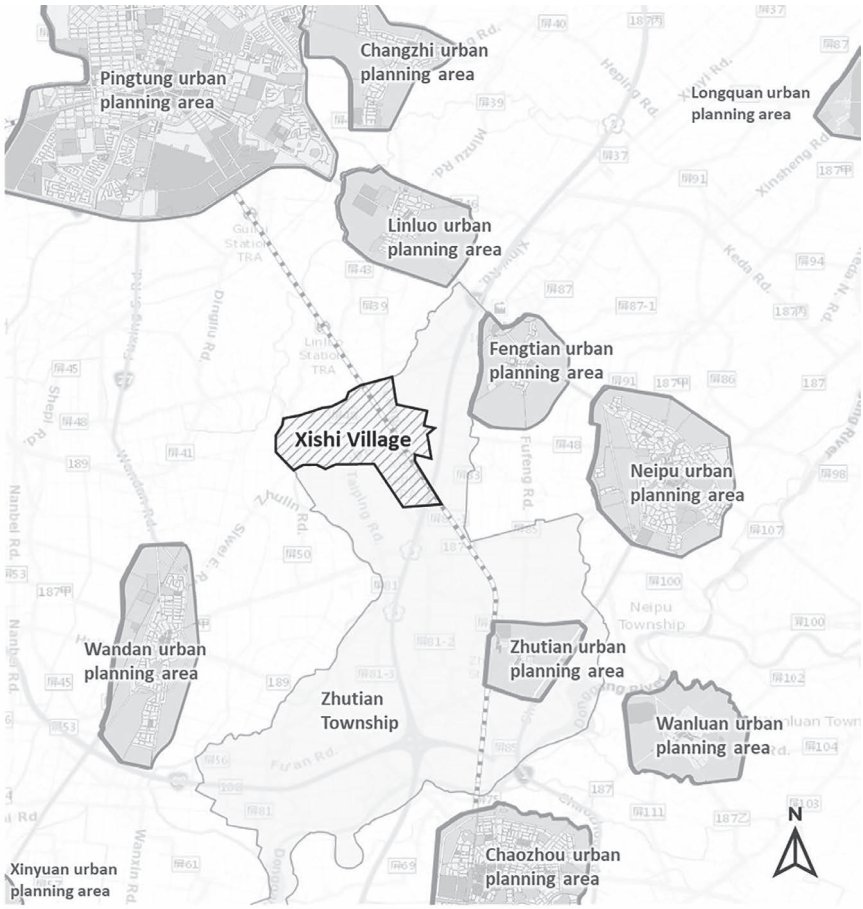


*Figure 2.7* The location of Xishi Village and the urban planning areas are nearby.

*Source:* By the authors (2022).


*Figure 2.8* Land use in Xishi Village.

*Source:* By the authors (2022).

30% of the participants had the least mobility, where their paths were limited to within the village. As a result, their self-rated health scores and moving distance were lower than the average among the 20 participants. This shows that the daily life periphery of this type of older adult is limited in Xishi Village, where there is a deficiency in the provision of service functions to meet their basic needs. This directly affects their quality of life. The investigation also showed that these older adults have poor physiological functions, which restrict their daily activities and lead to lower-than-average self-rated health scores.

For the second type, 20% of the participants' daily mobility extended beyond the village but was limited to Zhutian Township. Their self-rated health scores were higher than the average of the total 20 participants. However, their daily moving distance was still below average. This indicates that these older adults believe that their basic daily needs can be met within the local township, but their conscious health scores remain at a medium level. Up to 50% of the participants' daily mobility ranged beyond Zhutian Township. Their self-rated health for both physical and mental conditions was higher than average. The mobility tracking results indicated that when the built environment was unable to meet the participants' needs related to daily activities, half of them could devise adjustment strategies to go beyond the neighbourhoods defined by the administrative units (Table 2.2). Also, the correlation analysis demonstrated that mental health is associated with daily moving time and distance (Chao et al., 2021).

*Table 2.2* Statistics of the tracking survey.

| *Statistics of the tracking survey* | *Average* | *Type 1* | *Type 2* | *Type 3* |
|---|---|---|---|---|
| Physical component summary | 74.94 | 62.58 | 78.88 | 80.78 |
| Mental component summary | 77.30 | 70.85 | 76.76 | 81.38 |
| Average daily elliptical area (Km2) | 9.77 | 0.94 | 4.25 | 17.27 |
| Average daily moving distance (Km) | 10.84 | 2.90 | 6.19 | 17.48 |
| Average daily outing time (Hours) | 4.77 | 2.37 | 3.53 | 6.70 |

*Source:* Data from Chao et al. (2021).

In addition, a correlation analysis was conducted. The findings indicated that the older villagers' physical health, mental condition, average daily moving distance, and average daily outing time were all statistically significant in relation to their daily activities (Chao et al., 2021). This finding was consistent with other studies that have found that leisure and entertainment activities and social participation are essential factors affecting conscious health (Lin et al., 2013). Therefore, for many rural older adults living alone, it is vital to have easy access to social activities that can effectively enhance their self-rated health status and help them maintain good physical and mental health. Furthermore, in terms of gender, male participants scored higher than females in the SF-36 scores for both physical and mental conditions. This survey result was similar to the findings of Tseng et al. (2003) concerning 17,515 older adults in Taiwan.

Nevertheless, the latest national census has confirmed that the average life expectancy for men in Taiwan is 78.1, while that for women is 84.7 (MOI, 2021). Interestingly, the self-rated health result is inconsistent with the actual life expectancy in Taiwan. According to the Annual Citizens Living Conditions Intentions Survey conducted by the MOI, older men consistently have better satisfaction scores regarding their health conditions than older women. In addition, the analysis of daily mobility among genders indicated that men scored higher in the average daily elliptical area, the average daily moving distance, and the average daily outing time than women in the case of Xishi Village. This reflects that the rural areas in Taiwan are still influenced by the conservative "male breadwinner model" and that older female villagers may be more vulnerable and need more local care services, most activities centered within the village. Hence, community-based AFCC schemes in rural areas should consider how to motivate older female villagers to stay active by understanding their lifestyle and obstacles related to mobility.

## Institutional level – location choice of social welfare facilities under statutory urban planning contexts

### *Implement age-friendly facilities based on spatial equity*

The social welfare policy in Taiwan is influenced by "Welfare Pluralism" and a "Mixed Welfare Economy," and there is also a trend towards the privatisation of social welfare (Chiang & Ying, 2005; Yao, 2004). In this context, except for a few

public and public-to-private facilities, most social welfare facilities are provided and operated by the private sector. Private service providers must meet operational requirements, land use regulations, and building codes by law. For example, after being reviewed and approved by the local planning authorities, senior daycare centres (SDCs) can be located in residential, commercial, cultural, and educational zones. In the past four decades, private owners have chosen locations for social welfare facilities according to market demand, operation, and construction costs (such as house and land prices), physical environmental conditions, and the degree of public rebound. Such models, where service provision is based on the market mechanism, work when the ageing population only makes up less than 10% of the total population. However, in a super-aged society, the imbalance and insufficiency of social welfare services in some deprived areas where there is a lack of market forces will lead to social conflicts and inequality issues.

The MHW is responsible for enforcing social welfare laws and regulations regarding decisions related to the quantity and quality of social welfare facilities, including SDCs. In order to avoid an uneven distribution of resources and accelerate the deployment of social welfare facilities, the MHW announced guidelines indicating that each school district or administrative district should provide at least one social welfare facility as the national quantity standard. The local authorities have to follow such standards to ensure the provision of local facilities. In 2014, the MHW further announced a national policy to provide SDCs in response to the trend towards ageing. The "Taiwan 368 Care Service Plan" aimed to establish one SDC in every township in Taiwan by the end of 2016 by subsidising private daycare service providers. As of 2020, however, there were still 100 townships, mostly rural and remote communities, without any daycare centres. The lack of profit was the main reason behind the absence of private service providers in these areas.

Figure 2.9a illustrates the current demand for SDCs by township based on population, where a darker colour represents a higher demand. Figure 2.9b shows the current supply of SDCs. Most of the townships do not have enough senior daycare services. Figures 2.10a and 2.10b further illustrate the future demand for senior daycare based on the ageing trend. Six major metropolitan areas will encounter a significant shortage of SDCs. The two figures indicate that the supply of social welfare facilities in a single county and city is insufficient. However, there are also problems of inequality in terms of supply among counties and cities. Chiou (2014) pointed out the inadequacy of welfare institutions for people with disabilities. In 2016, the Taiwan Social Welfare League (TSWL) conducted a service evaluation and found a gap between the number of geriatric psychiatric daycare centres and older people service cases in various counties and cities, indicating that there is still an inadequacy in both quality and quantity of social welfare facilities. In addition, the TSWL advocated the urgent need for new public-private-non-governmental organization (NGO) partnerships directed towards providing social welfare facilities (TSWL, 2016).

In response to the concept of ageing in place, the MHW has emphasised home-based and community-based senior care services as a primary policy since 2016. To address the shortage of senior care services mentioned above, the MHW has sought aid from spatial planning departments. One of the roles of the spatial

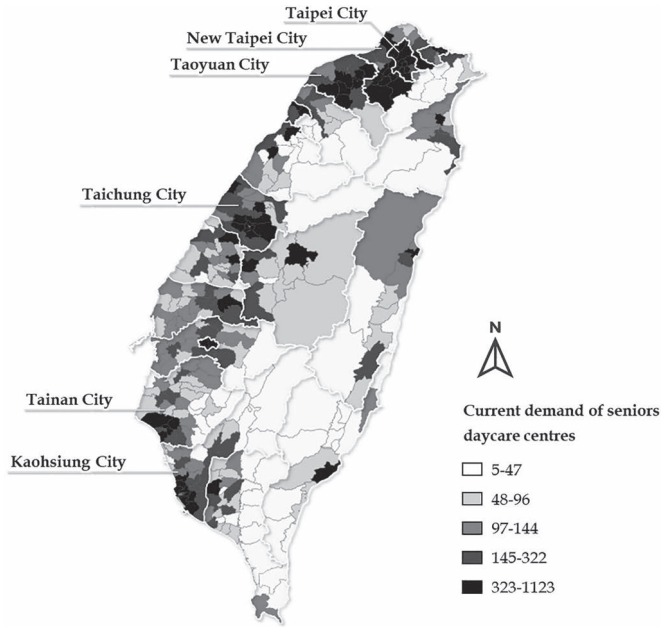


*Figure 2.9a* Current demand for SDCs.

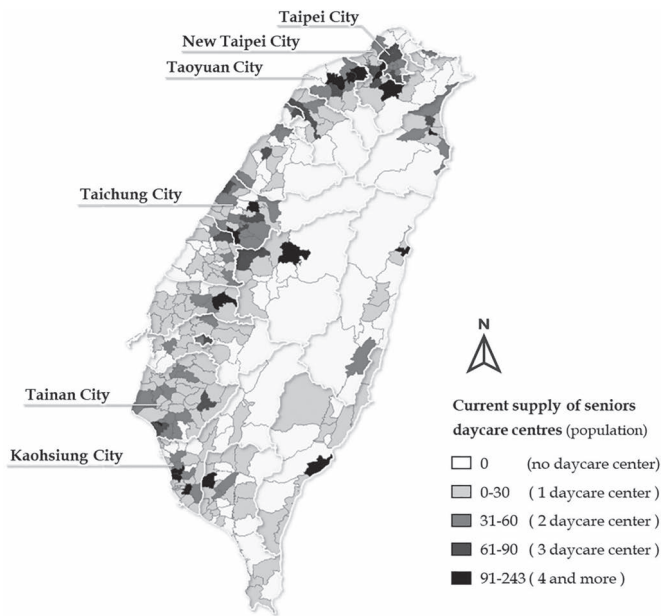


*Figure 2.9b* Current supply of SDCs.

*Source:* By the authors (2022).

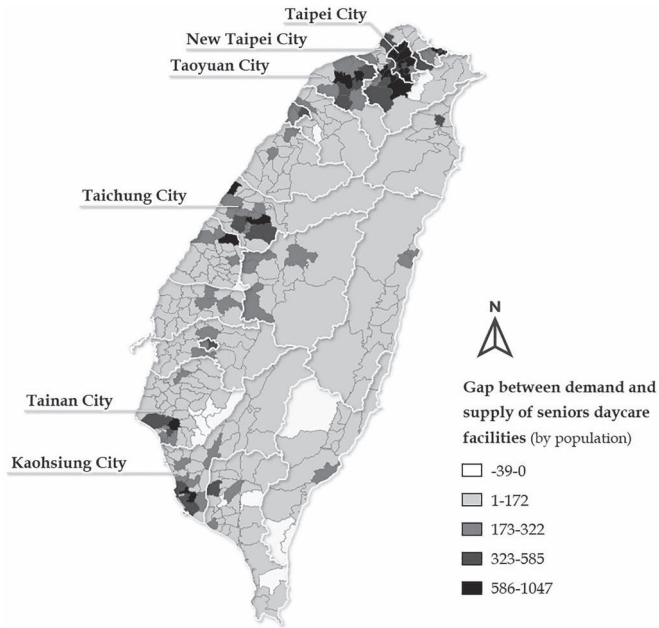


*Figure 2.10a* Current demand and supply gap of SDCs.

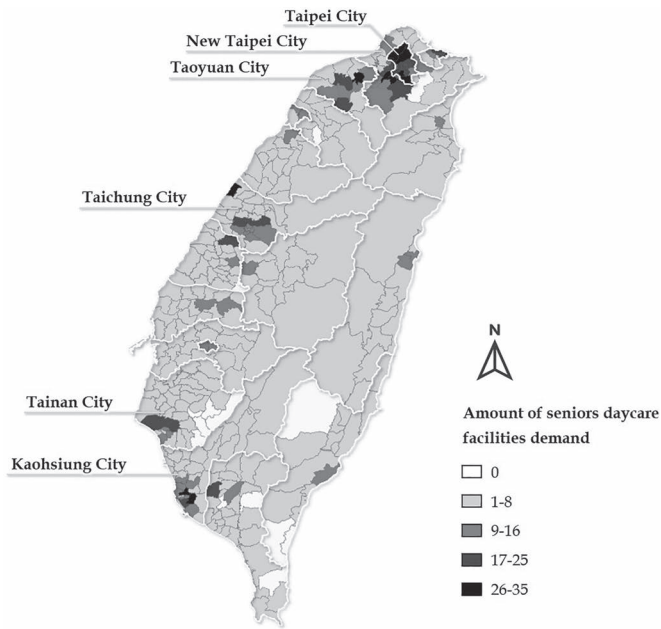


*Figure 2.10b* Future demand for SDCs.

*Source:* By the authors (2022).

planning department is to provide proper land use plans and public infrastructure to ensure quality of life for residents. A rigid zoning system in Taiwan prevails in urban areas (Askew & Chao, 2012). Urban development can only take place when permitted by zoning ordinances. However, until 2017, there were neither legal grounds nor provisional standards for the planning departments to facilitate overall infrastructure planning for senior care services. As a result, the planning sector could not stabilise the supply. Private facility providers selected locations for SDCs based on single project considerations and market conditions without overall spatial planning guidance.

In 2017, the Urban Planning Law (UPL) was amended for a periodical review of urban planning and stated that statutory zoning plans should ensure the fair provision of social welfare facilities, including senior care facilities. The inclusion of social welfare facilities in public facilities in Article 46 of the "Urban Planning Law" is a critical milestone, highlighting the role of the planning authority and reconsolidating cross-departmental collaboration. As a result, the urban planning department can take legitimate action to ensure that the supply of social welfare facilities meets the demand and improves citizens' overall quality of life. Also, the amendment allows the planning department to regularly review the quantity and quality of social welfare facilities from the governmental perspective.

Chen (2020) discusses the possible site selection standard of SDCs in urban areas, which are classified as community-based long-term care service institutions under the Long-Term Care Services Act 2017(LTCSA). The LTCSA establishes quantity standards for new SDCs in accordance with the provision of long-term care services. However, despite the UPL amendment, in terms of actual location choices for new SDCs, a lack of demand survey data has become an obstacle in practice. Usually, the public sector has four unofficial general principles for new facility site selections. (1) Avoiding risks of disaster: Any new public infrastructure should avoid being located in high-potential disaster risk areas to reduce residents' possible exposure to disasters. (2) Priority is given to the use of public land to ease the financial burden on the government. (3) Priority is given to reusing already-developed land plots for public facilities to underpin the sustainable development goal. For example, due to the ageing population and declining birthrate, the demand for school space has decreased, potentially making schools suitable locations for senior daycare facilities in the future. (4) Priority is given to converting or revitalising obsolete public buildings to avoid wasting space. Nevertheless, without clear site location criteria outlined by law, the actual locations selected by the planning authority for SDCs will be more likely to follow the four principles above, rather than addressing the actual demands of the older adults who are most affected. Hence, inequality in older adult care service remains a significant challenge of ageing-in-place.

***Case study: introducing an allocation method for SDCs in urban planning areas based on Integrated Spatial Equity Evaluation (ISEE)***

Many people in later life tend to have limited mobility and weaker bodily functions when interacting with the built environment. It is crucial to have the necessary

facilities or services near their homes, preferably within a 400–800 meter periphery (Chao, 2019). Public facilities, a type of urban infrastructure, must be allocated considering fairness and accessibility in an ageing society (Tsou et al., 2005; Chao, 2019; Sun et al., 2020). The connotation of "spatial equity" ensures that all residents have access to the same quantity and quality of services regardless of where they reside (Tsou et al., 2005). Chen (2020) confirmed that "spatial equity" should be regarded as a key indicator when planning for SDCs in urban areas based on the above definition. When applied to policy, this concept also complies with Article 46 of the UPL (social welfare facilities should be arranged according to the distribution of residents). Furthermore, the SDC is designed to offer care services during the daytime so that older adults are taken care of in the community while young family members are at work. Accessibility should be a priority for urban planners. Hence, the "Spatial Equity Index," a tool for measuring accessibility, and the concepts of the Lorenz curve and Gini coefficient are applied in this study.

In response to the concept of spatial equity, Chen (2020) used the Integrated Spatial Equity Evaluation (ISEE) proposed by Taleai et al. (2014) and modified it to be a guiding allocation method suitable for urban planning in Taiwan. The ISEE discusses the allocation of facilities from the perspective of a fair opportunity to access a specific space and obtain services. It takes parcels as the spatial unit for the discussion, analysis, calculation, and presentation of accessibility and other features. This method takes residential parcels as the demand unit and facility parcels as the supply unit. The ISEE calculates the standardised accessibility of each residential parcel to a single type of facility service to determine the relationship between the supply of accessible facility services and the population's demand per residential parcel. Also, considering the high population density, the small street block scale in zoning plans and the mixed land use pattern in Taiwan. Chen (2020) further adjusted the definitions of measurement of the demand unit, demand quantity, supply unit, and other attributes and positioning methods (see Table 2.3). Meanwhile, to make this method more applicable in actual planning

*Table 2.3* The adjustments to ISEE in Taiwan.

| *Factors* | | *The original ISEE* | *ISEE in Taiwan* | |
|---|---|---|---|---|
| | | | *Adjustments* | *Instructions* |
| Demand | Location | Residential parcels | Basic statistical area | The factors are adjusted to the high population density city pattern in Taiwan. |
| | Number of residents | Population on residential parcels | Population in the basic statistical area | |
| Supply | Location | Public facilities parcels | The block (or land use district) of the facilities | Cooperate with the scale adjustment of Taiwan's urban plan |
| | Scale | The scale of the services | Per capita floor area of the facility | Adjust to the facility planning |

*Source:* Data from Chen (2020).

practice, the current location choice principles, including avoiding high natural disaster risk areas as well as taking into account the public land first policy in Taiwan, were incorporated to construct a spatial equity allocation method that is exclusive to Taiwan. It is important to acknowledge that older adults' need for SDC will not be evenly distributed in any spatial context.

This study takes Qianzhen as a detailed plan area in the Kaohsiung metropolitan area, the second-largest city in Taiwan, as the empirical case study area. With only one SDC set up, over 90% of the local older adults reside beyond the service coverage (Figure 2.11a). Owing to the lack of continuous and accurate data on older adults in need of daycare services, the planner would have to estimate that approximately 7.3% of the total ageing population will require SDCs, as projected by the MHW. Eight possible sites, including vacant public land and underused public buildings, for new SDCs are evaluated using the ISEE to seek the optimum location for the next SDC to maximise service coverage based on the demand and accessibility requirements. Figure 2.11b illustrates the final result ranking, where the suggested location choice is on the eastern of the urban plan areas. This evidence-based method helps the planning authorities establish a standard when seeking proper SDC locations under the spatial equity principle.

To conclude, there is a consensus at the institutional level that urban planning legal tools are vital to delivering a fair community-based and age-friendly


*Figure 2.11a* Estimated older adults in need of SDC.


*Figure 2.11b* New SDC location choice suggestion.

*Source:* By the authors (2022).

service network in Taiwan. Given the rapid ageing trend in Taiwan, urban planners will need to focus on collaborating with public health departments and obtaining updated information on the changing spatial needs of older adults at various urban planning levels in the coming decades. In addition, prompt responses from statutory plans are essential for providing care services on a timely basis.

## Discussion and conclusion: towards age-friendly urbanism

The WHO identifies critical challenges in population ageing, acknowledging diversity in older age as the primary issue. The GNAFCC also emphasises that there is no "typical older person." Hence, the AFCC guidelines and principles must be interpreted in accordance with the local contexts, including older adults' needs, different cultural characteristics, and the local planning framework. In addition, diversity in the built environment, such as the urban-rural gap, results in greater diversity among ageing cohorts due to their different living contexts. Hence, there is no single solution for AFCC implementation. It is essential to obtain evidence-based

information about the local older adults before developing action plans. Although previous studies suggest that the daily lifestyle of older adults may contribute to their health status, appropriate age-in-place approaches can still vary in different environmental and cultural contexts. Hence, the development of a local AFCC paradigm reflecting the distinct lifestyle is much needed. Based on Chao and Huang's statement of the need for an oriental AFCC paradigm, this chapter first reviewed the existing literature regarding the AFCC global and local experiences and identified the distinct characteristics of East Asia AFCC promotions regarding ageing trends, built environment settings, bureaucracy, and local culture. A top-down model with increased governmental input was established to better promote the AFCC in Taiwan based on the cultural bureaucracy in most East Asian countries. After a 10-year AFCC movement, all 22 cities and counties in Taiwan joined the AFCC advocacy. An annual performance award hosted by the MHW ensures continuous promotion from local governments (Huang et al., 2019). In addition, the experience in Taiwan demonstrates that the effectiveness of the top-down model directly depends on political leadership and cross-departmental collaboration.

To substantially affect AFCC promotion in the East Asian setting, the commitment from planning authorities and alliances between spatial planning and health professionals must be enhanced at various organisational levels. The two case studies in Taiwan presented in this chapter point out that the AFCC concepts can be interpreted in various ways due to inequalities in service resource distribution and contrasting planning systems in urban and rural areas. We have rigid zoning plans in urban planning areas, whereas, in rural areas, the planning systems are more discretionary (Askew & Chao, 2012). Older Taiwanese adults tend to have a strong emotional attachment to their land and are compliant with authority. Hence, urban or rural legal planning instruments have to take a crucial role in the promotion of the AFCC.

In rural areas, 79% of the total land in Taiwan has fewer public resources than in urban areas. The Xishi Village case study helps illustrate the local investigation's importance. Sun et al. (2020) state that older adults' lives are intertwined with their environments. The characteristics of the built environment affect older adults' place embeddedness, leading to different sociospatial and psychological experiences. Urban planners and policymakers can better understand older villagers' actual lifestyles, daily mobility status, and local cultural contexts. When it comes to input resources for implementing the AFCC, planners will better understand what is most needed and how to allocate resources, given the limited space and funding. We also realise from the case study that a lack of official data and detailed records of older adults in rural areas has become a significant obstacle to delivering sufficient AFCC strategies.

In terms of urban planning, according to the top-down model, planning regulations are expected to facilitate age-friendliness in urban settings in Taiwan. Many scholars have pointed out that green and open spaces are essential factors contributing to older adults' physical activities and satisfaction with urban living (Zhang et al., 2019; Chao, 2019). Hence, local survey results will provide suggestions about open space design principles that will enhance the sense of safety and protection of

healthy older adults in the community. In terms of implementing equal support for fragile older adults, the top-down solution will rely on land use ordinances to provide community-based social welfare facilities such as SDCs for older adults. The case of the Qianzhen detailed plan area in Kaohusing City indicates the challenges to modern planning related to providing new facilities in already developed urban settings from spatial equality perspectives. Unlike other public facilities, social welfare facilities should be more user-oriented and easily accessible, especially SDCs. Thus, many of the proposed projects for new SDCs or health interventions have used elementary schools as a platform based on the school districts (Jourdan et al., 2021). Clearly, a new evaluation method for location choices for new SDCs is needed so as to maximise the service coverage and make the implementation of the spatial equality concept financially feasible.

The core goal of the AFCC is to create an inclusive environment that can support older adults with various health statuses to age in place for as long as possible. Such an idea also shares the same visions and commitments as the New Urban Agenda proposed by the United Nations Human Settlements Programme (UN-Habitat) in 2017 to enhance livability and well-being and underpin sustainable development actions. In seeking a successful local model for the AFCC, although cities and communities in East Asia have had a late start in participating in the GNAFCC, some cities in Taiwan and Hong Kong have explored the proper ways to interpret the AFCC concept in the local political and cultural contexts. According to her research in Hong Kong, Ng indicated that people's right to a healthy urban life would be essential for urbanism in the future (2016). It is clear that high-density urban contexts and mixed-use land with rigid planning regulations could make bottom-up AFCC implementation more complex in many East Asian cities. Hence, one potential solution could be to make the age-friendly concept a mandatory requirement in the statutory planning system. Also, various environmental factors are associated with the development of place attachment, which can help sustain the sentimental and functional links between older adults and where they live. Therefore, the promotion of the AFCC in East Asia has to consider the strong people-land connection and develop action plans based on residents' daily lives. Finally, Sun et al. (2020) highlight that future urbanism intertwines with population ageing trends. Understanding the relationship between environment-related experiences and well-being is conducive to achieving age-friendly urbanism.

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# 3 A recipe for disaster? The consequences of planned sprawl for the non-urban ageing population: the case of Belgium

*Pascal De Decker*

## Introduction

"How does an older person walk to the shops?" This is one of the questions that the late Cornelis van Eesteren (1897–1988) asked his students when they presented him with an urban development plan for assessment. Van Eesteren was one of the founders of the Congrès Internationaux d'Architecture Moderne (CIAM) movement and the designer of the Amsterdam Expansion Plan, the plan that would guide the spatial development of the city (Jansen, 2017). Where do people walk their dogs? Where can children be children? These questions illustrate that urban and spatial planning and design must be at the service of people and society. In the words of Vermeersch (1994), urban and spatial planning and design have as their goal the search for the best conceivable reciprocal adaptation of space and society, which is for the sake of society. This means that planners must address the long term, including the effects of changing demography. In our countries, ageing is predictable. Older persons do not become old overnight; they become old gradually throughout the years. So, as Dillemans (1989) writes, there is time enough to anticipate. So, did the planners anticipate this? Did they take the ageing of the population into consideration when they were asked "to plan"?

In numerous Western Countries, often for different reasons, post-war urbanisation occured in a sprawled way, ignoring its long-term consequences. Today, libraries can be filled with texts taking stock of their negative consequences. Sprawl is not only linked to climate change, congestion, landscape deterioration, and so on; it also creates a geography that makes it difficult, if not impossible, to fulfil essential social tasks. One can argue that geography is striking back (Kaplan, 2012), even at lower spatial scales.

This chapter deals with the long-term consequences of (the lack of) spatial planning in Flanders, the Dutch-speaking part of Belgium, in the post-war period and its implications for the older persons living in the current period and the times to come. We argue that the spatial policy developed in Belgium and Flanders was built on choices that aimed to solve past political and social problems rather than guiding future social developments. As a result, the Belgian authorities established a "spatial order" that was not resilient to partly "foreseeable" events, such as population ageing, which is the subject of this chapter. Now that the magnitude of

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ageing is becoming real, it is becoming apparent that the choices made are turning out to be a recipe for disaster. Many tens of thousands, if not hundreds of thousands, of older individuals are expected to be denied care in the near future due to their past choices. It will not be possible for very many to age well in place (Smetcoren, 2015) because it is not *the right place* (cf. Golant, 2015; Segedy, 2018). The types of questions like *How old persons go to the stores* (cf. Van Eesteren) were not asked and are still not asked today, as Volckaert et al. (2021) show.

This chapter is structured as follows: The first part examines why the home and the spatial order of society (the place of residence) are essential for ageing people. Then we look at the old persons' policy in Flanders. In the following sections, we look at how the Flemish space is organised and how it was created. This is followed by a brief presentation of research that, among other things, assessed the relationship between the place of residence and the accessibility of facilities. Both the measurability and the perception of the older people who live in non-urban areas are discussed in relation to these findings.

## Place matters

Although different from person to person, when ageing skills decline, power decreases, moving becomes more complex, walking is slower, and many things in the world go too fast or are no longer comprehensible. Moreover, people fall away sooner or later, increasing the risk of social isolation and even loneliness. According to the New Gerontologists (NG), successful ageing comprises three elements: (1) avoiding illness and disability, (2) maintaining active mental and physical functioning, and (3) staying active (Golant, 2015). Moreover, according to NG, it is never too late to start: "The frailty of old age is largely reversible. Most older people, even the very old and weak, have the capacity to remarkably increase their muscle strength, balance, walking ability, and overall aerobic power." Even more: "Older people can significantly improve their short-term memory by making lists and training their memory with practice games" (Golant, 2015, cited in De Decker et al., 2018b, p. 5). According to the NG, older persons must look for activities that replace working life. They are better off looking for volunteer work, new friends, and new activities (Nelissen, 2017; Maier, 2017), "A little activity does a huge amount to slow ageing. So, movement is a key factor in ageing well, and isolation should be avoided at all costs" (Dupont, 2014).

The NG demonstrate (1) that there is a strong link between doing physical activities and physical and mental disorders, disability, and survival; (2) that there is a positive relationship between certain activities and the cognitive status of older persons; (3) that older people who are more engaged in a multitude of leisure, cognitive, and physical activities score better on cognitive exercises than less committed older people; and (4) that the total number of productive activities of older people (work, formal and informal volunteering, care) is related to self-reported well-being (in Golant, 2015).

Golant (2015) emphasises that this message is not wrong, but it is incomplete. As a geographer and gerontologist, he argues that it is necessary to include in the

discussions the findings of a new branch of gerontology, namely that of environmental gerontology (EG). The focus of the EG is "to understand and predict how the residential and care environments occupied and used by older adults influence their physical and psychological well-being, and their mission is to find solutions that will optimize the fit or congruence between aging people and the places they live" (Golant, 2015, p. 8). EG states that it is generally assumed that people age in "a spaceless context":

> It is as if the dwellings, buildings, neighbourhoods, communities, and regions in which they live and their built natural, social, organizational, and political environment make little difference in whether they enjoy their lives, feel good about themselves, live independently, and achieve healthy lifestyles.
>
> (Golant, 2015, p. 8)

This statement is supported by Krout and Hash (2015) in their book on rural aging: "most discussions of aging fail to consider that people do not age in a spatial vacuum. They all age somewhere, and the place of aging has impacts." EG also points out that the place where someone is staying is essential for active aging. Healthcare providers also point out that – and where – older people live has a crucial impact on their quality of life (Diez Roux, 2002; Kawachi & Berkman, 2003; De Witte et al., 2012). They refer to the presence or absence of access to appropriate food, reliable transport, and adequate housing. We add the role of the wider environment and, therefore, the place of living. De Graeve (2016) points out in this context that the most significant problems occur in rural areas and remote places. Others, including Alter (2018) and Segedy (2018), speak about the doom of ageing in the suburbs (see for a recent reply: Golant, 2019).

When one reaches a certain age, the difference between a friendly place and a hostile one may depend on apparently insignificant details (Dupont, 2014). Taking stairs becomes difficult, crossing the road is an adventure, and using the bathroom is inconvenient. Social relations change. At a certain age, people (start to) stop working. As a result, more time and activities take place in and around the home and neighbourhood. The operating radius decreases (Wiebe, 2017).

> The totality of their ways of living – how and where they have fun, enjoy their friendships, keep stimulated, feel wanted and supported, attend religious services, shop, bank, obtain medical care, volunteer, and pursue new encore careers – become far more tightly synchronized with their physical addresses.
>
> (Golant, 2015, cited in De Decker, 6)

Or the immediate living environment becomes more important as someone gets older.

When there is a chronic health problem, whether physical, mental, or a combination of both, accommodation becomes even more crucial; regardless of its location, the home and its immediate environment become more important not only as

a place to live comfortably but also as a setting that must compensate for deterioration or loss; in these situations, especially, the provision of care is important. The once-clear boundaries separating one's house from the rest of the world become vague. When care enters the picture, the capacity to move around the home easily and safely, as well as reach one's home freely and safely, is needed for a high quality of life. Today, houses and residential spaces are not built for older persons. "Reaching what were once accessible destinations becomes a crucial concern" (Golant, 2015, p. 9). Fit people cannot imagine that at a certain point in time, the apparently "simple acts" of reaching the grocery store or doctor can become a problem, let alone reaching the toilet or using the shower in their own home. As columnist Gross puts it: "(. . .) by now, ageing in place, unrealistic for some, scary or unsafe for others and potentially very isolating, has become so entrenched as the right way to live out one's life that not being able to pull it off seems a failure, yet another defeat at a time when defeats are all too plentiful" (quoted in Golant, 2015, p. 63). This brings politics and policy to the forefront. Put simply, there are two options. One can create well-designed housing and living environments with the necessary services in the neighbourhood that can cater to the needs of the people in later life. This option brings older persons (care) and spatial planning (location) policies together. The other option is to do nothing, leaving older persons to stay put in maladapted dwellings and surroundings. In sprawled environments, this can be a disaster. We will discuss this in the next section.

**Policies concerning ageing**

The Flemish government opts for ageing in place (AiP), that is, for older people to live in their trusted homes for as long as possible. Although the Flemish Region subsidises care and resting homes and facilitates the construction of supported housing, the policy for older persons is nevertheless dominated by AiP. The government wants to counter or even reverse institutionalisation and take care "out of the institution" and "into society" (Vandeurzen, 2014, 2019). Following the World Health Organization (WHO), this is translated into what the government calls "circles of care." "Care" should be delivered to older persons "as close as possible." So, living well and healthily in old age starts, according to the government, with the person – or herself doing the right things (see NG). If care is required, it should be provided as far away from government-subsidised care services as possible (directly or indirectly).

Being the node in the inner network, the partner, who is frequently another older adult, is the primary caregiver. Children are next in line. Suppose there is no partner or nearby children, in that case, the outer network (neighbours) and the community (volunteers and non-governmental organisations (NGOs)) should take over, eventually helped by formal in-home care (e.g., housekeeping or nursing). Only if this is not possible anymore does institutionalised care come into the picture.

One can read the AiP argument in two (complementary) ways. First, it is a part of the debate on the rising cost of the welfare state. We can no longer afford the costs of our ageing population, so we must economise (Huyse, 2014). One way to

do that is state withdrawal and redirection of responsibilities (and money) away from costly welfare institutions to "society." The second is partly a nostalgic, even romantic, dream of a possible return to a (pre-industrial) society that is built up by socially cohesive local communities that take care of those in need (children, old persons, those who are ill, etc.) (Volckaert et al., 2021). The fact is that this policy is running against the tide because, after all, after industrialisation, many of the previously local functions were taken over by the market or the state (Harari, 2017). One can, consequently, counter-argue that a return is not possible and that this idea is even naive or misleading. Nonetheless, ideological arguments aside, the AiP choice has significant effects, whether by withdrawing from existing services or failing to provide new ones. However, when re-reading, again and again, the conditions for what the government considers to be a good environment to age in place, one must conclude that such a policy in the light of the current realities and challenges on the field is not only unrealistic but also most probably not executable, since several conditions are not met.

According to Golant (2015, p. 61), ageing well in place entails (1) that old persons live in a home that is or can be adapted (e.g. installing handles, improving lighting, improving access, accessible toilets and bathrooms, etc.); (2) that old persons have at least one dedicated family member to assist them around the clock if necessary (and this person lives in or lives in the neighbourhood); (3) that older people live in places where (affordable) home and community care is available; and (4) that older persons can use age-friendly or health-friendly buildings, neighbourhoods, and communities that offer their residents a variety of infrastructure and services.

AiP may be the dominant mantra, but arguments exist for *moving in time* (MiT). After all, with the regularity of the clock, messages appear around isolated older adults who are depressed and malnourished and about people who have died days, sometimes weeks, before they are found. As a result, the protagonists of AiP do not truly serve the many older people who live in inadequate homes and residential environments, as is the case for most Flemish seniors. In the following section, we will explore (the causes of) the underlying spatial disorder that the ageing population is experiencing.

## Creating a spatial disorder

The residential environment in which people live sets limits on their actions (Kaplan, 2012). Urban and spatial development, co-created by planners, creates "firmness" and "spatial fixes" (Harvey, 2003; Florida, 2010). Planning is therefore co-responsible for creating boundaries. Roads, railways, canals, buildings, nature reserves, and many other implementations of urban and spatial planning have persisted for a long time. After all, planning is necessarily about the "longue durée" and must, therefore, consider the long-term consequences of its decisions. In other words, it should be estimated which "categories" of people will be able to do what they need to do in and from a certain location within 10 or 20 years or longer. Can people live a good life when they are 75 in the place they moved to

when they were 25? For planners, this requires imagination and empathy. As the created "spatial order" can take many forms, one "order" will function differently from "an*other*" order. These "orders" are not neutral in their consequences but profoundly affect people's lives. Living in a compact "area" or "in *sprawl*" makes a serious difference in reaching other people, social activities, and all kinds of facilities from the place of residence.

In Belgium and Flanders, for historical-political reasons (De Decker, 2011), the successive governments have chosen and implemented a spatial order that systematically dispersed people and functions. This has led to (1) a less resilient spatial order and (2) an extremely high dependence on cars (Boussauw et al., 2011; De Vos, 2015). In the words of Strauven (1980): "Belgium, the joker in the European pack, has managed to create an architecture of such splendid and full-blooded chaos that the visitor suspends all normal judgment." Moreover, modernist architect Braem writes in his manifesto on "the ugliest country in the world": "Seen from an aeroplane, Belgium must look like a patchwork quilt sewn together by a lunatic from God knows what garbage and then spurned with disdain by an invisible giant who strews about the contents of boxes of bricks" (Braem, 1968, translated by P.D.).

Both statements date to the end of the 1960s. It was already clear at that time "that towns and villages were not harmoniously developed, so that it is difficult to speak of an urban design" (Anselin, 1967, translated by P.D.). Spatial planner Anselin argued, in that same period, that in the short term, it is the task of spatial planning in Belgium to create a certain order and to give structure to the very fragmented buildings. "If the created condition is accepted, it is impossible to arrive at a responsible urban development and planning structure," says Anselin (1967, translated by P.D.). "One" has accepted that condition, resulting in "a full-blooded chaos."

Although Belgium was confronted with all the environmental problems created by the 19th-century twin development of industrialisation and urbanisation (De Decker, 2011), the country did not succeed in creating a consensus on any spatial, urban, or land planning (Mougenot, 1988). Consequently, it would take until 1962 to adapt the first law on spatial planning, with the implementation of the planning features not earlier than the second half of the 1970s. So, until the late 1970s, there were no spatial limitations on the places where people could build their houses. A culture was created wherein people built houses wherever they wanted. This post-war era of non-planning coincided with an economic boom and a steep increase in the number of households, resulting in spatial chaos. When the destination plans were ultimately authorised after 1975, they came too late, as the house construction storm already had ended, and the harm had been done. Nonetheless, the destination plans were ineffective steering mechanisms, as the amount of land allocated for development was enormous, resulting in an oversupply of housing land. This was due to the wishes of the government to keep land prices down (Saey, 1988) and the very optimistic population prognoses that the planners used (Lacoere, 2020). Moreover, this huge oversupply is situated outside the cities: only 27% of the destinations for houses were (and are) located in urban areas

(Departement Omgeving, 2018). As of today, only 7% of the land is labelled as urbanised (Pisman, 2020).

Despite the fact that settlements were already widely dispersed at the start of post-war prosperity, the baby boomers, or contemporary older people, fuelled greater fragmentation. Many of them live in scattered parcels, in ribbons along dangerous roads, in scattered single homes, and in villages without facilities. We illustrate this with some images.

Figure 3.1 compares the Belgian-Flemish use of space with that in the Netherlands. Built-up areas are white. It shows that the use of space in Belgium/Flanders is much more chaotic and dispersed. The figure shows, in particular, a sharp contrast between the compact building in the Dutch core area (The Hague, Amsterdam, Utrecht, Rotterdam) and the dispersed one in the Belgian-Flemish Region (Antwerp, Leuven, Brussels, Ghent), two areas with approximately the same population. Figure 3.2 illustrates this at a more detailed level. The grey areas are built-up cores, white stands for open space, and the black spots are places where allotments for housing were approved in the period 1962–1967. They show the unplanned and scattered way of development that was standard all over the Flemish Region and would steer future sprawl.

This "full-blooded spatial chaos," being "a recipe for disaster," can be read as the spatial expression of a society. This explanation, and consequently the spatial chaos, was partly planned by the choices imposed by the political world but was also sustained by the planners. The professional and public debate invariably refers to the De Taeye Act as the culprit. This law, which was approved in the context of post-war reconstruction in 1948, provided a subsidy for constructing single-family homes for every household that built their own house. In Belgium, a premium would be paid for several 100,000 homes. But just blaming this law is too much of a good thing. It could only be effective because, first and foremost, there was no spatial planning – which meant that "anything was possible" – and, second, there were no alternatives – collective social housing remained extremely limited, and the private rental sector was poorly regulated. Moreover, individual housing construction could only become *massive* due to post-war economic growth – which

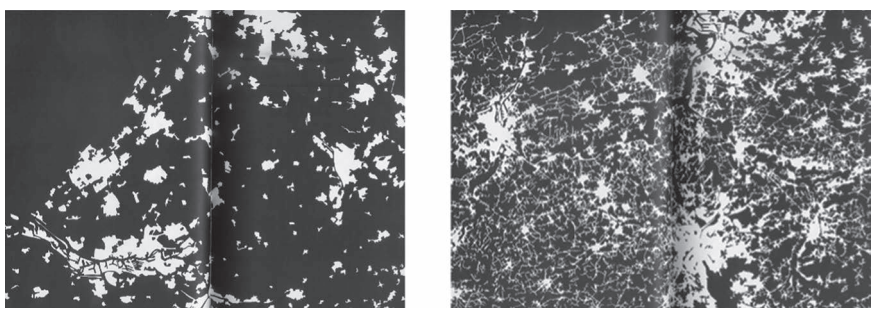

*Figure 3.1* Land use in the core areas of Belgium (left) and the Netherlands (right).

*Source:* De Geyter Architects (2012). Permission approved.

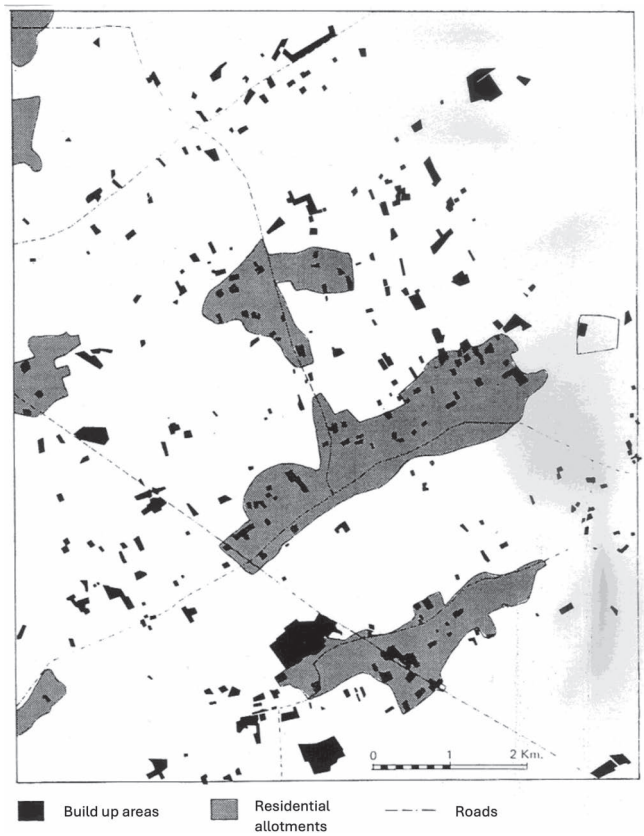


*Figure 3.2* Flanders, an illustration of the take-off of the post-war sprawl.
*Source:* Van Havre (1967).

would last until the 1970s – in combination with the development of social security that would protect the population against all sorts of things (Kesteloot, 2003).

Moreover, the dominant approach ignores the past. The post-war choices with regard to housing and urban and spatial planning did not just fall out of the blue (see Segedy, 2018 for the United States). They further built on a model that was already hegemonic (Gramsci, 2019). In the words of De Caigny (2007), housing was a central theme in creating a mentality of fashion, rationality, and discipline among the workers – including values that were attached to the single-family home like order, navy, cosiness, being a full-time housewife, and regular cleaning, washing and cooking. Already before the heydays of the welfare state in 1948, a survey revealed that 95% of Belgian households were eager to have a house with a garden. Since then, a significant amount of research has led to the same conclusion.

As mentioned already, the sprawl was fuelled by the baby boomers. They are currently the population cohort that is reaching the pension age. Because Belgians


*Figure 3.3* Flanders, the share of people older than 65 years per ward, 2020.

*Source:* Statistics Belgium/Statbel, map created by Lieve Vanderstraeten (Katholieke Universiteit [KU] Leuven).

tend to stay put (Meeus & De Decker, 2015), they will primarily age in the homes and areas where they have resided since their late 20s or early 30s. This will thus be in a sprawled landscape, as Figure 3.3 shows.

**Centralisation of services**

To fully understand the consequences of the Flemish sprawl for the former baby boomers, who are now older persons, we have to deal with the spatial development of services. Mass sprawl is characterised by a chaotic addition of monofunctional housing artefacts, with the car as a mass vehicle, and the impossibility of creating an efficient public transport system. Simultaneously, the world of facilities underwent significant changes, resulting in the loss of various functions at the local level. At the beginning of the 1960s, most villages had facilities that met the daily needs of their inhabitants. They were, as Thissen et al. (2021) have illustrated, autonomous. As a result of economic growth, this gradually changed and resulted in the loss of many services. Many places do not have a bakery, butcher, or grocery store in the vicinity. Bank branches and automated teller machines (ATMs) are also disappearing. The zones in between cities and villages never had services. Figure 3.4 illustrates that. The effect is that walkability, which is important to serve older people, is at stake (Figure 3.5). Above the (slow) disappearance of privately allocated essential services in villages, many public services also gradually became affected by centralisation trends, usually prompted by austerity logic and efficiency thinking. This led to reduced supply and sometimes the disappearance of post offices, public transport, and police services. It also led to re-localisation – usually to urban centres, so further away from the "sprawl" – of administrative and care facilities such as hospitals and rest homes. That is to say that since the 1960s, the long-lasting spatial sorting of people has been accompanied by the centralisation of facilities, with the result

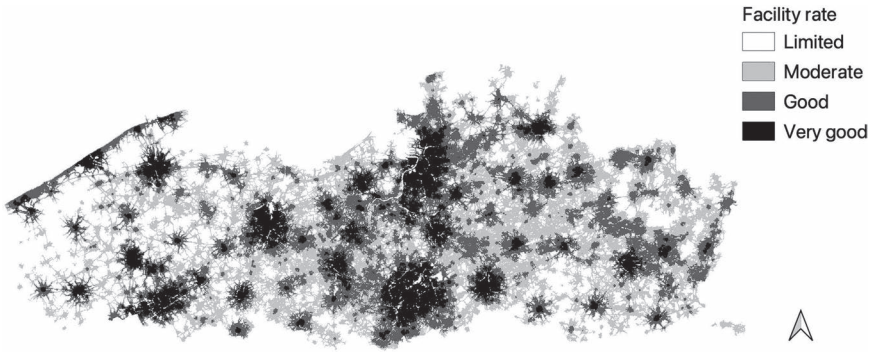


*Figure 3.4* Flanders, the geography of services, all services per ha.

*Source:* Flemish Institute of Technological Research/VITO, map created by Babette Wyckaert (KU Leuven).

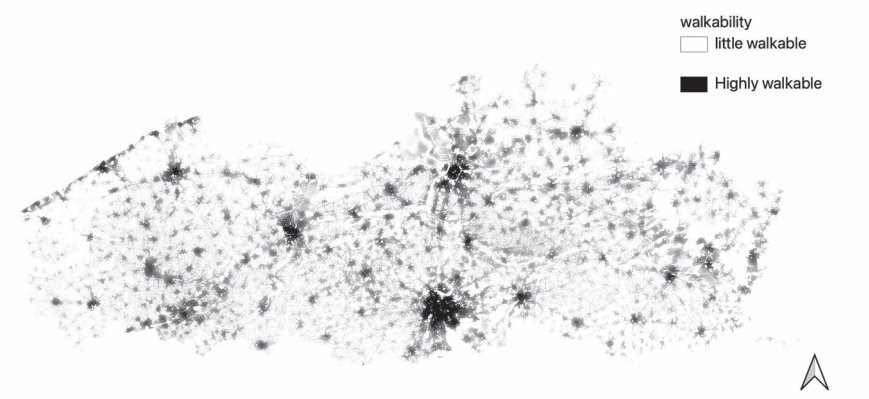


*Figure 3.5* Flanders, walkability score.

*Source:* Flemish Institute of Technological Research/VITO, map created by Babette Wyckaert (KU Leuven).

that car dependence is still increasing (despite the climate discourse). Many old villages and added mass sprawl developments since the 1960s have become service deserts.

## The availability and accessibility of facilities for older persons

"If old people live in a suitable home in a subordinate neighbourhood, they are trapped in a sort of golden cage" (Penninx & Royers, 2007, p. 2, translated by P.D.). As stated previously, there is a need for basic amenities and people in the neighbourhood as a condition for AiP with dignity. The double movement of "sprawl"

and the centralisation of both private and public services have created a spatial organisation that hinders the less mobile in terms of reaching out to necessary goods, services, and people. Recent research shows that AiP is indeed a difficult task for many. In this chapter, we stick to some information concerning services and mobility (Vandekerckhove et al., 2013; De Decker et al., 2018a) since people "have to eat" and, if that is not available, they need transport to reach what is necessary. The information was obtained through large quantitative surveys (Belgian Ageing Studies/BAS), the Great Housing Survey 2013 and 2018, and our own qualitative research in different spatial settings (Belgian Coastal Region – a retirement area, and rural and semi-rural areas). In-depth interviews were conducted with approximately 200 older persons.

**On services**

The withdrawal of provisions is an issue among older persons. During the interviews in sprawled and rural areas, spontaneous reference was made to the disappearance of shops and cafés. Respondents also indicated that they did not foresee such an evolution when they went to live there (De Decker et al., 2018b), when they "did sprawl."

> When we constructed our home here, that was 40 years ago, in the year '74 . . . we said: it is right next to the marketplace, almost on it. It was nice to live here. Two hundred meters from the village centre. However, it has no use anymore. There is nothing left. We must take our car anyway when we want to go to the shops.
>
> (77, female, rural respondent)

> When you come from the city . . . it is a big change. If you come here and you see: oh, there is no store. You have to be able to plan. I have to make sure I have bought everything in advance. (. . .) You cannot get up at 8, drink a coffee, read the newspaper, and then say: "What shall we eat today?" It does not work that way. You have to defrost meat a day ahead. (. . .) Yes, we do not have anything around here anymore. We have no bakery. We have no butcher. We have no grocery store. We have nothing. And then all of a sudden, you have a visitor [the interviewer] and you cannot say: I will quickly buy a packet of biscuits. No.
>
> (70-ish, female, rural respondent)

However, the presence and accessibility of facilities for older persons are crucial for at least three reasons (De Witte et al., 2012). First, it requires less effort to go to a basic facility (such as the baker, butcher, or grocer) when it is close by. In addition, if the facilities are accessible, the old persons are encouraged to walk, which, as mentioned, contributes to better health. And third, it is good for the psychological well-being of older people. Neighbourhood facilities influence the well-being of residents by encouraging face-to-face contact and social relationships within

a neighbourhood or contributing to involvement in the neighbourhood (Van der Meer, 1996; Daverveld, 2006).

Table 3.1 reports the availability of facilities based on the Large Housing Survey 2018 (cf. Figure 3.4). It was mainly the over-65s who indicated that the facilities are much less accessible for them. A pharmacy, a supermarket, the bus, or the tram are not within walking distance. It is not unexpected – because there are simply many more facilities – that facilities in urban locations are reported to be more accessible through "walking." In non-urban areas, only slightly more than half of the residents have most facilities within walking distance (Table 3.2).

The Belgian Ageing Studies also investigated the extent to which practical facilities are present in the neighbourhood. The question was: "Which of the facilities below are insufficient in your area?": Grocery, bank, hairdresser, doctor, butcher, bakery, service centre, mobile shops, post office (Figure 3.6). More than 30% of respondents said they missed a grocery store, a post office, and a bank branch. More than a quarter pointed to the absence of a butcher, baker, pharmacist, and service centre, and 20% had no general practitioner (GP) nearby.

*Table 3.1* Flanders, the accessibility of services in the neighbourhood for older persons, 2018.

| | *Total* | *65+* | *Pensioners* |
|---|---|---|---|
| Bakery | 76.1 | 71.0 | 71.8 |
| Butcher | 65.4 | 62.7 | 63.1 |
| Vegetable shop | 58.7 | 55.4 | 55.9 |
| Grocery | 63.8 | 57.7 | 60.2 |
| Pharmacist | 77.5 | 73.0 | 74.4 |
| Bank/ATM | 63.8 | 61.4 | 60.9 |
| Bus or tram | 91.5 | 86.4 | 87.9 |
| Supermarket | 62.3 | 58.4 | 59.5 |
| GP | 47.5 | 51.2 | 50.9 |

*Source:* Housing Survey 2018/Woononderzoek 2018, calculation in Heylen and Vanderstraeten (2019).

*Table 3.2* Flanders, services at walking distance as reported by +65y and degree of urbanisation, 2018.

| | *Non-urban* | *Urban* |
|---|---|---|
| GP | 44,3 | 51 |
| Supermarket | 54,3 | 71,6 |
| Bus/tram | 88,8 | 93,8 |
| Bank | 59,5 | 68,5 |
| Pharmacy | 71,6 | 84,3 |
| Grocery | 58,2 | 70,1 |
| Vegetable shop | 51,9 | 66,3 |
| Butcher | 60,2 | 70,7 |
| Bakery | 71 | 81,9 |

*Source:* Housing Survey 2018/Woononderzoek 2018, calculations by K. Heylen (KU Leuven).

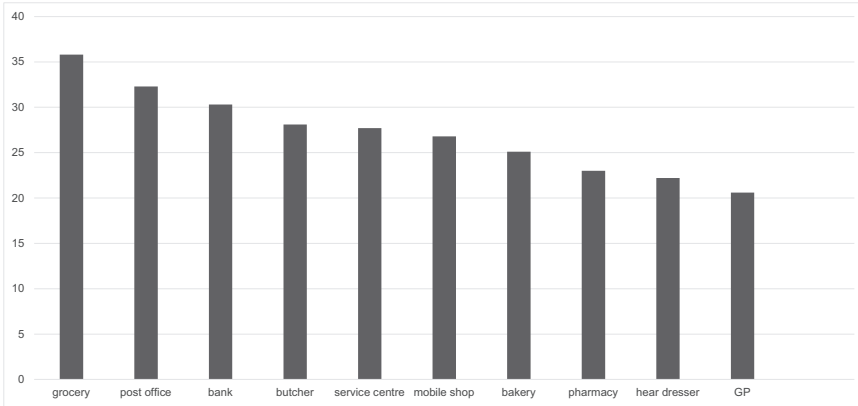


*Figure 3.6* Flanders, service shortage, was reported by +60y in early 2010.
*Source:* Belgian Ageing Studies, taken from De Witte et al. (2012).

## On transportation

Regarding mobility, public transport is needed when older people can no longer drive a car. If this is unavailable or does not match their wishes, it hinders their ability to live independently and participate fully in society. This is especially true for those who live in sprawl outside the (small) cities, where public transportation is limited or nonexistent and needs to be more efficient and able to organise profitably. Not only is participation in leisure activities compromised, but several necessities are also challenging to obtain because, as we have cited and illustrated, they live in service deserts. For example, they live too far from shops, or there is no public transport to buy food and drink. Consequently, even when this is hardly responsible, car use is customary because many old people travel by car out of necessity.

Unlike the urban respondents (Volckaert et al., 2021), the non-urban respondents mainly used cars. In the small city of Mol, for example, no fewer than 82% of the older adults said that they used a car at least once a week (De Witte et al., 2016). Even those who moved around the house with great difficulty kept using the car. For example. One of the respondents could barely move from the dining table to the kitchen, and bringing the coffee pot to the table during the interview was an act that took a few minutes. However, she was still driving a car because continuing to drive a car was inextricably linked to being able to live in her current home for as long as possible.

> Yes, yes, I still do everything by car. But . . . how can I say. At a certain moment you are in vain, and you do not want to give up yet.
>
> (81, m, larger village countryside)

Although there are safety problems associated with car use, alternatives are not considered. The car is the ultimate means of transport. However, the respondent in the quote below pointed out that some women do not drive a car (see Golant, 2015).

> If you live in the countryside, you need practically two cars. Or the woman cannot drive, then you only need one car., But you see that well if the woman can drive, you have two cars.
>
> (60–70, m, hamlet)

> Q: Do you do the shopping by car?
> R: Yes, hey. We cannot go with a net sock [carrier bag] hey
>
> (80, v, village)

> But that [the car] is really for the big commis [groceries], huh. Because so to the Aldi that my wife could still do with the bike. But those are small quantities that you can bring with you, hey.
>
> (Jozef, 63, village)

> But if you have to go shopping with your bike, yes, go and get a loaf of bread, but go and get a bowl of water by bike.
>
> (Roger, 76, village)

However, ageing also means that due to physical limitations or because of feelings of uncertainty about being in traffic, older adults are increasingly forced to leave the car aside as their main means of transport, for example, because visibility is reduced or because they are afraid. However, purchasing a smaller car motivates some older people to venture back into traffic.

> R1: My wife still has a small car and drives very little with it.
> Q: And why did that come?
> R2: Because I no longer started to see well.
>
> (Leo, 79 and Juliette, 76, hamlet)

> But look, I do not dare drive the car anymore. Bernard is still doing this around here, not too far.
>
> (Godelieve, 85, hamlet)

> I still drive now. We first had a large car. And I came from [locality] where the market is. Moreover, I told William at the church that I had to park somewhere in between, but I felt stuffy with that car. I said, "There must be a smaller car." Furthermore, now that is no longer a problem.
>
> (Lea, 77, village)

Finally, car use also impacts road safety and the quality of the living environment. In the respondents' eyes, increasing car traffic detracts from the area's peace and rural character.

> But what do we have? That's the traffic. The traffic has become busy here, which is disturbing. Driving outside in a car is dangerous. And so early in the morning, from 6 am, the driving starts, and then we are obliged to turn the windows up in the summer. From the noise of the cars, they drive to the ring. And that is back in the evening, isn't it? Yes, yes, it is busy here. It's a shortcut here. But if we bought building land in '72, then no car drove here yet. That has increased. And then we have the container park behind it, and that's where traffic comes in, right? But it is mainly work-to-home traffic that passes here. That is the only drawback that we have here. For the rest. . . . But then again, you can't foresee how it evolves.
>
> (Mia, 80, village)

**What if?**

As people get older, mobility and self-reliance can decrease. This can mean that older people no longer dare to drive a car. Our respondents had difficulty imagining a life without a car and often responded irritably to the what-if question. Just as with the inadequacy of the home, many old people apparently do not want to think about any problems that may arise.

Our respondents saw two options. First, they would seek help from their children to ride with them or bring them groceries. In addition, many knew that relocation may be the only option if their mobility decreased too much. However, this remains a (potential) problem that is not anticipated. For example, Luc stated that they had not yet thought about that scenario. Rita agreed with him, saying that it was unforeseeable.

> Q: And how would you do that if you couldn't drive the car anymore?
> R: Then I would ask a daughter-in-law to drive.
> Q: Can you count on them for such things?
> R: Yes, sometimes it happens that [daughter-in-law] drives along.
>
> (Elodie, 73, hamlet)

> Q: And did you have to become less mobile? Were you no longer able to cycle or drive a car properly?
> R1: Yes, then it gets worse, of course. But then you can't live here either.
> Q: Then you wouldn't live here?
> R2: That's a problem that we don't think about.
> R1: You can't foresee that because you don't know how it works, hey.
>
> (Luc, 75 & Rita, 74, hamlet)

> Q: And should that no longer be driving, then . . .?
> R1: Then there is a problem.

R2: Then we appeal more to the children or the neighborhood that they bring it hey.
R1: But then you get a problem.

(Reinhilde, 78 & Marc, 79, Bel)

## Discussion

The impetus for this chapter was derived from the fact that a considerable number of old(er) individuals in Flanders (Belgium), both now and in the near future as the population ages (will) live in service-poor areas. The chapter deals with the confrontation of demographic development (ageing) with the spatial organisation of society. As a result, the people who are part of the current and near-future development of ageing will be confronted with the effects of previous spatial decisions. In Flanders, this spatial heritage is sprawled. So, if people do not move and have little intention to do that in large numbers (Pannecoucke & De Decker, 2017), they will end up in service-poor areas. This presents itself as a disaster for many of them, since the importance of the dwelling and its environment becomes bigger when they become older and less mobile, as Golant (2015) stresses. The results presented here already show that in non-urban areas, old people experience the drawback of lacking basic services. This adds up to the finding that they also lack informal care and that, for many of them, loneliness looks to be around the corner (Volckaert et al., 2021).

This "disaster to come" results from the combination of two developments. On the one hand, there is an ongoing sprawl, which is de facto "planning" the dispersal of the population (De Decker, 2011). At the same time, due to the pursuit of economic efficiency (private services) and the new public management of the government (public services), services have become more concentrated, withdrawing from less dense areas to larger villages and cities. Looking back, the conclusion can be drawn that spatial planning in general and spatial policies ignored the long-term effects of population dynamics. Even today, this is not taken up since the repercussions of sprawl for an ageing population are not considered in any planning papers (De Decker et al., 2018a, 2018b). A further conclusion is that spatial planning and spatial policies have (and continue to have) a fairly static picture of people's lives and societal dynamics. People were reduced to abstract numbers and equalised "to numbers of houses needed," which was then translated into the surface needed for land for housing. This process neglects the fact that people's capabilities change over time and that they may require different kinds of housing located in other places. It was too easily assumed that everyone would continue to live in families with children, using cars to move around and to access the services they needed.

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# 4 Comprehensive community care in Japan

*Yoshihiko Baba and Chika Ooyama*

## Introduction

Japan has the world's highest proportion of older adults (+65 years old) and, thus, has been considered a model for future super-aging societies (McCurry, 2015). The ratio is expected to rise continuously, from 26.8% in 2015 to 39.9% in 2060. The number of older adults with dementia in Japan was expected to be 4.62 million (15.0% among ≥ 65 years old) in 2012, and a further 4 million were considered to have mild cognitive impairment. Accordingly, the cost of dementia care is expected to rise from US$ 120 billion in 2014 to $160 billion in 2025 (McCurry, 2015). A recent survey stated that in Japan, frail and prefrail people account for only 8.7% and 40.8%, respectively (Murayama et al., 2020). While ageing is rapidly progressing, the country is now seeing a significant population decrease, and it is predicted that the decline will be from 128 million people in 2008, at its peak, to 87 million in 2060.

When people get older, their physical and mental health tends to decline compared to when they were young. This tendency is called frailty, a syndrome of physiological decline in late life characterised by marked vulnerability to adverse health outcomes (Fried et al., 2004). For example, frail people have a higher risk of falling. Fear of falling may prevent them from taking part in various activities. Also, they are more likely to live with incurable or chronic diseases. As a result, they tend to be more sedentary and housebound, if not bedridden. Another critical aspect of ageing is dementia, characterised by a decline in memory, language, problem-solving, and other thinking skills that affect a person's ability to perform everyday activities. More and more studies have found that dementia may cause older people to lose a sense of the environment.

Both frailty and dementia are caused by ageing but are also known to be affected by lifestyle. Therefore, it is vital to have a healthy lifestyle: regular exercise or physical activity, a healthy diet, quality sleep, and social participation are the key components of this, some of which can be promoted by urban planning. In particular, the World Health Organization (WHO) recommends moderate physical activity of 150 minutes per week for older adults. This is almost equivalent to 30 minutes of walking, or 3,000 steps, daily. However, the health status of older

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people varies significantly. According to a long-term survey in a small town in Japan, the year-average number of steps per day ranged from 1,000 steps per day to 14,000 steps/per day (Aoyagi et al., 2009). Social participation is also recognised as preventing functional disability (Kanamori et al., 2014).

The public and private sectors have been working together to innovatively build a better super-aged society to prevent older adults with mild cognitive impairment and/or (pre)frailty under Comprehensive Community Care (CCC) from exclusion processes.

The concept of CCC was officially proposed in "Long-Term Care for Older Adults towards 2015," a report published in 2003, although the target year was later shifted to 2025 (Leroi et al., 2018). After the report was published, several cases among the super-aged societies attempted to establish CCC all over their super-aged countries. In some cities, healthcare professionals have adopted community-oriented (*machizukuri*) approaches to CCC.

This chapter focuses on the current urban issues associated with the ageing population in Japan. The relationship between urban planning, especially recently introduced compact city policies (see below), and other age-related planning will be examined. Case studies of CCC will be explained, followed by a critical review to contribute to a theoretical and practical understanding of the super-aged society.

## Urban issues associated with the ageing population in Japan

Studies on the medical effects of ageing have been conducted for many years, but few studies have been done on how ageing affects society. As of 2020, Japan has the world's highest population of adults aged 65 and over. The government and public agencies have begun compiling data to address age-related issues. In 2018, there were 16,927 cases of missing individuals with dementia (NPA, 2021). There have also been frequent reports of wrong-way driving on highways by older drivers, who may have lower cognitive function (137 cases by those 65 and older in 2018 alone) (E-NEXCO, 2021). In 2015, the Ministry of Agriculture, Forestry and Fisheries (MAFF) estimated that 8.25 million older adults lived in food deserts with no food supplier within a 500-meter radius (MAFF, 2021). Caregiving fatigue has resulted in tragedy as well, with 30 older individuals killed by family or professional caregivers in 2014 alone and 74 others nearly killed, resulting in 168 incidents (Gale, 2017).

Some ageing-related issues seem to have been identified and are beginning to be dealt with. For example, dementia-related missing have been recognised worldwide, and some measures, for example, Lifesaver International, Safe Return, and Silver Alert, have been implemented (Murata et al., 2021; Rowe et al., 2011). As in many other countries, license renewal for older people is accompanied by a cognitive function test to reduce car-related accidents, and voluntary driving cessation is also promoted. In addition, the highways are now equipped with a warning alert

for wrong-way driving (E-NEXCO, 2021). However, many older people who are used to driving cars cannot take public transportation.

Nevertheless, many issues remain unsolved, and there is a need for more innovative measures to accommodate a successful ageing society. The Cabinet Office of Japan has studied continuing-care retirement communities. It has proposed cities of active ageing (*shogai katsuyaku no machi*), or Akita and the prefecture of Kanagawa WHO's Age-Friendly Cities programme. Still, few of those communities have addressed the issues in the context of urban planning in a broader sense.

## Urban planning and healthcare planning

Japan's modern urban planning was first legislated in 1919 and revised in 1968. The policies have been revised several times, and a significant reform was made in 2000 following the 1999 Decentralisation Act. Currently, in Japan, urban planning is being revised to reflect local needs as part of the decentralisation process in many cities. Still, prefectural and municipal governments prepare urban master plans. Land use planning, the development of infrastructure and parks, landscape and advert control, and historical conservation are the primary tools. The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) surveyed and reported the needs of the super-aged society in 2005. Some argue that a super-aged society may be an opportunity to reform the shrinking cities (Koohsari et al., 2018; Murakami et al., 2009), but it does not seem that ageing is adequately incorporated into urban planning.

A 2014 report by the Japan Policy Council predicted that about half of the current municipalities would cease to function due to population decline (Yoon, 2020). This trend is frequently found in rural areas such as Tohoku, but some highly urbanised municipalities, for example, in the 23 Wards of Tokyo, are also at risk. The MLIT adopted the compact city policy as a countermeasure to this problem and institutionalised the Location Normalisation (*ricchi tekiseika*) Plan in the 2014 amendment of the Special Measures Concerning Urban Reconstruction Act. Reference was made mainly to Transit-Oriented Development in Europe and the United States, with Strasbourg (France) and Portland (Oregon) being used as examples. In Japan, Toyama City has been promoting a compact city policy since 2002 and is a representative example. As of July 2019, 477 cities have formulated their location normalisation plan (Yoon, 2020).

On the other hand, it has been pointed out that few cities can follow Toyama City in terms of having a successful compact city policy, except Utsunomiya City (Morimoto, 2021). Under the location normalisation plan, the Urban Function Incentive Area (*oshi kino yudo kuiki*) and Residence Incentive Area (*kyoju yudo kuiki*) will be narrower than the conventional Urbanisation Promotion Zone in the location normalisation plan. The developments will be centred in these areas to maintain density and provide fundamental services for the residents.

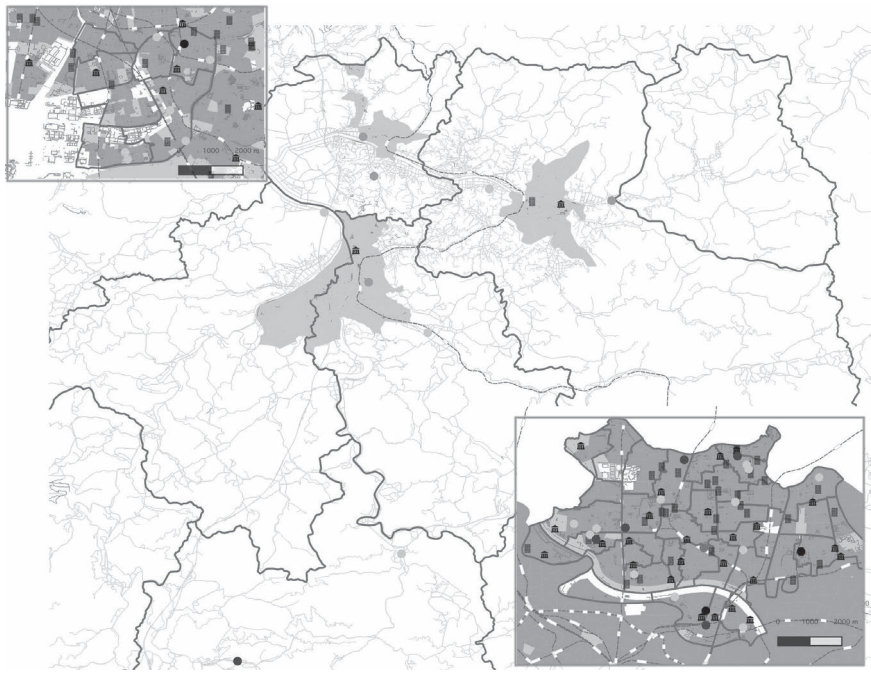

*Figure 4.1* Urban master plans and ageing-related planning.

*Source:* The Association of Small-Scale Multifunctional In-Home Care Services (2021). Permission approved.

Figure 4.1 illustrates the structure of the planning system in Japan. Each municipality prepares the Grand Vision (*kihon koso*) and the Basic Plan (*kihon keikaku*). An urban master plan, as well as a master plan of housing and a long-term care insurance development plan (*kaigo hoken jigyo keikaku*), are subsequently prepared under the Basic Plan. At first, this system seemed like a well-structured plan with a long-term vision, but it has been criticised. While the Basic Plans foresee the next five years, the urban master plans foresee even more extended periods. On the other hand, long-term care insurance development plans are reviewed every three years to reflect the rapidly changing demands of the ageing population.

Few current discussions regarding a super-aged society have addressed the issues mentioned in the previous section. However, the urban master and location normalisation plans often address ageing as an urban issue. For example, older people must move out of the Daily Living Area if they live outside the Residence Incentive Area. The MLIT's other policies, such as Smart City, do not address aging-related issues. For example, mobility for older adults is a significant concern. However, a mobility revolution often means the use of advanced technology, complex public transportation networks, car sharing, and other things that

are difficult for many older people to handle, often accompanied by the attrition of staff, which could otherwise provide individualised attention to older adults. In addition, driving cessation is encouraged despite the fact that the public transportation network has been shrinking (Ichikawa et al., 2016). One of the few policies that the MLIT has been working to promote for the super-aged society is the provision of age-friendly housing, despite housing vacancy becoming a more severe issue (Wakabayashi, 2020).

People are not always happy with developments, and conflicts have occurred. As a result, there have been two distinct approaches to development in urban planning: a centralised, developer-led approach and a decentralised, community-oriented one. The latter, the neoliberalist approach, is often called machizukuri in Japan, where neighbourhood associations play a crucial role (Sorensen & Funck, 2009). For example, some neighbourhood associations allow their members to discuss and solve local matters, building a solid geography-based network (Baba, 2011).

The role of neighbourhood associations in urban planning is often regarded as necessary for mobilising local activism (Sorensen & Funck, 2009). Although neighbourhood associations are not officially positioned in urban planning, their members "have managed to compensate for many of the shortcomings of urban facilities by their self-reliance and solidarity and evident flair for urban living" (Sorensen & Funck, 2009, p. 345). In the era of a super-aged society, neighbourhood associations are considered a secondary safety net on top of government care to support self-help. The "mutual aid" (an informal network involving local health volunteers) (Sudo et al., 2018) is then supported by more public social solidarity care and government care in the healthcare planning of Japan.

In Japan, healthcare planning is typically separate from urban planning, but it is now considered part of a more comprehensive approach. This is demonstrated through the recent introduction of a long-term care development plan focusing on creating healthier environments for older individuals. The Ministry of Health, Labour, and Welfare (MHLW) shifted their policy in 2000 from "institution-based care" to "home-based care" for the people in later life. However, there is a growing need for community-oriented care in areas experiencing rapid urbanisation or in rural areas where resources are limited. Long-term care planning now includes "comprehensive community care," emphasising a community-centred approach as shown in Figure 4.2.

So, what is the difference between home-based care and community-based care? In a similar discussion about rehabilitation, some argue that community-based rehabilitation may result in different outcomes from home-based rehabilitation (Hale, 2004). The main features of community-based rehabilitation are empowerment, partnership, and participation (Malcolm, 1997). This idea seems to have much in common with urban planning. While outpatient care/rehabilitation is given in the facility and home-based care/rehabilitation is given in the home, community-based care may be given anywhere in the community, including in the streets, parks, public transport, or shopping malls.

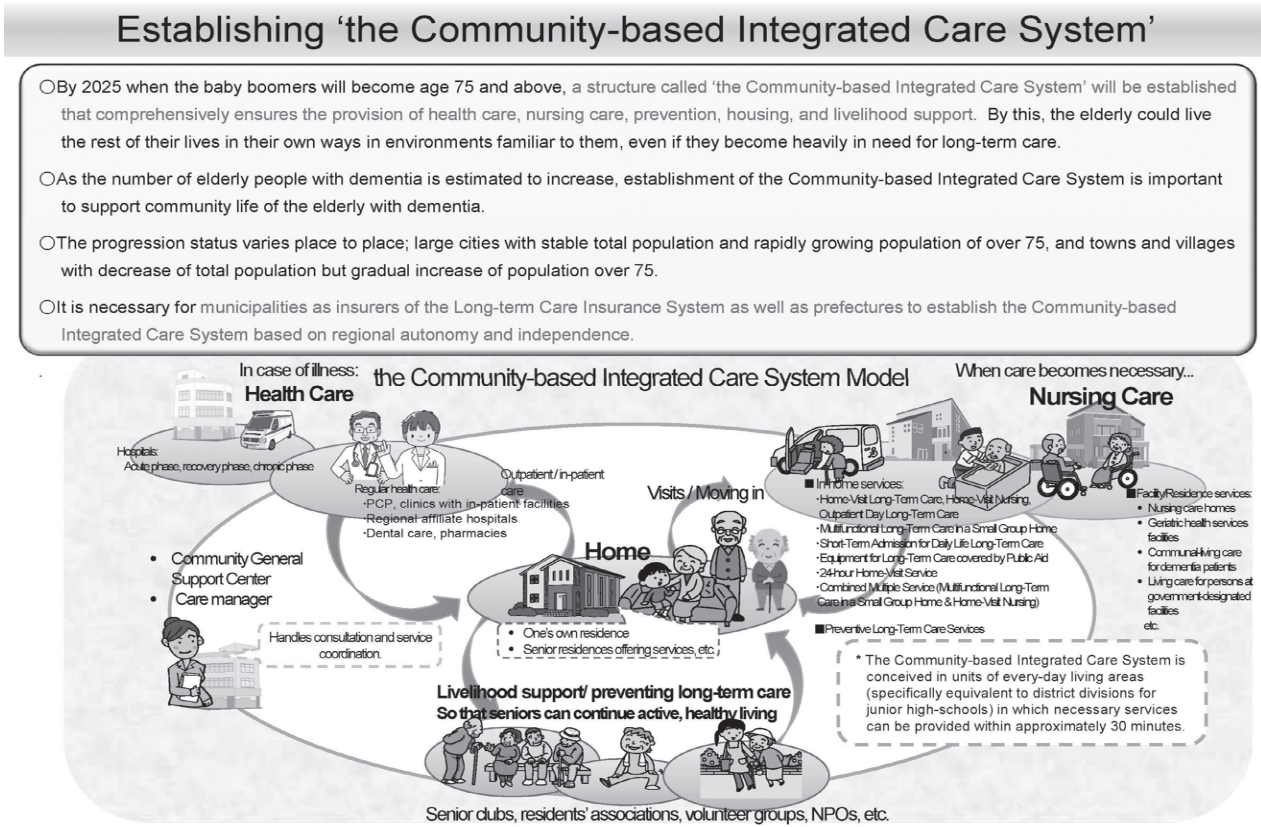


*Figure 4.2* Establishing "the Community-based Integrated Care System."

*Source:* https://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/establish_e.pdf. Permission approved.

**Comprehensive community care**

**Box: Long-Term Care for Older Adults towards 2015**

The measures for long-term care to support the dignity of older people are as follows:

(1) Seamless long-term care service at home (24 hours a day, 365 days a year)

Small and multifunctional care services should operate 24 hours a day, 365 days a year
The services may provide long-term care at their centre and the homes of older people
The city should develop such long-term care services in daily activity areas (DAAs)

(2) Introduction of new housing: not a home or an institution

New housing should be barrier-free
New housing should ensure safety and may offer various services
Older people may move to such housing in their DAAs

(3) A new role for institutions

Institutions may provide long-term care to non-residents

(4) Establishment of the CCC

The projects should start as early as possible to establish CCC by 2015*.

* The target year has been extended to 2025.
*Source:* (Ministry of Health, Labour and Welfare, 2003)

The MHLW has proposed establishing the CCC, in which older adults will be able to continue living in their familiar community without losing their dignity and with assistance to maintain their independence. The term first appeared in the governmental document "Long-Term Care for Older Adults towards 2015," published in 2003 by the Director of Health and Welfare Bureau, MHLW (see Box).

The Japanese concept has several English translations: for example, Community-based Integrated Care (Hatano et al., 2017; Morikawa, 2014) or CCC (Tokyo Metropolitan Government, 2018; Tsuji, 2014). "Integrated care" refers to the integration of acute, post-acute, and long-term care. Also, the term is used to be comparable to United Kingdom (UK)-led research on integrated care. However, the care in Japan has not been included in a systematic review of integrated care (Baxter et al., 2018). It is said that the term was first used by Dr. Noboru Yamaguchi

at Mitsugi Hospital, Onomichi. In the 1970s, Dr. Yamaguchi found out that many patients were readmitted for bedsores 6 to 12 months after they were released from the hospital and realised the importance of the integration of acute, post-acute, and chronic care. The importance of "community-oriented care" was noted after the Great Hanshin earthquake in 1995. In areas with a strong community network of "neighbourhood associations" (*chōnai* or *chōnai-kai* in Japanese), the reconstruction was generally smooth, and the residents were healthier (Iwasaki, 2000). The importance of community has since been reinforced during and after natural disasters.

Although the implementation of CCC may vary, reflecting the local needs, the underlying concept is comprehensive care, community-based care, and integrated care. Therefore, CCC should cover all the residents and their families of any health status to protect the dignity and support the self-reliance of older adults. To accomplish these objectives, the MHLW introduced a small-scale multifunctional in-home care (SMIC) service to help older adults live independently 24 hours a day, 365 days a year. The MHLW also proposed affordable and supported housing for older people to continue to live in their community. Care management should involve assessing the person's status extensively and preparing a tailored care plan to meet his/her needs.

The primary role of comprehensive community care is to ensure the independence and dignity of older people. To achieve this goal, CCC should be comprehensive; it should cover people of all ages and all health statuses; it should support and be supported by everyone in the community; and it should be sustainable. As for housing, if the older person finds it difficult to live in her/his own house, it can be renovated according to her/his current health needs, or he can find affordable housing in the community.

#### *Long-term care insurance and rehabilitation*

Small-scale and multifunctional in-home care (SMIC, *shōkibo takinō*) was introduced in the 2005 amendment of the Long-Term Care Insurance Act to meet the community-based service proposed in *Long-Term Care for* Older Adults in 2015. SMIC is often considered a one-stop service for care management, daycare, home help, and short stays. SMICs were given more flexibility: the care service may be offered at home, at an SMIC centre, or elsewhere (Figure 4.3).

In Japan's long-term care insurance, care managers play a vital role. They are responsible for managing home care services, including medical procedures like suctioning, tube feeding, urination, and insulin injections. Additionally, they oversee helper services such as physical care and daily living assistance. Care managers are indispensable professionals who ensure the well-being of those receiving care. In particular, the medical services needed by older adults with high-level medical needs are not sufficient in all but a few areas. Management is the key to effectively using scarce service resources to make up for the shortage of these services. Care managers also link informal services, such as friends of the older person assistance and neighbourhood associations, to improve her/his quality of life. However, there is also an issue with care managers. Because care managers are independent of medical and long-term care services, there is a drawback to reacting to urgent needs

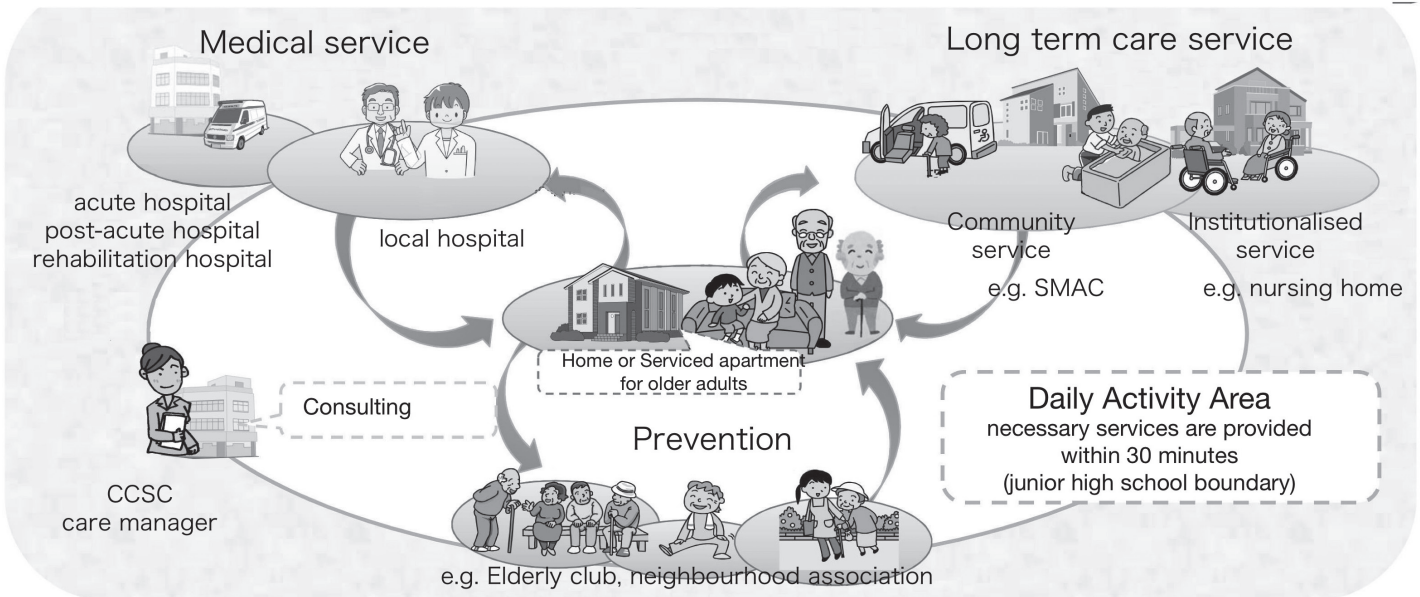


*Figure 4.3* There are different kinds of services to support self-help for the older people.

*Source:* The Association of Small-Scale Multifunctional In-Home Care Services (2012). Permission approved.

flexibly. SMIC, by incorporating care managers, has become a solution to complex cases.

Another vital change to SMICs is that they are classified as a community-oriented service (Table 4.1). In fact, all of the services added since 2006 are community-oriented. The characteristics of community-oriented services are as follows: while the prefecture authority supervises the other long-term care services, community-oriented services are supervised by the city authority. Therefore, the availability of services is limited to the residents of the city. Also, the municipality specifies several community-oriented service development targets in a long-term care service development plan and revises them every three years (Baba, 2017). Another significant difference, compared to home-based services, is that the service cost is a flat rate according to the care level of the users. Therefore,

*Table 4.1* Lists of the long-term care services in Japan.

| | *Number of recipients/1,000* | *Number of service providers* |
|---|---|---|
| 1 Home care services | | |
| Visiting care | 1456.7 | 33176 |
| Home-visit bathing | 123 | 1770 |
| Home-visit nursing | 701 | 11795 |
| Home-visit rehabilitation | 153.6 | 4614 |
| Day service | 1604.5 | 23381 |
| Day rehabilitation service (daycare) | 621.8 | 7920 |
| Short-stay daily-life care | 739.1 | 10615 |
| Short-stay medical care | 152.9 | 3781 |
| Healthcare guidance for in-home care | 1053.5 | 39123 |
| Daily-life care service in specified facilities | 280.2 | 5550 |
| Assistive technology rental | 2 413.1 | 7113 |
| 2 Care facilities | | |
| Social welfare facility for older adults requiring long-term care | 690.7 | 8057 |
| Health service facility for older adults requiring long-term care | 566.2 | 4285 |
| Sanatorium | 75.4 | 1057 |
| 3 Community-based care services | | |
| Regular visits/on-call Visiting care | 36.8 | 946 |
| Visiting care at night | 12.6 | 172 |
| Community-based day service | 596.8 | 19452 |
| Day service for older adults with dementia | 82.7 | 3439 |
| SMIC | 143.2 | 5648 |
| SMIC and home-visit nursing | 18.1 | 627 |
| Daily-life group care for older adults with dementia | 257.4 | 13904 |
| Community-oriented daily-life care services in live-in facilities | 10.4 | 350 |
| Community-oriented social welfare facility for older adults requiring care | 75.7 | 2344 |

*Source:* By the authors, from the Ministry of Health, Labour and Welfare (2020).

*Table 4.2* DAAs at ordinance cities.

| *DDAs* | *Ordinance cities* |
|---|---|
| Neighbourhood | Chiba, Sagamihara, Saitama, Shizuoka, Hamamatsu, Kobe, Kitakyushu |
| Junior high school district | Sendai, Yokohama, Okayama, Hiroshima, Fukuoka |
| Two or three junior high school districts ward | Niigata, Kyoto, Sakai, Kumamoto Sapporo, Kawasaki, Nagoya, Osaka |

*Source:* By the authors, from the Ministry of Land, Infrastructure and Tourism (2015).

older persons can visit the daycare or ask helpers to visit their home as often and for as long as necessary. This makes it possible to change the care plan as soon as the users health status changes.

Furthermore, community-oriented services require staff to undertake a series of extensive training sessions in dementia care. The training is standardised and is offered at fundamental (1-day lecture), senior (6 days lecture + 2-week training), leader (8 days lecture + 5 days practical training at other facilities + 2 weeks practical training at own facility), and instructor levels (9 weeks). Finally, the MHLW allows community-oriented care services to care for older adults, not only at the home of their home or a daycare centre but also at a farm, shopping mall, or any place in the neighbourhood. This enables the care staff to offer occupational therapy or other alternative therapies, such as horticulture therapy.

In Japan, school districts are often viewed as community units, particularly in cities. Some cities, like Sendai and Yokohama, use junior high school districts and develop SMICs accordingly. However, many cities use DAAs that are larger than junior high school districts (see Table 4.2) (Baba, 2017). It's worth noting that long-term care insurance development plans do not reference the location normalisation plan.

### Senior housing

Table 4.3 demonstrates the types of senior housing available in Japan. Until recently, senior housing was either luxurious apartment led by the private sector or facilities under the Social Welfare Act. Most older adults' homes are not comfortable environments with smaller rooms or multiple beds. In some cases, when a resident needs care at a hospital, he/she must leave the room. The MLIT introduced the Apartment with Services for Older Adults (ASO, *sābisu tsuki kōreisha muke jūtaku*) to the 2011 amendment of the Act on the Securement of Stable Supply of Housing for Older Adults. ASOs offer a larger room with fewer ramps, adequate equipment for older adults, and various services. The services provided by ASOs vary. Some ASOs offer only meals, while others offer leisure activities. For example, Grapes Garden, an ASO managed by a flower shop, has a garden and offers gardening therapy. The Ginmokusei group, in northern Tokyo and Chiba, has a small candy store operated by older residents inside the buildings to attract local children. Although there is not enough evidence to

*Table 4.3* Types of senior housing.

| *Housing type* | *Act* | *Area per person (sq metre)* | *Maximum accommodation* |
|---|---|---|---|
| Special nursing home (*tokubetsu yōgo rōjin hōmu*) | Social Welfare Act 20(5) | 10.65 | 516,000 |
| Nursing home (*yōgo rōjin hōmu*) | Social Welfare Act 20(4) | 10.65 | 65,113 |
| Affordable nursing home (*keihi rōjin hōmu*) | Social Welfare Act 60 and 20(6) | 21.6 | 91,474 |
| Private care home (*yūryō rōjin hōmu*) | Social Welfare Act 29 | 13 | 349,975 |
| Group home for dementia (*ninchishō gurūpu hōmu*) | Social Welfare Act 5(2)6 | 7.43 | 176,900 |
| ASO (*sābisu tsuki kōreisha muke jūtaku*) | Housing for Older Adults Act 5 | 25 | 148,632 |

*Note:* A special nursing home (Social Welfare Act) is defined as a Social welfare facility for older adults requiring long-term care (Long-Term Care Insurance Act). Group home for dementia (Social Welfare Act) is defined as daily-life group care for older adults with dementia (Long-Term Care Insurance Act).

*Source:* By the authors from the Ministry of Health, Labour and Welfare (2012).

support this, these characteristics are expected to help prevent frailty in older adults.

As far as an ageing society is concerned, senior housing is one of the few policies developed by the MLIT, which administers urban planning policies. Although other policies of the MLIT are concerned with the super-aged society, more are concerned with the development and life of younger generations. For example, although driving licenses for old-old people (75 years old or older) have been discouraged given the increase in vehicle accidents involving older adults, a limited number of policies help older adults find alternative transport modes. The smarter and more complex public transportation becomes, the harder it get for older adults to use it. Consequently, more and more people are home-bound, if not bed-bound. Therefore, it is important to take accessibility to shops and other services into account.

In some municipalities, the master plan for housing addresses the provision of ASOs. However, the master plans for housing include only general policy statements and do not specify how much accommodation should be supplied in each area. In this sense, it lacks consistency with the location localisation plans. Instead, for ASOs, the prefectural governments focus on maintaining the quality of buildings and services for the benefit of older residents.

## From theory to practice

CCC is a national strategy for the super-aged society in Japan. Thus, the central government has collected good practices (Ministry of Health, Labour and Welfare, 2014), including a list containing 400 cases from Japan's 1,700 local governments.

The list is somewhat simplified; there is only one topic per local government, and it is rather cross-sectional. Perhaps one of the large-scale examples is Kashiwa, Chiba, as it is a joint programme between Urban Regeneration, the largest quasi-public developer, and the University of Tokyo. However, perhaps one of the earliest, although not listed in the report, is Yukarigaoka, Sakura, in the same prefecture, where a single developer has continuously developed since 1971 (Otsuki, 2018). Other typical CCC samples include Andanchi (Sendai, Miyagi), Share Kanazawa (Kanagawa, Ishikawa), and Nakamachi Care Residence (Setagaya, Tokyo). They are the development complexes of an ASO and a SMIC. The dementia-related practices of Omuta, Fukuoka, have been praised, as the residents regularly drill to find missing dementia wanderers (Hayashi, 2017). Wako, Saitama, has an extensive assessment system for its older residents. These cases seem to have strong leadership and a relatively small community.

There are a number of other practices that the central government does not cover. In this section, cases of sustainable practices are reviewed, in which both young and older adults with any health status are involved; all the residents have some role, and the meetings and events are sustainable. Among such practices, two cases from metropolitan regions (Minami-ku, Nagoya and Adachi, Tokyo) and a case from a regional city (Unnan, Shimane) have been chosen (Table 4.4). The reasons behind the selection of the cases are related to urban issues such as access to community resources. In addition, all the cases deal with some social roles and participation. Two deal with mobility issues, and two deal with dementia care. In addition, two cases deal with COVID-19-related situations.

*Table 4.4* The summary of the case studies by the authors.

| *Characteristics* | | *Adachi* | *Minami-ku* | *Unnan* |
|---|---|---|---|---|
| | | *Tokyo metropolitan* | *Nagoya metropolitan* | *Regional* |
| Area | | 53.25 km2 | 18.46 km2 | 553.18 km2 |
| Population | 2010 | 683,426 | 141,310 | 41,917 |
| | 2015 | 670,122 | 136,935 | 39,032 |
| Density | | 12,584.45 | 7,417.93 | 70.56 |
| Population ≥65 | | 168,272 | 39,317 | 14,264 |
| | | 25.1% | 28.7% | 36.5% |
| Population ≥75 | | 80,091 | 18,907 | 8,329 |
| | | 12.0% | 13.8% | 21.3% |
| Junior high school districts | | 36 | 7 | 8 |
| Comprehensive Community Care support centres | | 25 | 3 | 2 |
| Small-scale multifunctional in-home care service | | 14 | 6 | 5 |
| | with a visiting nurse | 5 | 0 | 1 |
| Apartments with services for older adults | | 37 | 4 | 1 |

*Source:* Ministry of Land, Infrastructure and Tourism (2015).

***Minami-ku, Nagoya***

In March 2000, COVID-19 hit day services in Minami-ku, Nagoya. The same authority concealed the details when the municipality identified a cluster of infected patients in a day service and publicised this. The service recipients, their family members, and care managers were not informed at all. This resulted in COVID-19 spreading to other day service providers. Care managers and day service providers then reacted quickly and agreed that the information would be shared when an infected cluster appeared.

The city of Nagoya, which has 2.3 million residents, forms the third-largest metropolitan area in Japan. Minami-ku is one of the 16 wards of the city. According to the Seventh Long-Term Care Insurance Plan, DAAs are set based on the ward rather than the junior high school district, as the central government proposes. Minami-ku is one of the 16 wards of the city, with approximately 136,000 residents. The city designates DAAs by ward, so Minami-ku is a single DAA. The ward has two CCSCs and a branch.

On 12 November 2016, "The Second Kanayama Collection" was held at a large shopping mall, Aeon Mall Aratamabashi, Minami-ku, Nagoya. Although the title does not mention it, all the models were 65 or older. The shopping mall group is also famous for promoting Mall Walking, which was initially developed in the United States of America (USA) (Duncan et al., 1995). Minami-ku was the oldest society in the third-largest city in central Japan. The event was hosted by a long-term care insurance service network and subsidised by the Nagoya Urban Centre. The audience was as large as 500, including the families and friends of the models. According to the city's location normalisation plan, Aratamabashi is in the Urban Function Incentive Area.

Such "senior fashion" events are becoming increasingly common in Japan, such as the Platinum Fashion Show in Kawasaki, Kanagawa, and the Senior Fashion Show Sugamo Collection in Tokyo. What makes Minami different from other senior fashion pageants is the key to understanding and practicing CCC. Initially, the event was planned by long-term care professionals of Minami-ku, Nagoya, where older residents account for 28% of the population. Twenty-eight models, most of whom were under long-term care and some had severe locomotive syndrome, showed up to display their coordination choices. The coordination was a collaborative project with students of the Department of Fashion and Culture at Sakuradai High School. Older participants were given a lesson on the runway walk by Nagoya Mode Gakuen college students. A 90-year-old woman, usually assisted when walking, walked on the runway, and Japanese classical dance was played.

***Unnan, Tottori***

The city of Unnan is located in Shimane Prefecture. It is a small town, or rather a collection of small villages, with 44,000 residents. The population of Unnan City

has been decreasing; the total population was 41,917 in 2010. By region, the population is increasing in and around the centre of the former towns and villages, especially in the areas within the city's Urbanisation Promotion Zone. On the other hand, the population is decreasing in the mountainous regions, especially in areas far from the town centre. These trends suggest that it is necessary to consolidate the functions of major cities into areas of increasing population, while maintaining the centres of life in each region. In addition, there is a relatively high mobility trend in the neighbouring cities of Matsue and Izumo in terms of daily activities such as purchasing, and it is necessary to strengthen the linkage with the cities with rich urban functions. The city has formulated its location normalisation plan but has not set up Urban Function Incentive areas.

The seventh long-term care insurance development plan also identifies accessibility and mobility as one of the issues. The plan designates three DAAs in the city: Daito Kamo, Kisuki Mitoya, and Yoshida Kakeya. As the name suggests, each DAA has two smaller neighbourhoods. The city has two Community Council of Senior Citizens (CCSCs), one in Daito Kamo and the other in Kisuki Mitoya. The CCSC supports the older residents of Yoshida Kakeya in Kisuki Mitoya.

The small city has environmental constraints, including a need for more resources and limited information (Ohta, Ryu, et al., 2019). However, it has established a research institute to promote the physical activities of older adults. The city has developed community-wide interventions, in which each DAA has been given an intervention for several years. The research revealed that it took five years to promote aerobic, flexibility, and muscle-strengthening activities (Kamada et al., 2018).

The city has been thriving by empowering and attracting younger generations. Co-unnanjuku, a city project to encourage younger residents to start a business in the area since 2011, has created several businesses. Mr. Sugimura, an occupational therapist, found that putting weight on his/her forearms helped the hip swing out better, and tightening his sides stabilised his core and allowed him/her to walk longer distances. He saw an older person at the supermarket, leaning on a walker while shopping. Then, he came up with the idea of developing a shopping cart that could be used for rehabilitation while shopping. He attended Co-unnanjuku in 2017 and opened a supermarket in Kisuki Mitoya district, equipped with comfortable shopping carts for older people (Hayashi & Abe, 2017).

The company's current business model can be divided into three main categories: collaboration with long-term care services, commercial facilities, and local governments. First, long-term care facilities adopt the idea of shopping rehabilitation with a tailored shopping cart. This includes examining which commercial establishments in the neighbourhood can implement the programme, negotiating with the actual stores, and previewing the commercial establishments (checking steps and traffic lines and ensuring safety). Then, the company rents a space in a commercial facility to set up a shop and relevant services, where exercises are performed, and shopping rehabilitation is carried out. In some cases, retail facilities

have approached the company, and in other cases, nursing care facilities have been able to differentiate themselves by offering this service. In many cases, local governments are also involved in these projects.

***Adachi, Tokyo***

In Adachi Ward, Tokyo, a SMIC service operates a monthly bus service that visits each nursing home and makes a short trip to a high-street shopping mall (Baba et al., 2021). For people with dementia who want to take a bus to go back to their childhood home, a fake bus stop is sometimes used (Lorey, 2019). In the past, SMICs in Adachi would rent an actual bus to transport older individuals, some of whom had dementia, to a nearby high street. They opted for a standard low-floor bus instead of a high-floor coach due to its convenience for those with locomotive syndrome and its familiarity.

The bus was not operated by a single service provider but by an association of long-term care service providers. They also run community care meetings and discuss how older people, especially those with dementia, can continue to live in their own community rather than in an institution. Sadly, however, the bus operation had to be ceased in 2018 due to a staff shortage. In fact, there is a nationwide shortage of bus drivers due to the declining population (Okamoto, 2019).

At some service providers, older people clean their nearby parks. This is part of the city's community management of municipal parks. Such a community-based park management society (*koen aigokai*) has been legislated in many cities (Mutiara & Isami, 2012). Many park management societies belong to the nearby neighbourhood association, but a local business may lead such activities in some areas. Today, there are several groups of older adults under long-term care who clean the park as part of their long-term care and rehabilitation.

## Critical appraisal

As we have seen in several case studies, healthcare professionals, local communities, schools, and business sectors have been working with local governments to establish CCC nationwide. The self-governed policies of CCC have been proven to bring a sense of a life worth living (Ohta, Sato, et al., 2019). In addition, community-based care may involve more physical activity than home-based care, preventing diseases (Baba et al., 2021). What makes CCC more successful is identifying the barriers for each individual and providing appropriate aid towards participation activities.

One major issue is the lack of consistency between urban master plans and long-term care insurance development plans. According to the Municipal Basic Plan, all plans, including housing and other development plans, should align with the urban master plan of the municipality. However, in reality, these plans often do not align with each other. While the urban master plan looks 20 years into the future, health and long-term care insurance plans only look three years ahead.

Additionally, the location normalisation plan, which is a part of the urban master plan, may not include long-term care insurance service providers in the urban function incentive areas, and access to these facilities may not be adequately considered. Furthermore, residents who wish to move to a residence incentive zone may not be guaranteed to find a suitable location within their DAA.

The concept of DAAs may be misleading. Currently, DAAs are used in two ways: the development promotion of community-oriented services; and the activity area of individual older adults for care planning in the community. In the former sense, MHLW expects SMICs to be developed in each junior high school district. The school district is one of the neighbourhood community units in Japan (Hashimoto, 2018). The development of SMICs and other community-oriented care services will be planned in the city's long-term care insurance development plan. Still, the development of SMICs has not been adequately progressed (Baba, 2017). Given the introduction of the location normalisation plan, the setting of DAAs should consider urbanisation and residence incentive areas. In the latter sense, DAAs may differ for each individual. In "Long-Term Care for Older Adults towards 2015," older adults, even with a disability, will be able to continue to live in the community if they are given appropriate community-based rehabilitation in their daily activity area (Figure 4.4). Such rehabilitation may include regular walking, shopping with staff assistance, occasional chats with old friends, etc. However, most care managers have limited knowledge of rehabilitation and may think only of home-based rehabilitation.

Second, the current policies encourage segregating the generations. Housing policies related to older adults ensure that older adults have access to affordable housing, but such housing excludes young adults. There are programmes overseas where students live in the same apartment (McLaughlin, 2020) or even in nursing homes (Harris, 2016). As for SMIC, the MHLW allows disabled children to be cared for along with older adults, but the Ministry doesn't offer those possibilities for children without disabilities. The subsidies from Research and Product Development in Onna, Okinawa, Japan (REPS) encourage the developers to include SMIC or another long-term care service, but it would be better if some rooms were open to students or single parents with children. Also, as in the case of Minami-ku, Nagoya, more interactions with high school and college students may lead to more active participation. In this programme, the participant students studied fashion, not long-term care.

Third, it is crucial to understand the characteristics of older adults with and without dementia. When people get older, they may lose motor and perceptual skills and working memory but usually maintain their emotional and procedural memory. This means that they can clean the streets and parks, use a knife and conventional cooking stove, or even drive a car they have previously used, but it takes more time to learn to use a new cooking machine, drive a new car, or take public transportation which they have not used before. If driving cessation is required, then older adults are also required to learn how to use public transport (Risser et al., 2015).

| Status | | Daily activity area | Steps per day |
|---|---|---|---|
| Robust | | | 8,000 |
| Frail | | | 5,000 |
| Disabled | Support level 1-2 | | 3,000 |
| | Care level 1 | | 2,000 |
| | Care level 2 | | 1,000 |
| | Care level 3-5 | | |

**Tokyo**

| Transport mode | Destination | Distance | Steps per round trip | Participation |
|---|---|---|---|---|
| walk | | | | |
| | neighbourhood park | | 1,000 | |
| | neighbourhood cleaning | | 1,000 | YES |
| | convinience store | | 1,000 | |
| | bus stop | | 1,000 | |
| | train station | | 2,000 | |
| by bus | | | | |
| | shopping mall | | 2,000 | |
| | hospital | | 2,000 | |
| by train | | | | |
| | city centre | | 4,000 | |

**Other metopolitan cities**

| Transport mode | Destination | Distance | Steps per round trip | Participation |
|---|---|---|---|---|
| walk | | | | |
| | neighbourhood park | | 1,000 | |
| | convinience store | | 1,000 | |
| | bus stop | | 1,000 | |
| | train station | | 2,000 | |
| by bus | | | | |
| | shopping mall | | 2,000 | |
| | fashion show at mall | | 3,000 | YES |
| | hospital | | 2,000 | |
| | city centre | | 4,000 | |

**Regional towns**

| Transport mode | Destination | Distance | Steps per round trip | Participation |
|---|---|---|---|---|
| walk | | | | |
| | neighbours | | 1,000 | |
| | bus stop | | | |
| by car | | | | |
| | shopping mall | | 500 | |
| | exercise at mall | | 2,000 | YES |
| | hospital | | 500 | |
| by bus | | | | |
| | city centre | | 4,000 | YES |

*Figure 4.4* DAAs are defined by care level and urban characteristics.

*Source:* By the authors.

## Future perspectives

Establishing comprehensive community care (CCC) has faced obstacles nationwide, not only from government officials but also from healthcare professionals, long-term care providers, and local communities working together. Best practices involve various stakeholders, including high school students, to create a society that values and supports older adults. However, urban professionals have been slower to embrace this trend, resulting in urban development that primarily caters to younger adults who are more adaptable to change.

Nevertheless, as the proportion of older adults increases, the cities will be more friendly to people with or without physical or cognitive impairments. As we have seen in the case studies, the municipal authorities should attempt to include all residents in co-productive approaches (Suzuki et al., 2021). It is important to note that many older adults seek "serious leisure" (Lee et al., 2019).

Currently, geriatric science is taught at colleges and healthcare schools. However, gerontology, such as the mobility of older adults, is rarely taught at schools of urban studies. While younger generations are willing to study new technologies, they may be reluctant to study gerontology and mature technologies. Suppose students and young adults are given more opportunities to learn how to cope with ageing by living or studying with older people. In that case, they might stay robust until the late stages of life and develop more age-friendly environments at various scales. Thus, a structured education programme on ageing and dementia for students may be necessary to be more innovative in the future.

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# 5 Ageing and ambient assisted living

## New landscapes of dwelling

*Santiago Quesada-García*

### Introduction

In his well-known Gulliver's Travels, Jonathan Swift said that every man desires to live long, but no man wishes to age. However, getting older is still the only way we have found to live long, as stated by Sainte-Beuve (Deschavanne & Tavoillot, 2007).

Longevity can be understood as the period by which a living being manages to survive longer than other individuals of the same species. Pascal Bruckner (2019) maintains that the possibility of extending life is one of humanity's most extraordinary collective achievements. It is the most palpable reflection of the advances achieved in the health field. Longevity in human beings is a mirror of the success of the fight against some infectious diseases, mortality resulting from childhood illnesses, and childbirth complications, or those related to more advanced age groups. Hence, health has become an issue of social concern through ageing.

Extended life prolongs age but not youth. Ageing is a biological process by which living beings become old, which involves a series of structural and functional changes that appear over time and are not the result of diseases or accidents. In recent decades, old age has tended to be stigmatised, as it implies the deterioration of the body. The tyranny of youth is, *par excellence*, the utopia of an unhappily old society. However, until recently, in many societies, old age was a synonym for wisdom. What age teaches us is the meaning and importance of nuances, learning to distinguish what is trivial from what is fundamental, for instance, love, beauty, poetry, art, and so on. Therefore, old age is not a synonym for resignation (Bruckner, 2019).

Today, the gap between the biological life of people and the age of work and social retirement is increasing. This circumstance provides an opportunity to rethink how to live and how to plan for the important period in human existence that is entailed by ageing, which can span 20 or 30 years. In this light, old age becomes a precious resource. An older adult needs to continue to be eager in his or her desire to enjoy the world and to undertake new goals. Bruckner (2019) argues that in the third and fourth ages, one must persist in being, loving, working, and learning without ever abdicating to age. This idea means that old age should be as active and healthy as possible. However, the current social structures are based

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on the life expectancies that were common after World War II, when 50 was the threshold for what was considered the beginning of old age. Currently, men and women over 50 are in a similar condition to those over 30.

On the other hand, our society is immersed in a silent digital revolution based on communication, which is changing the manner of social interaction, participation, residential solutions, and even city models (Applebaum, 2021). Today, it is unnecessary to go out to the street to shop, work or debate a political issue; it can be done online (Echevarría, 1999). The current society is undergoing a rapid transformation in the way in which people transmit and receive information. It is a new communication revolution that is having significant consequences. Information and communication technologies (ICTs) have emerged as the application of scientific knowledge for practical purposes and have acquired particular importance. In this context, the notion of Ambient or Active Assisted Living (AAL) appears in domestic spaces to introduce technology-based services and assistance that enable older people to have a healthier, safer, and more comfortable life in their home environment for as long as possible.

## Ageing in the cities of the fourth digital decade

According to the report on the ageing of the world's population by the Population Division of the Department of Economic and Social Affairs of the United Nations (UN, 2019), in 2050, one in five people will be older than 60. The number in this age bracket will reach 2.1 billion, exceeding the number of youths between 15 and 24 years old. In addition, almost 80% of older adults in the whole world belong to developing countries, thus indicating that agedness is not exclusive to First World countries but rather is a general phenomenon (UN, 2019).

The accelerated rhythm of ageing of the world's population will impact the demand for goods and services, as well as social protection, health, housing, education, transportation, information, and communications. It will also influence the work and financial markets, family structures, intergenerational relationships, and, undoubtedly, the development of multi-level governance. Such a general impact will create a need for policies and significant urban transformations since, by the middle of the 21st century, 70% of the world's population will live in cities, and this population will be substantially aged, as indicated above.

By 2070, one in three Europeans will be older than 65 (European Commission, 2021). The active-to-inactive population ratio will reach one active to four inactive persons; this proportion is currently one to two. With this assessment, in recent years, the European Commission has developed a line of action that combines the uncertainty of the cost of old age due to disease, dependency, and other factors with the appreciation of the added value that older people bring with their knowledge, experience, and so on. The EU4Health Programme of the European Union (EU) 2021–2027 underlines that, to adequately face old age and achieve the best well-being in European societies, the systems must incorporate policies that promote health and prevent illness in order to decrease the impact on the economy, assistance, and social development (Figure 5.1).

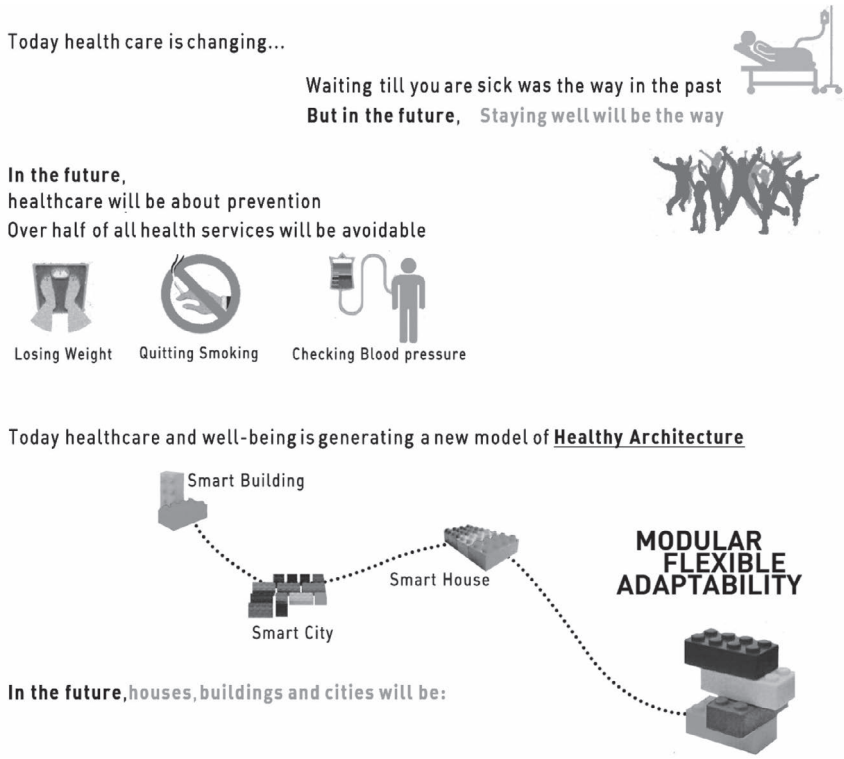


*Figure 5.1* Trends in healthcare and their impact on a healthier architecture.

*Source:* Prepared by the author, adapted from a design by Hyojung Kim and Barcelona Global Design in Lleó et al. (2015).

Thus, the growing paradigm of healthy ageing arises based on developing and maintaining functional, physical, and cognitive capacities in a way that enables the well-being of people during their ageing process. This is achieved if they can perform, fully and autonomously, the Instrumental Activities of Daily Living (IADL) (Graf, 2008) while fulfilling their needs and vital aspirations. People's functional, physical, and cognitive skills are influenced by both physiological and psychological changes and by aspects related to health or the presence or absence of illness. These capacities are determined by two factors that interact with one another. The first is the intrinsic faculty of each person, that is, the combination of their physical and mental skills. The second is the physical environment and social ambiance in which they live (Proulx et al., 2016).

Physical spaces and environments, as well as the technology integrated within them, can be planned and designed to adapt to people's attitudes and capacities. One of the most important actions to promote healthy old age is, therefore, the planning of adapted and adaptable environments. It is necessary to build a habitat – both individual and collective – that promotes the maximum quality of life over

the course of the constant evolution of human needs throughout childhood, youth, maturity and, especially, in the context of ageing (Robinson & Pallasmaa, 2015).

This means thinking about architecture and the cities of the future with a view to meeting the individual and social demands generated by this growing demographic trend and giving priority to essential aspects for older adults such as experience and memory, accessibility and adaptation, functionality and diversity, integration and social interaction, as well as the meaning and use of habitable spaces and environments. These intangible values must be added to the growing technological influence caused by the gradual and unstoppable digital transformation that has surrounded contemporary society over the last three decades and is still far from complete (Quesada-García et al., 2023b).

This transformation is a new kind of revolution – dizzying and silent – that is leading to changing attitudes in regard to the ways in which people and environments interact, habits of living, and the production of a definite change of mentality in the current society (Echevarría, 1999). Every day, people are more intensely and proactively seeking or demanding constant improvements to their quality of life by means of efficient environmental, health, and intelligent solutions that must be as sustainable, affordable, and integral as possible.

The digital revolution incorporates innovative forms of communication that promote new methods of interaction through mobile devices, cell phones, television, and the internet, and entail a radical mutation in the relationships between people and between people and domestic objects. The common element in the majority of everyday devices is their technological essence. They are devices that are capable of gathering and processing data, which, thanks to the possibility of communicating with each other, makes them *intelligent*. This new interaction is characterised by three factors: a ubiquitous experience in high definition; the connection of electronic and home appliance devices with a range of services; and interactive communication between computers, telephones, tablets, or visual and touch recognition devices (Quesada-García & Pulido, 2012). Technology has become another component in the landscape of everyday life.

The catalyst for this digital revolution has been the internet, which is a decentralised set of interconnected communication networks that enable and build a fluid information transmission network. The concept of the internet of things (IoT), coined by Kevin Ashton, first appeared in 1999 at the Massachusetts Institute of Technology (MIT) Auto-ID Center (Ashton, 2009). The IoT is a network of physical objects with embedded technology, such as sensors or software, capable of communicating and interacting with each other or the external environment. In a home, they are typically household appliances or technical items, including devices (such as thermostats, home security cameras, systems, lighting fixtures, etc.) that support one or several ecosystems and that can be controlled through devices such as smartphones or speakers.

The connectivity of these products allows them to have some capabilities that are external to the physical device itself. These include the collection of data that can be analysed to inform decision-making, enable operational efficiency, and continually improve product performance. When these objects can change their

responses based on the data information and their own experience, they are called "smart objects" or "smart connected things" (SCoT). A smart object is not only a connected element but a product with effective interconnected management that improves its interaction with other objects and with people. It can be created as a manufactured product or by embedding electronic chips or sensors in non-smart physical objects. SCoTs are active products integrated by software and sensors, and they are connectivity that permits data to be exchanged between the product, maker, operator/user, and other systems.

In buildings, the concept of IoT technology is applied to products used within a "SmartHome." This type of home is made up of intelligent components, which are combined and reproducible in standardised models; smart objects that are designed to assist, in real-time, the domestic environment through the synergetic interaction of automation systems and technologies, materials, and innovative processes. To achieve that goal, an inhabited place must have a set of elements or subsystems that are interconnected with each other through mutual relations, with open, secure, and highly reliable software that acts as a whole according to general, pre-established rules.

The response provided to the individual and collective needs of people by these assisted environments progressively transforms into demands for effective, sustainable, and affordable services, both for the open market and cities. As such, an osmotic and permeable process is generated between the offer of services and the implementation of technologies to enjoy them, in which the micro – the intimate home space – enriches the macro – the urban space – and vice versa. That is, there is an interaction between the domestic scale of the Smart House, the intermediate scale of the Smart Building, and the construction of a city that must become increasingly more intelligent each day (Mazziotta & Jenkins, 2016). The Smart City appears as a new urban model that is open in its definition; in it, the city is understood not as a physical, closed, and geographically defined element but as a network of a series of overlapping layers or grids which interact in order to improve their functioning and efficiency. The basic layer of a Smart City is the environment, on which other networks are superimposed, consisting of the following grids, layers, or systems: (a) information analysis and management; (b) water supply and purification; (c) waste and productive management; (d) energy generation and supply; and (e) urban mobility (Quesada-García & Pulido, 2012).

Each one of these grids corresponds to an urban system that, in turn, consists of a multitude of interwoven nodes (Figure 5.2). These systems, which are equipped with sensors, communicate through a network that allows information management and decision-making. The purpose of this network organisation – multi-scale or fractal – is to facilitate the efficient response in real time to the constant flow of social demands. The Smart City is a network of networks that changes, mutates, and is in constant movement. Based on the persistent needs of society, it also adapts, incorporates new layers, modifies existing ones, builds new networks, and creates unsuspected landscapes (Quesada-García & Pulido, 2012).

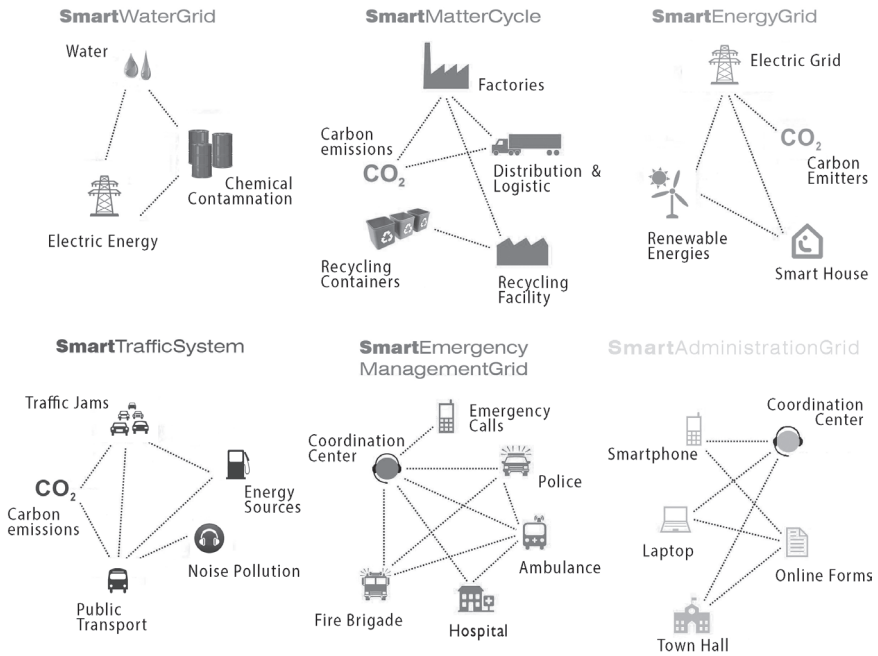


*Figure 5.2* SmartGrids, layers, or networks that make up the Smart City.

*Source:* Prepared by the author.

In a few years, the services necessary to satisfy the demands and needs of the increasingly ageing population will constitute a new layer of the Smart City that must be designed and planned.

### Ambient and active assisted living: emergence of a new concept

The application of new technological paradigms and means of management to the field of healthcare and older adults stemmed from the concept of ambient intelligence (AmI) at the end of the 1990s. The concept of AmI was originally developed by Eli Zelkha and Brian Epstein and their team at Palo Alto Ventures (Zelkha & Epstein, 1998) and was presented at the Digital Living Room conference, organised by Philips, and developed during the following decade (Figure 5.3).

AmI refers to the use of intelligent assistance systems, embodied and integrated in different habitable environments, which create an omnipresent technological layer capable of transparent interaction with the inhabitant, observation, and interpretation of their actions and intentions. The objects can proactively interact with people where they are needed and are sensitive to both the user and the context (situational, spatial, temporal). The communication between the system and user

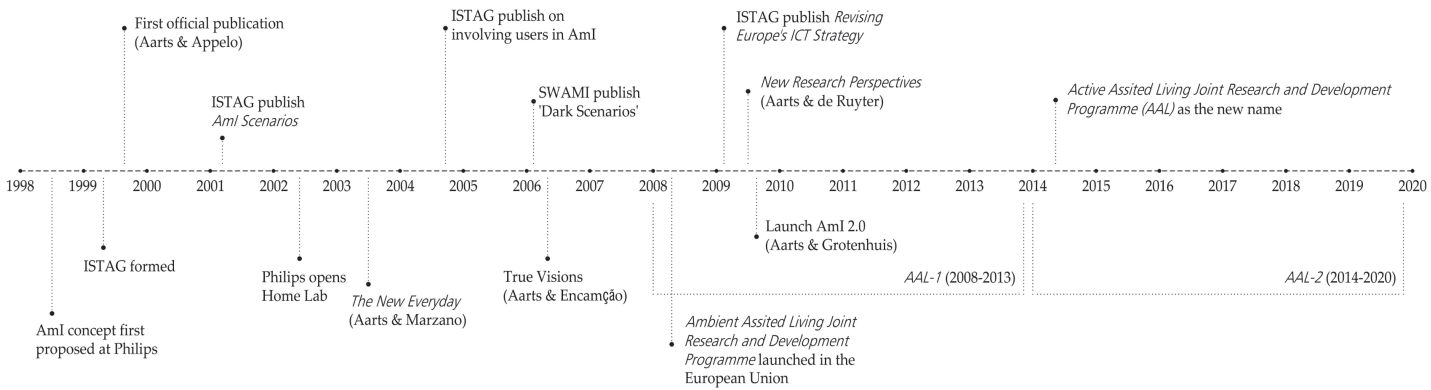


*Figure 5.3* A timeline of key events and publications on AmI.

*Source:* Prepared by the author.

takes place in such a way that the device can act invisibly with the person and display a proactive behaviour by which it takes action in advance of a future situation rather than reacting. These assistance systems are designed to take control of a situation and make early changes, rather than adjusting to a situation or waiting for something to happen.

The AmI approach implies that technology is designed by and for people rather than expecting the users to adapt to the technology, as has tended to be the case up until now (Losco et al., 2017). This is the main difference between IoT and AmI. AmI faces its application with a holistic view focused on the person. The concept of holistic (from the Greek *holos*, meaning whole or integral) refers to the notion that the whole is not the sum of the parts, nor can it be explained by analysing how its separate components function; rather, it is imperative to do so integrally, contemplating the reality of its complexity. A holistic perspective implies overcoming the prejudice of the incapable individual and replacing it with the notion of the real person (Mace, 1998). The solutions of AmI aim to fulfil seven of the foundational principles of Universal Design – Design for All in Europe – (Connell et al., 1997). This is a process of designing products (devices, environments, systems, and processes) that can be used by people with the broadest range of skills in the widest range of situations (environments, conditions, and circumstances).

Also, AmI is not limited to a straightforward and unique and connected relationship between objects or between the product and user but rather extends to all of the components of the multidimensional space (ambient) surrounding the inhabitant – the floor, walls, ceiling, paths, spaces, clothes, and so on (Koolhaas, 2014). The ambient begins to be "intelligent" when it does not need to be calculated or programed. The environment can learn the preferences of the inhabitant, constantly adapting the parameters of the system and, therefore, improving the inhabitant's comfort, well-being, and quality of life (Aarts et al., 2001). AmI offers a new paradigm in which people can use technology through an environment that is aware of the context and in which the technology is adaptive, responsive, acceptable, and useful to their needs, habits, gestures, and emotions.

To achieve its objective, AmI first tries to identify the characteristics of the context of each inhabitant after recognising the specific tools used and the activities they performed by this person. With this data, the activity is broken down into several components, levels, and sublevels that are recomposed coherently in an adequate design capable of supporting a certain lifestyle. It is a method reminiscent of that presented in 1936 within the context of architectonic standardisation by the German architect Ernst Neufert in his well-known book *Bauentwurfslehre* (edition in English: Architects' Data) (Figure 5.4).

AmI can contribute to technological advances in the human habitat with particular reference to services for people with specific needs and who may require specific solutions and, therefore, are at several degrees in relation to technology (Figure 5.5). Since its introduction, AmI has become part of the core strategies of many of the world's leading technology companies, such as Google, Amazon, and Microsoft.

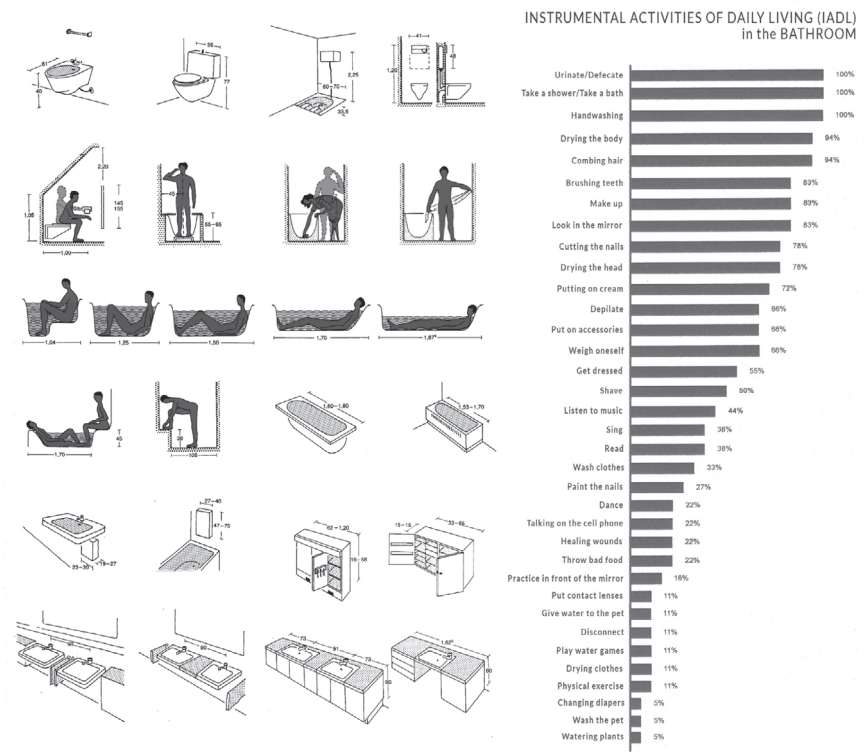


*Figure 5.4* IADL in the bathroom.

*Source:* Martínez Arribas and Roca Sanitario in (Lleó et al., 2015). Permission approved.

The Ambient Assisted Living Joint Research and Development Programme was launched in the EU in 2008 as a response to this new technological paradigm. AAL appeared for the first time as a concept related to health, demographic change, well-being, and the design and construction of environments. Later, starting in 2014, this programme was renamed the Active Assisted Living Research and Development Programme (Quesada-García et al., 2023a).

AAL applies the tools and methodology of AmI (Becker, 2008) in order to promote and extend the quality of life of older people in their environment, promoting their healthy ageing, reducing the social and health system costs of the EU states, and creating a framework for the development of common standards with which to strengthen European industry in the area of Information Technology and Communication (ITC) (AAL Programme, 2008).

The three objectives of AAL are:

- To improve the quality of life and well-being of older persons and their caretakers through the availability of ITC-based products and services that facilitate their active and healthy ageing.


*Figure 5.5* Above and below left: Intelligence urinal, which, through sensors, screens, and connections to analyse the data instantly, allows us to know the person's hydration status instantly. Above right: Smart mirrors that turn opaque using facial biometric readings are useful for Alzheimer's patients. Below right: Faucets with temperature and water flow sensors and smart mirrors with weather information.

*Source:* Collage prepared by the author.

- To sustain a critical mass of research, development, and innovation applied to a trans-European scope for ITC products and services, particularly those that affect small- and medium-sized industries. The intention is to increase private investment and improve the conditions of industrial exploitation.
- To contribute to the sustainability of health and assistance systems for caring for old persons, establish a coherent framework for developing European solutions and focuses, and include minimum common norms that adapt to the diversity of social preferences and comply with regulatory aspects.

The AAL is being conducted jointly by EU member states and other countries associated with the 2020 Horizon, such as Israel, Switzerland, and Canada. The first AAL-1 programme was effective until 2013 and had six calls for funding. As of 2014, the initiative continued with a new AAL-2 research and development programme (2014–2020) with a budget of around 600 million euros managed within the 2020 Horizon Research and Innovation Framework Programme.

**AAL: projects and practical applications**

Over the past 13 years, the AAL Programme has focused on addressing the challenges of an ageing population and taking advantage of the opportunities that it entails. Of the 155 projects financed by the AAL-1 Programme between 2008 and 2013, only 19 introduced solutions to the market. This corresponds to an

approximate proportion of one project reaching maturity in the market for every ten research projects financed by the AAL Programme until 2021.

One of the first projects to be financed, which had a notable impact, was the Perspective Spaces Promoting Independent Ageing project – PERSONA (Flórez, 2008). This project focused on using devices through an artificial pet, robot, or object in home decoration, devices with the capacity to interact with the web on behalf of the user, establishing an empathetic relationship with the latter to serve them as an intelligent intermediary. However, the most significant contribution of the PERSONA project was the enumeration and classification of the types of services that, in general terms, older people could require:

- Services to complement the skills and capacities of older people in the IADL, guiding the user throughout the day, for example, assistance with home chores (cooking, cleaning, washing, and shopping) and personal care (hygiene, lifestyle, healthy diet, and reminders to perform activities and take medication).
- Services to prevent injuries at home, making the occupants feel safe, and giving older people the capacity to manage their lives in their own space without the need for the constant presence of a caretaker.
- Social integration services alleviate loneliness and isolation, provide a means of communication based on ICT to facilitate the need for company and exchanging experiences, and help create friendships, social contacts, and opportunities to participate in community activities.
- Mobility services, helping older people perform activities in their neighbourhood and encouraging them to go out autonomously with confidence and security, for example, providing information on public transportation, helping with navigation, or assisting them if they feel lost.

For an AAL system to be implemented in a given environment, the PERSONA project defined four different levels on which to scale the distribution of services: the person, the home, the neighbourhood or nearby geographical space, and the city or broader geographic space (Guillén & Arredondo, 2011, pp. 238–239). The first level is aimed at older adults who, finding themselves in more or less difficult conditions, can directly benefit from a product, service, or system, the characteristics of which provide the user with a direct support function. The second level includes the possibility of adapting the home environment to the user's specific needs. The third and fourth levels consist of systems that directly or indirectly assist with social and/or affective matters and which promote inclusivity through services and technologies that increase the potential for relationships between older adults and their family and friends (Figure 5.6).

Another project, called the AALIANCE project (AALIANCE, 2009), involved a more transversal vision based on three spheres of activity:

(1) The domestic environment, or "ageing at home," refers to ageing while enjoying a better quality of life for a more extended period and maintaining a higher degree of independence, autonomy, and dignity with the help of technology.


*Figure 5.6* Four levels of AAL service distribution.

*Source:* Prepared by the author.

The home environment must be perceived as relaxing, mobility must be viable, and transportation must be available.

(2) The work environment, or "active ageing at work," is ageing and staying active by continuing to be useful to society. A person remains productive for a longer period with access to ICT via online learning tools, coupled with innovative actions in the workplace, facilitating a better work-life balance.

(3) The social environment, or "ageing in community," refers to ageing while remaining in contact with partners, friends, and family members. A person is socially active and creative on social networks. In addition, he or she has easy access to commercial and public services that reduce social isolation and loneliness, one of the main problems of the ageing population.

Other research projects related to the field of AAL have investigated the problems of urban mobility and accessibility to transportation services to make it easier for older adults to move around the city. The ASK-IT Project (Guillén & Arredondo, 2011, p. 242) focused on the development of applications that could help people with motor disabilities access public transportation through multimedia and multi-modal information services that are activated according to the geographic location of the user. The project aimed, essentially, to offer transportation guidance and information. Another example of AAL's action in this scope is the VADEO (2018) application, in which users can indicate problems with accessibility in any space in a city and can be guided through alternate routes.

Using web technology, the AAL Programme has also promoted the creation of gaming networks, entertainment, and leisure options. For example, the SilverGame (2009) project involved developing applications for attractive multimedia games and stimulants to promote a social connection to the provider of a virtual environment through Web 2.0. This environment allows its users to share hobbies, such as singing or dancing, and, ultimately, to share online experiences in order to maintain social contact if they are not able to travel.

Some of the research projects funded through the AAL Programme have resulted in products and services that have ultimately been marketed. Between them, the 2PCS (Personal Protection and Caring System project, see www.2pcs.eu) aimed at offering the user more freedom of movement, thus promoting a greater degree of physical security. It is a service that enables older persons to have more autonomy and to go out and walk outside since it keeps them connected with their relatives or caretakers. Movement sensors coupled with self-learning algorithms empower the end-user and their friends and family to provide care through quick responses and prevention through the early detection of risks as a proactive means of preventing more serious complications (AAL Programme, 2020). Another product is SENSARA HomeCare, a platform that enables older adults to live independently and safely for longer. It offers an intelligent senior lifestyle monitoring system with a focus on preventative care and personalised alarm systems (AAL Programme, 2020).

This innovative landscape is made up of a new economic and technological ecosystem in which several actors coexist and interact with one another: inhabitants, users, caretakers, researchers, technological and integration companies, service providers, social service entities, and public administrations. It is interesting to note how AAL has additionally attracted the interest of architects, sociologists, anthropologists, and urbanists, thus transforming the initial name of the research programme into a concept or model for the design of architectural and urban spaces that the population can use and live in throughout their lifetime. It can be argued that a new residential assistance paradigm called AAL has arisen in the last decade but this has yet to be theorised or conceptualised.

## AAL: a notion still to be built

The great opportunity and the main challenge of the AAL Programme have been to establish tools that can enable older people to enjoy the benefits of Health 2.0 in a joint and synergetic manner with their nearby environments and with their caretakers (AAL Programme, 2020). However, the technical options that companies offer today are still far from 100% AAL because the solutions that are currently being implemented do not yet achieve the benefits and objectives that they were intended to achieve. The programme has enabled the introduction of some products to the market, although not as quickly and completely as was foreseen. Despite promising technological advances and the fact that the current technology is in a position to contribute its knowledge to provide some services that improve the quality of life of older adults, AAL remains more of a vision than a reality (Gunnarsdóttir & Arribas-Ayllon, 2012). AAL is still in its initial stage. Why are its services and products not as available as may be desired? Why hasn't the model been developed more broadly?

The general implementation and development of AAL face several difficulties (Wrede, 2012). One of the main barriers to applying AAL is related to how older people perceive, use, and interpret technology at this time. The capacity of this

age group to absorb the intense use of technology that is distributed and hidden in the environment or the person's daily activities is still very limited (McCreadie & Tinker, 2005). In the current technological and digital revolution, society is experiencing a moment of transition in which several generations with different levels of technological experience coexist: the grandparents, the sons/daughters, and the grandchildren. The use of new technologies is expected to advance in parallel with caretakers progressively becoming older, as they will have developed digital needs and demands based on their own life experiences.

Another limiting aspect of AAL is the necessary respect for the user's privacy, which is a significant barrier of an ethical and legal nature (Fugger et al., 2007). Data privacy is an area of data protection that concerns the proper handling of sensitive data, including personal information and other confidential data. In this field, it is still necessary to improve the legal framework that effectively standardises and protects the use and handling of the information that is available on the devices that interact with the user in his or her intimate environment. The balance between surveillance and privacy and the ethical and transparent use of data, which would deserve in and of itself a monographic assessment, hinders full confidence in the domestic introduction of technologies that use personal data for the purpose of providing services.

The reliability, safety, and maintenance of technological devices may also cause concern for the user since, at present, it is difficult to guarantee that all of the systems will operate consistently and correctly all of the time and that the failure of the systems will not entail a new "technological dependency" – an additional disability to the physical or cognitive ones derived from old age – in the sense that if to carry out certain activities safely, one depends completely on technology. If it fails, the person is prevented from carrying out those activities.

The development of AAL services in professional, social, or domestic environments has also been uneven up until now. Most of the efforts have focused on creating solutions related to the home environment, such as telemonitoring, measuring, therapeutic compliance, nutritional support, personal safety, and support for daily life activities. The development of services related to professional and social environments, such as the examples described in the previous sections, is, at present, testimonials. In general, AAL services have been implemented in small-scale pilot projects, with the services almost always focused on home care (to prevent falls, facilitate calls and remote assistance, monitor vital signs, etc.). This lack of implementation in non-domestic environments has perhaps been due to the fact that specific scales of spatial application have not been contemplated or sufficiently developed, for instance, the medium scale of facilities or the territorial scale of urban planning. Midterm (four years) and long-term (ten years) forecasts are also needed for homes, which are adapted and adaptable and aimed at people who require diverse and personalised needs for each individual sector.

Technical-commercial limitations exist that have to do with the processes necessary for the implementation of devices and the deployment of technology in the domestic environment. Isolated single-function systems are easy to install, but

the complexity greatly increases when several technologies must be combined. In a market controlled by companies with patented products – a market in which corporations aspire to be dominant providers – technological barriers are created by the devices' interoperability (Wrede, 2012). In contrast, it is worth mentioning the home products available from large companies, such as Securitas Direct or Konica, and, most importantly, from the GAFA (Google, Apple, Facebook, Amazon) multinational telecommunication companies. These companies have managed to introduce personal assistants, such as Alexa and Google Home, into the population in a highly effective manner. In the near future, together with televisions and cell phones, these assistants will be the doorway to the services these firms will offer to older users. The capillarity that the GAFA has achieved in the market contrasts with the scarce implementation of the products arising from the EU's AAL Programme.

The AAL Programme was initiated with the purpose of creating a technological business tissue in the European environment that would be capable of producing ICT products and services aimed at improving the quality of life of older adults. However, technological innovation is necessary yet insufficient for a space to meet the vital needs of its users. Developing such spaces involves creating environments and surroundings where human beings can feel fulfilled with complete awareness, autonomy, and freedom. A house is not a machine for living, as Le Corbusier said, but a home to be inhabited that is able to promote personal fulfilment.

People's quality of life also depends on intangible factors and values that do not depend on technology. The identity, character, and quality of the physical environment are intimately related to the vital social and cultural experience of each individual. In other words, the cultural and symbolic components of spaces have a special impact on people's emotional and cognitive stability. If an older person can inhabit a personal space and preserve a sense of belonging to a place with autonomy, he or she will have a better quality of life. In the design of space, residences and homes for old people that succeed in creating a sense of belonging to an environment are very important because each individual's history, memories, and experiences are interwoven with the spaces in which they reside and the spaces in which they have lived.

Another, and perhaps the greatest, barrier to the complete implementation of AAL is the transformation of Ambient Assisted Living syntagma from the denomination of an EU research and funding programme into a conceptual paradigm for intervention in domestic and urban spaces beyond the one-way service-user relationship by means of a technological product or service. Under this new paradigm, the term extends to the multiple dimensions surrounding people, including their cognitive and knowledge aspects, such that the interactions are not only instrumental but, more importantly, meaningful (Figure 5.7).

The notion of AAL needs to be updated, but above all, it requires a definition of the environment or surroundings in which people live, as well as the implications of the former for the latter. The theorisation and conceptualisation of AAL are needed not only in terms of technological assistance and services but also

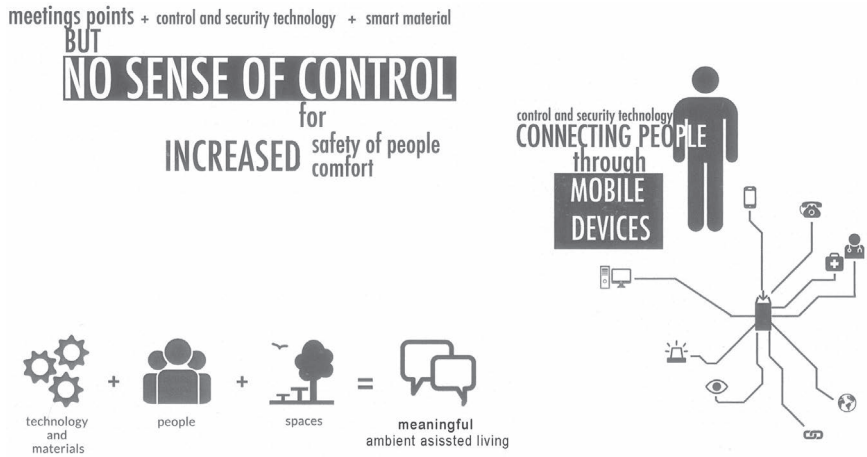


*Figure 5.7* Meaningful AAL.

*Source:* Prepared by the author and adapted from a design by Hernández Perdomo and Iseco Sistemas in Lleó et al. (2015).

in considering all of the inherent aspects of inhabited space. In turn, the meaning of a new spatial design paradigm must be explored: what it consists of and how it may respond to the changing needs of a growing and constantly evolving ageing population. The lack of an articulated theory on what AAL means, as well as its impact on the architecture and planning of cities, is a major limitation that prevents it from being implemented in a sustainable, consistent, and ongoing way.

## Meaningful AAL: an open conclusion

Despite the barriers (technological, institutional, economic, social, and theoretical) to the application of AAL, architects, urbanists, and engineers have begun to outline a new way of understanding and designing environments to be inhabited – in the mid-and long-term – by populations that change, evolve, and age. In due course, AAL will be implemented because of the efficiency, comfort, and well-being it entails.

The evolution of the notion of assisted living in the next ten years will come about through significant advances in cloud-based service technologies and standard service platforms, the development of the IoT, and e-trade portals that will promote new business models that will serve to permeate this stratum of the older population. Services based on a web environment e-cloud will open a new way of incorporating each user's experience in co-creating content. AAL will serve to improve the services of the providers, who, in turn, will respond to the specific demands of the users. This should also help public administrations better plan their services to quickly adapt to changing social needs.

With the correct AAL implementation, home users will be able to establish personalised solutions according to their needs, desires, and economic resources, as they would with decorating and equipping their homes. However, for this to occur, technological platforms are needed based on the standards that support the interoperability between the different manufacturing and provider services distributed in the network. These platforms still have a long way to go in order to reach this technological standard. Four technological requirements must also generally be met (Flórez, 2008):

- Natural interfaces: Interaction systems between people and computers must be intuitive to use, sensitive to the context, and multi-modal, that is, multi-user, multilingual, multichannel, and multipurpose. They must be based on the most common methods of human interaction, such as voice and gestures. The most paradigmatic example is the Nintendo Wii, which revolutionised the console world due to the fact that it has a more natural command than other games. As a result, it enables greater immersion despite its narrative graphics and despite the fact that its quality is lower than that of the competition.
- Dynamic networks of massively distributed devices: For multiple devices to work together efficiently, they must communicate through either wired or wireless networks. These networks must be able to adjust and reconfigure themselves based on devices' presence, absence, or errors. An example of this is when someone travels to a new country and their device automatically connects to the network, allowing them to make calls and use other functions without needing to reconfigure their device manually.
- Comfortable hardware is the integration of devices with processing capacity in everyday objects, such as vehicles, furniture, clothing, toys, home appliances, etc., that are not annoying to use and that are transparent. One of the basic lines of work is wearable computing, which is developed in accessories such as watches, cell phones, and clothing. These devices have sensors that measure vital signs and send data or alarms if necessary.
- Security and reliability: the entire technological layer of intercommunicated and omnipresent devices must be secured against indiscriminate use. For this, robust systems must have built-in information encryption methods and authentication mechanisms that use, for example, biometry-based techniques (fingerprints, iris, voice, etc.).

The intelligent environment must be capable of maintaining, extending, or adapting to the evolution and changing needs of ageing people in such a way as to ensure that they have healthier, safer, and more comfortable lives with more personal autonomy and that they maintain vital contact with their cultural and social environments for as long as possible. However, as mentioned above at the end of the previous section, AAL as a paradigm or concept of design must not be limited to providing technology-based services. The reason for this is that although technology is a catalytic tool for some of the material challenges that society faces, it is insufficient in and by itself to respond to human needs.

The relationship between technological innovation and social or cultural references places the architectural project at the centre of the search for solutions that synthesise needs, behaviours, and interactions between the environment, technology, and people. Architectural design acts as a stimulus for a broad search for solutions that are not just the result of solving one technical problem. Architecture, as both an art and a technique, builds the daily scene of the habitat and gives meaning to the places and spaces that people inhabit. Through the meaning that architecture gives to spaces and environments, human beings can relate to the values that transcend them as individuals and connect them with their vital, social, and cultural realities (Quesada-García & Valero-Flores, 2017).

Taking these considerations into account, with the progress of AAL, it will be possible to build assisted environments that can intelligently and emotionally interact with the users of those spaces as an *exo-brain* or at least enable them to build their own *exo-brain*. Architecture, as a technique, will integrate intelligent assistance systems into buildings embedded within environments in such a way that they may interact invisibly and proactively with the occupants (Figures 5.8 and 5.9).

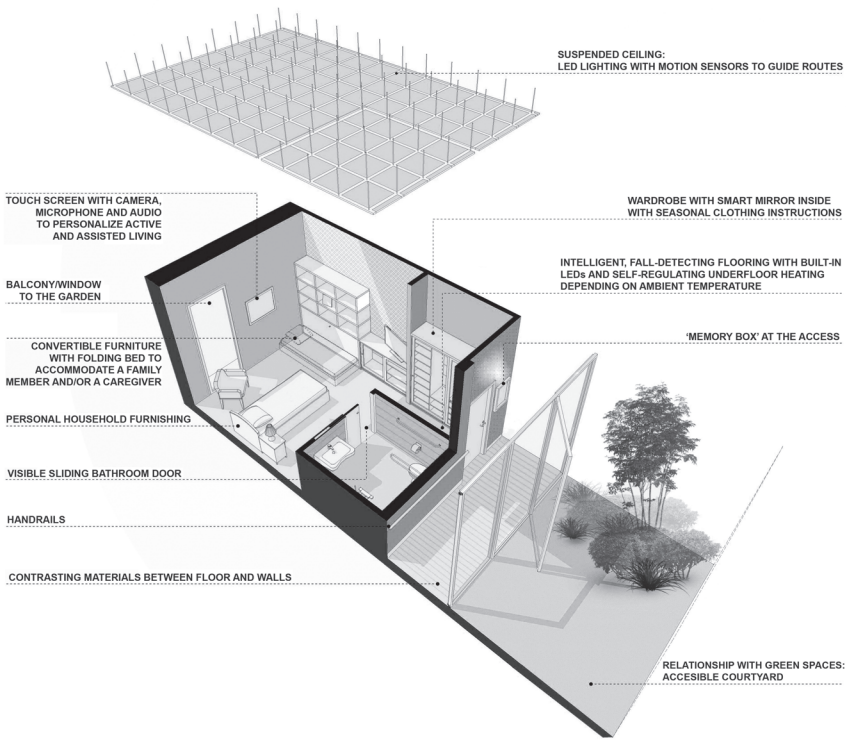


*Figure 5.8* Design of rooms for an Alzheimer's disease patient.

*Source:* "Laboratorio Tematico: Margherita Bolgiani, Alessandro Radice, Jessica Rosino" workshop directed by S. Quesada-García at Politecnico di Milano (2019).

*Figure 5.9* House for six older adults.

*Source:* "Laboratorio Tematico: Margherita Bolgiani, Alessandro Radice, Jessica Rosino" workshop directed by S. Quesada-García at Politecnico di Milano (2019).

This will enable the creation of assisted spaces that promote a healthier, safer, and more comfortable life – one in which each person adequately manages and controls his or her everyday physical reality with more personal autonomy. However, architecture goes beyond a mere technique or the application of technological systems. Architecture, as a two-thousand-year-old art, also builds spaces with compositional and formal resources that provide them with a meaning that transcends their intended function. This makes the space comprehensible, and the occupant may find a narrative, a symbolic value, and a sense of belonging. Architecture reconstructs connections with highly codified and symbolic cultural circuits in such a way that the habitat, in addition to being a refuge and an aid, is, as Roger Bartra says (2014), a cognitive prosthesis of the human being.

The challenge that AAL presents as a new paradigm of dwelling consists of knowing how to design spaces that can behave as a kind of collective and individual *exo-brain* – one that is capable of adapting to the gradual demands and needs related to the evolution of the ways of life associated with the increasing longevity of the population. This challenge also extends to other scales of use, which range from the collective spaces of buildings and facilities to the public spaces of cities.

In the near future, cities will have the capacity to manage, share, and transfer data and information to facilitate governance decisions in real time. The confirmation of this new city-network model provides a glimpse into the solutions in response to the older population's needs, which will play a primary and particularly

determinant role in city planning. Future intelligent cities will add layers or grids dedicated to healthy ageing to their configuration layers or grids. These cities will consist of adapted and adaptable housing, as well as facilities and services that can be used by a population that will constantly evolve and demand new residential solutions.

Future urban models should continue to be developed with great care being taken in regard to the inclusion, in the city planning and housing design, of decisions that, under the apparent objectivity and neutrality associated with technological solutions, are closer to *Orwellian* control than to the scope of freewill cooperation: the polis.

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# 6 Settlement planning in Russian policy and practice

## Is ageing in the focus?

*Elena Golubeva and Anastasia Emelyanova*[1]

### Introduction

#### Global concerns about population ageing

The population ageing process, as in the growing number of people aged 60 years or older in the overall population, is an overarching challenge for societies, spanning from the remote and sparsely populated Arctic across urban and rural Europe and further on globally. In its report on World Population Ageing:2015, the United Nations Department of Economic and Social Affairs emphasised that rapid ageing of the population impacts almost all aspects of sustainable development and that there are many benefits of greater longevity to individuals, families, and society. It also conveyed the increasing pressures on healthcare systems and social protection of the population (United Nations, 2015b). According to the demographic indicators related to the ageing profile, the median age (i.e., the age that divides a population into two parts of equal size, with half the people younger than this age and half older) in the world will grow from 30.9 years in 2020 to 36.2 in 2050. During the same period, the old-age dependency ratio (i.e., the ratio between the number of persons aged 65 and over and those of productive age, i.e. 20–64) will increase from 16.3% to 28.4% in the world. It will double in Europe, from 32.0% to 53.7% (Table 6.1). In most countries, the ageing process is twofold: more people are reaching retirement age, and life expectancy is increasing steadily. Exceptions may be caused by larger pandemics. For instance, the COVID-19 pandemic reversed the recent improvements in life expectancy in Russia: life expectancy was 71.1 years in 2020 compared to 73.3 years in 2019, that is, two years were lost (Ryazantsev et al., 2021). The number of years that pensioners live without disabilities is also increasing. At the same time, the ageing process is accompanied by frailty and the need for support in everyday life, which implies the need to study the distribution and determinants of the health status of different population groups and its application to the monitoring of health problems (World Health Organization, 2015).

1 Authors' Contributions: Both authors contributed equally to this paper and listed alphabetically by the last name.

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*Table 6.1* The indicators related to the ageing profile in Russia and selected world regions.

| | *Reference period* | *The Russian Federation* | *World* | *Europe* | *Northern America* | *Asia* |
|---|---|---|---|---|---|---|
| Female life expectancy at birth (years) | 2015–2020 | 77,5 | 74,7 | 81,6 | 81,6 | 75,7 |
| Male life expectancy at birth (years) | | 66,8 | 69,9 | 75,0 | 76,7 | 72,7 |
| Difference between female and male life expectancy at birth (years) | | 10,7 | 4,8 | 6,6 | 4,9 | 3,0 |
| Female life expectancy at age 65 (years) | | 18,1 | 18,3 | 20,3 | 21,1 | 17,6 |
| Male life expectancy at age 65 (years) | | 13,3 | 15,6 | 17,0 | 18,5 | 15,0 |
| Difference between female and male life expectancy at age 65 (years) | | 4,8 | 2,7 | 3,3 | 2,6 | 2,6 |
| Population median age (years) | 2020 | 39,6 | 30,9 | 42,5 | 32,2 | 38,6 |
| Projected population median age (years) | 2050 | 41,6 | 36,2 | 47,0 | 39,9 | 43,0 |
| Old-age dependency ratio 65 +/20–64 (%) | 2020 | 25,3 | 16,3 | 32,0 | 14,8 | 28,5 |
| Projected old-age dependency ratio (%) | 2050 | 41,7 | 28,4 | 53,7 | 31,3 | 40,9 |
| Prospective old-age dependency ratio (%) | 2020 | 19,8 | 11,7 | 19,4 | 11,6 | 14,7 |
| Projected prospective old-age dependency ratio (%) | 2050 | 26,1 | 17,3 | 27,1 | 19,9 | 19,7 |
| HLI, both sexes (years)** | 2015–2020 | 67,5 | 60,0 | 74,6 | 74,5 | 62,4 |

*Source:* Data from (Scherbov et al., 2020).

In comparison to the rest of the world and its more developed regions, and despite the improvements since 2004 (Timonin et al., 2017), Russian life expectancy is still less than in most European countries, the USA, and Canada, especially for males (Table 6.1). One reason for this is the several decades of negative trends and short-term fluctuations in life expectancy in Russia due to the country's mortality crisis that lasted from the mid-1960s until the latter decades of the 20th century (Timonin et al., 2017). During the 1960s and for a long time afterward, Russia was also a country whose increase in the human life indicator (HLI) slowed down or stalled. In the meantime, steady growth patterns in the HLI were recorded in other countries around the world (Ghislandi et al., 2019).

## Demographic profile and policy in Russia: main challenges

Adding the territories of the Russian European North (10th–12th until 17th century), Siberia, and the Far East (16th to 20th centuries) has made Russia the largest


*Figure 6.1* Federal subjects of Russia by population density. Number of people per square km.

*Source:* Wikimedia.

country in the world today (Figure 6.1). The essence and peculiarities of the colonisation of the northernmost, especially the Asian regions of Russia, compared to similar processes in America and other parts of the world, have been discussed widely (Anderson et al., 2014; Filatov, 2017; Raghavan et al., 2014; Rybakovsky, 2018). The colonisation or resettlement by Russian people started almost a century later than elsewhere in the world. Biological resources such as valuable fur and food raised commercial interests in the North. This continued until the late 20th century when many people moved from Russia's south and middle latitudes to settlements of various scales in the less favourable north and east directions. This migration was partly forceful (prisons) but mainly voluntary, as labour migration was encouraged to explore minerals, raw materials, and oil and gas resources (Fauzer & Smirnov, 2018; Rybakovsky, 2018).

Since 2002, international initiatives have taken concerted action to find new approaches to support healthy and productive ageing in "added years of later life" and have developed social practices, structures, and policies to enable older adults to contribute to society. These approaches include the recommendations contained in the Madrid International Plan of Action on Ageing (MIPAA), the World Health Organization's (WHO) global strategy and action plan on ageing and health, and, most recently, the 2030 Agenda for Sustainable Development and the United Nations Decade of Healthy Ageing (2020–2030) (European Commission, 2020; United Nations, 2002, 2015a; World Health Assembly, 2016; World Health Organization, 2020). One overall goal is to afford and encourage "ageing in place" (Wiles et al., 2012), which relates to the importance of the familiarity of places for a personal sense of identity and belonging.

Russia was an active partner in that sustained collaboration and developed its own national strategies to address population ageing, echoing the principles

of global guiding documents. The Concepts of the Demographic Policy of the Russian Federation for the period up to 2025 (The President Executive Order of 9.10.2007 №1351, 2007) and an additional Concept of the Demographic Policy in Russia's Far East for the period up to 2025 (The Government Decree of 20.06.2017 №1298-p, 2017) were introduced in response to, in particular, the concerns about slow growth in certain regions of Russia, slight to severe depopulation in others, the increasing old-age dependency ratio, and the decreasing overall population size and fertility rate.

In 2012, Russia released the Concept of the State Migration Policy until 2025 (The President Executive Order of 08.06.2012 №Pr-1490, 2012). The country's Central and North-Western Federal Areas account for more than two-thirds of the total volume of Russian migration, both external and internal (Florinskaya et al., 2015). However, the population distribution is extremely uneven: the population density in the Far East and the Arctic part of the country is especially low. For instance, population density in the Far East is less than one person per 1 sq. km., and this issue was addressed in the policy to develop the region (Golubeva & Emelyanova, 2020). The Russian government has tried to prevent significant loss of people due to out-migration, depopulation, and population ageing in the Arctic, Far Eastern, and the other most depopulating territories through a set of legislative measures (The Federal Law of 0611.2014 № 172-FZ, 2014; The Government Decree of 20.06.2017 №1298-p, 2017; The Order of the Government of the Russian Federation 05.07.2010 N 1120-p, 2010; The President Executive Order of 9.10.2007 №1351, 2007).

Stabilising population decline has recently been recognised as a matter of national security. In 2020, for example, the President signed a Decree to update "The Strategy for the Development of the Arctic Zone of the Russian Federation and Ensuring National Security for the Period until 2035," where it was reiterated that out-migration, population loss, and lower quality of life and health indicators in the Arctic compared to nationwide were threats to national security (The President Executive Order of 26.10.2020 №645, 2020). The main reasons for the population decline in the Arctic and the Far East in different periods were the completion of cycles of natural resource development and lower quality of life in comparison with the central regions (Smirnov, 2020); the latter is also true for most rural areas in the country.

Rural settlements in Russia include villages, farmsteads, Cossack villages (stanitsa), kishlaks, auls and others, where self-government is exercised by the population directly and (or) through elected and other local self-government bodies (The Federal Law of 06.10.2013 № 131-FZ, 2003). The recent trends in the settlement system indicate that the country is actively involved in urbanisation: in search of work and prospects for a better life, people move from rural settlements to cities and urban agglomerations. There are also policies on rural development in place that intend to significantly increase the level of employment and incomes of the rural population, reduce the spread of poverty, improve the habitat, and, on this basis, slow down the process of depopulation and expand the number of regions with a stable and growing rural population (The Government Decree of 30.11.2014 № 2136-p, 2010). Most of the concepts in politics and federal laws in this area

have been adopted relatively recently; hence, it is not yet possible to see the programme's impact on the population and its spatial distribution. Their effectiveness and results, especially in the latest decade, also need to be evaluated scientifically as this is currently an under-researched area. The implementation of the current policy will continue until 2030 (The Order of the Government of the Russian Federation 02.02.2015 N. 151-p, 2015).

Considering the above-outlined depopulation as a matter of national security, coupled with relatively low living standards and socio-economic decline, especially in rural areas, societal ageing is closely related to these issues and is itself a megatrend of the modern-day demography of Russia and elsewhere in the world. In response to this megatrend, Russia introduced its strategy for ageing in Russia until 2025 and the Plan of Action on the Strategy on Ageing for the first period, from 2016 to 2020 (Plan of actions on the Strategy for the benefit of older people in the Russian Federation for the period up to 2025 (the first stage until 2020), 2016). Researchers have made several recommendations to the national level authorities concerning the implementation of the ageing-related strategy and programmes (Bulanova, 2019; Dubovik, 2019; Klimantova, 2019; Tkachenko, 2018), including:

- to separate programme targets and indicators by gender and to develop different actions for men and women at the national level, considering the regional differences in demographics across the Russian Federation;
- to separate programme targets and indicators by age between younger and older people, and to tailor different supportive activities for each subgroup;
- to create a mechanism for collaboration between the social service and healthcare sectors to enable the development of a comprehensive and long-term care system; and
- to take the urban-rural dimension and the urbanisation process into account in the programme design (Emelyanova & Golubeva, 2021; Golubeva & Emelyanova, 2020).

***Introducing the global focus on age-friendly settlements***

From a global perspective, Goal 11 of the Sustainable Development Agenda (United Nations, 2015a) supports promoting age-friendly cities and communities to allow all people to maximise their abilities throughout their lifetime. Areas with age-friendly settings provide older people with more opportunities for personal and professional growth and allow them to participate and contribute to the activities of their communities while maintaining independence, dignity, health, and well-being. Such conditions can be created in both urban and rural areas, considering the needs of people regardless of their age (Del Barrio et al., 2018) and by setting priorities, planning strategies, and implementing them using the available human, financial, and technological resources. Active ageing is broadly defined as the process of optimising opportunities for health, participation, and security in order to enhance the quality of life as people age (World Health Organization,

2002). In an age-friendly city, the policies, services, settings, and structures support and enable people to age actively by (World Health Organization, 2007):

- Recognising the wide range of capacities and resources among older people,
- Anticipating and responding flexibly to ageing-related needs and preferences,
- Respecting their decisions and lifestyle choices,
- Protecting those who are most vulnerable,
- Promoting their inclusion in and contribution to all areas of community life.

Active ageing depends on a variety of influences or determinants that surround individuals, families, and nations. They include material conditions as well as social factors that affect individual types of behaviour and feelings (Moulaert & Garon, 2015). All of these factors, and the interactions between them, play an important role in affecting how well people age. Many features of urban infrastructure and services reflect these determinants and are included in the composition of an age-friendly city (World Health Organization, 2007, 2010). These determinants must be understood from a life-course perspective that recognises that older people are not a homogeneous group and that individual diversity increases with age. The rate of decline is largely determined by factors related to lifestyle as well as external social, environmental, and economic factors (World Health Organization, 2007).

From an individual and societal perspective, it is important to remember that the speed of one's physical, mental, occupational, and other types of decline can be influenced and may even be reversible at any age through individual and public policy measures. These include an individual's choices regarding good nutrition and optimal physical activity, as well as living in an age-friendly living environment (World Health Organization, 2008). Because active ageing is a lifelong process, an age-friendly city is not just age-friendly. Barrier-free buildings and streets enhance the mobility and independence of people with disabilities of all ages. Secure neighbourhoods allow people to venture outside confidently to participate in physically active leisure and social activities. Families experience less stress when their older members have the community support and health services they need. The whole community benefits from the participation of older people in volunteer or paid work. Finally, local economies profit from the patronage of older adult consumers. The operative word in age-friendly social and physical urban settings is enablement (World Health Organization, 2007).

## Aims, methods, and definitions

### *Aims*

International and national policy frameworks in the field merely focus on healthy ageing in urban settings. Our work aims to outline urban ageing and tackle the strikingly under-researched challenge of healthy and active rural ageing in Russia. Our specific research questions are: Do the ongoing governmental programmes and practices for handling the settlement (city) environment consider the needs

of people with limited mobility, particularly older people? Do such programmes contain and promote key elements of healthy ageing?

### *Methods*

The study has a theoretical nature and methodology and applies systematic theoretical argumentation to a certain degree. In order to collect the scientific and legal literature discussed in the paper as a review, we used a mixed approach, which was achieved by using online indexing services and searching using keywords related to the chapter's topic in the Russian electronic library eLibrary.ru: "архитектура города для пожилых людей" (in English, city architecture for older people) – 1608, "развитие доступной городской среды для пожилых людей" (development of an accessible urban environment for older people) – 2596, "развитие городской среды для пожилых людей" (development of the urban environment for older people) – 5536, "планирование городской среды для пожилых людей" (urban planning for the elderly) – 2739, "дружественная среда для пожилых людей в сельской местности" (friendly environment for older people in rural areas) – 35.

### *Definitions*

#### *1. Settlements in Russia*

A number of definitions are used to describe settlement types in the 2019 Spatial development strategy in Russia. For example, a "large urban agglomeration" (крупная городская агломерация) is a set of compactly located settlements and territories with a population of 500 to 1000thousand people, connected by the use of infrastructure facilities and a combined economy, including labour and social connections. If the population exceeds 1000 thousand people, the city becomes the "largest urban agglomeration" (крупнейшая городская агломерация). Older citizens in such urban settings live in areas with a higher density of people and services and are, therefore, closer to amenities.

A "rural area" (сельская территория) is the territory of a rural settlement and inter-settlement area (Spatial development strategy) (The Order of the Government of the Russian Federation 13.02.2019 No. 207-r., 2019). Typically, older adults can reach specialised social care and medical care only to a limited extent across a rural environment; they must travel to nearby towns to get care and services or, alternatively, receive support from close neighbours or family in an informal way, if possible.

"Spatial development" (пространственное развитие) refers to an improvement of the resettlement system and territorial organisation of the economy through conducting an effective state policy of regional development. Notable challenges include engaging citizens in decision-making, making settled territories inclusive for all ages and population groups, and ensuring that old age-friendly technology, jobs, and services are available.

*2. Quality of life and environment*

The role of the living environment in enhancing one's quality of life is clearly expressed under the framework of the "quantitative-subjectivistic" approach. There, quality of life is interpreted as a "degree of comfort with the societal and natural environment, own life activities and the level of own well-being, social, spiritual, and physical health" (Babintsev et al., 2003, p. 44). Babintsev et al. state that due to widespread urbanisation, quality assessment of the living environment takes a special place in measuring population life quality (2003). Troshina adds that for societal and individual welfare, some of the most burdensome effects of ageing are associated with decreasing autonomy and increased dependency on the surrounding people and the state. There are also historically formed positive social and psychological mechanisms that affect the interaction of the population, including a close connection with the habitat: the existence of a personal farmstead, a commitment to traditions that serve as a guarantor of the stability and well-being of the society, as well as the enormous authority and influence of the family, the role of informal mutual support, and public opinion. In the Russian context, this issue is crucial for older people in a rural environment (Troshina, 2016).

*3. Accessible environment*

The creation of an accessible environment is one of the tasks set out in the Spatial Development Strategy of the Russian Federation for the period up to 2025 (The Order of the Government of the Russian Federation 13.02.2019 No. 207-r., 2019). The problem of accessibility for individuals of various ages has long existed in Russia. However, this problem has only started to be actively discussed within the last ten years. It has been addressed by adopting governmental documents aimed at maintaining a citizen's right to free and unhindered access to goods and services.

An accessible environment is the basis for a higher quality of life. It acts as a strategic resource for the state. It contains such directives as the preservation of the city, the improvement of territories, and the creation and modernisation of social and cultural facilities. The main elements of the urban environment that are important for an accessible environment are highlighted in the official Russian documents (Melkonyan & Adgikhin, 2018). The first of these are elements associated with a dwelling's surrounding space, such as housing and communal services, the house itself, and a yard. Second, there are the elements that determine the movement of people from one point to another, such as ensuring their safety while driving, pedestrian infrastructure and safety, and transit spaces. Third, the elements characterise the territory's sociocultural objects where people spend time outside their homes, such as the external attractiveness and uniqueness of the city, the landscape of public spaces, leisure, sports, entertainment, parks, and cultural centres.

The term "accessible environment" also refers to infrastructure. Infrastructure elements can be used by, for example, older people with sensory, physical, or mental disabilities. Most of all, this term is used to define components and structures that can be used by people in wheelchairs (Mikhailenko & Rybnikov, 2017). In this way, an accessible environment is understood as the organisation of the

surrounding space where everyone, despite any physical or functional difficulties, has the ability to move freely along any chosen route to maintain access to all social, transport, and other infrastructure. Based on this, the Russian Federation has defined an accessible environment in accordance with the UN Convention on the Rights of Persons with Disabilities (Convention on the rights of persons with disabilities, 2006):

- A "barrier-free" psychological environment in society and the elimination of "barriers in relationships."
- Unimpeded use of vehicles, transportation, and communication means.
- Unimpeded access to communication and information.
- Unimpeded access to social infrastructure and the physical environment.
- Unimpeded access to social services, including rehabilitation services.

*4. Citizens in Russia with limited mobility or immobility*

The main population group that benefits from an accessible environment is people with limited mobility – people who experience difficulties in moving independently and receiving services or necessary information. For the purposes of the analysis in this chapter, the following are classified as limited mobility groups of the population: older people with disabilities, people with limited (temporarily or permanently) health capabilities, for example, injuries, parents with strollers, people carrying heavy luggage or other loads in their hands, children under the age of seven, and pregnant women (The Order of the Government of the Russian Federation 01.12.2015 N 1297, 2015).

Also, according to the enacted state standards (Set of Rules for the Accessibility of Buildings and Structures for Persons with Reduced Mobility [Доступность Зданий и Сооружений Для Маломобильных Групп Населения. Актуализированная Редакция СНиП 35-01-2001, СП От 14 Ноября 2016 Года №59], 2017), the population with limited mobility is divided into four groups depending on their level of mobility:

1. The M1 group includes people with hearing loss (impairment) and people without disabilities, that is, pregnant women, people over 60 years old, preschoolers, etc.
2. The M2 group includes older persons, people with prostheses, the wholly or partially visually impaired, and people with cognitive impairments.
3. The M3 group comprises people with musculoskeletal disorders who use additional support, such as walkers, canes, and crutches.
4. The M4 group comprises people without mobility who are forced to move in manual wheelchairs.

Not all group members are people with disabilities. They may have various temporary or permanent functional difficulties, be pregnant or move with a wheelchair (The Order of the Government of the Russian Federation 01.12.2015 N 1297, 2015). For older people, low mobility is associated with low social engagement,

even without a disability (Rosso et al., 2013). Also, full immobility is quite common in older people and may have physical, psychological, and environmental causes. In addition, immobile older people may have several diseases that worsen their condition, such as arthritis, osteoporosis, hip fracture, stroke, or Parkinson's disease (Walsh et al., 1999). An accessible, barrier-free environment is crucial when older people with these complications need to move to, for example, get services.

*5. Barrier-free urban environment*

As stated above, the term "barrier-free urban environment" is another commonly used phrase in Russia. A barrier-free urban environment is defined as a large environmental system – an organisational or functional community of environmental objects located in space (Teryagova, 2014). According to the results of the analysis by Teryagova, there are four main stages in the process of creating an environment that is accessible to people with limited mobility. The author claims that the status of the environment for people with limited mobility in the Russian Federation can currently be considered as being at stage 1, "Emergence." This stage is associated with the initial construction and building of basic components for a barrier-free urban environment. Some parts of the system are already working. However, essential components are still missing, including those for older people with mobility issues (Teryagova, 2014).

## Discussion of existing Russian state programmes for older people and foreign experience research of age-friendly settlements

### *Foreign approaches to the cities designed to foster active retirement*

When discussing age-friendly communities in Russia, it is important to state that according to the forecasts, three out of five representatives of the "third age" will live in cities by the middle of the 21st century. This is in line with the general trend of urban population growth of up to 80% (Shagrurova & Butueva, 2020). This implies the larger development and implementation of urban programmes aimed at making the urban space comfortable and accessible for individuals in old age. In 2007, the WHO released the first guide for creating an age-friendly environment globally (World Health Organization, 2007), containing a checklist of traits that are good for older people in cities. There are two main urban models for an older person, the so-called American and global models (Paramonova, 2011), which could serve as a guide for future projects for the improvement of cities, considering both the positive and negative sides of each model.

The first model, called Sun City, tested in the USA during the last five decades, is designed to foster active retirement and aims at the creation of an age-restricted community mainly for older people, where the entry age is 55 years old (Город. томск.ру, 2021). The positive sides of this model are, first of all, the presence of a developed age-friendly city infrastructure, which contributes to an active lifestyle for people of retirement age; the availability of health and social services; and

employment opportunities in the city, which take into account the physical and cognitive capabilities of people in old age. It has several community recreation centres with an amphitheatre, a softball field, bowling centres, golf, a dog park, etc. The positive experience of living in these settlements for older adults allows for talking about the legitimacy of this model, at least for modern American society.

The second model, which can be called "global" or "multicultural," started to develop based on a large-scale WHO study on ageing in culturally diverse countries and cities. Eight main attributes of urban life were analysed, considering the opinions of older people. All eight attributes can be grouped into several themes: (a) comfortable accommodation and healthcare, (b) ensuring an active lifestyle that enables participation in modern society through awareness, (c) the possibility of using novel methods of communication, as well as (d) feasible employment in the field of production, not only in the kitchen, household, or gardening at one's dacha (summer cottage), which is very typical in Russia (Paramonova, 2011).

***Russia's attempts to build age-friendly cities based on foreign experience***

Two Russian cities – Volgograd and Tuymazy – joined the WHO-led project "Age-friendly cities." The head of the Tuymazy age-friendly project, G. Minnigaleeva, reported that "age-friendly ideas are not a novelty in Russia. Old age has always been respected, and older people are supposed to be entitled to care and support from the younger generations. They had also always been considered family patriarchs, playing the most important role in the household through their extended families. In the 1970s and 1980s, older persons were honoured as those who had won World War II and enjoyed even greater respect. In Soviet times, when most incomes were controlled by the government, older persons' pensions were generally enough to maintain a decent lifestyle" (Minnigaleeva, 2014).

According to Minnigaleeva (2014), the situation changed after 1991. Suddenly, older people were the only reminder of the previous epoch and became living embodiments of all of its disadvantages and disappointments. It was quite difficult for many of them to get used to the new economic reality with new rules, less security, and more freedom. Many of them were left out of the new social order and became foreigners in their own country. This made younger generations think that the older ones could no longer contribute and play a role in the greater community (Minnigaleeva, 2007, 2014). Gradually, the situation shifted positively with the adoption of new government-sponsored non-governmental organisation (NGO) programmes. Based on the results of the assessment of cities, proposals for subsequent social programmes for older adults were accepted. They included the necessity of barrier-free environments and the provision of dental and several other health services, which are otherwise not readily available through the state healthcare system because of additional costs or waiting lines. The barrier-free environment programme is a federal-level programme, but every region develops its own implementation plan and reports the results to Moscow. The primary goal of the barrier-free environment programme is to improve the urban physical environment in order to better accommodate the needs of people with disabilities. The website www.moigooda.org/afc/ provides guidance on how to analyse the urban

environment and the need to involve older people in the community in terms of setting the right priorities and meeting their needs in the city. Another 20 municipalities joined the programme "Age-friendly Cities" (Vasileva, 2013; Minnigaleeva, 2014).

The legislative basis for Russian age-friendly settlements was two nationwide programmes: "Shaping a Comfortable Urban Space" and "Accessible Environment." An updated state priority project, "Shaping a Comfortable Urban Space," was enacted by the government in 2019 (The Order of the Government of the Russian Federation 29.03.2019 No. 363, 2019). In our opinion, it will contribute towards moving from the current stage 1, "Emergence," towards stage 2, "Completion," of building a barrier-free urban environment (see all stages in Teryagova, 2014). This will meet the needs of older people and will start to be broadly used by population groups with limited mobility. The qualities of "comfort," "safety," and "information content" will add up to the quality of "accessibility" of the environment at this stage. Information about the infrastructure elements of accessibility is available on the website of the Russian Federation's state programme "Accessible Environment," posted in the section "Map of Accessibility" (State Program of the Russian Federation "Accessible Environment," 2021).

The accessibility map itself suggests considering the following types of institutions in all settlements of the Russian Federation: administrative organisations and institutions; road transportation; residential buildings and premises; healthcare institutions; objects of culture; medical and social expertise; places of employment; youth policy; education; the Pension Fund of the Russian Federation (PFR); consumer market and service sector; communication and information; social protection of the population; physical culture and sport; and the Social Insurance Fund (FSS).

Five main criteria are used to assess social infrastructure for families with limited mobility. Facilities are evaluated based on their accessibility to (1) people with visual impairments, (2) people with hearing impairments, (3) people moving in wheelchairs, (4) people with disorders of the musculoskeletal system, and (5) people with intellectual disabilities.

Each of the accessibility criteria is assigned a corresponding score, resulting in a rating scale by which one can judge the state of accessibility of the whole facility. Based on official information, scoring and judgement about the availability of facilities are possible for all objects of infrastructure. For example, within the activities of the "Accessible Environment" programme, every city in the Russian Federation has an interactive map of the accessibility of city objects and facilities. There, one can get all of the information for people with limited mobility and decide whether to visit a particular site in the urban environment or not (see e.g. Arkhangelsk City at Yandex Maps, 2021).

### *Challenges and strategies for depopulation territories and areas with low population density*

The Russian spatial development strategy stated the fact that "over the last ten years, there has been a gradual decrease in the migration outflow from Eastern Siberia and the northern regions of the European part of the Russian Federation"

(The Order of the Government of the Russian Federation 13.02.2019 No. 207-r., 2019). There has been a steady population decline in cities with a population of less than 100 thousand people, as well as in rural areas. However, most southern regions in the European part of the Russian Federation and settlements included in larger urban agglomerations are exceptions (The Order of the Government of the Russian Federation 13.02.2019 No. 207-r., 2019). There are problems associated with "significant intra-regional differences in the level of socio-economic development, including the lag in the standard of living of a significant part of rural residents from the standard of living of urban counterparts, and a low level of comfort of the urban environment in the majority of the cities, including the largest urban agglomerations" (The Order of the Government of the Russian Federation 13.02.2019 No. 207-r., 2019). This certainly leaves its mark on the possibility of creating a comfortable environment, especially in rural areas.

Nevertheless, the priorities for spatial development in the Russian Federation until 2025 are outlined and include the development of territories with low levels of socio-economic development and potential for economic growth, as well as areas with low population density and predicted growth of the local economy. It also underlines the mechanisms for the development of promising centres of economic growth and their maximum dispersion across the territory of the Russian Federation. It suggests options for the social development of areas with low population density that lack their own potential for economic growth (The Order of the Government of the Russian Federation 13.02.2019 No. 207-r., 2019).

The current Russian governmental strategy on ageing has only one point related to the development of general infrastructure in relation to people in old age. According to this document, meeting the needs of older citizens necessitates the development of public transport, such as ensuring the availability of transport, road facilities, and social facilities for the benefit of older citizens (*Strategy for the benefit of older people in the Russian Federation for the period up to 2025*, 2016).

***Russian language research on urban and rural ageing***

Given the worldwide and national forecasts of increasing life expectancies, advances in health technologies, and improvements in the internet literacy of older people, it is likely that older people will live longer and lead a more active lifestyle in the near future. This means they will choose new forms of urban housing and communication. To create architecture and urban infrastructure of high quality and convenience for the older generation, it is necessary to understand what the retirees of the future will be like. According to the forecasts, by 2050, every third inhabitant of Russia will be old – mainly the matured representatives of generations X and Y. A new age group will appear – younger old or "new seniors," according to the author's terminology. These "new seniors" will be people free from age prejudices, leading an active lifestyle, who will be ready to work, develop, and master new skills and technologies (Troyan, 2016).

In connection with the forecasts on population ageing in Russia, documents at the federal level have been adopted in Russia aimed at improving the urban

environment, as mentioned earlier in section with Definitions, term 3 "Accessible environment" (The Order of the Government of the Russian Federation 01.12.2015 N 1297, 2015; The Order of the Government of the Russian Federation 29.03.2019 N. 363, 2019). However, there are only a few scientific studies related to building a friendly environment for older people in urban areas, and most of them were conducted either in larger cities (Samara, Rostov-on-Don, Volgograd) or in Moscow during the period 2012–2019. Published research in the Russian language on age-friendly environments in rural areas has not been found. Instead, developments in this area are focused mostly on social projects and initiatives rather than academic research. There are some social projects at the sub-national regional level aimed at making the environment accessible to the local communities in rural areas.

Among the published studies, a special relationship between space or territory and an ageing person can be noted. The longevity and experience of residence in a city, district, or certain territory strengthens a person's connection with this space and reinforces the sense of one's own role as an "inhabitant of the region," "city dweller," etc. (Kienko, 2019). In analysing older people's relationship with space, social, and biological age categories can be combined. Ageing as a socio-biological process is associated with transforming lifestyle and activities, communication, values and social attitudes, adaptation, and identity. As a person ages, there is usually a decrease in adaptive resources, flexibility, mobility, and openness to change. At the same time, there is often an increase in valuing conservatism and intolerance towards asocial manifestations; older people place more importance on trust in people and the value of care (Korotaev et al., 2019, p. 139). Other researchers have noted an increased sense of solidarity and altruism among older people (Radina & Porshnev, 2014, p. 154). An established system of values, customary practices, and the need for stability and predictability determine attachment to familiar, well-known people. Elyutina noted that the special attachment of older people to old things could be explained by the desire for security and "self-defence" with old things against social and spatial changes, using them as a way to preserve memory (Elyutina, 2009, pp. 105–106). Reznichenko concluded that attachment to one's home grows at an older age and is a resource for psychological health and well-being (Reznichenko, 2016).

Research funded by the Russian Foundation for Basic Research (Kienko, 2019) showed that residents of the capital and other large cities in Russia are the least satisfied with their city, the state of its public spaces, architecture and planning, cleanliness, and urban noise in comparison with residents of medium-sized and small cities (the larger the city, the lower percentage of satisfaction for various indicators, ranging from 40% to 70%). However, in all types of cities, respondents over the age of 60 considered their city cosy and attractive (80% compared to 67%–77% in other subgroups), hospitable, and clean (Kienko, 2019).

Older respondents were less likely to call their city noisy. They rated the condition of public spaces, such as parks, squares, and streets, higher. However, their assessment of the condition of their own backyards was not significantly different from that of other age groups. The older the respondents, the more they liked their city; among people over the age of 60, this figure was 88%. Among aesthetically

attractive objects, older people rated lawns and flower beds, trees, buildings, architectural designs, sculptures, and memorial complexes in descending order. In general, these objects were also highlighted by representatives of other age groups. Meanwhile, the natural visual environment (trees – 49%, lawns, flower beds – 51%) was much more important for older people than for young people (32%–36%) and people of middle age (40%–50%). It should be noted that historical memory was more significant for the older generation: 27% of older respondents and 20%–22% of representatives of other ages noted that memorial complexes were aesthetically attractive objects (Kienko, 2019).

The typical answers to the question "What is missing in your city?" in a general population sample, including older respondents, are "people behaving in a civilised way" and "interesting public events" (about 30% of respondents). Residents of bigger cities lack peace and safety, while residents of medium and small cities lack high-quality leisure opportunities, from parks and squares, theatres, museums, and concert halls to cafes and restaurants. The answers to this question were highly differentiated depending on the respondents' age. Older people lack security, peace, and quietness than people in other age groups. They miss buildings that embody the history of the city, that is, museums and exhibitions, as well as enterprises of consumer service that consider the preferences of older citizens. Kienko concluded that older people themselves do not focus on the challenges of an age-unfriendly environment; they try not to notice the manifestations of social and spatial exclusion. This brings even more necessity and relevance to the development of a favourable environment for older people in Russian cities and villages (Kienko, 2019).

Another similar study was carried out in Moscow (Gorina & Burdyak, 2015). The main criteria for the quality of the urban environment discussed there were its "friendliness" in relation to the residents, the city's comfort for living, and the possibilities to develop human capital and implement one's life plans. Considering that the balanced development of the urban environment is only possible if the interests and needs of the most vulnerable socio-demographic groups are taken into account, the special focus of this research was on families with children younger than 18 years old and the older population (50 years and older). The urban infrastructure is an important factor that influences citizens' quality of life. It is a primary provider of basic social (education, healthcare, etc.) needs as well as housing and communal services and transportation (Gorina & Burdyak, 2015).

The study of Gorina and Burdyak showed that the population of Moscow has a positive perception of the urban environment, a high degree of adherence, and a relatively low level of conflict in relation to it. This statement is also true for families with children younger than 18 years old and older people who have their own specific requirements for the urban environment. Families with children, as well as older people, do not make high demands on the quality of the living environment at the city level in general but are more sensitive to problems around everyday life in their residential area. In terms of population ageing, the quality of life problems in old age is increasing. Today, in many countries, the idea of active longevity is being actively promoted. However, older people often cannot cope with restrictions regarding access to services and urban infrastructure of acceptable quality.

The development of infrastructure in the municipalities and the improvement of the quality of services could smooth out the differences in the standard of living among city dwellers upon retirement (Gorina & Burdyak, 2015).

In another study, an environmental approach was used that made the residents, their subjective perceptions, and their assessment of the urban environment the centre of attention. It saw the residents as an important factor in forming the environment (Konina, 2003). Between the townspeople and the environment, there can be either a relationship of conflict, rejection, and alienation or mutual acceptance and adaptation. Those can lead, respectively, to degradation and deterioration of the quality of life or to the positive development of mankind and the environment (Popov, 2007). Thus, residents' assessments of the comfort of the urban environment and information in terms of how they perceive the city are crucially important for providing a safe and supportive living environment.

Non-profit organisations and partnerships have become actively involved in the development of the urban environment over the past five years in Russia. A map of successful participation practices and involvement of citizens in the development of the urban environment has been created, including descriptions and analyses of the 90 best practices from Russia (Agency for Strategic Initiatives, 2021).

Successful practices of engagement and participation have been devoted to various forms of civil participation and the methods used to involve residents in urban development projects in Russia. Those have been done by local communities, civic activists, and professional urbanists. When selecting the best practices, the authors were guided by several fundamental principles, such as the direct participation of citizens in decision-making through consensus, the desire for self-organisation and cooperation of citizens, and the presence of cross-sectoral interactions among citizens (Agency for Strategic Initiatives, 2021).

## Conclusion

The chapter has covered a wide range of issues related to settlement planning in Russian policy, research, and practice. It has also discussed whether a demographic megatrend such as population ageing is the focus of those. It has shown the initiatives related to urban and rural contexts separately. The chapter started by discussing the main challenges of the current demographic profile and indicators of ageing globally and in Russia. It also introduced both global frameworks/policies on ageing and age-friendly settlements, as well as relevant Russian legislation. All of the topic-related definitions and concepts, such as quality of life and an accessible environment, citizens in Russia with limited mobility, and a barrier-free urban environment, were fully introduced with relevance to the life of aged persons.

The authors conclude that the ongoing governmental programmes and practices of handling the settlement (mostly city level) environment have population ageing or the promotion of healthy ageing in focus only to a certain, secondary extent. For example, the current Russian governmental strategy on ageing has only one point related to the development of general infrastructure for spatial development in relation to older people. These developments mainly occur due to other state

programmes of the Russian Federation, such as "Shaping a Comfortable Urban Space," "Accessible Environment," the "Spatial Development Strategy," or other legislative documents. The latter includes more resources and efforts to develop territories with low levels of socio-economic development and the potential for economic growth, as well as areas with low population density and predicted growth of the local economy.

Russia has attempted to investigate the need for new types of age-friendly cities based on the foreign approach, using the cities of Volgograd and Tuymazy as test cases alongside the WHO-supported project "Age-friendly cities." We also found that research by Russian authors on the topic of the age-friendly environment is scarce and mostly concerns urban areas and larger cities (Samara, Rostov-on-Don, Volgograd, Moscow; there is either no or very little research on rural areas. Currently, rural development happens mostly through social projects and initiatives rather than academic research.

In the last few years, Russian non-profit organisations and partnerships have also become more active in developing an urban age-friendly environment.

As the next steps and possible future priorities, we think that governmental responses, data collection, and scientific analysis in planning age-friendly environments are especially necessary in Russia's remote and rural locations.

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# 7 Ageing and urbanisation in Zambia

## The need for "age-friendly cities and communities"

*Fred Moonga*

### Introduction

There are a growing number of older people (those above 60 years) globally (McQuaid et al., 2021; United Nations, Department of Economic and Social Affairs, Population Division, 2017; Lloyd-Sherlock, 2010). Developed countries, especially in Europe, were the first to experience population ageing, mainly as a result of declining fertility and mortality (Leeson, 2018). Accordingly, they responded to this challenge with increased welfare services, including housing and transportation (Leeson, 2018), among others. On the other hand, low- and middle-income countries, especially in Africa, have small numbers of older people, although they are increasing fast and are projected to increase even faster. For instance, in 2015, only 3.5% of Africa's population was aged 65 years and above, but this figure is projected to increase to 6% by 2050 (Leeson, 2018). Most countries in the sub-Saharan African (SSA) region have young populations due to high fertility rates; in some of these countries, the average number of children per woman is 5.5 (Cincotta & Hummel, 2009).

People in Africa have a median age of <20 years; in contrast, in Europe and the United States of America, the median age is >38 years (Njenga et al., 2020). This means that development planning in Africa predominantly focuses on its young demographic group, which is demanding in terms of education, skills training, employment, and entrepreneurship opportunities. Thus, issues concerning older people are generally secondary when it comes to resource allocation and development planning. Nonetheless, African countries contribute the largest share of the growing number of older people (HelpAge International, 2018). Therefore, it may not be long before these countries start spending more on their rapidly increasing number of older people. Due to the fast rate of increase, there may be insufficient time for African countries to plan for demographic change and related requirements. Thus, to manage such a demographic change in Africa, there is a need to enhance the culture of filial responsibility, that is, taking care of older relatives rather than sending them to older adults' homes.

Alongside the ageing population, there is growing urbanisation globally (Leeson, 2018; Phillipson, 2010) with varying drivers, which will be discussed later. This has been characterised as "one of the most significant social trends of the 21st

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century" (Williams, 2016, p. 2). However, it also affects rural areas, as will also be discussed later. Like ageing, urbanisation is not uniform across the world (Leeson, 2018). Some areas are more urbanised than others, while others are urbanising more rapidly than others. Urban areas are characterised by, among other things, advances in technology such as automated teller machines (ATMs), computerised bus or train ticket sales and purchases and other electronic transactions, and escalators, among other modern built environments, which may be challenging for some older people to use. Other issues of migration towards urbanised areas include overcrowding, mainly in unplanned settlements, a shortage of housing and other amenities, and pressure on public service provision. Because of these issues and the increasing urbanisation, alongside ageing, there has been a growing interest in the urban policy discourse relating to ageing and city life (McQuaid et al., 2021), most notably "active ageing" (WHO, 2002) and the "Global Age-friendly cities" (WHO, 2007). These policies will be discussed in detail later in the chapter.

Across the world, urbanisation has pushed and pulled people, mainly of working age, to cities over the years in search of employment, business, and other opportunities. As with ageing, Africa is a latecomer to urbanisation. About 30% of the world's population lived in urban areas in 1950, but by 2014, this figure had risen to 54%, while in Africa, the urban population was still just about 40% in 2014 (Leeson, 2018). Thus, the majority of the world's population lives in urban areas (Williams, 2016). The United Nations (UN, 2014) estimates that by 2050, urban dwellers will account for 66% of the global population, while Africa's urbanisation is projected to increase to about 56% in the same period (cited in Leeson, 2018). Evidence suggests that SSA is the most rapidly urbanising region in the world (Chastain & Oluic, 2009; Williams, 2016; Kohli et al., 2020). According to the UN, Zambia's urban population is projected to increase to 58% by 2050 (Sladoje, 2016). Although traditionally, many older people in Zambia live with their relatives, especially in rural areas, there is an increasing number of older people residing in urban areas, as will be discussed later in this chapter. Thus, both ageing and urbanisation are looming challenges for Africa in general and Zambia in particular. As Phillipson (2010) notes, population change and urbanisation will shape social life in the 21st century. Therefore, governments, professionals, and families need to prepare for both.

This chapter analyses ageing and urbanisation in Zambia and how policies can address the associated opportunities and challenges. It also analyses Zambia's need for and slow adoption of the "ageing-friendly cities and communities initiative." Although the focus is on Zambia, references are made to Africa and SSA from time to time in order to appreciate the broader context in which the country is found. The main idea of the section is presented in the following paragraphs. The context and the theoretical framework are then presented, followed by the critical appraisal of the subject. Before concluding, future perspectives on ageing and urbanisation will be discussed.

## Main idea

The increasing numbers of older people globally and locally have created interest in research and policy on ageing. For instance, evidence from Uganda, Cameroon,

and Guinea suggests that there is a need for age-friendly cities in Africa (WHO, 2018), as in the developed world. In relation to urbanisation, ageing is anchored on the "Age-friendly Cities and Communities" policy framework launched by the World Health Organization (WHO) in 2006 (McQuaid et al., 2021). However, countries like Zambia still lag behind in research on ageing and urbanisation. Consequently, they lag behind in creating "age-friendly environments." This is partly due to the small number of older people living there. Although the number of older people in Zambia has been increasing steadily over the years, they are fewer compared to other age groups. According to the United Nations, Department of Economic and Social Affairs, Population Division (2017), in 2017, there were 696 000 older people (60 years and above) in Zambia compared to 107 000 in 1950, and this figure is projected to rise to 1,114 000 to 2,986 000 in 2030 and 2050, respectively.

Despite increasing ageing, the challenges facing older people in Zambia are usually masked by traditional filial arrangements, which blind policy experts to ageing and its associated challenges. Importantly, the institutionalisation of older people (keeping them in older adults' homes) is discouraged and is often the last resort for older people without close relatives to look after them. In this country, the dual-earner model (where both the husband and wife work outside the home) is less common. This means that one of them, and often some other relatives, mostly women, are available to care for older relatives. Moreover, city life is hardly considered for older people in Zambia; it is only for youths and those in employment, as well as those in business and other income-generating ventures. As such, creating "urban-friendly environments" that suit their challenges is limited, although things are slowly changing. These are some of the factors that make Zambia an interesting, if not important, choice for analysis regarding ageing and urbanisation, particularly because the general and urban populations have been increasing over the years, as will be discussed next.

Gross and Monteiro (1989) assert that Africa's fast urbanisation is due to three main interrelated factors, namely, the overall rapid population growth, rural-urban migration, and the reclassification of rural areas as urban areas. As regards the first factor, in the country under discussion, the population grew from 7,874,610 in the 1990 census to 9,961,170 in the 2000 census and to 13,219, 730 million in the 2010 census (Crankshaw & Borel-Saladin, 2019). Although there was no census in 2020 due to the COVID-19 pandemic, the population was estimated to be about 18 million in 2022 at the time of writing. Thus, its population is increasing rapidly despite the high death rates from HIV/AIDS, malaria, and recently COVID-19.

Regarding the second factor (rural-urban migration), the development of industries, especially mines in the case of Zambia, has contributed to rapid rural-urban migration among people searching for employment and various other opportunities in urban areas. Additionally, given that the incidence of poverty is highest in rural areas in Zambia (United Nations, Department of Economic and Social Affairs, Population Division, 2018), some people migrate to urban areas to escape the ravages of poverty by seeking opportunities in urban areas. Finally, the third factor is explained by the expansion of cities and the development of some rural areas, which has led to the latter being reclassified from rural to urban areas. Therefore, all three factors articulated by Gross and Monteiro (1989) are at play in Zambia.

However, rural-urban migration is the most prominent. It can be attributed to both pull and push factors. The pull factors include employment and business opportunities in urban areas, while the push factors are mainly poverty-related in rural areas.

Despite this rapid urbanisation, urban ecological research is limited (Shackleton et al., 2021). Thus, there is limited evidence on which to base urban planning in the context of ageing in Africa in general and Zambia in particular. In most urbanised societies, urbanism is associated with growth, especially in economies, infrastructure, and affluence. However, the Zambian scenario can be characterised as "urbanisation without growth." This is a situation where urbanisation takes place without urban economic growth, thereby resulting in high urban unemployment and high levels of poverty (Fay & Opal, 2000). This was especially the case during the structural adjustment period in the 1990s, when the movement of people to urban areas was not related to urban economic growth.

## Urbanisation in Zambia

Urbanisation in Zambia, like elsewhere in the region, has been rapid in the last few decades. It has historically been fuelled by youths migrating to cities in search of formal employment, especially in the mines. The urban population rate in Zambia increased from 1.3 % during the 1990–2000 period to 4% in the 2000–2010 period, compared to 3% and 1.5%, respectively, for the rural population and 2.4% and 2.5%, respectively, for the national population during the same period (Crankshaw & Borel-Saladin, 2019). The fast pace of urbanisation has resulted in growing unplanned settlements, which are associated with overcrowding and poor amenities. The UN projects that Zambia's urban population will increase to 58% by 2050, which is likely to create pressure on service provision and necessitate the replanning of cities (Sladoje, 2016). Sladoje further asserts that smaller towns are projected to have the largest population increases. Perhaps planning for "age-friendly cities and communities" could be easily implemented in these towns, since they still have many undeveloped spaces.

Over the years, urban development has been drifting into rural areas, thereby reducing the divide and causing the reclassification of some rural areas as urban administrative centres or districts. In other words, rural areas are slowly being consumed by urban areas despite "counter-urbanisation" initiatives. Therefore, even if retirees relocate to rural areas, they will still be in an urban area in some way, or their rural residences might become part of the city with time. For instance, during the period 1990–2010, seven (7) settlements were reclassified from rural to urban areas because their population sizes exceeded 5,000, and most people were no longer reliant on agriculture (Central Statistics Office, 2010). Similarly, between 2012 and 2015, many rural areas were reclassified as districts despite having limited infrastructure.

Urbanisation may be unsuitable for all age groups due to its associated challenges. For instance, Smith (2009) notes that urban areas may not be suitable for older people because of three main problems: neighbourhood problems, such as overcrowding, noise, and air pollution; living environment problems, such as

practical fears in the daily lives of older people, and perceived problems associated with the city environment, such as fear of crime and access to high-quality services (cited in Kohli et al., 2020). Urbanisation also results in the displacement of inhabitants and the loss of neighbourhoods and social networks (Orton, 2017). Inhabitants' land (especially for older and poorer people) is often bought off, mostly by rich people and corporations with industrial and business complexes. Thus, the people in the neighbourhood, especially older people, lose their relational resources and practices, which override the need for a better living environment (Gilroy, 2012) associated with urbanism. For example, the construction of a shopping complex, from which many older people may not even shop due to financial challenges, may not atone for the loss of neighbourhoods and community ceremonies that they are accustomed to, yet it leads to their permanent displacement. However, rural areas are also not completely safe for older people in the Zambian context and perhaps other African contexts because of accusations of practising witchcraft.

As people migrate to urban areas (mainly youths), rural areas are depleted of the able-bodied labour needed for agricultural production. Consequently, rural areas have become vulnerable to food insecurity, particularly when taking into account the effects of climate change in recent decades. Additionally, after its independence, Zambia had a "go back to the land" policy (Mujenja & Wonani, 2012), which encouraged people to settle in rural areas upon retirement to engage in rural-based occupations, especially agriculture. Although the policy has not been completely discarded, its implementation has waned tremendously over the years, partly because of diminishing incentives in rural areas. Successive governments have had different priority areas, some of which have de-incentivised "going back to the land." Because of the "go back to the land" policy, planners probably saw no need for "age-friendly cities and communities." Moreover, rural settlements are hardly planned because of the vastness of space for human settlements and other activities. While the literature is replete with urban planning studies, this is not the case with rural planning.

Some older people grew up in rural areas, but they could not migrate to the cities for employment because of a lack of education. Thus, there are those who hardly see the need to migrate to urban areas. However, cities and towns are expanding rapidly. Despite these changes associated with urbanisation, ageing-related needs and challenges are hardly embraced in urban planning in Zambia. Instead, there are instances where the expansion of cities displaces some Indigenous people, especially older ones, instead of incorporating them into the urban hood where they can have access to various urban amenities. In general, urbanisation activities affect rural and urban populations negatively and positively, as will be discussed later.

Despite the general trend of rural-urban migration, counter-urbanisation emerged during the structural adjustment era, when many workers in Zambia were retrenched at the peak of privatisation. According to Crankshaw and Borel-Saladin (2019), this is when the proportion of the population living in urban areas declines due to urban-rural migration occasioned in part by the poor performance of the urban economy. This trend has waned tremendously in modern times for various reasons. Some retirees opt to stay in urban areas because of the challenges of rural

life that they may not be resilient to and are not familiar with, having spent most of their lives in urban areas. Thus, they find it easy to stay in an urban environment that they are used to. Others opt to have residences in both urban and rural areas. As such, they migrate seasonally as the need arises.

In general, many people are reluctant to change their residences when they are older. This is due to older people's attachment to their environment and the importance of the environment in shaping human behaviour and the life course. Thus, older people prefer to "age in place" due to the familiarity of their residence and community. "Ageing in place" means an older person's attachment to their home or neighbourhood (Kamalipour et al., 2012) and receiving support in their residence. According to Phillips et al. (2010, p. 17), it means living "independently by receiving services as needs change."

The place is important in human geography and gerontology (Orton, 2017) but is multidimensional. The multidimensionality aspect is important in understanding ageing and urbanisation. It is multidimensional in that it entails physicality and social, emotional, and psychological, and cultural aspects (Iecovich, 2014); that is, the home and interaction patterns in the neighbourhood. Also important in choosing a residence are historical path dependencies; this means "the tendency that locational choices occur based on previous choices, rather than relational decisions based on socioeconomic conditions" (Geyer et al., 2012, p. 2944). Thus, having migrated to an urban area in the past, some older people might decide to remain there after retirement, that is, they "age in place." Moreover, children of such migrants grow up in urban areas, thereby establishing homes there. Thus, their environment becomes important to their well-being and survival as they age. With time, this increases the number of older people living in urban areas and creates the need to plan urban environments to accommodate their needs. However, infrastructure such as healthcare centres, parks, shopping centres, and other public places may not have been developed to suit the needs of older people (Lloyd-Sherlock, 2010), especially in Zambia.

## Context

One of the most significant periods of urbanisation in Zambia was around 1997, when the government, at the peak of privatisation, sold council and institutional houses to sitting tenants (occupants at the time), most of whom were either retirees or were due to work for just a few years before retirement. Justified as empowering people with houses and as a way to avert the high maintenance costs of houses, this decision seems to have reversed the famous "go back to the land" policy of the previous regime, thereby reifying urbanisation. The "go back to the land" policy was anchored on ensuring that most of those who retired returned to rural areas, thereby indirectly reducing overcrowding in cities.

When people were empowered with houses (a move critics have argued was a ploy by the governing party to win political support), some saw no need to relocate to rural areas, as had been the practice in the past. With a house in town, one would occupy it, rent it out and occupy a cheaper one, or even sell it and use the money

for other things. With all of these options, one did not need to relocate to rural areas, since the urban environment became the "place" that was safe and affordable. As Casey and Yamada (2002) observe, in deciding where to live, older people often view their existing home or community environment as having a sense of connection, familiarity, and safety. Thus, the sale of the council and institutional houses not only empowered people with houses and, in some cases, income from these but also consolidated urbanisation, which, in a way, can be corrected through decentralisation.

**Decentralisation in Zambia**

One of the reasons for the rural-urban migration in Zambia is the lack of development in rural areas. Since independence, the government has tried to reverse this trend by developing rural areas partly through decentralisation to ensure effective service delivery to all parts of the country and to ensure that local people participate in the development process. However, the results have been less positive and from time to time, the idea has been abandoned or at least not fully implemented. The poor results have been partly attributed to poor funding and low capacities of the people at the local level to formulate and implement the development projects successfully (Chikulo, 1985). The central government has also been reluctant to surrender political power and other resources to local organs, which ultimately disincentivises the latter. Efforts to revive decentralisation by successive governments have been less successful, partly because the problem of poor funding has remained unresolved.

In August 2021, the country held general elections, which ushered in the United Party for National Development (UPND) government, which defeated the then-ruling Patriotic Front (PF) in a landslide victory. The new government, described as the "new dawn government" by the president elect, Mr. Hakainde Hichilema, announced its intention to fully implement decentralisation with much funding. Indeed, there was increased funding in the first budget for 2022, which was presented in October 2021, especially for constituency development; the budget for this rose from K1.6 million to K25.7 million ($89,819 to $1,442,729) per constituency (Lusaka Times, 2021). However, it is too early to write about the failures or successes of the new government's decentralisation drive, since it is the first budget and first term. Nonetheless, given that funding and political will have been the main challenges over the years and they have been enhanced, it is expected that, at least on the basis of these two issues, decentralisation will finally be fully implemented.

Bottlenecks are expected in the capacities of the local authorities to successfully implement decentralisation, as has happened previously. However, the government has also announced planned capacity-building programmes and enhanced accountability. Thus, one of the implications for ageing and urbanisation is that with enhanced funding, both social protection for older people and general infrastructure development, especially healthcare centres as well as healthcare staffing, which are very important in older age, will be increased and improved. The

enhanced funding will also provide an opportunity to develop "age-friendly cities and communities" since constituencies are found in rural and urban areas. If the decentralisation process is successfully implemented, the rural-urban divide in Zambia is likely to diminish given the ongoing rural electrification project, which aims to ensure that most rural areas have electricity, roads, and other associated services and development. Thus, decentralisation is likely to augment the development already taking place in rural areas, which will enhance the lives of older people by availing them of much-needed resources for older age, such as healthcare.

**Urban planning**

Increasing ageing, as discussed earlier, requires planning for "age-friendly cities and communities." To do this, there is a need to change from physical planning, which is done by experts and oriented towards the appearance of cities and their constituents, to participatory planning, which takes into account the diverse needs of stakeholders. Participatory planning involves stakeholders in the design of buildings, walking paths with sheds, rest stops and benches, public toilets and other amenities, as well as safety and security and how these can be easily accessed by older people and others with access challenges.

Urban areas are endowed with resources and economic opportunities such as employment and business, as well as access to various amenities that attract people from different areas of the country. But they are also replete with challenges such as diversity, density and the nature of populations, as well as myriad social problems such as crime, substance abuse and prostitution, among others (Williams, 2016). These challenges and social problems necessitate urban planning to make city life safer and more affordable, and the management of available resources easier. Without proper planning and design of urban environments and policies, urbanisation can result in overcrowding, underserved, and increasingly unliveable and unproductive cities (Sladoje, 2016, p.1). Therefore, cities require planning to ensure efficient and effective service delivery to all and, in the context of increasing ageing, to accommodate the needs of ageing populations.

Although older people in Zambia are generally disadvantaged, they are important stakeholders when it comes to land use planning. The Urban and Regional Planning Act number 3 of 2015 provides two representatives for regional chiefs as members of the regional planning authority. A substantial amount of land in Zambia is customary (owned by traditional leaders such as chiefs and headmen/women). Older people close to these institutions are consulted in development planning either as representatives of their local traditional authorities or in their own capacity as local elders. In some instances, they are the ones who either provide the land or sell it to developers. Thus, although the Act is silent on ageing, older people play a substantial role in urban development planning, necessitated in part by demographic change. As such, they are regarded as drivers of social infrastructure development in the African context (McFarlane & Silver, 2017) in general and Zambia in particular. However, they can also lose it to the state if there

are some planned government activities, such as the construction of a school, a health centre or road, or mining activities, among others, in which case they are compensated.

People's actions on the environment, such as mining, deforestation, and pollution, have a direct bearing on the lives of those who live closer to where such activities take place. Such effects can last for several generations. The unhealthy environmental conditions in which children are born or grow up have a bearing on their health throughout their lives. In Zambia, mining activities, in particular, have had negative effects on the environment and its habitats over the years. For example, Kabwe town is one of the most lead-polluted towns in the world (Sladoje, 2016). Lead infestation, both in the soil and water, is said to have negative health effects, including poor cognitive development in children who are born and grow up in such an environment. This means that those children have a low academic performance, which leads to reduced employment opportunities and other life opportunities, and thereby, they become victims of unemployment-related challenges, which become dire in older age. However, the economic and developmental value of mining industries makes the government reluctant to implement effective environmental protective measures (Sladoje, 2016). Closing a mine, for instance, simply means sending many workers and their families into poverty and jeopardising the economy of the country.

## From theory to practice

Two theories that relate to ageing and urbanisation will be discussed and applied to ageing and urbanisation in Zambia, although reference will be made to Africa from time to time because of similarities with other countries within the region. These are the ecological model of ageing and the social navigation theory.

### *The ecological model of ageing*

This theory draws a great deal from the importance of "place" in human development and the life course. A place can be conceived as the physical, social, cultural, and other environmental aspects of familiarity, especially those relating to the residence. Thus, the ecological model is relevant to both ageing and urbanisation, as it emphasises the importance of the environment (urban environment in this case) to the ageing process and the ageing person. In this theory, older age is seen as a critical and vulnerable phase in the life course that the environment influences (Wahl et al., 2012). In this case, the environment includes physical relationship patterns and circumstances that impact human behaviour.

Within the ecological model, a city is viewed as a system with various components, cultures and subcultures, institutions, rules and regulations. "The city is viewed as an organism where the function of the whole is greater than each of its parts" (Williams, 2016, p. 53). In this context, city or urban planning is expected to take into account all of the components that make up the "whole," such as the needs, cultures, and challenges of all of the inhabitants, including older people.

The physical, social, and economic dimensions make up the ecological understanding. However, this approach has been criticised, among others, for being conservative and embracing incremental rather than radical change, being deficit-oriented, and ignoring power issues (Williams, 2016). The city has various inhabitants with varying backgrounds, relationship patterns and tastes, inequalities, consumption patterns, interests, and power, among other diversities, yet the ecological model assumes harmonious relationships among these.

***Social navigation theory***

The social navigation theory was developed by Vigh (2006) while studying how young African people adapted in conflict-affected areas. Vigh observed how young people tried to maximise their social opportunities to overcome the constraints occasioned by human conflicts (McQuiad et al., 2021). Adaptations and efforts to overcome the challenges of war were compelling and generated applications for different age groups in different spatial environments. Thus, Vigh found that while the subjects were trying to adapt to the environment, they also made efforts to use resources within it to make it better. In other words, people shape their environment based on their interaction with it and the opportunities and constraints it offers in their lifetime. For instance, while some environmental changes bring about anxiety, they also bring about opportunities and ways of adapting among those affected.

As described by Vigh (2009), social navigation "affords a view to the dynamic co-creation of figure and ground, showing us that people act in and shape their social environments in constant dialogue with the way the social environment moves and the way it is predicted to act upon them and shape the circumstances of their lives" (cited in McQuaid et al., 2021, p. 433). For instance, as urbanisation accelerates in Zambia, so does environmental degradation. This is because trees and other environmental constituents have to be uprooted or destroyed in order to construct buildings, roads, industries, and other infrastructure. Consequently, negative consequences emerge, such as air and water pollution, shrinking spaces, and pressure on amenities as a result of the overcrowding of inhabitants.

Although the social navigation theory has mainly been applied in the context of youths, it can also be applied to marginalised older people in Zambia (McQuaid et al., 2021). As noted by McQuaid et al. (2021), older people in urban SSA are generally marginalised but are able to navigate their spaces and states of being. Despite being forced into mandatory retirement, some are able to navigate the urban challenges. In the transport and built environment, older people are made to use urban facilities such as transport, stairways, and footpaths, among others, like other age groups without challenges. Thus, in using these spaces and facilities, they navigate the challenges associated with ageing. As discussed earlier, the "go back to the land" policy encouraged them to relocate to rural areas upon retirement, where some died earlier than they would have due to hardships that they were not used to. However, others navigated the hardships and became civic leaders or prominent farmers or business leaders in their localities. The next section offers a

critical appraisal of the care of older people in Zambia and how this impacts adopting the "Age-Friendly Cities and Communities initiative."

## Critical appraisal

In Zambia, older people predominantly live with their relatives, mostly in rural areas, through the extended family system, which is supposedly still stronger than in developed countries. High levels of unemployment help to ensure the availability of family members (mostly women) to look after older relatives both in rural and urban areas, in addition to the traditional requirement to look after them. Thus, the small number of older people in urban areas and the "go back to the land policy" in the past, as well as the filial responsibility discussed earlier, contribute to slow policy change and action in designing "Age-friendly Cities and Communities" and "Active ageing" frameworks in the country.

"Age-friendly Cities and Communities" is a policy framework developed by the WHO in 2006; it means "environments which support people at different stages of the life course and which encourage community participation" (Phillipson & Ray, 2016, p. 153). This means that cities and urban environments, in general, should be planned in a user-friendly manner for all ages, including older people. Africa is the only region without members of the "Age-friendly Cities and Communities Network" (WHO, 2018). Because they do not have registered cities, African countries cannot benefit from the available resources, partnerships, and collaboration in this area (WHO, 2018).

"Active ageing" was adopted by WHO in the late 1990s (WHO, 2002) and is aimed at enabling older people to preserve their physical, social, and psychological well-being and participate in societal activities in line with their needs, preferences, and abilities without jeopardising their health, safety, security, and care needs. It has gained prominence in most countries over the years. It is defined as "the process of optimising opportunities for health, participation and security in order to enhance the quality of life as people age" (WHO, 2002, p. 12). Furthermore, it emphasises the importance of activity or physical exercise in people's lives, especially older people, in order to age healthily. This initiative is aimed at ensuring that people age healthily both as individuals and as a subgroup, as well as in relation to younger generations. As such, the life course perspective becomes important in "active ageing" as it explains how childhood experiences, such as being born and growing up in unsafe environments, such as those polluted by mining and other activities, impact later life. Another important aspect of "active ageing" is the recognition of older people's right to participate in the affairs of society and to be treated like others in the population.

The non-adoption of the "Active ageing" and "Age-friendly Cities and Communities" policy frameworks in Zambia are also partly due to the demographic situation, which is dominated by the young population. This means that social, physical, and other challenges relating to access and use are hardly taken into account when designing and developing infrastructure such as buildings, footpaths, and transport, among other built environments. The dearth of evidence and literature on ageing and urbanisation, as well as the limited collaboration among professionals in the

country, such as engineers, physical planners, and social scientists, also contribute to delays in embracing the "Age-friendly Cities and Communities initiative." However, this remains an important contemporary framework that is worth adopting in both the current and future planning of urban environments in the context of ageing populations, as will be discussed next.

## Future perspectives

Older age is associated with various challenges, including ill health, especially non-communicable diseases such as cancer, diabetes, and cardiovascular diseases (Kohli et al. (2020). Such health challenges are fatal in countries with limited healthcare resources and capacities. In Zambia, most of the good healthcare facilities are found in urban areas. Therefore, it may be ideal for older people to live in urban areas or closer to them. However, evidence suggests that urban life has challenges for older people, as discussed previously.

In analysing the future of ageing and urban planning in Zambia, it is compelling to think of partnership and participation in the planning process while being mindful of local circumstances. A participatory planning approach can create "sustainable" cities and communities (Satterthwaite, 1999) that are eco-friendly and minimise human-occasioned environmental degradation. In such an environment, every age group can live productive, secure, and less stressful lives. Active and meaningful participation (Hockey et al., 2013) promotes social inclusiveness and "active ageing." These policy values have the potential to ensure the sustainability of cities and the built environments therein, while meeting the challenges of older people in urban communities.

There is also a need to take into account the importance of the culture of filial piety (responsibility) in Zambia, which has helped in caring for older people, although it has masked their vulnerabilities for a long time. In such a system, it is unlikely that elder abuse will be noticed, let alone reported to the authorities, such as the police or social workers. Nonetheless, it is an important model in the Zambian context that may require a few modifications as situations change. Thus, in the Zambian context, "cities" may not be suitable for older people, but "communities" are and have been.

There is an emerging body of literature that emphasises "social infrastructure" in addition to "physical infrastructure" planning in terms of designing urban spaces. For instance, Simone (2004) asserts that urban spaces are products of people's movements and activities (cited in McQuaid et al., 2021). Indeed, it is the convergence of diverse people in cities that makes city life. Thus, urban infrastructure becomes "social" because of the interactions and collaborations among people from diverse backgrounds and with different interests. Older people are a heterogeneous group, hence their diverse requirements (Hockey et al., 2013), but they also contribute immensely to the fabric of our society (WHO, 2002). Planning professionals or authorities may not be conversant with the diverse needs of older people, which only they (older people) can articulate; hence, the need to include them in planning for "age-friendly" urban environments. This makes the "social infrastructure" relevant in involving older people and other professionals in urban

planning. However, the "social infrastructure" thesis has been criticised for overly assuming harmonious interaction outcomes and relationships among people with diverse interests and power relations, especially in urban areas (Doherty, 2017; Xiao & Adebayo, 2020). Slums, for example, which are common in low-income countries like Zambia and are products of urbanisation, are replete with inequality and violence and are therefore risky for older people.

Given the increasing numbers of older people in Zambia, it is only proper that they are involved in processes and practices that affect their well-being. This will promote their "active ageing" as a significant demographic subgroup. However, evidence suggests that they are the most excluded group in urban communities (UN-Habitat, 2010). This is mainly due to the negative stereotypes associated with ageing, such as being dependent, unproductive, and senile, among others. Evidence further suggests that processes that involve social exclusion affect older people (Phillipson and Ray, 2016) more than other subgroups because of their emotional attachment to their "place." Therefore, their involvement should be active and meaningful (Hockey et al., 2013), as participation is the essence of promoting inclusiveness in society.

## Conclusion

Ageing and urbanisation are rising in tandem globally, but research around them is still limited in low-income countries like Zambia. Urbanisation in Zambia has historically been influenced by migration, especially during the time of the discovery of minerals and natural population growth. While urbanisation has been rising in Zambia over the years, there has been limited planning of urban environments in accordance with social and demographic changes, especially ageing. This is despite the country being a member of the WHO, which promotes "active ageing" and "age-friendly cities and communities." The slow adoption of such policies is partly due to the relatively small number of older people, which hardly attracts policy attention, the culture of filial responsibility, the historical trend of "going back to the land" (rural areas) after retirement, and the notion that urban areas are not suitable for older people as compared to rural areas (Phillipson, 2004).

Rural areas are hardly planned for in Zambia, partly due to the vast space available for settlement and other activities and the limited planning capacities among the inhabitants, among other factors. However, since rural settings have historically been seen as a solution to ageing in Zambia, it may be necessary to improve and adapt these settings to an increasing number of older people rather than improving where they are coming from (urban settings). Perhaps a rural model of older people's environment that is suitable for the country's development stage would be ideal, rather than planning for urban environments where the number of older people is small. Nonetheless, older people's involvement in planning for the growing urbanisation is important given the challenges associated with city life and the rising number of older people, especially in urban areas.

Of even greater concern are the increasing number of corporations and capitalist entities, which are often foreign, that are involved in developing infrastructure in urban areas and sometimes rural areas, too. These entities hardly have regard for

issues such as "Age-friendly Cities and Communities" that do not contribute to their profit-making motives. For example, the Kafue steel industry was built very close to a residential area without regard for pollution and other negative externalities that it would cause to residents and the environment.

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# 8 Ageing in place with Chinese characteristics

## A case study of *Wangnong Shequ* in Ningbo City

*Feng Gequn and Yu Liqiong*

### Introduction

Due to the large size of the population and its national enforcement of the one-child policy since the 1980s, China's demographic structure has been distorted towards the grey end. Compounded with extending life expectancy, its ageing tendency is more rapid than the overall situation globally. Currently, there are 264 million residents aged 60 or above across China, who account for 18.7% of the national population (National Bureau of Statistics of China, 2021). This shows that China is confronting a structural challenge regarding a series of ageing issues. By 2050, it is expected to have nearly 500 million people aged 60 or older, a great ageing burden that will equate to Europe's entire population. With its rapid urbanisation, in over 60% of the country, most of the elders are now living in the city areas. As the ageing society shapes its urban landscape and spatial structure, this prompts us to rethink the relationship between the ageing population and the built environment in the context of urban restructuring. Though cities have more and better resources and offer greater opportunities, the majority of them are not prepared in terms of having support and services for ageing people (Hoof et al., 2018; Forsyth et al., 2019). Such a deficiency is particularly serious in Chinese cities.

As a measure of practice, a popular term that is used to refer to the ageing problem in most countries is "ageing in place" (AiP), which refers to the help that older people receive to stay in their homes as they age, either by providing their own eldercare or receiving care from family members (Means, 2007). Compared with institutional support and medical care, the cost of AIP is relatively low and family-friendly. With its attachment to place (the sense of place and place identity), home-based ageing is wholesome for people's mental health and contributes to reducing the loneliness of ageing residents (Wiles et al., 2012). However, most ageing people are mentally and psychologically sensitive to the changing environment in their surroundings, including the physical facilities, community amenities, access to daily needs, and residential transformation (Phillips et al., 2011). Sudden alterations to the environment can lead to the deprivation of such an attachment, further disturbing people's quality of life as they age (Marmot, 2004). In addition, ageing groups are confronted with decreasing capabilities in terms of managing their households as their age advances. With this circumstance in mind, urban governance needs to take age-friendly measures to

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address these concerns, as a favourable residential environment can bolster both the daily experience and the life quality of the ageing in terms of urban planning.

As for home-based ageing, China boasts a unique advantage. In traditional China, filial piety and the Confucius order with a family orientation play a key role in social coherence, and the family is a central and safe harbour where older people are attended. Compared with the ageing model of Western countries, China's AIP has a long tradition spanning a thousand years. In its tradition, an ideal Chinese family, the so-called extended family, consists of grandparents, parents, and children under the same roof. The so-called *Yang Er Fang Lao* (raising children helps prevent ageing) is taken for granted in traditional China, whereby every couple raises their children in the early years so that they can rely in their post-retirement lives on financial, emotional, and mental help from their adult children. According to this tradition, the whole family assumes a main supporting system for their old members and mobilises medical care if necessary. Even Chinese President Xi Jinping stressed, "Family is the bedrock of social stability" (Xinhua, 2016).

Nevertheless, with rapid urbanisation, spatial mobility, and emerging individualism, such a tradition of home-based care is being challenged. The ageing situation has become so serious that the Chinese government has enacted a civil regulation that requires adult children to visit their parents at least once a year (Law of the People's Republic of China on the Protection of the Rights and Interests of the Older People, 2012). Given the dramatic increase in the city's ageing population, there is now an urgent need to better understand the ageing situation and roll out appropriate policy and practice solutions. However, the Western model of nursing homes cannot be copied directly in China because of the different cultural contexts and huge financial burdens. In the long run, China needs to find its own way to cope with urban ageing.

In this chapter, we will examine the spatial behaviour of older people who live at home in Ningbo, a city with a high level of urban development and a large population of middle-aged individuals. As of 2020, individuals aged 60 and above accounted for 18.1% of the city's residents (as reported by the Ningbo Municipal Statistics Bureau, 2021). Due to the COVID-19 pandemic, we conducted research in the field and interviewed 20 participants in the Wangnong Shequ area, an older residential neighbourhood where the ageing population (those aged over 60) makes up approximately 27.8% of the total residents. Our research addresses three key questions: (1) How do older individuals perceive their environment, access to services, and support from the neighbourhood? (2) How are the daily activities of older individuals accommodated from a geographical perspective? (3) How does the local government meet the needs of older adults for services such as food delivery, household help, medical care, and emotional support? Additionally, we explore how the city is working towards becoming more age-friendly and address the challenges and successes of constructing such a city in urban China.

## Theoretical perspective

The literature on the AIP mainly explores the relationship between place and ageing, which emerged as an important area of research within gerontology and geography (or the geography of gerontology) in the 1980s (Lawton, 1982; Warnes,

1990; Smith, 2009; Renalds et al., 2010). The determinants of the AIP include housing and transportation, recreational opportunities that encourage physical activity, and places for social interaction and cultural engagement (Wiles et al., 2012; Mitchell & Aneshensel, 2016). It is well acknowledged that promoting AIP could contribute to the well-being of older adults by providing a sense of attachment, connectedness, security and familiarity, identity, independence, and autonomy (Wiles et al., 2012; Lum et al., 2014).

There are generally three theoretical strands that help to structure and analyse the AIP. First, the environmental theory stresses the importance of physical contexts (PC), which means the geographical attributes and environmental variables around the home and neighbourhood that promote or restrict the quality of life and healthy ageing (Lawton, 1982; Lewis & Buffel, 2020). The PC model suggests that personal behaviour and satisfaction are closely associated with an individual's experience with the surrounding environment and beyond (Wahl et al., 2012). Since the PC plays a central role in the lives of older people at different spatial scales, urban planning is vital for the coordination of the different issues at stake (Forsyth et al., 2019). While the home is an anchor from which older people go out into their surroundings to engage with others, access services, interact with society, and undertake other activities, it is also the place to which services, communications, and products are delivered by others who engage with the daily infrastructure. Socially, supportive environments provide opportunities for interacting with others (Lum et al., 2014; Mitchell & Aneshensel, 2016; Forsyth et al., 2019), particularly in those places that can produce casual incidences of encounters, like pocket parks, gym sites, and street corner shops, through which a sense of place and personal identity can be easily cultivated.

Second, the life course perspective, which refers to the neighbourhood effect on the health of older adults and the temporality of everyday life, highlights the relationship between daily activities and access ability (Quadagno, 2017; Lewis & Buffel, 2020). This perspective elaborates on how the ageing process shapes individual routine activity regarding the shrinkage of biological and physical capacities and what responses should be taken to cope with personal needs (Rowe & Kahn, 1997; Wahl et al., 2012); Clarke and Nieuwenhuijsen (2009) maintain that older persons are particularly susceptible to barriers in their surrounding physical environments as a result of declining health and functional status, financial strain and social isolation, especially persons with limitations in their functional abilities and those who need ready access to transportation and other services. Barriers to outdoor mobility that are created by the built environment can negatively impact a person's ability to function independently in the community, for instance, to access shops, banks, and health services (Clarke& Nieuwenhuijsen, 2009). The spatial concentration of daily facilities could attract older people for both social interaction and efficient servicing. This is particularly critical against the background of technological upgrading, with urbanisation and social transformation. This also shows that older people see staying where they are as providing a sense of attachment and connection, feelings of security and familiarity, a sense of identity, and independence. In contrast, the home in its material form is rarely mentioned. Similarly, Sabia (2008) concludes that older homeowners attach meaning to homeownership

in terms of financial security, family, and leaving a legacy (Mitchell & Aneshensel, 2016; Smith et al., 2017).

Third, over the past decade, the concept of "age-friendly cities" (AFC) has been developed with the aim of making physical and social environments more favourable for older people's well-being, health, and ability to live in the community (Hoof et al., 2021). It argues that older people represent a valuable resource in our societies, and therefore, cities should ensure older people's inclusion and complete access to spaces, structures, and services (Plouffe & Kalache, 2010). One of the main ideas of the concept is related to "Active Ageing" (Buffel et al., 2019). To make it clear, the World Health Organization (WHO) has stated that the term "active" in active ageing reflects the idea that people should be able to continue to participate in all spheres of life in old age – social, cultural, civic, spiritual, and economic (World Health Organization, 2002). Therefore, the AFC encourages "active ageing by optimising opportunities for health, participation, and security to enhance the quality of life as people age" (WHO, 2007). The AFC highlights three main issues, including service provision, the built environment, and social aspects (WHO, 2002, 2007). These reveal the principal traits of the "ideal" age-friendly city and show how changing one aspect of the city can positively affect the lives of older people in other areas (WHO, 2007; Hoof et al., 2018, 2021).

Unlike the theories of the three strands, the theory of AIP in China has remained a "Black Box" until now, when both AiP and places of ageing are changing dramatically. China has undergone accelerated ageing at a relatively low level of per capita income instead of ageing at a gradual pace as people grow wealthy, as is seen in Western countries (World Bank Group, 2016), which means that the ongoing trends of population ageing, and hyper-urbanisation are intertwined with each other; this was especially the case in the past 20 years of the 21st century. Though a growing amount of empirical research has paid attention to the AIP in China (e.g., Cao et al., 2014; Zhou et al., 2015; Zhou & Walker, 2020), most of this work is concentrated on the development of ageing communities, while the fundamental mechanism of AIP remains to be tapped. To address this research deficiency, we explore both the spatial and temporal dimensions of older people's attachment to places based on their daily life, with a particular focus on neighbourhood and the family orientation of the AIP.

Using an ethnographic approach, this research employs an analysis of semi-structural interviews. This enables us to explore a complex set of experiences in detail and chronicle older people's daily activities, how they perceive and use their neighborhood, and the impact on the persistent qualities of neighborhood. Therefore, it is necessary to describe the physical backdrop of the case study before engaging in the field interviews.

## The case study of *Wangnong* Shequ in Ningbo

Located in the Yangzi-Delta Region and approximately 200 kilometres south of Shanghai, Ningbo is a coastal city with a population of 9.4 million. In terms of spatial transformation, the Yangzi-Delta is among the most urbanised regions in

China. However, demographically, it has one of the highest proportions of older adults compared with the average in China (Zhou, 2019). With an urbanisation rate of up to 78% (the average rate in China is 63.9%) in 2020 (The Ningbo Municipal Statistics Bureau, 2021; National Bureau of Statistics of China, 2021), Ningbo ranks as one of the richest cities in China in terms of its gross domestic product (GDP) and boasts a favourable budgetary capacity to improve its urban infrastructure. Nevertheless, it is not well prepared for its ageing care, particularly on the issue of AFC.

In 2020, the proportion of aged citizens in Ningbo (60 years old or above) reached 26.21%, which is much higher than the average in China. This group is predicted to occupy one-third of the registered population by 2025 (Ningbo Civil Affairs Bureau, 2021). Such a demographic transition will pose a great challenge for the municipal government in terms of the social pension system and medical treatment. As for the registered older population in Ningbo City, 95% of the 1.7 million older people are experiencing home-based ageing, and among them, approximately 60% live with their families, while the other older couples, which account for 36.5% of the older population, choose to live alone (Ningbo Daily, 2020). To ensure that the old people live a healthy and happy life, Ningbo Municipal People's Congress has issued the "Regulations on the Service of Home-Based Ageing Care," in which home-based care is identified as a priority for ageing people, and it is stated that neighbourhood should play a supportive role for the AIP (Standing Committee of Ningbo Municipal People's Congress, 2018). In dealing with medical care, housing, and transportation for the ageing, the local government has published detailed measures for the care service, including institutional buildings for the family doctor and service station, age-friendly facilities, and a digital upgrade of the daily infrastructure. The community health station mainly offers preventive medical care, health education and counselling, medical checkups, and medical help for common nonsurgical illnesses. For those older people who have difficulty moving around and walking, healthcare providers deliver medical aid to their homes and charge a low fee for doing so (Figure 8.1). Up to now, 3.37 million residents have signed the patient-doctor contract (Ningbo Evening News, 2021); the system of service stations for home-based ageing has covered 100% of the subdistricts in the urban area and the towns in the rural area (The Ningbo Municipal People's Government, 2021); and all ageing people over 70 years old can enjoy free access to public transportation.

To have a spatial perspective for the AIP in Chinese cities, it is helpful to understand the urban structure in terms of city management and planning. Unlike the bottom-up initiative based on the neighbourhood level in Western cities, the urban spatial structure of China is managed in the administrative form of a top-down hierarchy from the municipal government (*Shi Zhengfu*), district government (*Qu Zhengfu*), and street office/committee (*Jiedao Banshichu*) to the residential community (*Shequ juweihui*), which further includes more neighbourhoods (Figure 8.2). Neighborhood services are also regarded as an emergent and vital source of personal social services, particularly for the vulnerable populations, including the frail and single older adults (Leung & Wong, 2002). Presently, there are three main types of

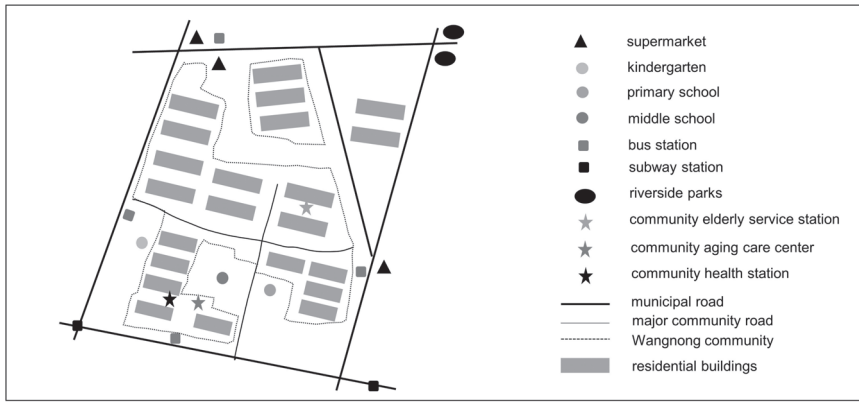


*Figure 8.1* A sketch map of the main infrastructure in Wangnong Shequ (within the dotted line), with numerous small grocery shops located on both sides of the two major community roads and near every entrance/exit of the community.

*Source:* Own elaboration.

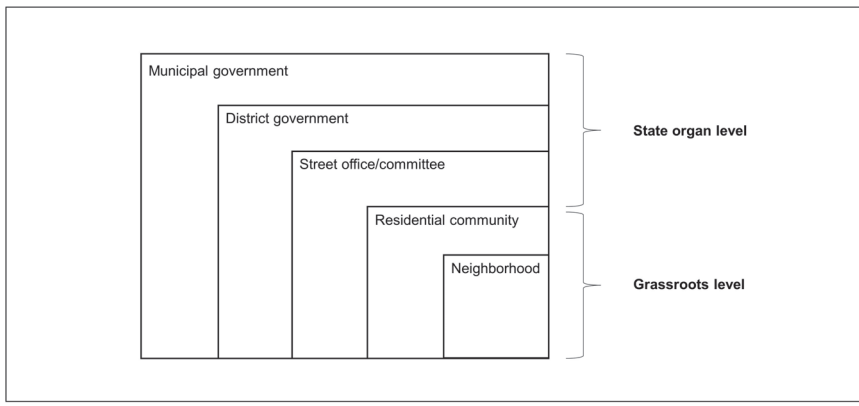


*Figure 8.2* Structure of urban governance in Chinese cities.

*Source:* By the authors from Feng and Chen (2019) "Old wine in new skins? China's neighbourhoods transformation from danwei to she."

ageing care in China, characterised by a "90–7-3" care pattern, meaning that 90% of the older population receives home-based care, 7% receives community-based care, and 3% receives institutional care (Lommen, 2021). Since institutional ageing (e.g., an ageing care centre) is either too expensive for most of the older people or overcrowded and of low quality, more than 90% experience home-based ageing (National Health Commission, 2021). The latter is anchored at the neighbourhood level, in which the family plays a central role for the old people, assisted by neighbourhood services if necessary.

In terms of the administrative structure, Ningbo has 10 city districts, 69 street offices, and 669 residential communities (2018). *Wangnong Shequ* is one of the 13 communities of the *Ximen* Street office in *Haishu* District. Located in the commercial downtown, it was built between around 1980 and the 1990s and covers an area of 350,000㎡. There are 147 residential buildings of different heights, ranging from two to three floors and six to nine floors, all without elevators. Due to its central location and the housing shortage versus the huge demand, the average size of the apartments is modest (compared with the apartment units in the suburban area); most are between 50 and 70 square meters with a living room, a kitchen, two bedrooms, and a bathroom. At the beginning of its establishment, most of the apartment owners were civil officials in the vicinity, industrial workers from the nearby factories (e.g., the glass factory), and former locals whose houses had been demolished. Since the massive urbanisation in Ningbo in the late 1990s, *Wangnong* has undergone demographic restructuring. During this period, a large number of young families moved into the new commercial neighbourhoods, which have higher housing quality and better daily services, in the suburban districts of Ningbo, and an inflow of lower-middle-class families replaced them. Meanwhile, the strategic development focus of Ningbo (e.g., its central business district [CBD]) has shifted away from *San Jiangkou*, the confluence area of the *Fenghua River, Yao River,* and *Yong River*, to the *Eastern New City*, and finally to the southern *Yinzhou New Town*, which has reshuffled the urban socio-spatial segregation in Ningbo (Figure 8.3). With the dynamic suburbanisation, the physical condition of the inner city, in which an overwhelming proportion of older citizens are concentrated and attached, is deteriorating.

As a result, the areas surrounding *Wangnong* are neglected and deindustrialised. With the physically dilapidated neighbourhood and the lack of renovation in the 2010s, the population in the neighbourhood is becoming diverse, deprived, and


*Figure 8.3* A sketch map of the spatial development of Ningbo City.

*Source:* Own elaboration.

older. Nevertheless, in terms of daily life, it is a convenient place with small grocery shops, eateries, pocket parks, schools, a neighbourhood clinic and a service centre for the AIP inside, and the Ningbo No. 2 Hospital, a shopping mall, banks, food markets, restaurants, and riverside parks outside; there is access to transportation within 5 minutes on foot, which is also attractive to ageing people.

In 2020, *Wangnong* had 14,000 residents from 4,950 households. Among them, 3,609 were over 60 years old, accounting for 27.8% of the community population (Wangnong Residential Committee, personal communication, April 6, 2021), which represents the typical picture of urban ageing in China. Normally, in the daytime, when the weather permits, one can see the kids playing in the open space while the grandparents sit nearby under the trees, chatting idly and playing chess with others. Overall, it creates an informal place in this neighbourhood. Nevertheless, given the degraded physical environment and ageing situation, the local government and neighbourhood committee have begun to launch a pilot project to upgrade the built environment and improve the living conditions in *Wangnong*. One of the main goals is to take care of the older adults' daily needs (Ningbo Evening News, 2021). Therefore, this is an ideal place to understand the situation of older adults, particularly with respect to the relationship between their daily lives and the neighbourhood environment.

In March–June 2021, guided by the overview of the demographic profile introduced by the Care Center for Ageing in Place director at the *Ximen* Street Office, we visited *Wangnong*, a subsidiary neighbourhood of *Ximen*. We conducted six semi-structured interviews with the old residents (Table 8.1), whose ages ranged from 60 to 80 years old. We also considered their different backgrounds in terms of gender, occupation, family structure, social status, daily behaviours, etc. Notwithstanding their differences, all of them had experienced national political campaigns (from the hardship and suffering during the 1950s and the Cultural Revolution in the 1960s to the economic and social benefits since the reform and opening in the 1980s), and such a personal history had presumably shaped their thinking and behaviours.

In the following part, the overview of the director of the AIP centre will serve as the government's response to the ageing problem and the daily practice of caregiving in the neighbourhood. At the same time, the interviews with the old residents

*Table.8.1* A brief introduction to the selected interviewees (all have pseudonyms, as requested by the participants)

| *Name* | *Gender* | *Age* | *Mode of AIP* |
|---|---|---|---|
| Ms. F | Female | 60 | Living in a typical extended family |
| Ms. D | Female | 73 | Living in an extended family |
| Ms. W | Female | 65 | Living alone (reemployed after retirement) |
| Ms. Z | Female | 72 | Living alone |
| Mr. L | Male | 69 | Living with his wife (empty nest) |
| Mr. Z | Male | 80 | Living with his wife (empty nest) |

will provide a chronicle of their daily schedules from the temporal-spatial perspective, particularly their personal difficulties associated with their physical facilities and the provision of basic services for ageing. Further questions concerned their housing choice, daily life trajectory, relationship with their family and neighbourhood, and expectations with regard to an age-friendly city building. Through these interviews, we expected to gain a general picture of the old residents in their AIP in the urban neighbourhood. Each interview lasted about one hour, and they were audio-recorded and transcribed verbatim as part of the primary study.

**Perception of the physical settings and provisions of services**

Despite the worsening conditions of this neighbourhood and the lack of elevators, aid services, and parking lots, the interviewees explained the reasons that they had chosen to stay in the place.

As the grandmother of two children in a typical extended family, Ms. F expressed her deep thanks for the short distances from their home to the kindergarten and primary school (approximately 200 meters and 400 meters, respectively), both of which are inside the community. This saves her much time when compared with those families who are not living nearby. Hence, she emphasised the accessibility of the schools for the grandchildren over the other discomforts.

Meanwhile, for Ms. W, who had resided in an apartment on the third floor since the mid-1990s and lived alone for five years, the convenient daily facilities were the main reason why she had stayed in this prime location of the city. Instead of moving to the spacious house with her family in the suburbs, she insisted on living in *Wangnong* for the sake of good access to transportation, supermarkets, groceries and clinics, particularly the Ningbo No. 2 Hospital, which is within 5 minutes' drive from her home. In her case, it is easy to get medicines for her chronic lung disease and hypertension and to receive emergency care as soon as possible. Over the years, these multiple facilities on the doorstep have led to her strong attachment to the community.

Contrary to Ms. W's place attachment, Ms. Z was tired of the deteriorating conditions of the neighbourhood mentioned above. She was eager to move to a newly built neighbourhood with modern facilities near her son's family. Unfortunately, she could not afford such an apartment, given her limited pension. For the time being, she was accompanied by a nurse who was taking care of her.

As for Mr. L and Mr. Z, they regarded the convenient facilities in the vicinity as an advantage of this neighbourhood. Taking the example of the riverside parks near *Wangnong*, they saw them as their "living room," which was at their disposal in their daily life. In their spare time, they often went there to exercise, enjoy square dancing, or fish for hours.

In conclusion, the selected interviewees can be divided into two groups according to the AIP centre's classification: the first type can be described as "the Security Type," which means that the older people had sufficient medical and social security but often felt lonely. Ms. Z was already stepping into this group, while for Ms. F, Ms. D, and Ms. W, it will only be after their grandchildren graduate from middle

school or their reemployed work ends that they will face the same challenge. The second type is the so-called Comfort Type, which includes those who have retired from their work but feel idle at home, such as Mr. L and Mr. Z, for whom the public space was the main source of their social connections with friends during their post-retirement life.

**Daily spatial activities**

Our interviews showed that all the aged residents led an active AIP, which accommodated their household duties and provided interdependent support in their daily routines. In this way, all family members benefited from such a tradeoff. A typical example is Ms. W, who described her daily proceedings as follows:

> I lead a simple life, usually wake up at 5:00 AM, at first watch TV and then have breakfast; at 6:30 AM, I walk to the next bus stop (instead of the nearest one) for more physical exercise. After working as a sales manager in a manufacturing factory for more than 30 years, I am so familiar with my old colleagues and have no difficulty dealing with tough customers. On the contrary, I have maintained a good relationship with most of them, all of which makes me feel more comfortable during my office time than when I am alone at home. At 4:00 PM, I leave the office, go grocery shopping, and cook dinner. I prefer to watch TV and check the news on my smartphone before going to sleep at around 8:00 PM. Before the pandemic, I used to walk for an hour after supper, as the community is so close to the riverside parks.

At weekends, she spends more time with family members, visiting her mother and older sister separately or playing Majiang with close relatives. If her daughter has time available, they will meet to chat or have dinner either at home or in a restaurant.

Ms. Z also leads "a simple life" after she was told not to watch too much television (TV) by her doctor in order to protect her eyes. Therefore, she listens to different radio channels all day long to alleviate her feelings of loneliness. Besides, she does grocery shopping once every three days. As she dislikes communicating with strangers, she refuses nearly all requests from friends who ask her to join diversified groups, including the activities held by the AIP centre. Before the critical COVID-19 crisis, she used to take a walk and exercise in the morning with a close friend who lived nearby. At the same time, unfortunately, the pandemic has brought one of her limited outdoor activities to a halt.

While Ms. W and Ms. Z lead independent lives, Ms. F and Ms. D orient their daily lives around their grandchildren. The older the children are, the less time they will invest in looking after them. While Mr. F is taking care of her seven-year-old grandson and three-year-old granddaughter on weekdays, her husband runs their

grocery shop in the neighbourhood. Usually, her daily life is round the clock, starting at 7:00 a.m. and ending at 10:00–11:00 p.m. As she said:

> First, I dress the two babies and help them with breakfast, then send the grandson to the primary school and the granddaughter to the kindergarten; after that, I return home and wash clothes for the whole family. At noon, I pick up my grandson from school and persuade him to take a nap after lunch. Around 3:50 PM, I pick up my granddaughter and then prepare dinner for the whole family. In the evening, I make them a bath and put them to bed.

It is only at weekends that both the son and the daughter-in-law are off work and bring the two kids out so that Mr. F and her husband can have spare time of their own. Though busy and tired, she felt satisfied with her daily life at the interview, and said that she really enjoys her life raising her grandchildren.

Unlike Ms. F, Ms. D considered caring for her grandchild a job without payment. She described the routine as follows:

> I have two different routines on weekdays and weekends. When I lived in *Wangnong*, "Kids First" became the main principle. As my grandson is in the *6th* grade in primary school and will stay in No.15 middle school for another three years, maybe I will still live here with them on weekdays. As a result, I have to follow the schedule of his timetable, that is, to have breakfast at 6:00–7:00 AM, lunch at 12:00, and supper at 6:00 PM. While I live alone in the suburbs at weekends, I wake up at any time I like. Once I choose to cook, I prepare dishes that last 2–3 days instead of cooking separately for each meal. Besides, I am so satisfied with this new community as it is located next to a subway station and has a big park for all the residents.

Contrary to "the Security Type" group, Mr. L's choice shows the behaviour preference of "the Comfort Type." With the motto "Playing Majiang keeps me from Alzheimer's disease," he considered it an inevitable part of his life and insisted on the importance of Majiang, as follows:

> You cannot watch TV all day and night; it is very harmful to your health; instead, you have to do exercise, and Majiang is one of them, as you have to use your mind frequently. Otherwise, you will grow older quickly.

When the Coronavirus attacked another city in Jiangsu Province through the chess and card rooms in July 2021, all of the places where Mr. L plays Majiang were forced to shut down by the local government, and thus, his life became more boring than ever before. Therefore, he and his friends began to gather in the parks and play cards. Hence, the riverside parks in the neighbourhood are full of older adults from 5:00 to 7:00 a.m. and 8:00 to 9:00 p.m. during the day.

Most participants generally mentioned similar keywords in their routines, such as Zao Shui Zao Qi (get up early and go to bed early), watching TV, grocery

shopping and cooking, taking walks in the parks, and playing Majiang. According to the local officials we interviewed, the ageing population in Haishu district tend to agglomerate in a 3-kilometer circle from a certain main medical service facility (e.g., Ningbo No. 2 Hospital). Wangnong has an extraordinary advantage in terms of the provision of comprehensive daily infrastructure within a 15-minute walk, which makes thousands of older residents choose to age in place.

**The local governmental solution and the construction of AFC**

In order to solve the ageing problem, one of the first initiatives from the *Ximen* Street committee began in 2004, when the AIP centre was founded by the director we interviewed. After nine years of pilot work, the centre had become a service model for ageing in Ningbo City. Due to its success story, the director was invited to attend a forum titled "How Should We Care the Ageing?" broadcast on CCTV (China Central Television) in 2013, and the practice of ageing care at *Ximen* Street was recognised as a model for ageing in Chinese cities in the programme.

During our interview, the director concluded that the centre's success could be attributed to sustainable social involvement, neighbourhood participation guided by the local government, and the interactive help of the citizens. He summarised their experiences as follows:

First, the centre defined its goal accurately: to implement the government policy regarding service issues for the basic needs of the old and self-initiative projects for the old. As there are currently 16,000 ageing residents among the 70,000 inhabitants on *Ximen* Street, it is impossible to accept the conventional idea, which is that the issue of ageing care belongs to the business of the local government (instead of the individual and family). Besides, the centre has only three formal official staff, so it seems impossible for them to cope with the overwhelming task.

Second, the centre has figured out several useful methods to tackle the difficult situation mentioned above, partly because the director is also an older adult and has a deep engagement with the ageing group. On the one hand, they use a detailed database of the personal backgrounds of the old population in order to differentiate the old groups based on their ages, incomes, and family status and mobilise the social resources of the neighbourhood to meet the real needs and requirements of the vulnerable groups. For example, they have divided the older adults into the junior cohort (60–70 years old, 60% of the old inhabitants), middle cohort (70–80 years old, 25%), and senior cohort (older than 80 years old, 15%) according to their ages. As for incomes, 90% of older adults have their own regular pensions, and very few are extremely poor or rich. As for the profiles of the families, they have divided them into the empty nest (separated from their children), widowed people (loss of spouse), and lost family (without children) besides the normal family status (multigenerational family) so that they can deliver specific help to older adults depending on the target group. On the other hand, with such a situation in mind, the centre has categorised their practice of ageing care into three types according to their needs and skills: (1) *The security type* – the ageing

care will aim at their daily needs, particularly in respect to their psychology; (2) *The comfort type* – the centre provides a platform, says the senior university, to boost their spiritual life; and (3) *The engagement type* – which includes those who are energetic and actively pursuing their personal hobbies and social skills. For instance, they have organised photography amateurs to take social-relevant pictures, like water pollution, which will be submitted to the local authority for decision-making. Meanwhile, their photos can also be put forward for awards, as the jury recommends.

Third, given the limited manning quotas granted by the street committee, the centre heavily depends on outside groups as caregivers. The social workers who provide care for older people are volunteers (volunteer workers) who are freshly retired, regular workers at the service station, and outsourced market-oriented organisations from eldercare companies. The specific care services are targeted at different groups based on the database. For example, the retired with high pensions must pay for daily services, while the poor groups will be served for free, such as food delivery and hair cutting. Moreover, the older people have an age-friendly neighbourhood with pocket parks, street-corner shops, community clinics, and access to transportation available for all of the old in the vicinity so that they can conduct their daily activities conveniently.

Apart from this model at *Ximen* Street, which shows the experimental effort from a local institution to cope with the provision of services for older people, it should also be attributed to the improvement in cooperation between the four (from municipal government to residential community) administrative structures in Ningbo City, which is forming an efficient network to construct an age-friendly city, while confronting the most serious ageing problems in the decade. After the launch of the "Regulations on the Service of Home-Based Ageing Care" in 2018, all of the administrative organisations saw sense, that is, the need to change their focus from ageing in institutions to AiP and the residential community, which is designated as the basic unit of urban social, political, and administrative organisation in China (Feng & Chen, 2019), began to take most of the responsibilities in regard to the AIP. Combined with the AIP centre, the construction of a community elder service station and care centre, along with the dissemination of a family-doctor system, constituted the main public policy mix for the older adults in Ningbo, and this has successfully alleviated the increasing pressures on the existing ageing institutions and main medical centres in this middle-aged city (Health Commission of Ningbo, 2021).

## Discussion

The case study of *Wangnong* has demonstrated that the practice of ageing care in the neighbourhood is a kind of interactive care model with a self-initiative. Instead of waiting for a policy decision, the care centre has assumed active responsibility for the old residents and mobilised the human resources available so that each older people group can overcome its daily challenges and lead a decent life. The interviews with the old residents have generally shown us that the aged people

of the Wangnong neighbourhood belong to an active ageing group. Anchored in their children's families, they are healthy and helpful. Raised in times of famine and political upheaval, they have led a dedicated, disciplined, and frugal life. With stable, guaranteed incomes from retirement or part-time jobs, they are not a burden on their family or neighbourhood; instead, they facilitate their families' daily lives and contribute to the neighbourhood.

Like Ms. F and Ms. D, they even take the children to school and accommodate domestic commitments. After years of being here, some have cultivated a strong sense of place and an intimate attachment to the neighbourhood. The reason that they can lead such a smooth routine life definitely has to do with the good access to the sophisticated infrastructure built by the city government. This also demonstrates that the geographical proximity of downtown commercial facilities plays an important role in their daily arrangements, even though the quality of the neighbourhood is deteriorating. Nevertheless, there are still aged people, like Mr. Z, who have complained about the shortage of elevators in the decades old buildings and limited connections with family doctors. Moreover, almost all of them are confronted with the digital divide, which further limits their ADLs and excludes them as a vulnerable group in the urban ageing society.

Throughout all of the interviews, few of the old residents mentioned the neighbourhood support from the urban government, nor did they speak of the public space, social gatherings, or community service centres (e.g., the service centre for the AIP) provided by the street office (except the riverside parks constructed by the municipal government). This suggests that the neighbourhood either neglects their personal interests or that the efficacy of the facility provisions needs to be improved. In other words, ageing is not only an economic issue but also a physical, social, and psychological concern, which requires network coordination as a whole to address the problems. To alleviate the physical handicaps and develop a holistic ageing model for the old groups, the findings advocate tapping into potential resources in terms of the interactive support and coordination of different stakeholders from family, neighbourhood, and government and further strengthening care awareness, encouraging the articulation of the older people and promoting the AFC at a neighbourhood level. In the end, the people residing in the neighbourhood play a large part in the success of age-friendly planning. Without their dedication and involvement, an age-friendly city would be nothing more than a mere promise (Hoof et al., 2021).

The case study has also revealed that the daily life of the old residents revolve around their families and that the traditional family still plays an essential role in ageing care. Supported by the family and the neighbourhood, the structural and interdependent life of the old residents have formed the AIP with Chinese characteristics. Overall, this model has ensured that older adults lead a decent, happy, and satisfied life with their families in the later stages of their lives. Considering China's rapid urbanisation and dramatic ageing trend, such a model could be a pragmatic and feasible practice. Nevertheless, the institutions for ageing still need to be more connected with the daily needs of the old residents, and the caregiving volunteers need to be trained and professionalised.

## Conclusion

With the rapid urban and demographic transformations, particularly with increases in the older population, China's old-age care services are facing a serious challenge. Fortunately, the long history of a family tradition of filial piety has greatly alleviated the heavy burdens on the state and the cities, especially concerning the AIP. However, there are many challenges, too, especially the one-child policy introduced in the 1980s that expired in 2016. As married single sons and daughters are the backbone of the "4–2-1" family structure (Li, 2021), one of the severe consequences is that they will face two pairs of parents to support and, most likely, be unable to provide effective services to them. This poses a big problem for those older adults who lack sufficient family care resources. So long as the institutional care is underdeveloped, the urban neighbourhood and the individual family will play a more important role in the AIP.

This study has integrated the daily schedules of older people's experiences of AIP into the urban structure in the Chinese context. The case study suggests that place matters regarding older people care at the neighbourhood level in the context of urban redevelopment, which further influences the neighbourhood's physical environment and shapes the old residents' daily behaviours. Therefore, a deep understanding of the places of ageing as well as older people's behaviours is critical to building the AFC (Lewis & Buffel, 2020). To achieve this goal, concerted cooperation between the family, the neighbourhood, and the urban municipality will be needed.

Compounded by the three-child policy launched in May 2021, the central committee of the Communist Party of China and the State Council jointly released a guideline in November 2021, which outlines a range of measures to meet the needs of the older people in a coordinated manner while tackling the issue of population ageing through joint efforts by the Party, government, and society, and to improve older people care services at home and through communities, to implement further its national strategy to address population ageing and boost the sense of fulfilment, happiness, and safety among the older adults (Xinhua, 2021). With positive measures, experimental practices, and explorations of the AFC, the fundamental dynamic of AIP in China and the way to cope with China's urban ageing will be revealed in the future.

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# 9 Ageing and gender

## An intersectional lens for inclusive city-building practices in the Global North and Global South

*Jenna Dutton, Mrudhula Koshy, and Chiara Tomaselli*

### Introduction

Discussing ageing without discussing gender is futile, and examining the intersections of gender and ageing without foregrounding race, class, sexuality, ability, and ethnicity risks making the complex interlocking dimensions of oppression invisible (Collins et al., 2021). To shed light on these intertwined disparities, in this chapter, we argue that intersectionality is an essential concept to navigate barriers in implementing gender mainstreaming approaches in urban planning and reframe the current restrictive agendas of gender mainstreaming approaches. Furthermore, when integrated with the ethics of care, we argue that the concept has the potential to facilitate the policymaking, planning, and design of age-friendly environments. The ethics of care aligns with contemporary feminist thought because it "reconceptualises traditional notions about the public and private" (Held, 2005, p. 12). This chapter adopts the notion that the ethics of care provide a basis for the transformation of society by demanding equal consideration for women and emphasising the values and moral significance of caring (ibid.). This simultaneously enables ageing in place while empathetically considering the needs of all ages and genders.

Global trends, such as an increase in life expectancy (Powell & Taylor, 2015), along with women typically having longer lifespans (Baum et al., 2021), are vital considerations for designing and adapting urban spaces for the ageing community. It is equally important to note that age-related consequences tend to disproportionately affect women, particularly in developmental contexts characterised by gender inequities, weak planning institutions, scarce resources, and chronic vulnerabilities. Studies have indicated that a more significant percentage of the ageing population in developmental contexts will be women, that is, 85 men for 100 women and that there are poorer, ageing women than men in such contexts (Powell, 2006). As Dhar (2019) stated, people in later life are not devoid of gender. Instead, as people age, the impact of age differs between men and women due to their status, perceived role, and the prevailing sociocultural norms in various contexts (ibid.). Frameworks such as the Global Age-Friendly Cities Guide (2007) have outlined several recommendations to achieve an age-friendly city under the umbrella concept of active ageing. This includes leveraging the capacities and resources of older people, bringing flexible solutions tailored to the different needs and preferences of

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people in later life while respecting their decisions and lifestyles, and protecting the most vulnerable while promoting inclusion (WHO, 2007). However, these frameworks do not explicitly consider all the contextual specificities or gender-related dimensions worldwide. For example, limitations in resources, existing chronic vulnerabilities, weak planning, and institutional mechanisms in Global South contexts mean that the needs of an ageing population are prioritised less by decision-makers (Chand, 2018; Ralston, 2018). As outlined below, using *intersectionality* as a theoretical lens to frame these intertwined dimensions of ageing in place could be useful for both urban planning practice and research.

## Theoretical foundation: intersectionality in relation to gender mainstreaming in cities

Intersectionality emerged in the 1990s as a field of study, as a concept, a theoretical lens, an interpretive framework, an analytical tool for engagement and relational thinking, and a form of critical inquiry and praxis to aid various sociocultural processes of inquiry (Collins, 1986; Collins et al., 2021). Scholars of intersectionality from various fields, such as critical race theory, political science, gender studies, and sociology, adopted the concept as a metaphor, heuristic and paradigm (Collins et al., 2021, p. 4) to examine how the influence of existing, top-down power relations, social conditions, and hierarchies impacts the lives of marginalised sections of the population. From an initial emphasis on the aspects of race, gender, and class, contemporary analysis and framing of intersectionality focuses on "commonalities across differences of race, gender, class, sexuality, age, nation, ability, and ethnicity" (Collins et al., 2021, p. 3). This expansion of intersectionality emerged from Black feminist epistemologies (Collins, 1986; Crenshaw, 1991), wherein the above "axes of difference" (Koleth & Temenos, 2021) are understood to be interdependent and mutually reinforcing. This, in turn, is understood to perpetuate the "interlocking nature of oppression" (Collins, 1986, p. 19) and chronic vulnerabilities as a result. Distinctions between structural and political intersectionality are made by Crenshaw (1991), wherein the former refers to inequalities experienced by people at various levels of society, and the latter refers to those inequalities resulting from non-neutral political strategies. From an urban planning perspective, this points to policies that are formulated for older people without adequately considering gender, disability, class, caste, ethnicity, or sexuality. In addition, limited research exists on ageing for transgender and gender nonconforming (TGNC) individuals and older people belonging to Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual (LGBTQIA+) communities (Henry et al., 2019). It is essential to acknowledge that "ageing can present a multitude of difficulties that people whose gender identity/expression matches what is socially expected based on sex may not have to face" (Witten, 2012 as cited in Henry et al., 2019). Although these disparities are prevalent globally, they are not often understood as resulting from structural and systemic gender inequity and risk invisibilising the interlocking dimensions of marginalisation and oppression (Collins, 1986).

From a gender studies perspective, intersectionality points to the need for

> a consensus that homogenising, essentialist, and exclusionary models of identity that falsely universalise relatively privileged experiences and identities to all "women," models that marginalise some (indeed, most) women while centring others, are unjust and inadequate to building truly emancipatory theories and political movements.
>
> (Carasthatis, 2016, p. 2)

Although gender mainstreaming has become a common approach in inclusive urban planning, it is employed at a macro-policy level. It often forms part of a top-down administrative process. In addition, current interpretations of gender mainstreaming approaches tend to be synonymous with the equity of women and often do not extend to people with nonbinary gender identities. Current theoretical perspectives on intersectionality are divisive regarding conceptualisations of gender as a separate category or whether it is better to embed it "within other social forms" (Roggeband & Verloo, 2007). In the urban planning domain, Horelli (2017) points out that there is a need to enable different ways of considering gender to broaden inclusive dimensions of planning and development.

In spite of the widespread use of intersectionality in social science analyses, scholars have raised critiques of intersectional analyses because of their predominant focus on gender-, race- and class-related narratives in the United States and Global North contexts (Falcón & Nash, 2015). In recent decades, it has been criticised for its ambiguous use as an open-ended buzzword and for lacking a coherent conceptual framework despite being heralded as the cutting edge of contemporary feminist theory (Davis, 2008). Limited interpretations of intersectionality regarding the consequences of colonialism and imperialism in Global South contexts (Patil, 2013) have also elicited calls for de-westernized and transnationalised forms of intersectional analyses. The emergence of practical notions of intersectionality is used to challenge existing hegemonies and social orders and has aided bottom-up, collective, participatory, and democratic ways of striving for social change and social justice (Collins, 2019). Scholars have attempted to combine the latter two trajectories of intersectional analyses to discuss how the aspects of gender, water access, chronic vulnerabilities, and citizenship are intertwined, particularly in complex developmental contexts in the Global South (Sultana, 2020).

Based on the above-mentioned theoretical trajectories, intersectionality is employed in this chapter as an analytical approach with an explicit focus on the intersections of gender and age. This intersection is considered helpful by the authors to examine the actionable presence of gender and age in policy discussions worldwide regarding inclusive urban spaces. Accordingly, the chapter addresses the following research question:

> *What are the potentials and limitations of intersectionality that could complement gender and ageing mainstreaming efforts in urban planning?*

We acknowledge that other dimensions of intersectionality are equally crucial for a holistic understanding, but this is less addressed within this chapter. Below, we highlight how this plays out on the policy level within global, national, and city-level frameworks that are formulated with the vision of achieving age-friendly spaces.

## General policy considerations policy for age-friendly cities

A range of policy approaches to enable age-friendly cities exist at various organisational and government levels. However, the implementation of these policies remains limited in the absence of localised capacities, resources, political will, and mandatory creation and adoption. The examples below showcase diverse policy approaches that attempt to make cities more age-friendly, in some cases explicitly including gender and intersectionality considerations.

### *Her City – UN-Habitat*

Launched in 2021 under "Her City" by tiontions Human Settlements Programme (UN-Habitat) and Global Utmaning, this collaboration stems from the Urban Girls movement established in 2017. The initiative focuses on amplifying the global involvement of girls to create cities that will work for "young women, and ultimately everyone" (UN-Habitat, 2021). The goal of the guide and associated toolbox is to allow planning and city-building professionals to mainstream youth and gender perspectives and to envision cities and communities that are "more inclusive, equal and sustainable" (ibid.). It also acknowledges that a "lack of knowledge in participatory urban planning and design, on a decision-making level," contributes "to widening the gender gap and to the marginalisation of vulnerable groups in urban development processes" (Harrouk, 2021). The document, however, does not mention age-friendly communities, older adults, or older women throughout. The singular reference to "elderly" in the document highlights the importance of a walkable radius when creating a base map (UN-Habitat & Global Utmaning, 2021, p. 31). This guide, in its second edition, was launched in June 2022 at the UN-Habitat World Urban Forum (UN-Habitat, 2022a). Despite the evolution of the document, which comprises 285 initiatives in 350 cities and 100 countries (UN-Habitat, 2022b), the focus remains on girls rather than women, without any mention of ageing considerations.

### *I'm a city changer with a gender toolkit – UN-Habitat*

UN-Habitat also launched a Gender Toolkit in 2016 as part of the World Urban Campaign and build-up to Habitat III. The document underlines "Gender Inclusion for Better Cities" and notes that "Equitable, inclusive and prosperous cities need to harness the potential of all citizens, irrespective of gender and age" (UN-Habitat, 2016, p. 9). While it acknowledges the gendered nature of human settlements and barriers to women's right to housing, there is no discussion on any other aspects of ageing.

***Handbook for gender-inclusive urban planning and design – World Bank***

This World Bank document, published in 2020, sets out approaches, activities, and design guidelines for implementing a participatory and inclusive design process that explores the city from the perspective of all citizens: women, men, and sexual and gender minorities (World Bank, 2020). It could be assumed that "women" potentially include older women. However, without explicit considerations of different stages of ageing, tools such as the above-mentioned fall short of facilitating inclusive city-building practices. Recent research has therefore recommended classifying the ageing population into three distinct age groups to recognise varying needs: younger seniors (65–74), mid-age seniors (75–84), and oldest seniors (85 and over) (Norris, 2021).

***A design guide for older women's housing***

This design guide, published by the XYX Gender Lab and Monash University in March 2022, focuses on outdoor spaces for connection. The research project responds to the high rate of homelessness among women aged 45 years and over in Australia and the importance of placing women at the centre of the design process to address women's health and well-being (Monash University, 2022). The findings were based on participatory research methods with individuals with lived experience, organisations, and expert panel sessions (Donnelly et al., 2022) and recommend the construction of quality, affordable housing for older women, and provide practitioners with best practice strategies (ibid., 2022). This design guide is one of the few resources explicitly acknowledging older women's housing needs and highlighting that "design that addresses the needs of older women has long-term benefits on their health, well-being, and outlook, dramatically increasing the investment's social value." (ibid, 2022).

These insights show that without broader systemic changes and shifts in global and national policy frameworks, changes in local city-building practices have limitations. This points to the challenges of ageing in place being neglected in gender mainstreaming discourses, suggesting it could be enriched through an intersectional approach.

## Policy, planning, and design

The following section highlights policy, planning, and design approaches in selected locations across the Global South and Global North.

*Canada*

In Canada, older people who desire to "age in place" in rural communities while remaining in their homes and wishing to stay active and engaged in their communities tend to face many barriers. In the 2007 guide for "Age-Friendly Rural and Remote Communities" conducted by the Canadian Federal/Provincial/Territorial Ministers Responsible for Seniors, an eight-page checklist indicates several

age-friendly features. Based on the information collected from focus groups all across Canada, these include clear sidewalks and trails, accessible public washrooms, grouped services and amenities, and accessible transportation for people with varying disabilities (PHAC-ASPC, 2006). These considerations are not dissimilar to concerns in more urban areas. However, there is less capacity to implement them in more rural contexts without a regional approach. Participatory research has also shown that a sense of community positively influences an age-friendly programme (McCrillis et al., 2021, p. 339). Studies also point out that, if implemented, age-friendly initiatives in rural areas are less sustainable due to the higher levels of volunteer burnout compounded with the complexity of population decline and limited fiscal resources (ibid., p. 337).

*France*

In May 2021, the Interministerial Report on the Adaptation of Housing, Cities, Mobility and Territories to the Ageing of the Population (Broussy, 2021) was published in France to update a previous 2013 report on the Adaptation of Society to Ageing. The report suggests 80 ideas for a new intergenerational pact, focusing on demographic transition beyond the usual social policy lens, and advocating for a transversal approach. The document brings an interministerial perspective, engaging the Ministry of Autonomy (in charge of public policies related to older people), the Ministry of Housing (in charge of public policies on housing), the Ministry of Territorial Cohesion (covering cities and territories), and the Minister Delegate for Gender Equality, Diversity, and Equal Opportunities. Being recent, it is unclear whether the report will result in transversal public policies. However, the intention of raising policymakers' awareness of the challenges of ageing and fostering age-friendly cities through a transversal and intersectional approach appears compelling. Among the propositions, the fifty-third addresses the challenges of "being a woman, old, alone and poor: a fight for feminist associations/Giving serious consideration regarding the condition of older women in 2021 in the City" (Broussy, 2021, p. 8). The author highlights that in the poorest neighbourhood of France – identified as "Quartier prioritaires de la Politique de la Ville," isolated households represent 36.7% (p. 116). However, half of the inhabitants of these households (56.1%) live alone, and half of them are over 60 years old (54%) (ibid.). Some feminist associations and researchers, including architects and urban planners, led the initiative *Le Printemps de l'Hiver* (2021) (The Spring of Winter) to reflect on the place of older women in the city. In spite of these initiatives, much remains to be done to bring a gender lens to the French "Age-friendly Cities" agenda. See Figure 9.1.

*Zoning*

Zoning is conventionally used as an instrument for master planning in many countries worldwide. To enable suitable living conditions for people in later life, zoning could be used to locate long-term care (LTC) homes near desirable amenities,

*Figure 9.1* An old woman walking with a crutch takes a break between two pedestrian crossings.

*Source:* Nathan Grisolet.

allowing for better ageing in place. However, zoning alone is not beneficial if it is unaccompanied by design elements that facilitate ease of movement and accessibility, connectivity to green spaces, and opportunities for social interaction. Examples of such design elements could include benches and shading within high-traffic routes for intermittent rest, wider sidewalks, and increased road crossing timings. Many of these elements also increase the general safety and well-being of not only older persons but also women. They are disproportionately less prevalent in communities with more racialised demographics (Song, 2015). These design interventions could be coupled with more detailed considerations on how different groups of women navigate the urban environment during different seasons and times of day to facilitate an intersectional approach to inclusive city-building practices. This could include providing public bathrooms that are accessible in multiple ways, through barrier-free design measures and better accessibility for those with varying gender identities who have historically been unable to use these facilities comfortably and safely. While public bathrooms are not a requirement solely for the older population, the call for intersectionality connects to broader social systems wherein accessible toilets are not available for the unhoused due to the infrastructure prioritised by those in positions of power (Ionescu, 2021).

Other attempts at holistic planning of cities include regulating zoning by prioritising mixed-use, walkable communities. While the concept of a 15-minute city (FMC) has grown rapidly in urbanist discourse during the global pandemic to

emphasise the need for hyper-local complete communities, it ignores the history of urban inequity (Sullivan, 2021). The FMC is characterised by most residents being able to fulfil their daily needs and activities within 15 minutes of walking or cycling (Pozoukidou & Chatziyiannaki, 2021). Despite this being an admirable goal, the target is less feasible in a North American context, and attempting to transplant its benefits directly from Europe could be considered "presumptive and colonial" (Ionescu, 2021). The FMC is also criticised as a minimalistic, ableist, and exclusionary view of the diversity of actors in urban space, particularly for those with a mobility disability (Zivarts, 2021). These perspectives highlight concerns regarding buzzword urbanism and the pitfalls of a simplistic approach that fails to recognise the importance of systemic thinking that includes context, history, ability and geography in an intersectional manner.

***Universal design and barrier-free housing***

An increase in the ageing population also means an increased demand for healthcare services and accommodations (Powell & Taylor, 2015) that need to adhere to universal and barrier-free design principles. Although there is a surge in the use of both these terms in planning discourse due to widespread consideration of equity, diversity, and inclusion, they are not integrated adequately in planning strategies. Universal Design is a "user-centred approach that considers the widest range of users by making a home easy to enter, move around in, adapt and anticipate changing needs over time" (Bringolf, 2010). Barrier-free housing is considered "housing which is accessible and adapted to the individual needs of a person with a disability" (Dunn, 1997).

While universal design includes barrier-free housing considerations, as highlighted by the National Disability Authority (NDA), it also involves designing beyond housing for a wider range of users regardless of their age, size, ability, or disability (NDA, 2020). Universal design is applicable at both the micro and macro levels. At the micro level, it could apply to a single design feature or product, and at the macro level, it encompasses the product, services, and associated environments (ibid., 2020). For example, this means designing a picnic table that is wheelchair-friendly. From a systems' perspective, it could mean designing a fully accessible public space. However, this does not mean that innovative designs alone can facilitate a transition to truly inclusive cities. As pointed out by Lezlie Lowe, these piecemeal interventions should be accompanied by a continuous "post-mortem" on public spaces so that planning processes ensure inclusive accessibility needs (Evergreen, 2021) at all scales and levels.

Several discussions persist, however, around what constitutes an accessible public space (Poldma et al., 2014). Going beyond the notion of physical accessibility, it is necessary to design for people who are hearing or vision impaired and those with disabilities that are not immediately apparent. People with a loss of vision tend to, for example, perceive shadows as a change in gradation. In such instances, surfaces designed to be "wheelchair accessible" through patterning on

the sidewalks or cracks in the sidewalk could pose a tripping hazard if they are not designed to be visually accessible.

One of the implementable drawbacks of barrier-free housing is that there are limited mandates for universal design principles for private property. For example, public areas of multifamily buildings must be fully accessible, but the individual units are often not required to adhere to these standards. Furthermore, these requirements do not apply to detached or other lower-density housing types. This could be perceived as an issue of enforcement, wherein planners may be unwilling to stipulate more than the building code minimums. They may also not be knowledgeable enough about the code to propose changes early in the design and planning processes. Even when adapting existing housing to accommodate needed modifications, economic and regulatory barriers can prohibit any changes, such as the cost of an elevator or regulations prohibiting construction (Chippendale et al., 2010, p. 59).

***Access and connectivity***

Limited considerations of gender and intersectionality in cities mean that access to community amenities and social services, such as childcare and facilities specific to older people, including LTC, is prioritised less. These buildings and their associated services tend to be located in areas with limited accessibility and connectivity (Davidson, 2020). As there are typically no land use districts for older people-specific homes unless they are for LTC, this further limits their availability and affordability.

Furthermore, the standard American suburban-style large facility "nursing homes" tend to be located outside mixed-use, amenity-rich neighbourhoods (ibid.). This leads to increased isolation and often results in a dependency on haphazard, intermittent, and unsustainable transportation. For example, in the North American context, senior citizens are less likely to use public and active transportation. This is due to a lack of availability and service delivery, wherein government policies cannot keep up with the rate of ageing (Macaulay, 2021). Planners and decision-makers may routinely face challenges in pushing for the transition from driving, especially if it is voluntary (ibid.). Access also necessitates consideration beyond physical planning. Recent frameworks propose combining planning for physical design, participation of older people, and community service delivery (Walker et al., 2013) to facilitate better ageing in place.

This can be achieved through the redesign and adaptive reuse of existing care homes as part of mixed communities, thus reducing the environmental impacts of demolition and new development. In Copenhagen, an existing care home in a working-class community was redesigned to be an intergenerational community through the integration of 360 care homes, 150 youth homes (which include 20 homes for young people with autism spectrum disorder), 20 senior dwellings, a daycare institution, and various public programmes such as shops, cafés, workshop areas, and parking facilities (Overstreet, 2016). Though these types of homes are not often prioritised, they are a vital contribution to inclusive housing stock. To

encourage mixed-use, intergenerational communities, there is a need for a range of home sizes, home types, and more adaptable housing possibilities.

## An intersectional approach to ageing: case studies from the Global North and Global South

In this section, we highlight a few relevant case examples from the Global North and Global South to further the discussion on incorporating intersectionality in an actionable manner. A range of tools and design principles are needed to cater to the needs of the ageing population. However, intersectional equity considerations remain challenging if planning processes are limited to data collection and formulating high-level policy frameworks. Implementing age-friendly cities requires concrete and actionable steps. The following examples demonstrate attempts to incorporate an intersectional approach in their ideation, creation, and implementation of age-friendly cities.

### *Method*

By presenting case examples at various scales, we highlight the similarities and differences in implementing age-friendly planning. To showcase examples of cities from the Global North, we provide secondary street photographs highlighting inclusive city-building practices, or lack thereof, in Amsterdam, Copenhagen, Paris, and The Hague. We acknowledge that the chapter is limited because of the lack of pertinent photos from the Global South illustrating the same aspects.

### *Global North*

We differentiate between Global North and Global South contexts based on existing geographical, economic, and political distinctions. Countries in the Global South are perceived to have similarities because of common colonial and developmental trajectories. However, within the Global North and Global South, there are a vast array of different subjective experiences, ideological positions, and sociocultural norms (Alloo & Harcourt, 1997).

As witnessed during the 20th century in several Global North contexts, the ageing population presents many challenges to individuals, families, and societies, with implications for urban planning (Leeson, 2018). While these societies need to address the structural changes induced by an ageing population, they are simultaneously facing a concomitant urbanisation process. Nearly 70% of the population in high-income countries already lives in metropolitan areas (OECD/European Commission, 2020). While urbanisation can have many positive aspects for urban citizens, particularly regarding access to better education, health, and social services, these benefits must be equitably distributed among urban dwellers to ensure sustainable living (Leeson, 2018). Therefore, there is a need to assess policies and actions taken to improve living conditions for older people in urban

centres, also looking at particular subgroups of this population, namely women's experiences and needs.

### *City level*

For the city level, we showcase the examples of Vienna and Copenhagen, two cities that are well-known for their progressive integrated planning and design strategies that also incorporate age-friendly initiatives.

#### VIENNA

Vienna continues to be named one of the most liveable cities in the world. The city has focused on gender mainstreaming since the early 1990s (Bauer, 2009) before the approach gained prominence in existing urban planning discourses and city-building practices. The city has since focused on developing gender-friendly public spaces, housing programmes, and mobility services, as well as gender-oriented master plans and urban regeneration initiatives.

Gender mainstreaming comprehensive planning in Vienna emphasises the core values of balancing production-related building, that is, work-related and reproduction, which refers to unpaid activities associated with care and daily life (Horelli, 2017). We argue that this approach simplifies the nuances of the post-production and reproduction phases of women's lives – more specifically, what we could call the ageing phase. This highlights the need to adopt an intersectional approach to gender mainstreaming, embracing the particularities of women's life in older age to plan accordingly.

#### COPENHAGEN

In recent years, Copenhagen has undertaken co-design and participatory efforts to create age-friendly and inclusive public spaces, residential areas, and public transport in consultation with older people residing in the city (COurban, 2019). To address the housing needs of the older population, architects and designers in Copenhagen are exploring innovative ways of designing inclusive and accessible spaces. The Ørestad housing development in the city is conceived as a retirement home but with "flexible social spaces" and other amenities that are accessible to the general public. Since a majority of the residents at Ørestad are living with dementia, interiors and entrances to apartments are customised to enable a safe space for the residents (Graham, 2018). Regarding the dissemination of vital information for the older population, an open-source magazine named *Senior Citizen in Copenhagen* (KK Design, 2018) offers contact information and sources of local help for daily activities and services, professional nursing care, preventive house calls, and details of age-friendly recreational activities in the city.

The photographs below showcase some examples of age-friendly and inclusive urban areas in Copenhagen (see Figures 9.2a, 9.2b, 9.3a, 9.3b, 9.4a, 9.4b, 9.5a, and 9.5b).

*Figure 9.2a* Showing accessible crossing with space to pause.

*Figure 9.2b* Showing accessible crossing on a busy shopping street.
*Source:* Siddhartha Mukherjee.

*Figure 9.3a* Showing accessible crossing and signs for cyclists.

*Figure 9.3b* Shows signage for pedestrians across the bike paths.

*Source:* Siddhartha Mukherjee.


*Figure 9.4a* Shows an environment conducive to older people who prefer to bike, with separate bike paths.


*Figure 9.4b* Shows cyclists and wheelchair users sharing the same bike paths, conducive to a safe soft mobility infrastructure environment.

*Source:* Siddhartha Mukherjee.


*Figure 9.5a* Shows seating without backrests in a public space in Copenhagen, which is not appropriate for older people.

*Figure 9.5b* Shows stepped access in a public space that is not inclusive of people who are older and physically impaired.

*Source:* Siddhartha Mukherjee.

*National level*

For the national level, we showcase examples of policy, design, planning strategies, and local governance and community initiatives from the Netherlands, Canada, and Japan.

THE NETHERLANDS

The Netherlands is considered progressive in its attempts to incorporate aspects of active ageing on a policy, planning, and design level (van Hoof et al., 2020). For example, mobility studies point to encouraging and normalising cycling for older people in the Netherlands and adapting existing infrastructure to facilitate the same (den Hoed & Jarvis, 2021).

Amsterdam, the capital city of the Netherlands, became part of the World Health Organization (WHO) global network of age-friendly cities in 2015. The city government instituted a multidisciplinary team to look into the aspects of housing, social participation, social inclusion, civic participation and employment, communication and information, community support and health services, outdoor spaces and buildings, transportation, and financial situations that would benefit older people. A five-year action plan targeted issues of dementia, loneliness, and accommodation for older people, as well as "spatial strategies to enhance an age-friendly environment" (Interreg Europe, 2021). The photographs below highlight the urban infrastructure and street profiles in Amsterdam, some of which are adapted for inclusive accessibility and some that could be improved (see Figures 9.6, 9.7a, 9.7b, 9.8a, 9.8b. 9.9a, and 9.9b). However, these physical interventions are not intersectional or gender-specific per se.

*Figure 9.6* Showing accessible push buttons at traffic crossings.

*Source:* Siddhartha Mukherjee.


*Figure 9.7a* Showing long crosswalk length in relation to the timing of the traffic light.

*Figure 9.7b* Shows crosswalk lengths with space to pause in between.

*Source:* Siddhartha Mukherjee.

*Figure 9.8a* Showing rest spaces in public, however, without backrests, which may not be conducive for older people.

*Figure 9.8b* Shows rest spaces used by older people in public spaces; however, they could be adapted better to suit their needs with backrests as well as with more comfortable seating material.

*Source:* Siddhartha Mukherjee.

*Figure 9.9a* Showing accessible pathways in the museum square.

*Figure 9.9b* Shows accessible pathways with adequate textures, changes in material as well as signs for cyclists.

*Source:* Siddhartha Mukherjee.

The Hague, centrally located in the Randstad urban agglomeration in the Netherlands, is also part of the above-mentioned Global Network. In 2020, in a bid to understand the needs of the older people in the city, The Hague municipality prepared a questionnaire on the various aspects mentioned above, sampling a population that included "older Western and non-Western immigrants" to take into account the diversity of the city (WHO Global Network, 2021). A few dissemination activities on active ageing in The Hague include the publication of the magazine *Old Gold*, which contains articles on age-friendly cities around the world and life stories of inspiring older people. The age-friendly action plan of the municipality, which emphasises the improvement of vitality, reduction of loneliness, and encouraging and facilitating ageing in place, is visualised in an infographic. In addition, initiatives such as "Community against loneliness," "Diverse The Hague," "Dementia Community Centre," and "Cultural Canvas" promote values of "advocacy, community service, sports, welfare, health, education" (WHO Global Network, 2021) (see Figures 9.10a, 9.10b, 9.11a, 9.11b, 9.12a, and 9.12b).

The Hague is also now a partner in a project entitled *How age-friendly are our cities?* that is led by The Hague University of Applied Sciences. They are further developing a tool from their aforementioned public questionnaire work, with research partners in Poland and Romania, that will be more replicable across the 1,100 cities of the WHO global network. The collaborative research project will result in a reliable measuring tool for age-friendliness, and the work will provide

*Figure 9.10a* Showing seating with access for mobility scooters.

*Figure 9.10b* An older woman rests on the curb on her mobility scooter.
*Source:* Siddhartha Mukherjee.

*Figure 9.11a* Showing seating with backrests and under shady trees in an open park.

*Figure 9.11b* Showing seating in the city centre of The Hague that may not be conducive for older people.

*Source:* Siddhartha Mukherjee.

*Figure 9.12a* Show clear demarcation between tram lines, pedestrian waiting spaces, and tactile paving.

*Figure 9.12b* Showing a segment of tactile paving within the terminal building of The Hague central station.

*Source:* Siddhartha Mukherjee.

an "internationally useful basis for collecting relevant data on age-friendliness, which will allow municipalities to govern more adequately and based on evidence" (Dutton et al., 2022).

These initiatives collectively point to attempts at incorporating intersectionality into practice for active and healthy ageing for diverse communities of older people in the Netherlands.

### CANADA

In Canada, the term "age-friendly" is often used, and action plans have been adopted by over 500 municipalities since 2007 using guidelines set by the WHO. More recently, a Government of Canada report used the term "age in community" (Etchen, 2021, p. 15). The "senior's" group of 85 and over in Canada is expected to increase by over 42% in the next decade, and women account for two-thirds of this age bracket (Norris, 2021, p. 9). Over a third of this category live in retirement and nursing homes, and half of women tend to live alone (ibid.).

The Government of Canada has used an intersectional lens by creating a document in collaboration between Young Women's Christian Association (YWCA) Canada and the Institute for Gender and the Economy (GATE) at the University of Toronto entitled *A Feminist Economic Recovery for Canada*. However, the policy

measures introduced to address the economic, health, and social impacts of the COVID-19 pandemic have had "limited gender-based analysis . . . and little to no intersectional analysis, either in the design of the policies or in understanding their impacts" (Sultana & Ravanera, 2020, p. 3). Despite this essential resource, there is no mandate to integrate this focus into policy and processes at a provincial or municipal level. Until recently, its implementation at the provincial level depended on the ruling government, political priorities, and available financial resources. Recently, funding from the federal level was available to provinces to increase childcare spaces and facilitate universal daycare at $10 per day (Government of Canada, 2021). However, recognising the impact on the senior population and the care economy remains limited.

Importantly, when considering the well-being and homes of the ageing population, including LTC, most care workers are women. The majority of care workers are immigrant women from countries in Southeast Asia and Africa (Lightman, 2021) who fill low-paid positions. Recent research has emphasised that the perspectives and needs of care workers are marginalised, and there is an urgent need to consider the well-being of immigrant LTC workers (ibid.). As of May 2020, "over 80% of COVID-19 deaths in Canada had occurred in care homes, partly due to a lack of proper funding and support" (ibid., 2020, p. 7). Furthermore, Canada also had the highest reported national share of COVID-19 deaths for LTC residents in the world (Oxfam Canada, 2021, p. 19). While these details paint a picture of ageing in Canada occurring in a private context, they emphasise broader systemic issues regarding neglect and social isolation that are reflected in the interaction with public space and the ability to age in place. These alarming statistics emphasise the urgency of broadening the scope of planning practice to intentionally include empathy and care.

### JAPAN

As of 2010, Japan had the largest percentage of an older population, markedly different from 1950, when it had the youngest population (Fishman, 2010). Japan is well known for its high life expectancy and being the most age-friendly country in the Asian region (Trahutami & Patria, 2020). Regarding Age-friendly Cities, Japan is very active at both the local and national levels (OECD, 2015). Several cities have implemented action plans; more than 25 Japanese cities are officially part of an age-friendly city initiative (WHO, OECD), such as Toyama and Akita. The latter city is particularly well known for joining the WHO Global Network for Age-Friendly Cities and Communities in its early stages in 2011. It has since then worked on implementing two Action Plans (2013–2016 and 2017–2021) to promote older people's social participation (WHO, 2018). The city of Toyama chose to support its older population through compact city strategies to improve public service accessibility and hence promote the independence of people in later life (OECD, 2015).

At the national level, Japan has mainstreamed the consideration of ageing and demographic changes in national urban policies through Japan's Future Cities

Initiative, which emerged in 2010. This policy aims to foster age-friendly urban environments by mobilising a sustainable economic and social system (OECD, 2015). In this country, approximately 30% of the population is above 65, and women comprise the majority within this age group. Considering that 1 in 3 women is 65 or above (D'Ambrogio, 2020) and 92 % of Japanese are urban citizens (OECD, 2015), older women represent an important segment of the population in Japanese cities. In parallel, poverty is growing among older people, particularly older women (D'Ambrogio, 2020). Alongside the acknowledgement of a gender empowerment policy to improve the fertility rate in Japan, we argue that an intersectional lens could adequately address the transformation of Japanese society and its growing population of senior women in its urban population.

### *Global South*

While several reports exist on the declining birth rates and increasing life expectancy (Powell & Taylor, 2015) in countries in the Global North, there are limited similar studies on countries in the Global South, wherein the global reporting trends tend to focus on the increase in the overall population. However, studies point to the fact that developing countries are poised to see an escalation in the ageing population, approximately 140% between 2006 and 2030, compared to 51% in the more developed countries (Krug, 2002). In South-Asian countries such as India, these projections should be seen in the light of a decrease in intergenerational support because of the increase in nuclear family arrangements and less governmental priority on arrangements for older people (Chand, 2018). In several African countries, the traditional care systems and familial support are informal and cater to the ageing population through "kinship networks and mutual aid societies" (Powell & Taylor, 2015). However, these ad hoc arrangements are overwhelmed by current socio-economic changes (OECD, 2007), such as women's increased migration from rural to urban areas and a proliferation of female-headed households in urban areas (Chant, 2013). These trends perpetuate the burden placed on women as caregivers, particularly in low-income communities, who are most often expected to tend to older persons in their families devoid of compensation.

#### *China*

Qiqihar, a city in northeast China, became a member of the Global Age-Friendly Network in 2011. Initiatives in the city included a seniors' month and the traditional Chinese seniors' day, wherein networks of "organisations, enterprises and individuals" that provide services to older people congregate (WHO, n.d.). Other efforts include facilitating "information platforms for home-based care" and emphasising the values of culture and spirituality for older people (ibid.).

As part of the 14th Five-Year Plan (2021–2025), the Ageing Health Department, anchored in the National Health Commission in China, plans to facilitate the creation of 5,000 age-friendly communities nationwide (China Global Television Network/CGTN, 2020). This also acknowledges that current digital interventions

in cities may exclude older people and that the digital divide needs to be addressed (ibid.). Studies from Chinese cities have indicated that strengthening social, health, and service infrastructure contributes to an age-friendly environment (Mui, 2014). Other suggestions include reducing fences and compounds and creating a network of soft mobility options to shorten walking distances (Rau, 2021). Infills with low- and mid-rise buildings hosting residential, community, and local shopping facilities among the high-rise buildings were other suggestions to enable age-friendly cities underpinned by notions of healthy cities, social cohesion, and well-being (ibid.). There is, however, a less explicit mention of facets of intersectionality that could potentially influence the above-said interventions in a more inclusive manner. Nonetheless, projects such as addressing the digital divide can easily become intersectional if they acknowledge the need to bridge the gender divide (OECD, 2019).

*India*

In India, urban planning think tanks and decision-makers acknowledge the need to make cities inclusive and accessible for all. The "Urban and Regional Development Plan Formulation and Implementation (URDPFI) Guidelines," steered by the Ministry of Urban Development, focus on key macro-level strategic aspects. Last updated in 2015, these include "inclusive planning, sustainable habitat, land use, and transport integration" and "disaster management concepts and governance reforms" (Ghosh, 2021). However, these territorial measures are less focused on universal design principles (ibid.) that can accommodate people's daily, tangible needs in later life. To address this shortcoming, in 2019, the National Institute of Urban Affairs (NIUA) formulated BASIIC (Build Accessible, Safe and Inclusive Indian Cities), aiming to facilitate and implement design principles that enable cities to become age-, gender- and disabled-friendly. While intersectionality is not mentioned as a key aspect in the various policy documents (e.g. NIUA (a), (n.d.)), the framing of the policies and guidelines showcase an awareness of the actionable aspects of the concept in relation to gender mainstreaming.

An addendum to BASIIC published after the COVID-19 pandemic also highlights the need to accommodate the needs of people in later life in the event of emergency response (NIUA (b), n.d.). Some of the intersectional measures mentioned in this document include the participation of civil societies in developing inclusive recovery plans, strengthening family, community, and local support services, "safety nets" for better care, information access, awareness, and sensitisation to special needs.

Despite these policy developments, implementation faces several challenges. This is because of existing sociocultural factors such as class, caste, and ethnicity and the perception of differences regarding these, which perpetuates inequalities. In addition, patriarchal societal norms accord preferential treatment to men, leading to systemic marginalisation of issues central to women's well-being, safety,

and security. This also means that poorer, ageing women from marginalised tribal communities or those considered to be from lower castes do not benefit adequately from macro-level inclusive policy agendas.

*Argentina*

Demographic ageing in Argentina is more pronounced in the big cities of the provinces and the wealthiest regions of the country (Redondo & Gascón, 2016, p. 154), similar to other Latin American countries. The country has a high proportion of people aged over 65 living in urban centres: in 2010, 92.3% of the people of this demographic lived in urban areas (Redondo & Gascón, 2016, p. 153). Due to these population trends, research was carried out as part of the implementation of the Age-Friendly Cities Project by a non-profit academic organisation called Universidad ISALUD, looking at three cities of different sizes: La Plata, the city of Resistencia, and the city of Lezame (ibid., p. 155). Despite the range of city sizes, the interviews conducted in all the cities had recurring themes. Notably, across all three cities, insufficient urban infrastructure limited the social integration of older people. This included broken footpaths, parks in need of maintenance, the absence of public restrooms and suitable benches, and complaints regarding public transport (ibid., p. 162). La Plata was the only city that executed a plan for improvements using a participative planning approach that gathered momentum in 2009 (ibid., p. 166). In 2013, a report listed an extensive number of improvements implemented across the city that included age-friendly parks, public toilets, public transit improvements, including discounts for retired persons, lighting improvements, and repairs to footpaths (ibid., p. 167).

As the capital and largest city in Argentina, the city of Buenos Aires also has the highest ageing population in the country. Therefore, the city's government formalised the Secretary of Integration of the Older People to promote social inclusion and healthy and active ageing (WHO, 2017). The city has many programmes for older adults, including the Active Ageing Program, Digital Inclusion Program, Older People Household Project, and Protection Program (Buenos Aires Ciudad, 2022). The main goal of the secretary is to make the city more age-friendly and promote the eight domains of livability of the WHO, including respecting older people (ibid., 2017).

Although gender is not specifically mentioned in these initiatives in Argentina, the focus on community participation and social inclusion allows for more intersectional considerations. In highlighting the Age-Friendly Cities project in the three initial cities, Nélida Redondo and Silvia Gascón (2016) conclude by speaking to the pressing need to strengthen bottom-up processes to obtain the commitment of governments to include requests from the older population, the importance of flexible planning techniques and pragmatic approaches to increase capacity, and the critical role of volunteer organisations run by older people in enhancing needs being met while guaranteeing project continuity (p. 170).

**Discussion and conclusion**

In this chapter, we explored the theoretical notions of intersectionality in relation to gender and ageing. Based on empirical findings from Global North and Global South contexts, we argue that de-westernised and transnationalised forms of intersectional practice and analyses allow for more age-friendly and inclusive built environments. This also includes a need for transnational feminist praxis through academic research and policymaking as an ongoing iterative process to critique existing epistemologies, methodologies, and practices (Koleth & Temenos, 2021, p. 8). In addition, there is a need to bolster gender-sensitive approaches and spatial development focused on care and collective community well-being.

Gender mainstreaming has served as a foundational approach and strategy for inclusive city-building practices and has enabled decision-makers to consider the implications of urban policies and decisions that explicitly consider gender-based needs. However, as observed in some of the case studies above, the approach tends to be encompassed in top-down planning approaches that inhibit public understanding regarding its actionable potential and perceived local relevance. Engendering urban planning was theoretically formulated by Horelli (2017) as a more progressive approach to adequately consider gender in urban planning. It is defined as an "application of a set of gender, age and culture-sensitive concepts, visions, strategies and practices in the different scales, phases, and arenas of the planning and development cycle" (ibid. p. 1782). This is echoed by others as a need for a shift from "masculinist or patriarchal epistemological structures" (Koleth & Temenos, 2021).

Gender mainstreaming toolkits, guidelines, and resources such as those formulated by the UN-Habitat are effective in facilitating transformation in the urban environment. However, their scope appears to be limited due to their focus mainly on the needs of women and girls. To achieve gender- and age-friendly cities in an actionable sense, there is a need for an intersectional descriptive lens wherein policies could focus on multifaceted identities, gender, and age categories beyond that of girls and young women. We argue that several current initiatives are limited by failing to properly consider ageing. A shift in approach could potentially ensure a multifaceted consideration of the complexity involved, and also result in more intersectional and contextual ways to consider gender diversity and ageing in urban planning. Planning could use progressive zoning to include a broader variety of built forms adapted to older people's needs and catering to their physical, mental, and emotional health. Ageing-in-place considerations are also crucially needed for populations that are historically limited from living in certain areas through restrictive and exclusionary zoning.

Several cities in Europe, such as Amsterdam, Utrecht, and Copenhagen, as well as cities in China such as Beijing, Shanghai, and Tianjin are collating discussions of healthy cities with age-friendly cities as the two concepts are interdependent and mutually beneficial. However, in several rapidly expanding cities in the Global

South, a lack of quality green spaces, open parks and soft mobility options, scarce resources, air pollution, and less political will to address the above make it challenging to physically implement notions of healthy cities. Planning with ageing in mind could therefore benefit from a systemic understanding that goes beyond older people-friendly fitness equipment in parks, haphazard place-making, and small-scale interventions. In addition, we argue that transformations that are intersectional in nature require longer-term considerations through policy as well as shifts in processes and participatory governance.

To answer the research question, we first explicate some of the opportunities that the concept of intersectionality presents to the ageing-in-place discussion. We argue that intersectionality offers a useful conceptual and analytical lens to understand the gaps and limitations in existing gender mainstreaming policies and city-building practices. As explicated in this chapter, intersectionality as a theory and inquiry process continuously evolves with valuable contributions towards planning research. We, therefore, concur with the arguments made in other similar studies that there is a need for critical scholarship that focuses more on the socio-economic and gender-based inequalities faced by the ageing population in the Global South (Powell & Taylor, 2015). In addition, critical scholarship has to explicitly address the intertwined nature of gender and age along with other aspects of oppression due to class, caste, ethnicity, and ability, and the marginalisation and chronic vulnerabilities that result from this in developmental contexts.

There also appears to be a vast disconnect between initiatives and policy approaches on gender mainstreaming and intersectionality and those focused on ageing. Whether at a global, regional, or local scale, there is a tendency for gender to rarely be a key consideration in the advancement of age. In practice, while many local governments and organisations are starting to emphasise more on equity, diversity, and inclusion on a policy level, there is limited incorporation of intersectional analysis. This is exacerbated by limited research on ageing for transgender, gender nonconforming, and older people belonging to LGBTQIA+ communities. Without adequately engaging with and advocating for the ageing population from a diverse demographic, planning will continue to assume the needs of older people without a deep and contextual understanding of specific intersectional priorities. Local governments could make more efforts to showcase diversity in communication and disseminate age-friendly actions to cater to the needs and aspirations of older people from marginalised or migrant communities. Public policies at the national level also have a role to play in bridging this gap by mainstreaming intersectional-oriented planning. As explicated by Leslie Kern in *care-full* planning, "putting care at the start of the list of questions we ask about what and how to plan, rather than as an afterthought or no thought at all, is necessary for achieving equity across gender, race, class, age, and disability" (Kern, 2021, p. 46). We conclude by arguing that an intersectional approach can enable a nuanced understanding of the experiences and identities of women and all genders that are vital to consider in conjunction with age-based needs.

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# Part 3

# Materialisation of ageing in place

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# 10 Materialisation of ageing and urban planning

*Thaís Debli Libardoni and Matthias Drilling*

## Introduction

The understanding of the ageing process is constantly evolving. This search for more pertinent and contemporary concepts and practices follows the needs of an increasingly complex society (Ascher, 2010) and is never exhaustive. Theoretical and critical discussions that relate to planning and ageing contribute to the deepening of important issues and significant advances in the search for societies better prepared to deal with the changing age profile of the population.

The World Health Organization (WHO) has brought ageing closer to urban planning with the Age-Friendly Cities Guide (World Health Organization, 2007), which is commonly used as a parameter by planners. However, concepts that claim uniqueness inevitably lead to a narrowing in understanding both the factors involved in the ageing process and the urban qualities and characteristics that affect the way in which older citizens relate to cities. Among them are cultural and regional aspects, which require a sensitive approach and endogenous actions. The WHO has an important leading role in pointing the way forward, but one of the questions guiding this chapter is whether the organisational framework would be sensitive enough to these issues. After all, is ageing a topic amenable to universal recommendations?

Planning for ageing has proven to be a much more complex process and of a strongly interdisciplinary nature. Moreover, many of these theories and concepts presented so far have not always been easily transformed into reality by planners because these approaches are not directed at planning in their origin. This distance leads to stagnation in the evolution of responses to existing problems. In the end, practice repeats outdated solutions in a continuous and ineffective cycle. The need for interpretation also brings issues inherent to each culture, occurring with peculiarities around the world. Here, we use "culture" not in a normative way but as a technique of a given society that develops along the dimensions of space and time.

Bridging theory and practice is the transformative idea of this chapter. It presents examples that have been constructed and/or conceptualised on different scales and under different cultural frameworks. The guiding idea of this chapter is to describe samples by the criterion of "innovation," that is, contrasting approaches to solving

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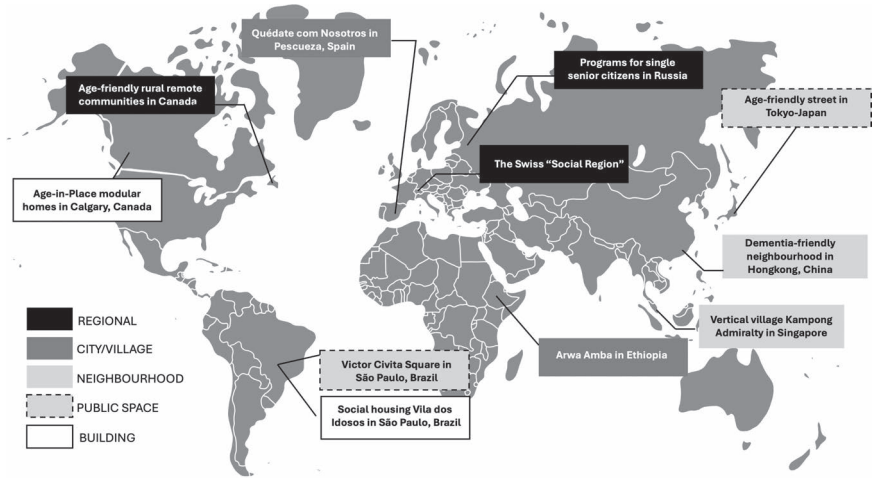



*Figure 10.1* Materialisation of ageing and urban planning around the world.

*Source:* By authors, 2021, with territorial delimitations based on Al MacDonald https://en.wikipedia.org/wiki/File:World_map_-_low_resolution.svg.

real problems. We are addressing five scales that are important for planning: regional, city/village, neighbourhood, public space, and building (Figure 10.1).

The presented solutions are based on the most contemporary conceptions within their themes and represent different countries and continents. We came to the conclusion that interdisciplinary insights built on backgrounds from different parts of the world are extremely desirable. Training in architecture, urban design, and spatial planning, as well as in social work and community development, combined with a cultural background from both the Global North and the Global South, has helped us in our search for the most innovative projects in the "in-between" of theory and practice.

This chapter proposes to cover possibilities in a wide range of realities to give planning practitioners insights through concrete ideas that have "built" ageing environments in a way that is sensitive to the needs and desires of older citizens. For this reason, the construction of this chapter has had a gradual maturation process, occurring through our own experiences and field trips during the last few years, with an eye for innovation. The methodology followed included exploratory research in books, scientific articles, and the internet. After relevant projects and case studies were identified, their authors and creators were contacted in order to have access to the necessary material for a more complete analysis. The subsequent return to the scientific literature contributed to strengthening the critical view of the examples. Thus, it is worth noting that this chapter does not stop at standardising the examples; rather, the presentation of each idea occurs according to its scale, from extensive regional maps to details and building elements.

## Regional scale and the challenge of integrating social and territorial actions

One of the great challenges related to planning for ageing is keeping older citizens integrated into the community, the family, and all the support networks that can help make the ageing process healthy and enjoyable. Isolation risks physical and psychological well-being and limits access to basic daily needs.

It is no coincidence that the first two examples are located in the two largest countries in terms of territorial extent in the world, Russia and Canada. The two examples address isolation in different ways. In Russia, the loneliness of single seniors has become the central theme of social programmes of family rearrangement and cohabitation, both at the regional and district levels. In Canada, with the vastness of its territory, there are often great distances between its urban centres and its small remote communities. This distance is not only geographical but also reflected in totally different urban realities and lifestyles that have contrasting demands on planners. The peculiar condition led to the study of these particularities for the implementation of a specific action plan that has contributed to the creation of small, age-friendly centralities in remote areas. The regional part of the chapter ends in Switzerland. Although it has a much more modest territorial dimension than the first two countries, this country has made progress in combating another type of isolation, the one related to the actions between its various regions. Switzerland is betting on an innovative solution to coordinate social and spatial planning. The idea is to promote integrated actions focused on the needs of social regions, which are made up of several municipalities, optimising responses to population ageing.

## Programmes for single senior citizens in Russia: foster families and cohabitation for ageing in place

The ageing process can lead to vulnerabilities that increase social risks. Older adults are especially at risk for loneliness and social isolation because they are more likely to face factors "such as living alone, the loss of family or friends, chronic illness, and sensory impairments" (National Academies of Sciences, Engineering, and Medicine, 2020). On the other hand, the State and the family are the two pillars of support to guarantee embeddedness for older people, assuming responsibilities and legal duties when they can no longer do so (Golubeva & Khabarova, 2019). However, for various reasons, older adults do not always reach old age and do not participate either in a family nucleus or in a community. In Russia, the "Strategy of Actions in the Interests of the Citizens of the Older Generation in the Russian Federation until 2025" pointed out a trend of family devaluation and aggravation of loneliness (Government of the Russian Federation, 2016). In the country, innovative regional actions seek to provide ageing in place with the support and integration of single senior citizens.

Since 2010, the foster family programme has established a community-based social innovation (CBSI) in several Russian regions. Each region has its own law,

respecting differences in financing and sociocultural conditions. Older people may move into the foster family's home or continue living in their own home, receiving visits (Ghiga & Golubeva, 2018). The goal is to create integration through a family environment, promote mental rehabilitation, and provide social assistance, especially in remote areas with no urban infrastructure support. For example, the law "On foster families for older people and disabled people in Arkhangelsk oblast" has implemented 148 foster families in the region since 2012 as social protection for single older persons and people with self-care disabilities. A study with these families pointed out the desire of 90.3%–95.7% of the respondents to remain in their communities during ageing (Golubeva & Khabarova, 2019). However, monitoring and staff training are necessary to effectively respond to the particularities of adaptation in each case (Ghiga & Golubeva, 2018).

In St. Petersburg, the second-largest Russian city, there was also a demand for solutions for single older persons. The "creation of special residential buildings for single senior citizens in St. Petersburg" programme (St. Petersburg, 2000) provided for the reconstruction of 5 buildings and the construction of 14 new ones to prevent loneliness through cohabitation (St. Petersburg, 2004). Currently, there are 20 buildings in 15 districts and 1,290 specially equipped apartments to accommodate over 1,500 single Petersburgers, including war veterans (Figures 10.2 and 10.3).

An important feature that is found both in buildings that have been reconstructed and those that have been fully constructed (Figure 10.4) is their integration into the consolidated urban fabric. This integration allows easy access to transportation networks, health services, green areas, and other amenities.

Older people in St. Petersburg live in a peculiar situation since this age group consists mainly of war survivors, most of whom were children at the time, and war veterans. These millions of people lived in a socialist society, which generally offered free medical care, education, leisure, etc. With the rise of capitalism, many of these social securities disappeared or were drastically reduced (Stroyev et al., 2010). In this way, more than housing, this programme provides residents with a range of social welfare services (Lipich & Azarina, 2012) and medical assistance when needed and offers the opportunity for single senior citizens to live side by side, preventing loneliness, promoting positive emotional experiences, and increasing their sense of self-esteem and self-confidence. Cohabitation is an alternative when it is welcomed by the resident. Moreover, due to the territorial reach of the programme, it is seen as an opportunity to improve the living conditions of older adults without them having to move away from the district where they have spent their entire lives (St. Petersburg, 2021).

Residents have a lease, paying independently for housing, utilities, and telephone. A special feature of this programme is that apartments are not subject to privatisation, exchange, subletting, or renting (St. Petersburg, 2021). Older people can receive a one- or two-bedroom apartment either permanently, under the condition that they transfer their former home to the city, or temporarily, using social housing as an alternative to a vacation home (Boldysheva, 2013). When applicable, the difference in cost between the two properties is returned as payment to the beneficiary (Lipich & Azarina, 2012).

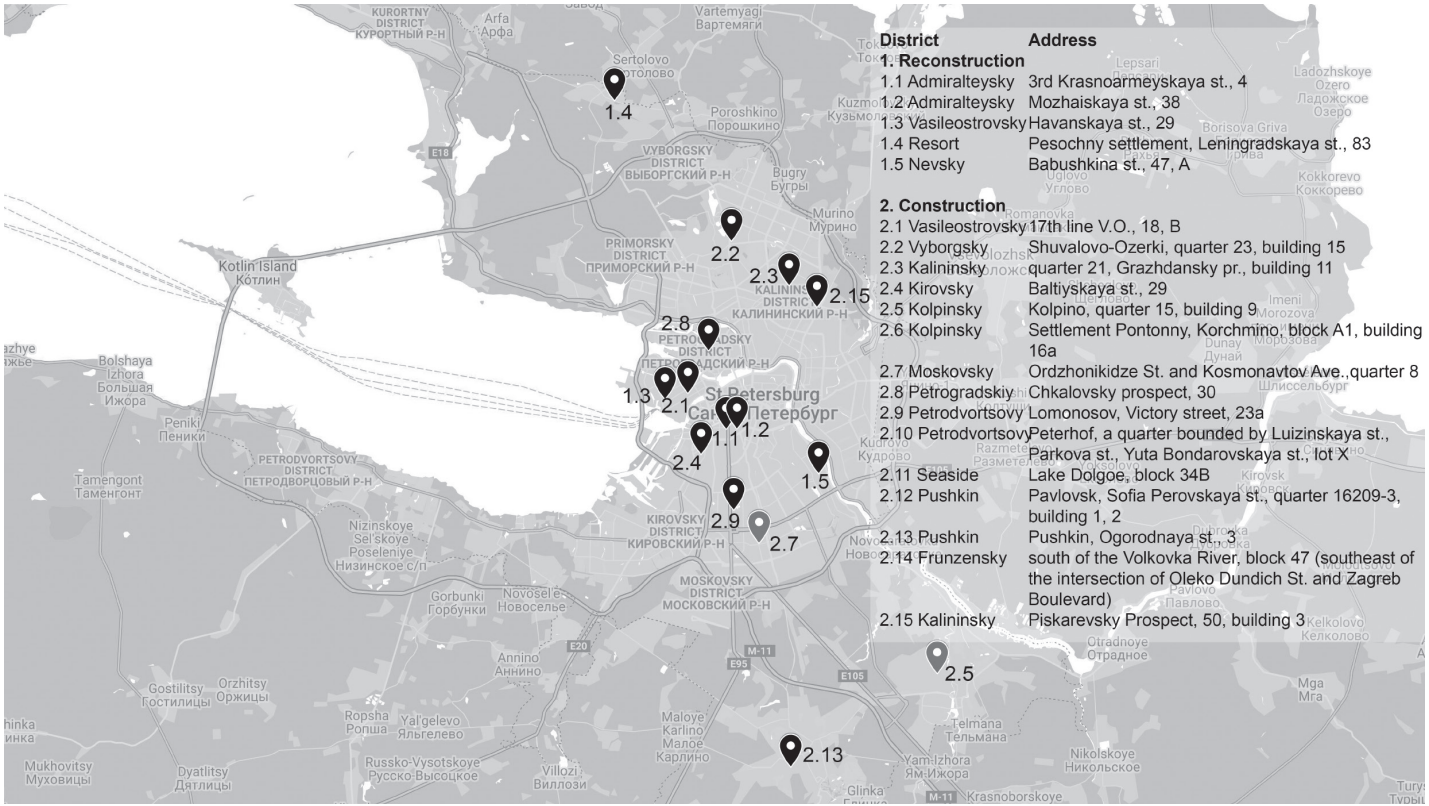



*Figure 10.2* Location of some special residential buildings (St. Petersburg, 2000).

*Source:* Google Maps, 2021, with additions by the authors.

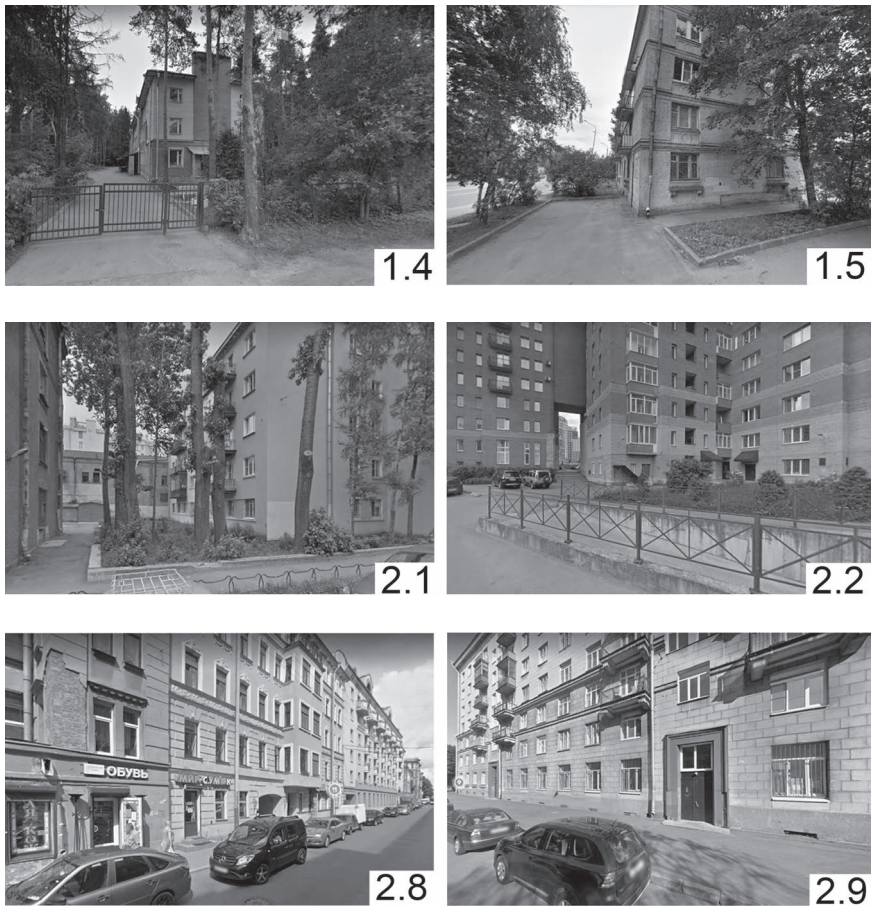
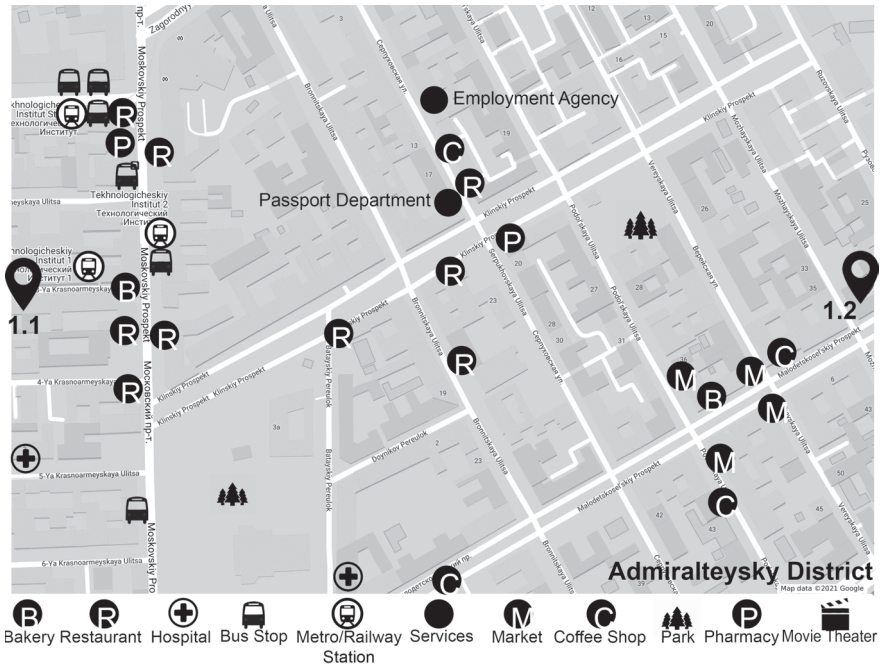



*Figure 10.3* Special residential buildings.

*Source:* Google Earth, 2021, with additions by the authors.

In the Kalininsky district, more than 500,000 inhabitants live, most of whom are retired. In this district, a special residential building was built for single older adults, which opened its doors to residents in 2014. The residential complex has 76 one-bedroom apartments, of which eight apartments on the second floor are equipped for wheelchair users, taking accessibility standards into account (St. Petersburg, 2021). In addition, there are eight free apartments, and the decision on their occupancy is made by the district committee (Administration of St. Petersburg, 2021) (Figure 10.5).

Up to 80 people can live in the building: single men over 60 and women over 55, or pensioners with disabled children. The building has elevators for those with physical disabilities, and the layout of the apartments takes into account the age peculiarities of the residents. The bathrooms are specially equipped, and the



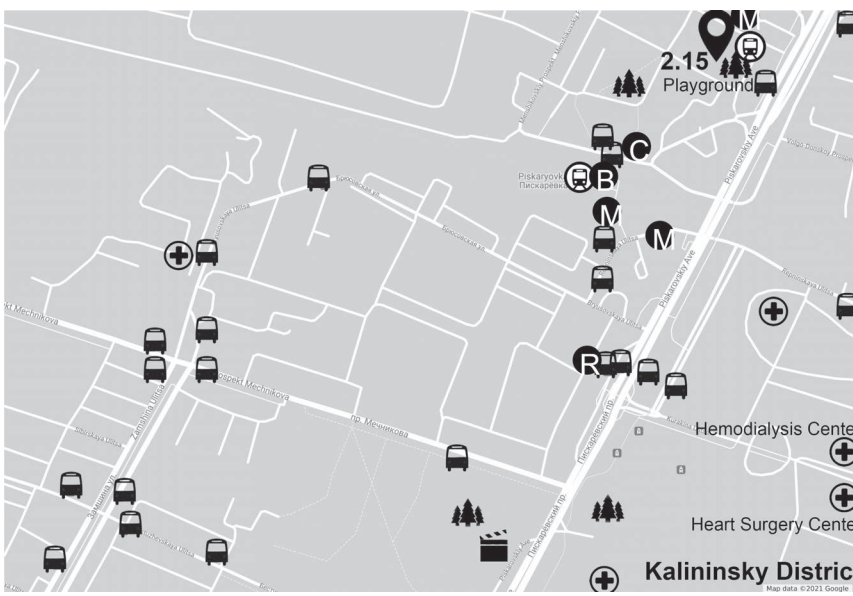




*Figure 10.4* Location of buildings 1.1 and 1.2, reconstructed in the Admiralteysky District (above), and building 2.15, constructed in the Kalininsky District (below).

*Source:* Google Maps, 2021, with additions by the authors.

*Figure 10.5* The residential building for single senior citizens under construction in the Kalininsky district, next to a playground, is furnished with equipment that enables intergenerational gathering.

*Source:* Google Earth, 2012.

thresholds and doors are compatible with wheelchair users. There is a common music and hobby room (Boldysheva, 2013).

On the first floor of the building is the Complex Center for Social Services for the Kalininsky District population, which serves citizens living in a special residential building. Specialists in social work, psychologists, and legal advisors conduct the residents' reception. They provide services in these fields and organise leisure activities. Each of the apartments has a direct connection with the control panel, which is operated by social workers. Moreover, the healthcare of the residents is one of the priorities. In the complex, there is a so-called Health Kiosk, where doctors introduce them to a healthy way of life, both with regard to physical activity and diet (Boldysheva, 2013).

The need for this service was proven by its success: in 2013, there was a waiting list in the district of over 300 people who wanted to live in housing like this (Boldysheva, 2013).

## Age-friendly rural, remote communities in Canada: ageing where no city exists

When it comes to making cities friendly to older adults, the problems of large urban centres quickly come to mind. Still, some characteristics of rural and remote communities are important for the quality of life of their older population. This is relevant in countries with large territorial extensions, such as Canada, where many rural communities are geographically isolated from larger centres, have

transportation difficulties, face budget constraints, have a low population density, which reduces investments, face harsh climates, have low economic productivity, and have scarce health and social services (Keating et al., 2013).

Seeking to bridge this gap between global guidance and specific needs, in 2006, the Federal, Provincial, and Territorial Ministers Responsible for Seniors in Canada endorsed the Age-Friendly Rural/Remote Communities Initiative (AFRRCI). The result was a guide using the same method as the WHO Global Age-Friendly Cities, but it focused on populations under 5,000. In the beginning, ten communities in eight provinces participated (Canada, 2006), and among them, Clarenville is one of those that has been most active in adapting to the ageing population (Figure 10.6).

All communities followed criteria related to population size (5,000 or less), ageing population experiences, degree of remoteness (proximity to a city), economic structure (agricultural, resource-based, tourism/recreation), and ethnocultural diversity (Canada, 2006). Thus, by qualifying these communities and making them age-friendly, small centralities are created in remote areas, catering to older adults not only from these towns but also from the surrounding areas. In this case, there is influence at the regional level.

The AFRRCI identified problems peculiar to small communities, such as lack of sidewalks; trails and walking paths without sufficient rest areas (benches) and restrooms; seasonal conditions that impact walkability and "scooterability," requiring snow clearing; lack of intergenerational and indoor activities for periods of poor weather conditions; and lack of lighting in some trails.

As for transportation, the initiative observed an interesting phenomenon: many older adults drive their own cars. Unlike city dwellers, older adults living in remote areas are much less likely to have access to public or alternative transportation. Thus, there is concern about their future and about losing their independence by giving up their license (Canada, 2006).

Population ageing and rural out-migration are occurring across Canada. Still, they are most significant in Newfoundland and Labrador (NL), where there is both out-migration – younger workers moving away – and in-migration – older adults returning to their homeland for retirement. Data suggests that this province will have the largest proportion of older persons in Canada by 2036 (Parke et al., 2012).

In this province, Clarenville stands out for some initiatives. In 2016, the town's population was 6.291; of these, 17.5% were adults aged 65 and older, and 2.5% were adults aged 85 and older (Statistics Canada, 2016). This small town has created an age-friendly centrality, concentrating facilities that include a regional hospital and long-term care centre, a seniors' village, and an Age-Friendly Park. All of these facilities are located in an area with walking access to the shopping mall, pharmacies, doctors' offices, and nature trails (Figure 10.7).

Its regional influence is evident in the services provided by the Regional Hospital to 32,000 people within the local and surrounding areas. The hospital has a 44-bed long-term care facility. Moreover, the town has three personal care homes (The Town of Clarenville, 2020).

The "Clarenville Seniors Village," described as a lifestyle village for adults, has been built since 2020. The complex, which will occupy 50 acres of land, foresees a


*Figure 10.6* Participating communities.

*Source:* Google Maps, 2023, with additions by the authors.

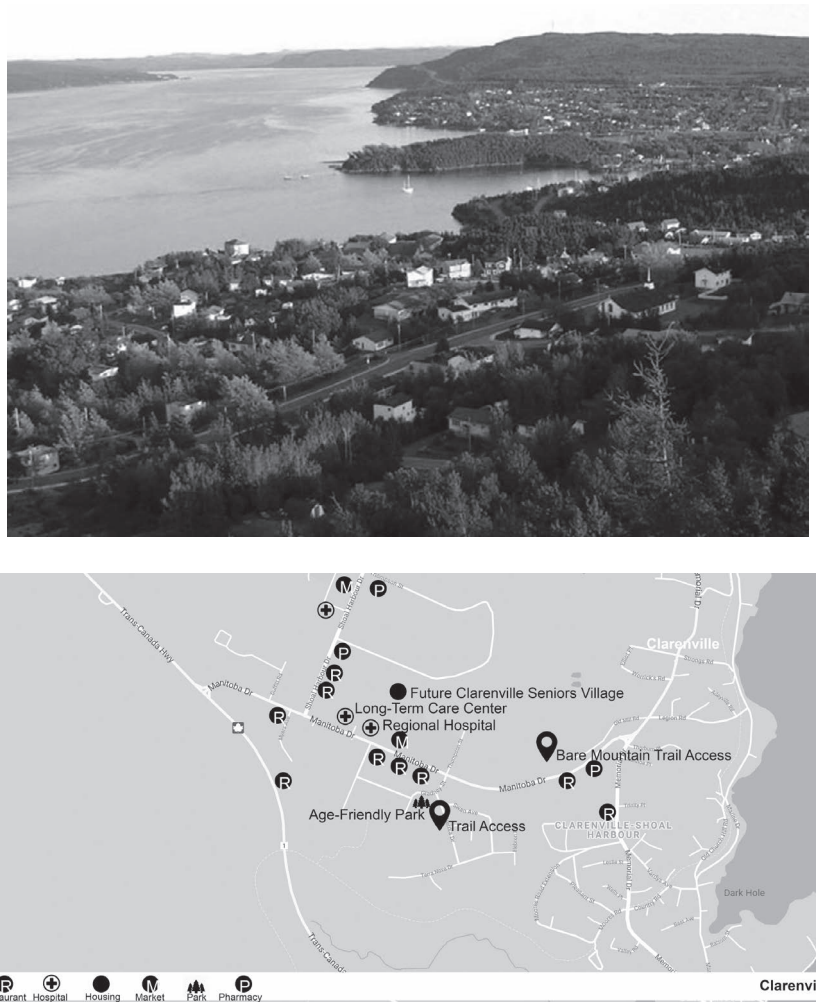



*Figure 10.7* Clarenville.

*Source:* Random Age-Friendly, 2021 (above) and Google Earth, 2023, with additions by the authors (below).

community centre with a bingo hall, games room, woodworking shop, and art room (Dean-Simmons, 2020), activities normally present in rural everyday life. With a proposal for affordable housing, the rent will start at $700 monthly, generating a waiting list of 300 potential renters (Squibb, 2018).

Living in rural areas does not always mean access to adequate outdoor recreation for older adults. Providing accessibility to green areas with safe paths and benches for resting is essential for safety and comfort. With this proposal of accessibility and community cohesion, the Age-Friendly Park was opened in 2014 (Saltwire, 2014) (Figure 10.8).


*Figure 10.8* Age-Friendly Park being implemented.
*Source:* Random Age-Friendly (2021).

The park is wheelchair accessible, has safe walking trails, benches, green spaces, a gazebo, tobogganing hill, horseshoe pad, fire pit, and a flourishing 33-bed community garden, which is operated by a community committee to provide the population with the opportunity to plant vegetables. The aim is to encourage social participation and physical and intergenerational activities. The park is also home to many community-based events, like outdoor bingo and musical performances (HelpSeeker, 2020) (Figure 10.9).

*Figure 10.9* Community garden.
*Source:* Random Age-Friendly (2021).

From AFRRCI emerged the Random Age-Friendly Communities (RAFC) Board, which was empowered by the town to carry out the assessment and help develop a framework of age-friendly practices. RAFC has officially been an organisation since 2007, aiming to create an age-friendly community and promote the principles of Healthy Ageing in the surrounding areas. RAFC produced a Health and Wellness Guide, provided Information Sessions (legal, health, insurance, elder abuse, financial, safe driving, home safety, electrical conservation, medications, etc.) to over 600 participants, offered free computer classes to seniors in the region (9 years, 17 classes, 239 seniors completed), developed a website (randomagefriendly.com), provided the local newspaper (The Packet) with a biweekly article about the organisation's happenings, provided an Annual Seniors' Information Fair (7th Fair drew 204 participants, 42 vendors), and established GATHER (Generating Awareness through Healthy Eating and Recreation) in 2008, a drop-in programme for adults 50+ years old. GATHER operates two days per week, and activities include an exercise routine, volunteer work, gardening, educational sessions, and recreational activities (Reid, 2020). RAFC continuously promotes trips and opportunities for socialising and physical activity outdoors, taking advantage of the region's natural landscapes (Random Age-Friendly, 2021) (Figures 10.10 and 10.11).

RAFC offers Clarenville Region Extended Seniors' Transportation (CREST) for individuals aged 60+ or those over 25 and confined to a wheelchair (Random Age-Friendly, 2021). The service covers an area with a 20-kilometre radius centred in Clarenville and reaches 12 communities. Initially operated with four routes, it was later changed to client pickup and excursions (Reid, 2020). This service is run solely by volunteers and has maintained over 80 volunteers (Drivers, Assistants,


*Figure 10.10* Outdoor activities.

*Source:* Random Age-Friendly (2021).

*Figure 10.11* Activities offered by the organisation: hikes on local trails (above), computer classes (next page), and the Annual Seniors' Fair.

*Source:* Random Age-Friendly (2021).

*Figure 10.11* (Continued)


*Figure 10.12* CREST – Clarenville Region Extended Seniors' Transportation.
*Source:* Random Age-Friendly (2021).

and Booking) since its inception in 2014. It has proven to be essential for seniors with mobility issues. CREST operates a 16-passenger/8-wheelchair bus Monday through Friday between 8:00 a.m. and 4:00 p.m. A cash fare of US$2 per person or bus pass of US$20 for 11 rides can be purchased. According to The Packet (Clarenville) (2020), the service is the only one of its kind in that province and, until January 2020, served approximately 12,996 riders, and 41% of those riders use mobility devices (Figure 10.12).

CREST is so successful that RAFC provided strategies to implement a similar service in other communities, such as Nelson (British Columbia/BC), Stephenville, Burin, Summerford, Grand Falls-Windsor & Placentia (NL) (Reid, 2020).

### The Swiss "social region": linking spatial and social planning

In Switzerland, the proportion of over-64-year-olds in the total population will rise to around 45% in 2050. Due to the likewise increasing life expectancy, the most significant increase is forecast for people over 80. This will result in a substantial increase in the number of people needing care. At the same time, a differentiation of lifestyles is taking place, and among them is a significant number of older adults who wish to maintain a high degree of independence into old age.

In order to provide autonomy for older adults wherever they wish to live, an effective support network is needed throughout a country's territory. However,

on a macro scale, the lack of balance is a major problem (Calthrope & Fulton, 2001). Not all municipalities have the same kind of infrastructure available. As the resources and the demands are different, coordination and integration of actions on a regional level may be necessary in order to optimise the results.

The "social region" is a structure in Switzerland that attempts to coordinate social planning and spatial planning tasks (Figure 10.13). After all, ensuring that

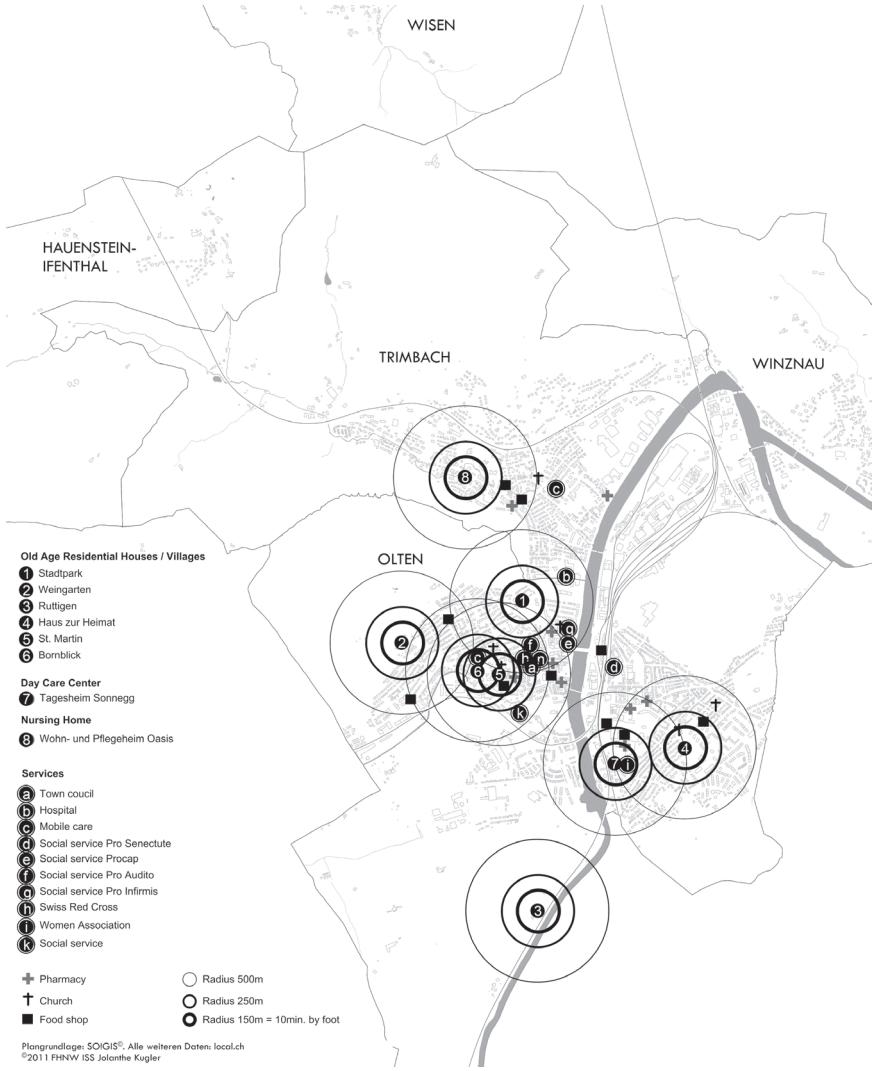



*Figure 10.13* The Social Region "Solothurn" is an example of the link between social and spatial planning.

*Source:* Kugler and Drilling (2012).

older people can lead self-determined, socially integrated lives in old age for as long as possible means looking beyond a single municipality to assess the need for nursing homes and adequate housing, including the conversion of existing apartments and homes into housing suitable for people in later life.

Several municipalities are joined together in the social region, which jointly performs the planning and financial tasks for this purpose. The objective of the social region's idea is to convince municipalities that they do not necessarily need to build new older adults' residential homes because there might be enough places in neighbouring municipalities. In this way, the social region supports the principle of spatial planning to use land resources as sustainably as possible.

Such principles are anchored in old-age guidelines developed by the social regions as part of "regional contracts." The "Solothurn social region," for example, defines five "pillars of old-age policy" that are intended to promote the preservation of independence for as long as possible: timely prevention, outpatient services, new forms of housing, progressive concepts of care for people in later life, and increased networking of services with an integral, holistic approach to old-age policy that is capable of adapting to changing requirements.

For fragile people, there are specific estimations of how many persons/beds with special treatment are necessary in the whole region (see Table 10.1). Those estimations function as a kind of "Masterplan" when they offer (1) scenarios of housing over a period of around 30 years and (2) a regional perspective for an older society in each municipality.

In most Swiss municipalities, housing in old age is interpreted as a regional task due to this networking. Transport routes and supply options (e.g., the 10-minute neighbourhoods) are always included in the planning. In this way, "regional housing" for people in later life influences architecture: new projects are developed with the population, as cooperative projects or multi-generation houses are more likely to be built.

This can be illustrated by the example of the "Leimental region." Projects for older people are visualised on a website in order to help older people analyse alternatives and choose among existing options. At the same time, municipalities find in these collections the basis of which offers are missing and can focus their own planning accordingly (Figure 10.14).

*Table 10.1* Forecasting the number of beds for fragile people in older age as a basis for spatial planning and architecture.

| *Social region* | *Nb of 80+ in 2020* | *Nb of beds in 2010* | *Nb of beds 2012* | *Beds forecast* | *Total* | *Nb of beds needed in 2020* | *Balance* |
|---|---|---|---|---|---|---|---|
| **Sub region 1** | 7'934 | 1'270 | 1'227 | 161 | 1'388 | 1'456 | −68 |
| **Subregion 2** | 6'596 | 1'061 | 1'059 | 49 | 1'108 | 1'211 | −103 |
| **Subregion 3** | 1'816 | 296 | 314 | 0 | 314 | 333 | −19 |
| **Total** | 16'346 | 2'627 | 2'600 | 210 | 2'810 | 3'000 | −190 |

*Source:* https://so.ch/fileadmin/internet/regierungsrat/vla/pdf/2013/Pflegheimpl.pdf; own explanations added.

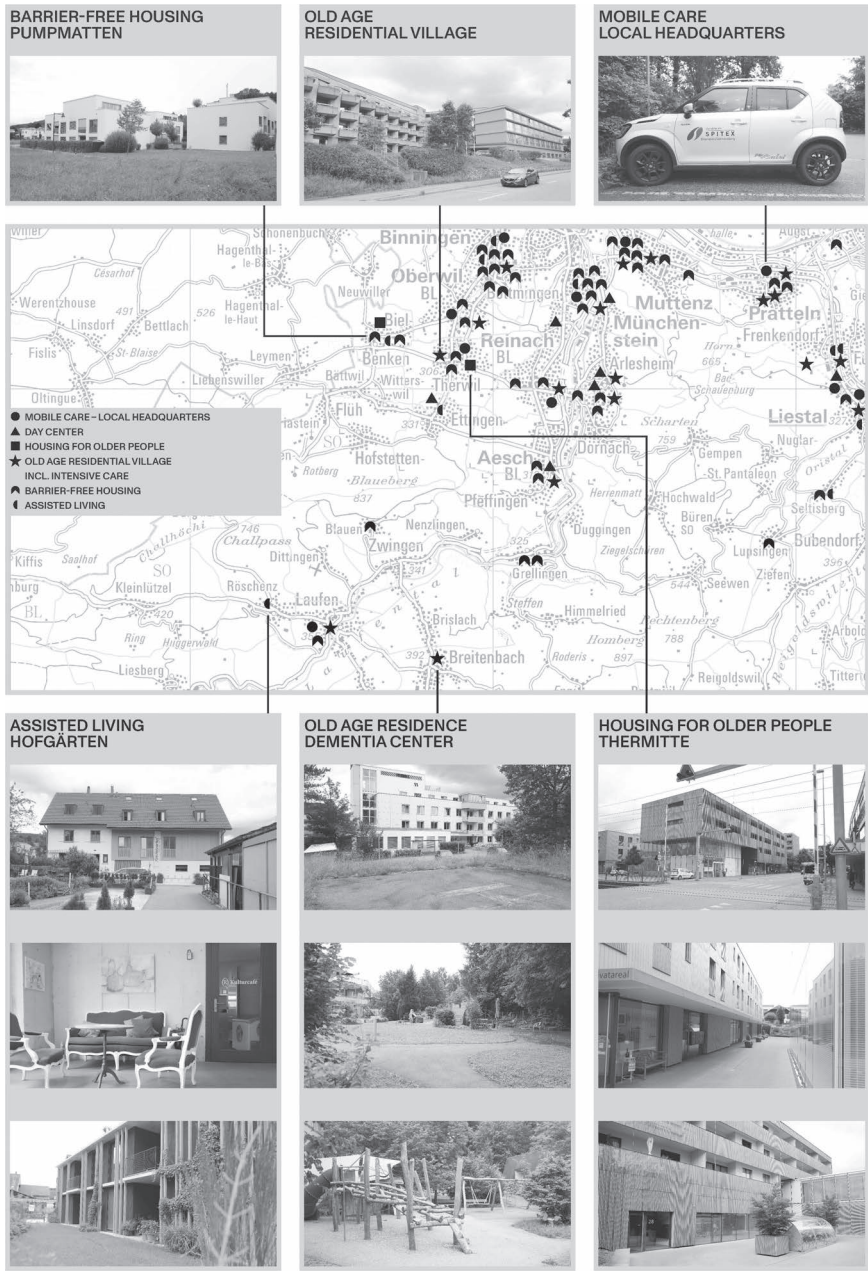



*Figure 10.14* Mapping and planning different services together in a social region.
*Source:* Matthias Drilling (2021).

Based on the regional approach, the social regions formulate targets and standards that are to apply in all participating municipalities. In the "field of action housing," these are:

- The place of residence should be centrally located and offer the possibility of shopping and close access to medical services and public transport.
- In the context of the need for care, the integration of people suffering from dementia into neighbourhoods or villages must be strengthened so that these people can be cared for in their own homes for a long time.
- Housing estates and flats for older people are basically forms of independent living that are not to be counted as long-term care. However, building regulations must ensure that small flats are not "soullessly" strung together and piled up in the smallest of spaces. Retirement flats are not simply smaller flats but must contain a good infrastructure suitable for the disabled and older people, including the surroundings.
- In the future, retirement flats should be increasingly equipped with technical and electronic assistance aids and combined with external "services" that enable accompanied and assisted living.
- Central components of accompanied and assisted living are Barrier-free flats in combination with a residential complex (retirement village, housing cooperative); communal facilities, such as a library, cafe, care bathroom, and washing and drying facilities.
- Instead of "all-around care" as offered in a retirement home, only as much help should be provided as necessary in each case. People in later life should be able to decide for themselves when they want to request care assistance and should not be given the feeling that it is an "institution" forcing help on them. Private and independent living should be maintained, even if older people need a greater degree of assistance.
- A special form of assisted living is the stay of older persons with a special life situation or problem (age, disability) in a host family.
- Daycare centres can support the need of the current and future older population to live at home for as long as possible in various ways: Relief is provided to relatives who take over care and nursing at home, and the danger of being overtaxed is reduced.
- Day centres offer older people with few social contacts the opportunity to break out of their own four walls, make social contacts, and experience new things. The varied offer in a day centre with activities of daily living, handicraft, mental, motor, musical, and social activities promotes physical and mental strength maintenance.

## City and village scale: planning for ageing in a framework of sustainability

With the phenomenon of population ageing occurring worldwide, there is an urgency to maintain the sustainability of the communities and all the systems that sustain them. Examples from two villages located in Spain and Ethiopia illustrate

two different realities that have addressed care for people in later life as one of the main pillars for maintaining the sustainability of their communities. In Spain, the decision to adapt the small community of Pescueza with the facilities of a senior village was the right choice in the face of a severe ageing population scenario, along with rural exodus. The unusual decision caused the small village to gain notoriety and prominence in the international press. In Ethiopia, the intentional community of Awra Amba brings an asset-based community development practice approach to community-driven sustainable development. Within this premise, the community is involved as a whole in caring for and respecting actions for older people and unable-to-work citizens.

### Quédate com Nosotros in Pescueza, Spain: deciding to become a seniors village

The flow of young people out of rural areas and the desire of older adults to be able to remain in their communities after retirement have produced both extreme depopulation of remote communities and significant ageing of their populations. This scenario has posed a serious challenge to generational renewal and the sustainability of rural regions (Gómez-Ullate et al., 2020). Moreover, it constitutes a complicating factor for implementing the strategies proposed by the WHO in its Age-Friendly Cities Guide since it focuses on large urban centres, which usually undergo gradual processes of population ageing, disregarding the specificities of cities with more severe cases.

In this sense, the local governments of these communities need to act on two main fronts, promoting the attractiveness of these areas to ensure their sustainability and adapting to the new social, economic, urban, and basic service offer demands imposed by demographic changes.

In the region of Extremadura, Spain, efforts have produced cases of good practices such as festivals that, betting on cultural tourism, have a positive impact on the cities where they are organised. Even if they do not make the population grow, they can act: avoiding business closure and migration; empowering social networks and the community; fostering public-private collaborations; and building on placemark (Gómez-Ullate et al., 2020).

Pescueza (Figure 10.15) is a small village in Extremadura, where, according to the *Instituto Nacional de Estadística* – INE (2022) (National Statistics Institute), in January 2022, only 125 inhabitants lived (71 women and 54 men). There, older adults represent more than two-thirds of the population (British Broadcasting Corporation/BBC News, 2019), shaping a critical case of population ageing.

Pescueza has struggled to attract other generations and promote tourism without success for years. The idea arose to "adapt the community to its residents" (Forero, 2016). The initiative for the programme *Quédate con Nosotr@s* (Stay with Us) came about in a lecture on rural exodus during "El Festivalino," an event that features theatre, workshops with elders, and concerts (Viejo, 2019).

The approach of former mayor José Vicente Granado and the current president of the *Amigos de Pescueza* Association, Constancio Rodríguez, was to approach the Age-Friendly Cities of WHO in terms of concept, but not in form, using this


*Figure 10.15* Pescueza, Province of Cáceres, Spain.
*Source:* Google Earth, 2023.

reference adapted for the rural environment. Today, the programme aims to provide the tools necessary for residents who want to remain in their village throughout their lives, with access to the necessary care and an infrastructure that takes into account the potential physical limitations that may arise with the ageing process (Figure 10.16).

The innovative factor of this concept is related to taking advantage of a community with reduced territorial extension and few residents to create a more controlled situation of accessibility and care.

However, while the latter requires seniors to move out of their homes and communities, this programme seeks to encourage seniors to age in place by fostering belonging and providing adequate support. Thus, for the success of the project objectives, Rodríguez (2020) understands that it is necessary to strengthen the community image as a mechanism to create a collective identity. Besides, living in an adapted community minimally interferes with the perception of freedom and normal life and makes professional care and living together gentler and more humanised. Internationally, it has been considered that the solution practically transformed the small community into a senior village.

The year 2009 marks the starting point of *Quédate con Nosotr@s*. One of its premises is to be a living project, changing its response to each need as the neighbours' demands change over time (Loro, 2021). This situation of proximity and knowledge in the neighbourhood promoted by the small village is indispensable to achieving this goal.

The initiative started with home care and a day centre from Monday to Friday, but the service was extended to weekends and holidays as requested by the community (Figure 10.17).

*Figure 10.16* View of Pescueza.
*Source: Asociación Amigos de Pescueza* (2021).

*Figure 10.17* Day center.
*Source: Asociación Amigos de Pescueza* (2021).

*Figure 10.17* (Continued)


*Figure 10.18* Bingo at the day centre.
*Source: Asociación Amigos de Pescueza* (2021).

The Center has two bathrooms per gender, a geriatric bathroom, laundry, linen, cleaning service, and a rehabilitation and therapy room. Seniors can enjoy a living room connected to the service kitchen, a TV room, and free spaces (El Periódico Extremadura, 2011). Rodriguez states that "the centre is somewhat the heart of the people of the city" (Loro, 2021) (Figure 10.18).

The centre has a capacity for 24 people during the day, operating from 9:00 a.m. to 9:00 p.m. (Viejo, 2019). When some neighbours began to need permanent care, two rooms were installed for four people to spend the night, constituting a residential centre (Figure 10.19). Currently, three more rooms are being built. The goal is to have ten rooms to meet the current demand.

*Figure 10.19* Residential support at the day centre.
*Source: Asociación Amigos de Pescueza* (2021).

Although the distances in the village are short, facilitating mobility for older adults was one of the main requirements. The absence of sidewalks meant that the flow of pedestrians and motor vehicles mixed together. Thus, a slower and safer route was demarcated with paint in the places most frequented by older adults, allowing unobstructed access, especially for walker users (Loro, 2021). This is an inventive solution for remote and historical sites where the lack of sidewalks is common (Figure 10.20). Moreover, handrails were installed along the public space so that those with mobility impairments could walk safely (Figure 10.21).

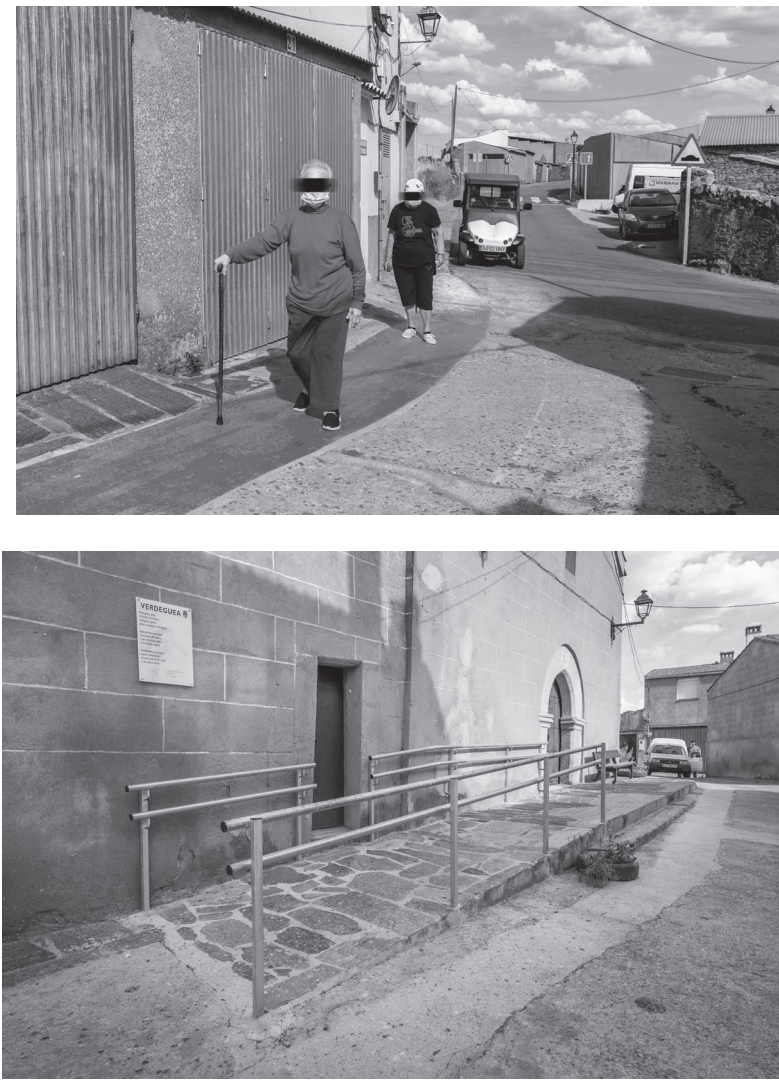



*Figure 10.20* Safe route (above) and handrails at the church access (below).
*Source: Asociación Amigos de Pescueza* (2021).

*Figure 10.21* Handrails along the public space.
*Source: Asociación Amigos de Pescueza* (2021).


*Figure 10.22* Vehicles for transporting older adults.
*Source: Asociación Amigos de Pescueza* (2021).

*Figure 10.22* (Continued)

These types of interventions are not often seen in large expanses of public space, usually occurring in private or indoor settings. Also, to facilitate mobility, the city provides an electric car to take older adults to the day centre, church, medical appointments, etc. In addition, an adapted van transports people with reduced mobility or in wheelchairs (Loro, 2021) (Figure 10.22).

The project also provides for some measures in the homes of the residents. For their safety, some cameras and alarms warn if someone has an accident and needs help (Rubio, 2018).

This action at different levels of accessibility allowed the programme *Quédate con Nosotr@s* to win one of the prizes awarded annually by the Technical Office of Universal Accessibility of Extremadura (OTAEX) (Rubio, 2018). In addition to the positive impacts on older adults, ten jobs have been generated, eight of which are permanent. These jobs have motivated young people to stay in Pescueza, as they have found the possibility of financial stability in the city (Loro, 2021).

In an evaluation in the context of the COVID-19 pandemic, Atochero et al. (2021) considered that Pescueza is an alternative model to nursing homes with better levels of user satisfaction. In addition, the solution stands out in times of health alert, proving itself to be a safer environment than conventional models.

**Awra Amba in Ethiopia: ageing in a socialist utopia**

There are many proposals for planning on how to deal with ageing in urban areas. Rural areas and small towns, on the other hand, are largely terra incognita.

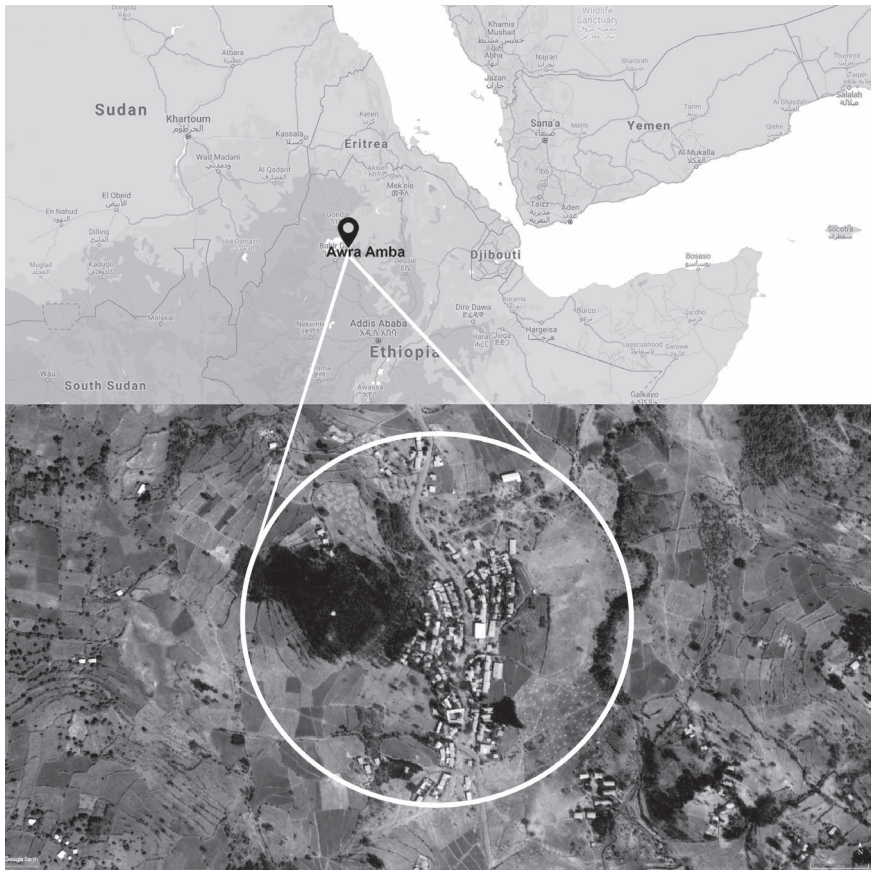



*Figure 10.23* Awra Amba in Ethiopia.

*Source:* Google Maps, 2023, with additions by the authors.

Especially where building projects are not possible, or traditional structures are not to be destroyed by modern approaches, examples are rare. Here, the village of Awra Amba in northwestern Ethiopia can offer innovative ideas (Figure 10.23).

Mengesha et al. (2015) call the innovation "asset-based community development practice." By this, they mean that planning builds on existing practices that have shaped community life for many decades and intervenes as little as possible. Community-driven development characterises rural Ethiopia (Figure 10.24). Member-led inclusive institutions "were organised around sociocultural values related to social control, reciprocated assistance, divine gratification, and conflict resolution" (ibid., p. 164). Accordingly, "self-help, felt needs, and participation" are at the forefront of local development.

Awra Amba is also an ideal type because the village committed itself to its own "constitution of moral principles" in 1972 and has practised it ever since (Atnafu Gete, 2005, p. 69ff.). Mutual respect, regardless of gender or age, plays a central

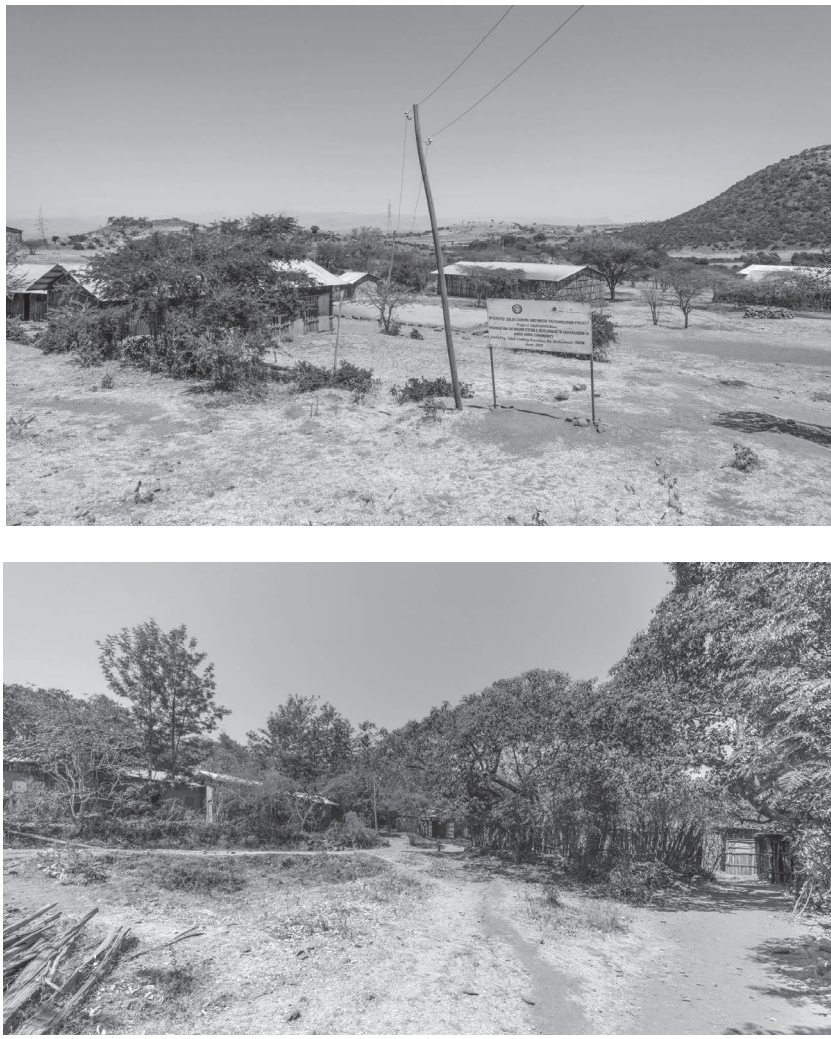


*Figure 10.24* Territory of the community.

*Source:* ©Alexander Savin, WikiCommons (2018) https://commons.wikimedia.org/wiki/File:ET_Amhara_asv2018-02_img132_Awra_Amba.jpg

https://commons.wikimedia.org/wiki/File:ET_Amhara_asv2018-02_img121_Awra_Amba.jpg

role. In concrete terms, this means that community members spend one day a week with the village's older adults, helping them with their daily chores or taking care of them when they are sick (Joumard, 2012, p. 40).

For almost all specific tasks, the village community of about 450 people has established committees. For old age issues, there is "the elderly care committee" as well as the "patient care committee" (Atnafu Gete, 2005, p. 115). It was also

decided that older people should be accommodated in a separate building, especially if they are in poor health (Figure 10.25). They continue to be cared for by all residents with food, bathing, and activities. All medical services are free of charge, and all villagers pay a regular "older persons fee" (Joumard, 2012, p. 58). Attac (2014) describes the extent to which village planning has responded to the need with solutions that are as sustainable as possible:

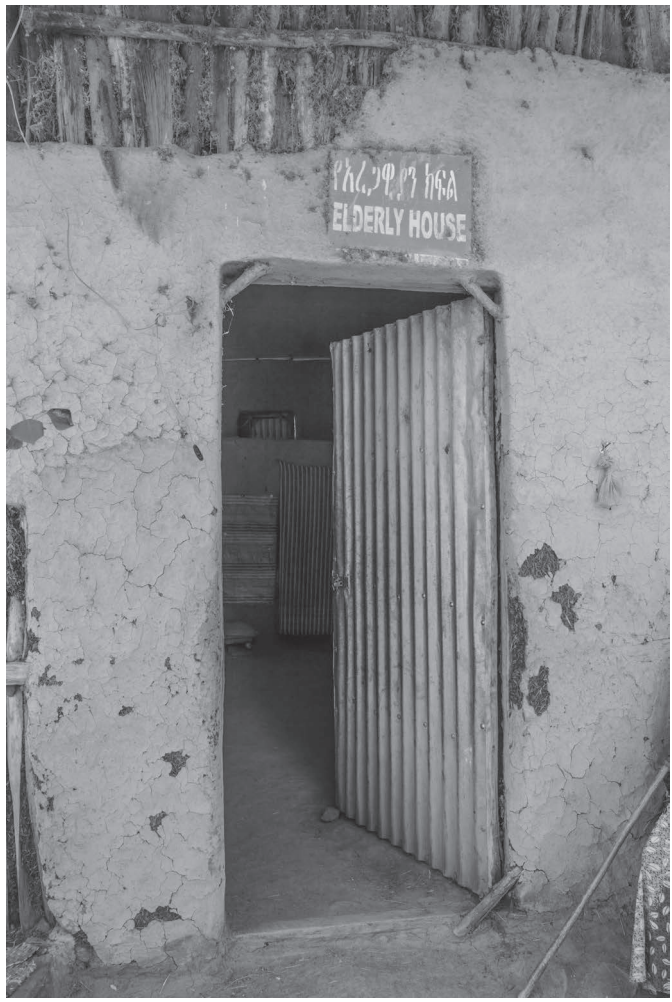



*Figure 10.25* "Older people's house."

*Source:* © Alexander Savin, WikiCommons (2018) https://commons.wikimedia.org/wiki/File:ET_Amhara_asv2018-02_img122_Awra_Amba.jpg

https://commons.wikimedia.org/wiki/File:ET_Amhara_asv2018-02_img123_Awra_Amba.jpg

*Figure 10.25* (Continued)

> At first, a small building with two or three beds was reserved for their use. This was replaced by a new one with twelve small individual rooms, which are maintained by the community. In 2005 four to six elderly lived here (...); in 2010, eight of these rooms were used by people between the ages of 75 and 90, two of them being outsiders to the community. The community no longer took old people from outside due to a lack of means (...) The situation has not changed in 2012.
>
> (Journard 2012, p. 58–59)

In keeping with its community-oriented sustainable development, Awra Amba also takes care of the education of its inhabitants (Figure 10.26), providing community members with various types of training and learning programmes. One of these is a week-long programme on caring for people in later life (Mohammed, 2020). However, according to Mohammed's (2020) survey, more than 73% of the people involved in older people's care in the community had their knowledge gained within their own families.

Mulatie et al. (2014) evaluated the innovation potential of such an asset-based approach. They interviewed residents of the care centre and asked them about their community participation and quality of life. They found that older people rarely participate in village development discussions and are hardly involved in decision-making. In contrast, they very much appreciate the cared-for life and the help that is offered to them. Despite living in separate houses, they feel very connected to the village and "were happy with their life in the center" (ibid., 2014, p. 180).

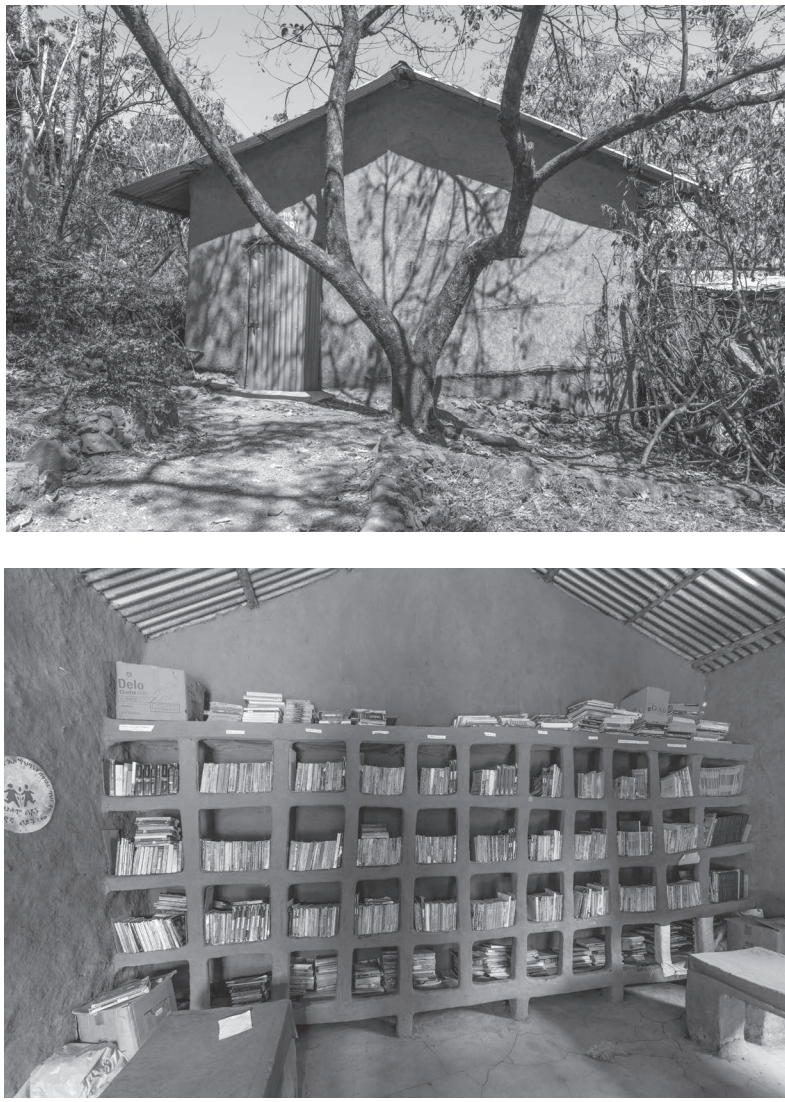


*Figure 10.26* The school library: more than 600 books to go.

*Source:* © Alexander Savin, WikiCommons (2018) https://commons.wikimedia.org/wiki/File:ET_Amhara_asv2018-02_img119_Awra_Amba.jpg

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### Neighbourhood scale: keeping centrality as a core concept

Centrality allows the concentration of services, commerce, leisure, and amenities, organising the dynamics of the city and facilitating mobility. Thus, multiple centralities are convenient for the general population. However, while respecting a

context of heterogeneity, small centralities may be more supportive of vulnerable social groups and their particularities, such as people in later life.

Here, the theme of centrality appears significantly in two contrasting proposals: a dementia-friendly neighbourhood in China and a vertical village in Singapore. The Hong Kong neighbourhood is a consolidated centrality that caters to and respects existing uses, customs, and behaviours. The innovation in this neighbourhood is that it represents a centrality with special importance for those suffering from dementia, while being fully open and catering to the general population's needs. The neighbourhood took actions to meet the needs of this particular population, becoming synonymous with a daily life of freedom and safety. Meanwhile, the proposal in Singapore was to build an entirely new vertical centrality integrated into the neighbourhood, positively changing the daily lives of older people and neighbours of all ages.

### Dementia-friendly neighbourhood in Hong Kong: more support for a normal daily life

Dementia is one of the most common conditions associated with ageing. And it seriously impacts the persons themselves, their relatives, and the social environment. Thinking of solutions to navigate people with dementia between autonomy and constraint has increasingly become a planning task. The classic approach of "keeping" people with dementia in old people's residential homes is coming under increasing pressure. In many countries worldwide, "dementia villages" have been built for some time far outside the city, where people are well cared for and live in safety from the dangers they can no longer assess. However, these villages are fenced off to allow people to stroll unaccompanied in the artificial worlds created especially for them. While there are solutions at the level of buildings and settlements, the question is how inclusive neighbourhoods can be.

There are very few examples that try to let people affected by dementia live in their familiar neighbourhood. Wah Fu Estate in the Southern District of Hong Kong has developed such an inclusive concept. Wah Fu Estate is a public housing development district built in the 1960s for low-income families, with about 18 blocks of houses. What was once planned as a satellite city in Hong Kong's "new town concept" has now become a district covering all life's needs (Figures 10.27 and 10.28).

The number of people suffering from dementia in the Wah Fu neighbourhood is correspondingly representative of Hong Kong: 5%–8% of the residents, with an upward trend. The municipal Welfare Office, through its Aberdeen Kai-Fong Welfare Association Social Service, registered early in the WHO "Age-Friendly Communities" programme and established in the following years, with support from foundations, the project "Wah Fu Estate – Dementia Friendly Neighbourhood." The aim was not to target the people affected by dementia but to sensitise the living environment so that people with dementia can enjoy the same freedoms there as all other people.

Five project components are crucial: "caregivers," "volunteers," "community stakeholders," "general public," and "third spaces." Caregivers and volunteers are common approaches to helping people with dementia and focusing on individual situations. More than 40 community stakeholders, mostly in the shopping centre

*Figure 10.27* Communal building in Wah Fu Estate.
*Source:* Matthias Drilling (2019)


*Figure 10.28* Entrance to the neighbourhood market hall.
*Source:* Matthias Drilling (2019)

of the neighbourhood but also near the office location, assume a central function in the orientation of people with dementia and in the case of their disorientation (Figure 10.29). These small- and medium-sized enterprises ("dementia-friendly

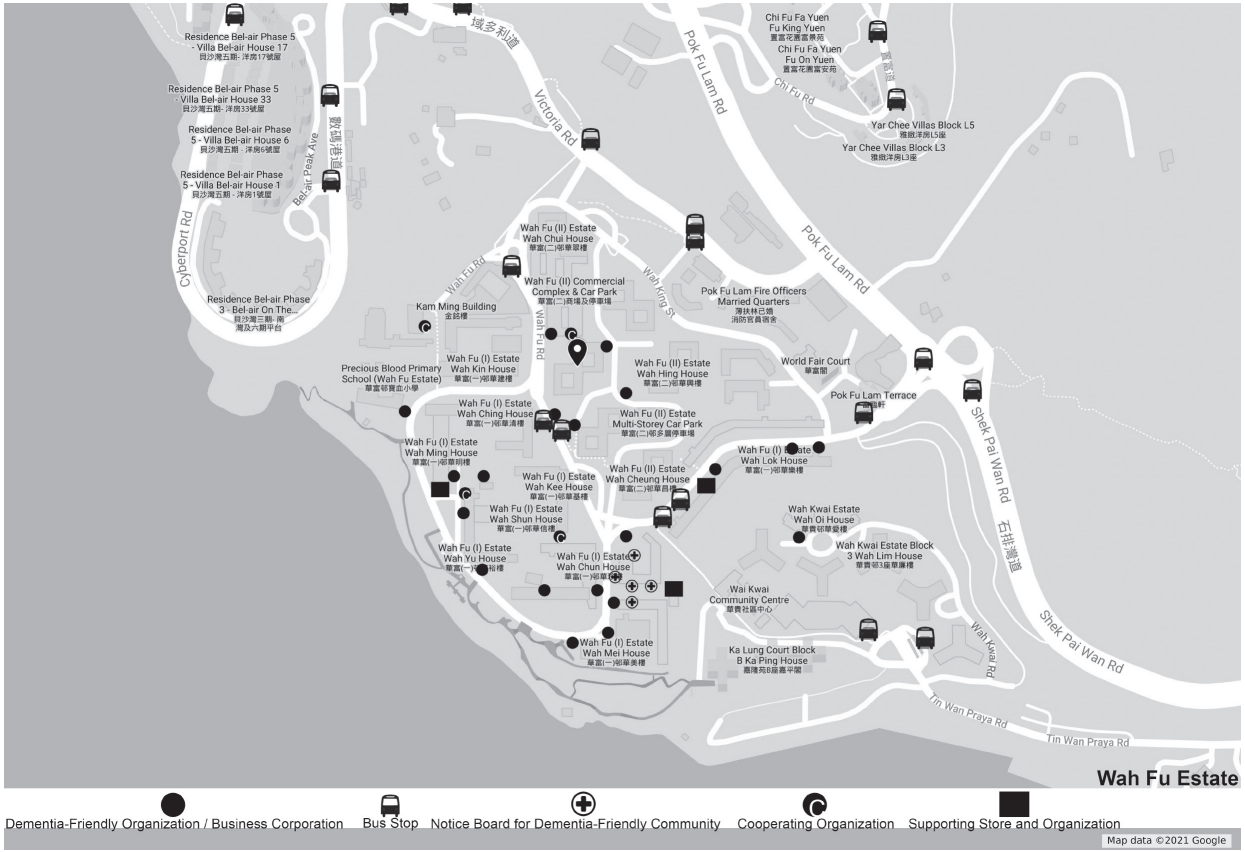



*Figure 10.29* More than 40 supporting stores guarantee the inclusive neighbourhood model.

*Source:* Google Maps, 2023, with additions by the authors based on http://www.cifa-net.org/files/news/3A_Project/2018/Powerpoint/Person%20with%20Dementia%20and%20Caregiver%20Companion%20Project.pdf.

business cooperations"), shop owners as well as schools have agreed to have an IQ (Informant Questionnaire for Cognitive Decline in the Older People) displayed in their shop windows, which directly activates help in the central office of the welfare association. People who have lost their way in the neighbourhood can either trigger help themselves, or the shop owner can do so uncomplicatedly. Through various activities, the public is educated about people with dementia; they learn how to approach people directly, offer help, or even use their IQ (Figure 10.30).


*Figure 10.30* "Safe spots," IQ codes, and Information codes outside and in the shops lead directly to security guides.

*Source:* Matthias Drilling (2019)

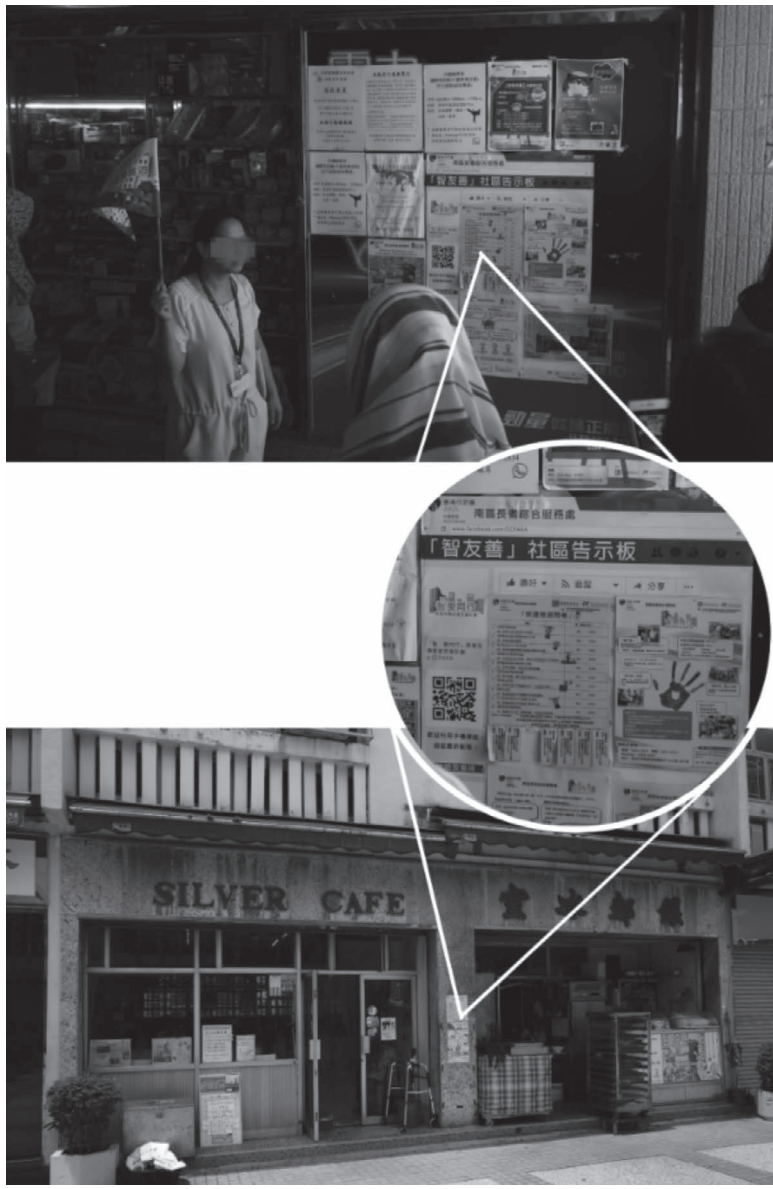



*Figure 10.30* (Continued)

The Silver Cafe (Figure 10.30) is one of the third spaces in the neighbourhood. Many shops have been open for more than 30 years, so the shop owners, as well as the customers, who mostly come from the blocks around the cafes and restaurants, take on important social control tasks.


*Figure 10.31* An "elder trek" public action in front of a leaflet in the mall for disoriented persons with dementia.

*Source:* Matthias Drilling (2019)

Thanks to these integrated measures, more than 200 caregivers and volunteers, as well as more than 4,000 residents in the neighbourhood, are sensitive to the fact that people with dementia are among the visitors, customers, or shop users who are dependent on their help (Figure 10.31).

The role of public space is changing in neighbourhoods like Wah Fu. Above all, the space is also thought of as a healthy city: orientation boards, explanations, or route signs visibly integrate themselves (Figure 10.32). Cars are kept away from pavements by distance markers, and as many seating areas as possible are offered along the streets. In this respect, the planning significantly subordinates itself to the social goal of an inclusive city.

In 2017, a group of scholars evaluated the dementia-friendly neighbourhood concept realised by the Association in Hong Kong (Sau Po Centre on Ageing, 2017). Questionnaire surveys were collected, and focus group interviews were conducted. "The typical participant of the questionnaire survey was a married woman aged over 65 years who has resided in the district for 29 years, living alone or with a spouse in a privately owned apartment, using older persons centres with fair perceived health, retired with a monthly income of less than HK$6,000 but still felt financially sufficient." The participants perceived the Southern district to be age-friendly in general. The sense of community is strong; the older the resident, the stronger the sense of community and perceived age-friendliness. "Among those aged 60 years or above, most (83.7%) used services or participated in activities provided by older person centres." The authors summarised that the results


*Figure 10.32* The open space as activating space, the omnipresence of an inclusive approach.
*Source:* Matthias Drilling (2019)

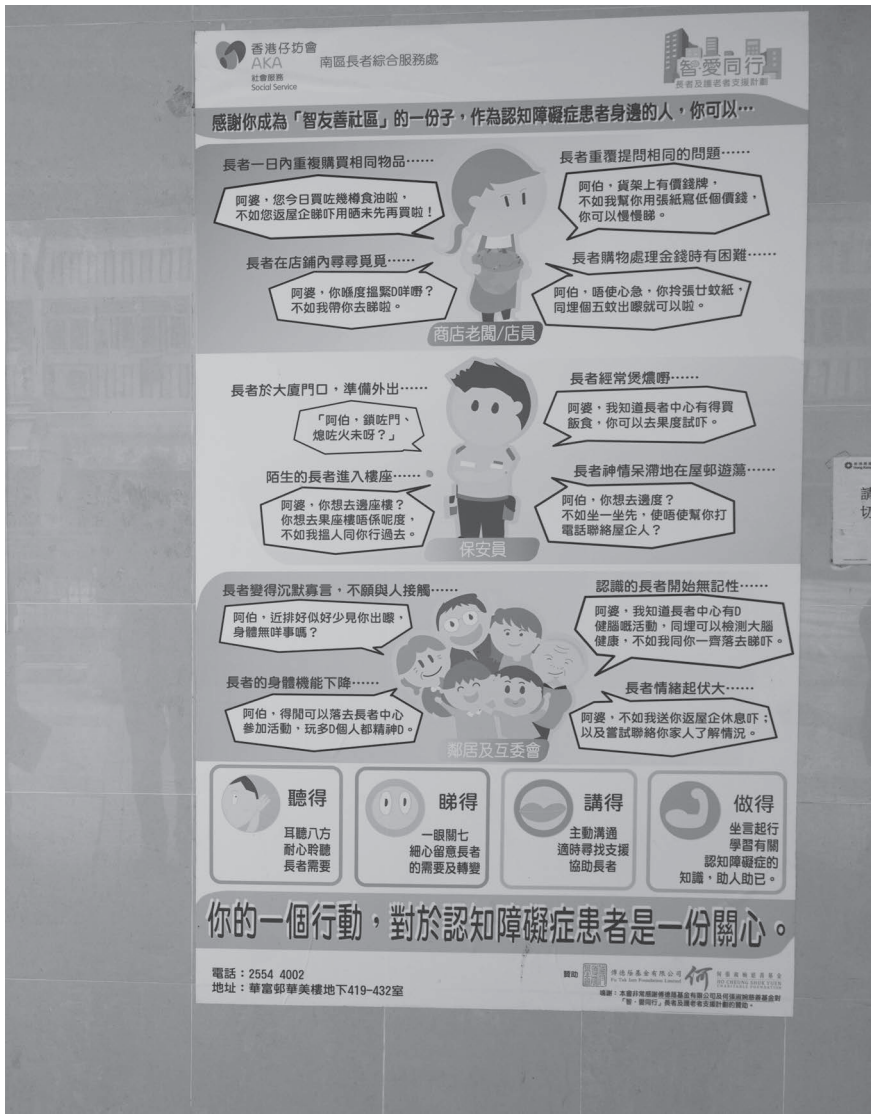



*Figure 10.32* (Continued)


*Figure 10.32* (Continued)

"suggested solid groundwork with a reasonably good sense of community and perceived age-friendliness" (ibid., 4).

### *Kampong Admiralty* in Singapore: horizontal and vertical communities

In urban areas, the classical morphology of residential houses is reaching its limits. Scarce space has to be regulated more strictly in order to achieve higher densities. This leads to a reduction in individual living space. In the end, the typical "stacking" of old people in monofunctional old people's and nursing homes is approaching social unacceptability. There is a need for materialised models that allow people in later life to carry on in a dignified and familiar environment. However, new ideas in this context are still considered primarily from the older adult's perspective and his or her functionality. Nowadays, we find senior-age residents in botanical parks close to zoos, with balconies towards sports arenas, and open to the neighbourhood through cafes or libraries. Intergenerational houses indicated a first step towards old age as a lifelong process rather than as a specific age group. However, even the intergenerational house remains more or less an isolated, iconic object. It must constantly redefine itself to the outside world and structurally implement its incorporated protective idea: to maintain the health of older people and thus control the insiders and visitors (e.g., through special opening hours and strict house rules).

In Singapore, *Kampung Admiralty*, a project by Washington Occupational Health Associates (WOHA) Architects, redesigned these standards. In the city,

there is a significant emphasis on urban greening as a development approach that accompanies an action plan for healthy ageing. This plan is based on promoting age-friendly neighbourhoods that encourage connectivity and walkable access to amenities. Approximately 6.05% of residents are 65 years or older in one such neighbourhood, Woodlands East. On an area of 255.35 hectares, there are 6 parks, 46 transport stops, 8 supermarkets, 1 hawker centre, 94 residential buildings with first-floor retail, 13 residents' committees, 1 community club, 6 community gardens, 4 senior citizen facilities, and 7 clinics (Tao et al., 2021). In 2017, *Kampung Admiralty* was built right in the centre of the neighbourhood (Figure 10.33).

Following the connectivity trend, the building represents a new part of the neighbourhood that has been built and is open to all people. Nevertheless, architects have always kept the perspective of old and frail people in mind. By permanently reflecting stereotypes of old age and defining ageing as a process that starts in childhood, *Kampung Admiralty* today is emerging as a vertical interweaving of generations and lifestyles, needs, and necessities (Figure 10.34).

*Kampung Admiralty* is a multi-agency project developed by the National Housing and Development Board in partnership with agencies, non-governmental organisations (NGOs), and other stakeholders in fields like environment, biodiversity, or early childhood development (Figure 10.35). Thus, architecture has become an agent and an advocate for social and environmental sustainability. *Kampung Admiralty* is a hybrid building characterised by high programmatic complexity. Strategic layering enables its hierarchical mix of functions. By adopting a biophilic approach whereby vegetation forms an integral part of the building's envelope, the architects have mitigated the urban heat island effect, ensuring thermal comfort and buffering noise from the adjacent station.

The scheme builds upon a layered "club sandwich" approach, located on a 0.9 ha site with a height limit of 45 meters. A "Vertical Kampung (village)" is devised, with a Community Plaza (fully public) in the lower stratum, a Medical Centre in the mid-stratum, and a Community Park with apartments for seniors in the upper stratum. The shape of the building allows visual access between the parts, and this means that even if the older adults have physical limitations that prevent them from participating in community activities in the park or the plaza, they can observe, feeling passively integrated (Libardoni & Chiarelli, 2021). Furthermore, proximity to healthcare, social, commercial, and other amenities supports intergenerational bonding and promotes active ageing in place (Figures 10.36 and 10.37). Locating a Medical Centre in *Kampung Admiralty* means that residents need not go to the hospital to consult a specialist or get a simple day surgery done.

The project considers important details for people in later life, such as apartments that adopt universal design principles. It also offers activities for all ages, such as the playground and exercise area, which are highly accepted by the people of the neighborhood for jogging, learning, or relaxing (Figure 10.38).

The development of *Kampung Admiralty* suggests several learning points that would be useful in planning similar integrated projects in the future. To carry out more intentional planning and selection of co-locators, the design of social, communal spaces encourages residents to interact daily. To offer shared community

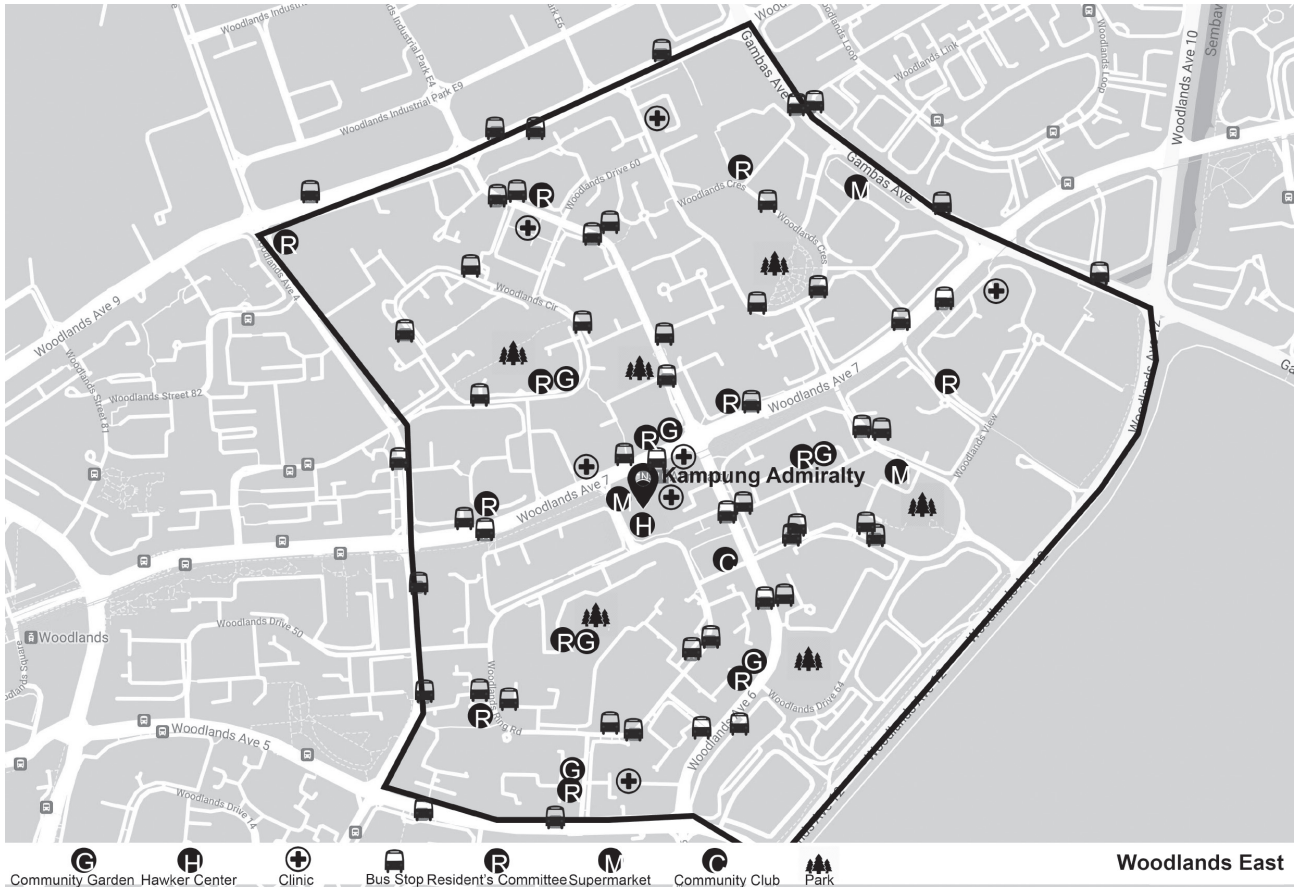



*Figure 10.33 Kampung Admiralty* in Woodlands East.

*Source:* Google Maps, 2021, with additions by the authors based on Tao et al. (2021).

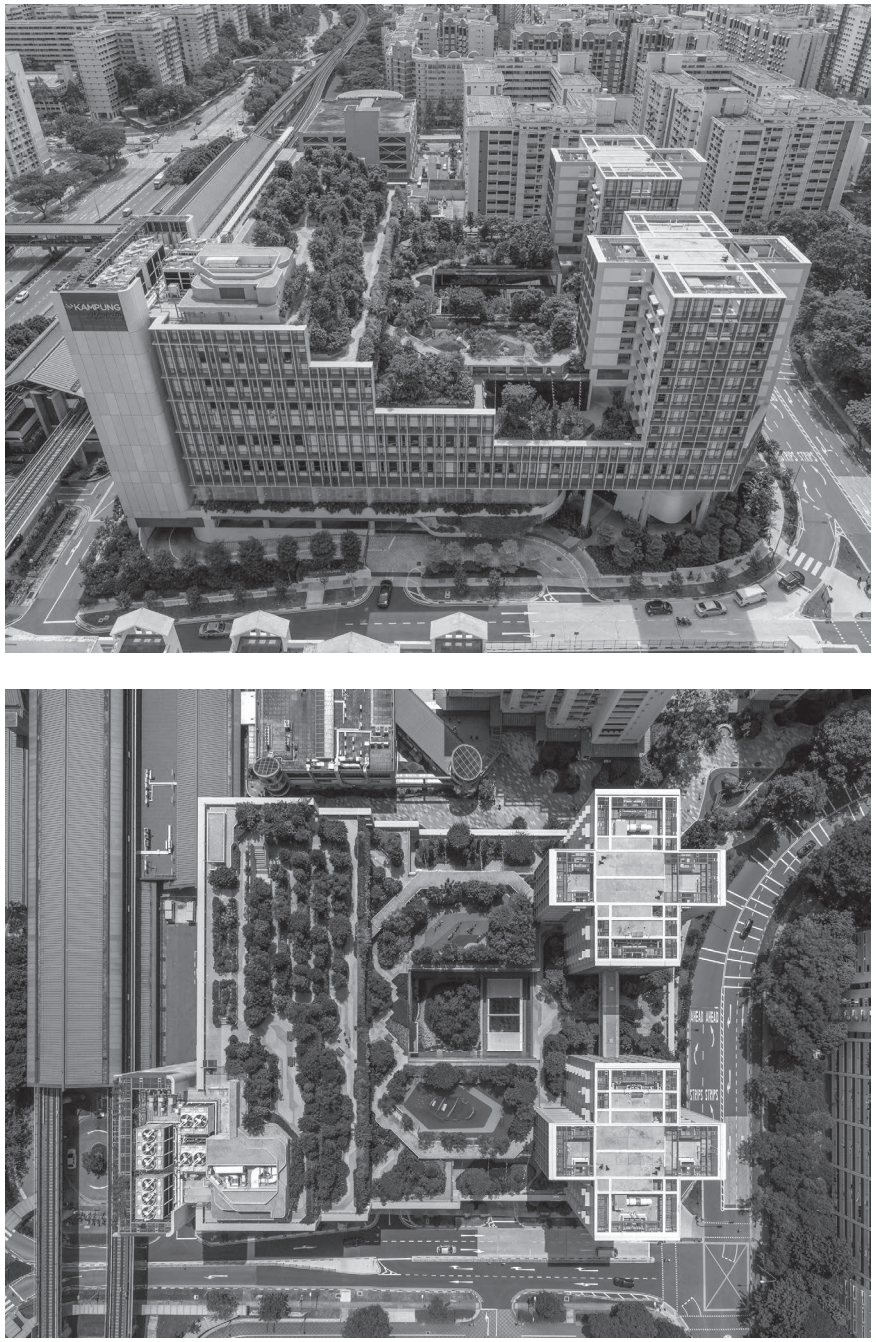



*Figure 10.34* One hundred four apartments for older people, singles or couples, are in two 11-story blocks: a community park, community farms, childcare, a hawker centre, and an active ageing hub (including senior care).

*Photos:* © K. Kopter.

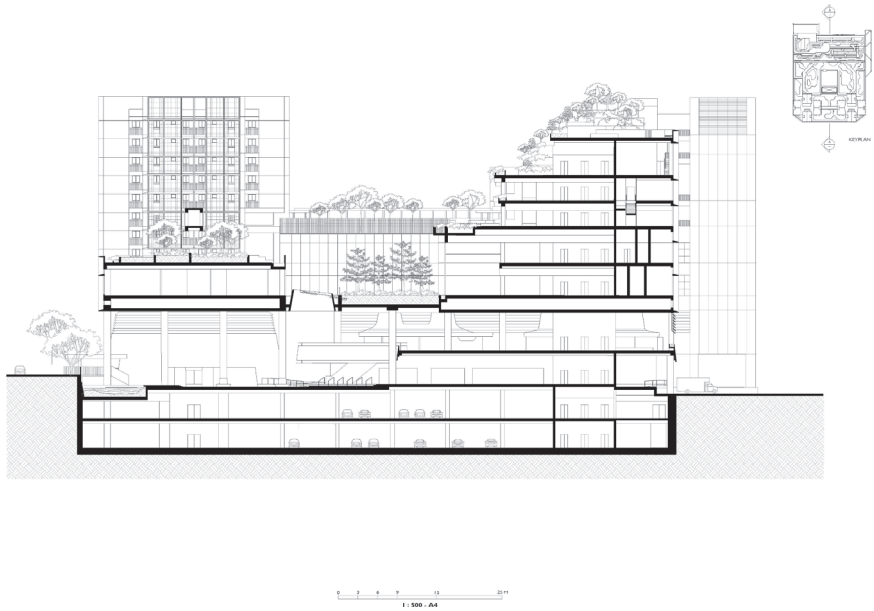


*Figure 10.35* *Kampung Admiralty* as a multi-agency project.
*Source:* Drawing: © WOHA Architects.

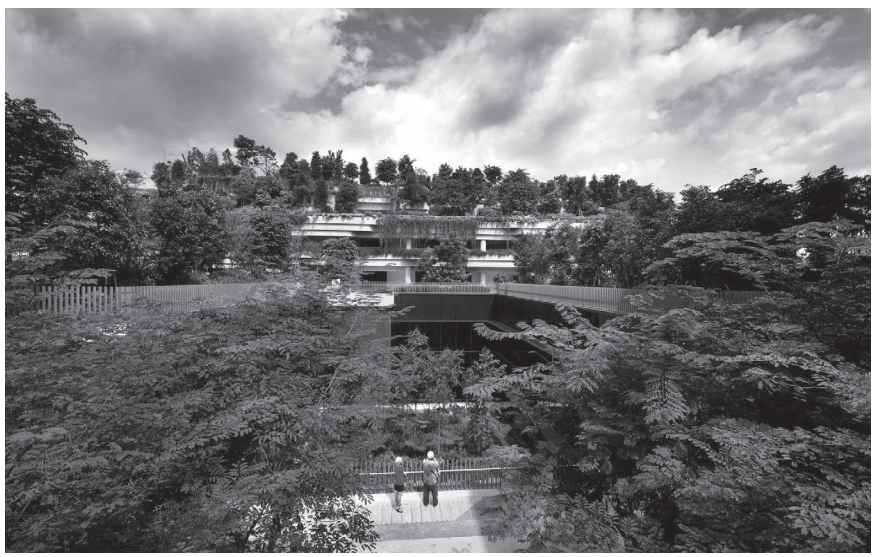


*Figure 10.36* Community Garden on the rooftop.
*Source:* Photo: © Patrick Bingham-Hall

*Figure 10.37* Community Hall.

*Source:* Photo: ©Darren Soh.

*Figure 10.38* The apartments adopt universal design principles and are designed for natural cross-ventilation and optimum daylight (above). The children's playground is nestled into the Community Park next to an outdoor exercise area, fostering intergenerational bonding (below).

*Photos:* ©Patrick Bingham-Hall

*Figure 10.38* (Continued)

spaces, leverage the synergy of co-location with venues for community engagement and events. It also enables seniors to venture out of their homes to interact with other residents. Projects like *Kampung Admiralty* need to establish support from co-locating agencies. Thus, the leading housing ministry set up a steering committee, well represented by senior management from the respective co-locating agencies, and as a whole-of-government approach to oversee the planning and construction of the new development.

In 2018, the research institute Biosia evaluated the project's natural aspects and the attitudes of the old people towards farming and biodiversity (Jain, 2018). According to their results, *Kampung Admiralty* has a higher biodiversity than the parks in the neighbourhood and "a diverse planting palette with a rich mix of shrubs and trees providing fruits, nectar, and host plants" (Jain, 2018, p. 17). Water features provide additional habitat for dragonflies and other water-associated species. The diversity is particularly high at the community farm. Being embedded in nature positively affects older adults and visitors. "People particularly valued the integration of greenery with convenience, mainly an affordable and well-designed hawker centre. Also, the majority of social survey respondents recognised the importance of biodiversity in a green building." (Jain, 2018, p. 17).

**Public space scale: planning for diversity**

One of the concepts that helps us understand the complexity of planning for ageing is diversity. A simple chronological classification is not enough to describe the older age group when this same group is so heterogeneous in terms of its functional

abilities, its culture, its needs, and its preferences. In addition, planning for ageing cannot occur in isolation from the context of urban diversity. Planning for diversity while respecting particularities is an egalitarian way to maintain community cohesion.

Within this scale, the chapter addresses two distinct urban typologies: a street in Japan and a square in Brazil. Despite their typological differences, these two spaces have played an important role as meeting and socialising places for older adults and of all ages. Still, they are two contrasting cases but linked by the diversity they represent. In Tokyo, the religious meaning of a temple generated the necessary attraction for the development of a street that was important to all citizens, especially older people. This unplanned solution has been consolidated over time and fully integrated into the urban fabric. The street is characterised by its diversity, which creates intertwining and functional religious, cultural, and social density in the daily supply infrastructure, meeting the needs of older adults. And, in São Paulo, a designed square that integrates a pre-existing social structure of great importance to the older population into a context of generational diversity and public space.

## Harajuku for grandmas – an age-friendly street in Tokyo

As populations age, urban planning faces the question of organising daily services so that people can reach them within a reasonable time, even at an advanced age and with frailty. Concepts like the "15-minute city," introduced by Carlos Moreno in 2006 (Moreno et al., 2021), are all about "living locally" and allowing people to meet most of their daily needs within a 15-minute return walk from home. Most of these models propose a decentralised supply structure and include the use of transport such as a bus, car, or bicycle in the 15-minute buffer. Access to safe cycling and local transport options is one of the accompanying ideas.

However, planning services in a time buffer forces older people to become highly functional: the routes and means of transport have the task of just bridging the space, the trips are often done alone, and social contacts are rather coincidental. Furthermore, transportation needs to be easy to access, cheap, regularly available, and throughout the time buffer. Otherwise, concepts such as the 20-minute city, the 15-minute city, and the 5–10-minute neighbourhood (Western Australian Planning Commission, 2015) are suboptimal in terms of cultural and social neutrality and less sustainable.

Japan has developed an alternative approach. Focusing on the idea of creating functional, cultural, and social interwovenness and density in the daily supply infrastructure, the *shotengai* concept is innovative. *Shotengai* generally represents the Japanese commercial street, particularly the shopping arcade (Balsas, 2016). In Tokyo's neighbourhood Sugamo *shotengai* has been developed towards a "culturally sustainable and ageing-friendly community" (To & Chong, 2017) where older people play a key role in local development "as resource, transmitters and multipliers" (ibid., p. 1) (Figure 10.39).

The street width of around 7m creates a feeling of embeddedness; people meet, greet each other, and talk about everyday life (Figure 10.40). The height of the

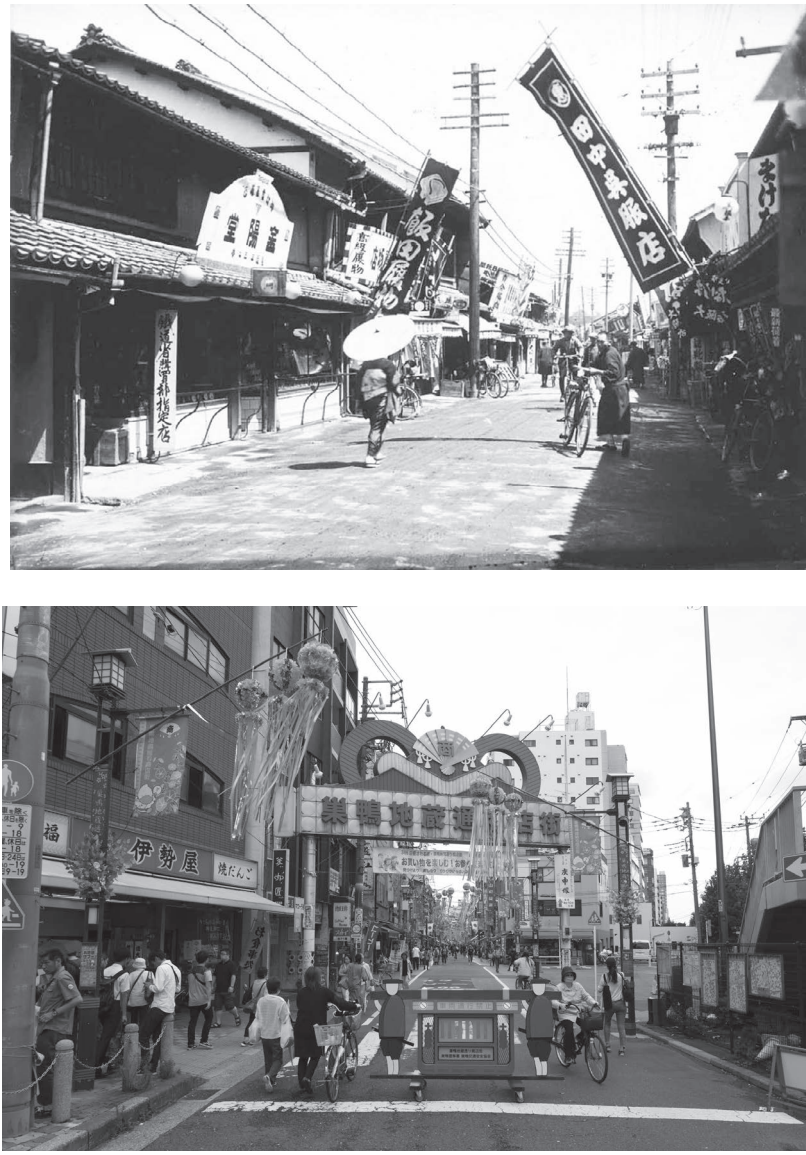



*Figure 10.39* Shopping street in ancient Japan (above) and today (below).
*Source:* To and Chong (2017, p. 642) (above) and Matthias Drilling (2020) (below)

houses is mostly limited to three to four stores (the third and fourth floors are for habitation, often for the owners themselves), which are the same height as the neighbourhood.

The many local shops are typical, ranging from butcheries, small supermarkets, grocery shops, restaurants, pharmacies, and barber shops. These services are


*Figure 10.40* Map of the street.

*Source:* By the authors, 2021.

closely adapted to the needs of the people in the neighbourhood. In this respect, it is a "community business" (To & Chong, 2017) as an alternative to the common "global business" that is found in many cities worldwide. Shop owners and local customers know each other, and shops become social spaces where older people stay longer than just for shopping. Many shop owners have placed chairs outside where people can linger and chat (Figure 10.41).

Sugamo shotengai is also symbolically marked as a human-scale streetscape. The street's entrance is highlighted by boards and a vehicle barrier, so the pedestrian zone is emphasised. Pavement and carriageways are on the same level, which enables accessibility. In the middle of the 800 meters long street with around

*Figure 10.41* Stopovers and spontaneous come-together for older people.

*Source:* Google Street View, 2015 (above) and 2020 (below).

200 stores, the Koganji temple is located. This temple is intentionally kept open to the street, leading to an extension of the street, and a larger square, underlines the cultural significance of the place.

Oshima et al. (2006) evaluated the people passing the temple and stated that there is a dynamic exchange between customers and visitors so that the temple area keeps the shotengai active. In this way, Sugamo shotengai also becomes a sacred place where the neighbourhood residents spend time and do their daily shopping. This mixture of stores, services, social niches, and cultural facilities frame that older people can meet their daily needs in familiar surroundings, practice their faith, and always be surrounded by the people they know and with whom they share their social time over many years. Nowadays, the area is kindly called "Harajuku for grandmas" (Harajuku is an area in Tokyo known as a centre of Japanese youth culture and fashion) (To, 2014) (Figure 10.42).

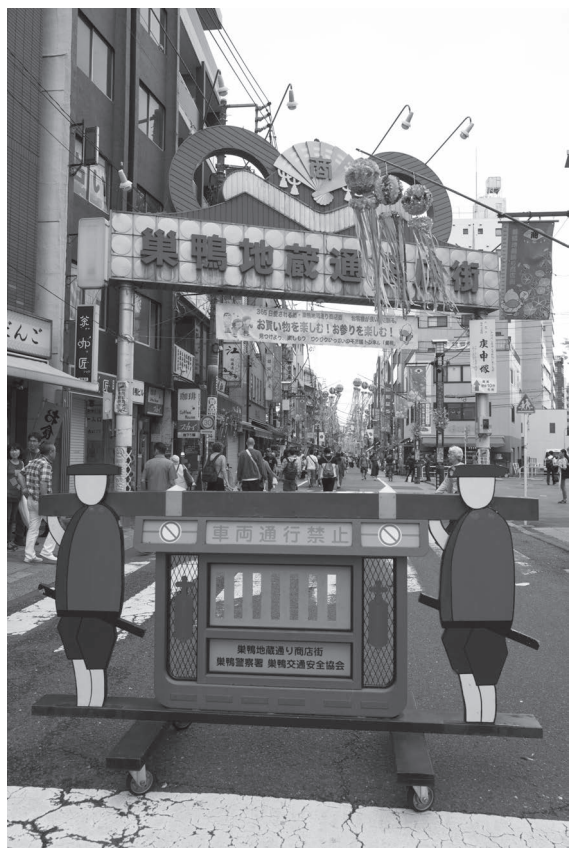



*Figure 10.42* Street entrance marks a barrier-free pedestrian area; community businesses favour healthy fresh food; a walkable neighbourhood for fragile people; and general stores that meet the daily needs of older adults.

*Source:* Matthias Drilling (2020).

*Figure 10.42* (Continued)


*Figure 10.42* (Continued)

Furthermore, *Sugamo shotengai* is part of a neighbourhood and is embedded in the residents' daily living structures and processes. Transportation systems are accessible at both ends of the main street, which allows residents to walk at a maximum of 800 meters. The street pattern between the main street and back lanes is very organic but hierarchical. Small accesses for pedestrians and children alternate with side streets for suppliers; almost every 50 meters, one can turn into the neighbourhood to shorten your walk.

Besides its planning-related aspects, like many other *shotengai* in Japan, *Sugamo shotengai* is based on a specific management structure: the main street was not planned and built as a single project with a single architect or owner; it has grown by each individual store which is built and managed separately. This makes the innovation people-driven and small-scale-growth-oriented. The street is developed incrementally, and often at a certain level of success, the shop owners agree to build common infrastructure like a roof over the street, unified lighting, paving, etc. (Bestor, 1985). Thus, step by step, a commercial street turns its functional retail role into the multifunctionality of a "community centre, rich in traditions and livelihoods" (Balsas, 2016, p. 210).

### Victor civita square in São Paulo: focusing on age and boosting intergenerational dynamics

Healthy ageing emphasises the need for older adults to participate "in their families, communities, and economies" (World Health Organization, 2020), referring to social groups with diverse age arrangements, engagement in physical or manual activities, and skill development. But, for this, an inviting, adequate, and accessible physical structure for people of all ages is needed. This idea aligns with

contemporary concepts of urbanism, such as "8–80 Cities," which bet on a more humanised vision of cities for everyone from children to older people (Penalosa, 2021). Nevertheless, senior centres, the places that usually offer these activities for the older population, tend to focus exclusively on the needs of this group, causing specific age segregation, even if they eventually promote intergenerational activities (Pardasani & Thompson, 2010).

The integration of age-focused places in age-diverse contexts can be an innovative solution to boost intergenerational dynamics (Libardoni & Chiarelli, 2021) while meeting the specific needs of people in later life. Urban public spaces are essential for quality of life in the ageing process because, besides meeting older adults' physical and psychological conditions, they are sources of social and intergenerational contact, thus providing community integration. However, these spaces are not always used by different population groups, and the connection to social infrastructure is considered in their design (Artmann et al., 2017). Interventions in underutilised spaces can positively change the lifestyle of the population, including older adults (Moysés, 2017).

Victor Civita Square in São Paulo, Brazil, creates a solution for the intergenerational appropriation of an abandoned area by potentiating the use of a pre-existing social age structure arising from public-private cooperation between the city government, which granted the use of the space and a private company, which provided construction and maintenance. The square, whose authorship is by Levisky Architects and Anna Julia Dietzsch, was completed in 2008. On the site chosen for the project, there were two buildings: the former incinerator, which was preserved, and the *"Centro de Integração, Informação e Preparação para o Envelhecimento – CIIPE"* (Center of Integration, Information, and Preparation for Ageing), which was demolished to build a new headquarters. The square is located in the Pinheiros District (Figure 10.43), a consolidated area with access to a network of interconnected transportation (Moysés & Alvim, 2019), where 21% of the residents are older persons (Instituto Brasileiro de Geografia e Estatística/IBGE, 2014).

The project proposed activities and spaces for all ages, as can be seen in Figure 10.44.

The incinerator operated between 1949 and 1989, burning household and hospital waste. Thus, the project's concept is strongly based on sustainability. Providing for the least possible impact on the land through a proposal in the shape of a "boat," that is, a metallic and wooden structure resting on the ground. The format considers the visual reach of wheelchair users when arranging the information panels, and the layout makes the circulation comfortable and spacious (Moysés & Alvim, 2019). Handrails along the route facilitate the movement of individuals with different mobility capabilities (Figures 10.45 and 10.46).

In the incinerator building is the Rehabilitation Museum, which houses a permanent exhibition about the whole process of recovery of the land and the building. In fact, the entire square functions as an Open Museum of Sustainability, attracting people of different ages and offering a leisure alternative for families. An educational proposal brings information about the techniques, technologies, and solutions for the recovery of contaminated areas (Figure 10.47).

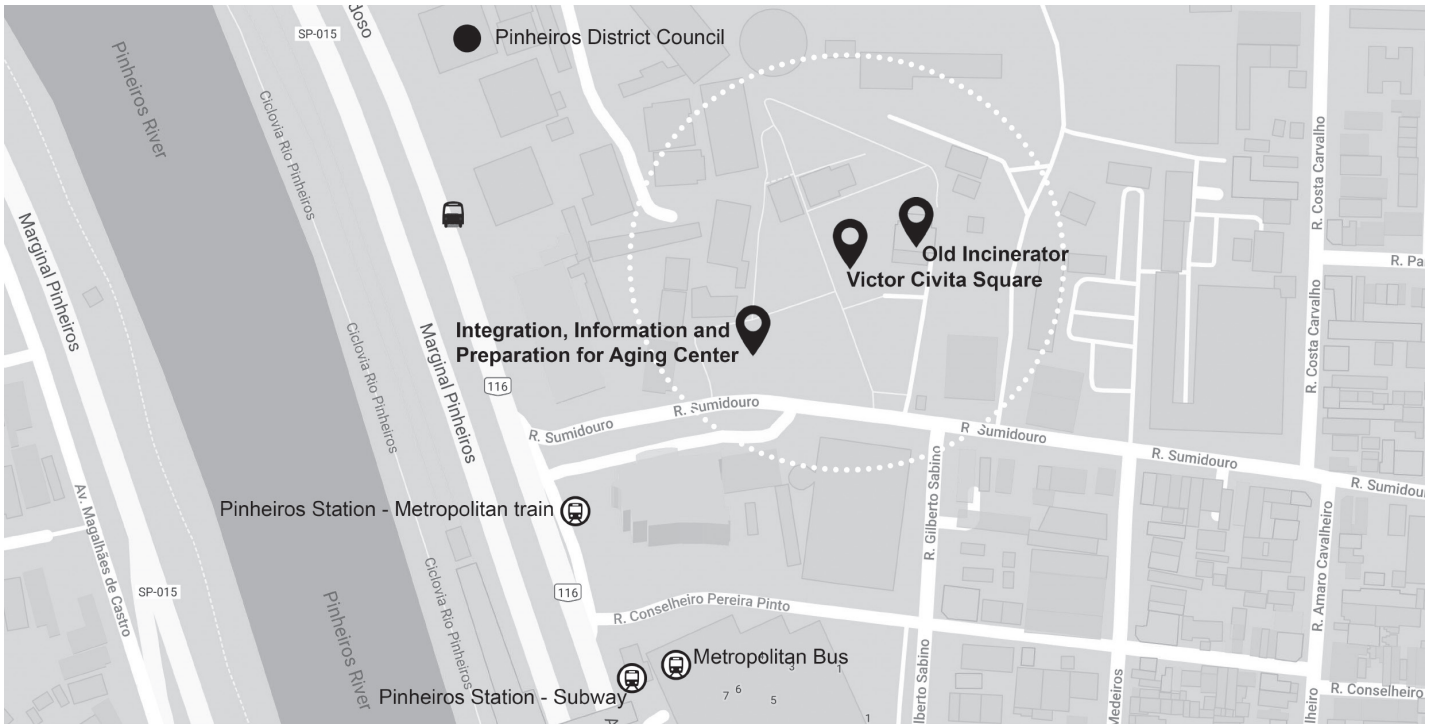
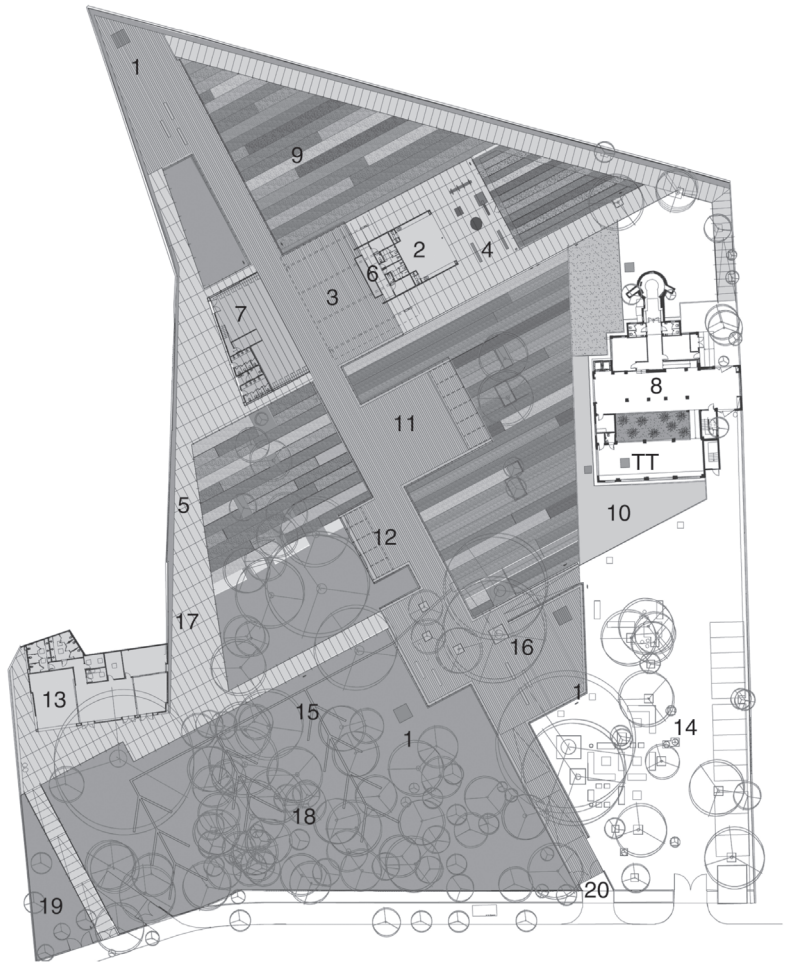



*Figure 10.43* Location of the Victor Civita Square.

*Source:* Google Maps, 2021, with additions by the authors.




(1) Temporary art exhibition;
(2) Kids workshop with free activities and classes for environmental awareness;
(3) Covered arena for musical and theater performances;
(4) Playground;
(5) Vertical garden (green wall);
(6) Changing rooms;
(7) Bleachers for 240 people and restrooms;
(8) Old incinerator: exhibitions and classes (Museum of Rehabilitation);
(9) Planters: laboratory of plants;
(10) Water filtering and recycling system;
(11) Recycled wood deck;
(12) Gym equipment;
(13) Integration, Information and Preparation for Aging Center (CIIPE);
(14) Cobblestone plaza: chess, interactive games;
(15) Irrigation by gravity with the use of on-site recycled water;
(16) Open deck areas, "living rooms" for exercises and classes;
(17) Permeable light concrete deck;
(18) Existing trees;
(19) Environmental testing of soil and water and access to CIIPE;
(20) Main entry.

*Figure 10.44* The layout plan of Victor Civita Square.

*Source:* Levisky Architects and Anna Dietzsch.

Kids workshop (next page above) and the covered arena (next page below).

*Source:* Nathalie Artaxo.

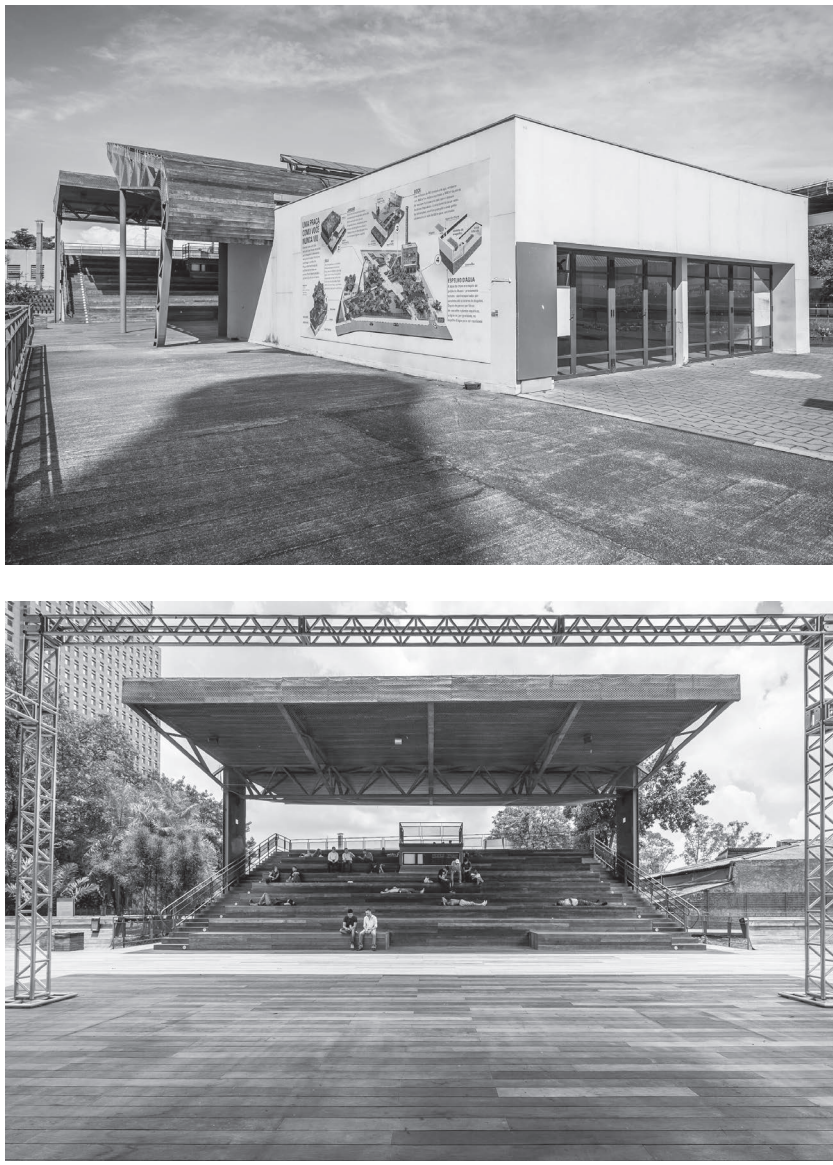


*Figure 10.44* (Continued)

Before the municipality opened the senior centre, older people only had a space in a basic health unit, so there was a great demand from the population. When it was already located in the square, the old CIIPE building had many maintenance problems and did not meet the needs of older persons, as it was an adapted space. Therefore, the project for the square included the construction of a new CIIPE. The

*Figure 10.45* Handrails were installed along the entire route (above).

*Source:* Nathalie Artaxo.

The shape of a "boat".

*Source:* Nelson Kon.

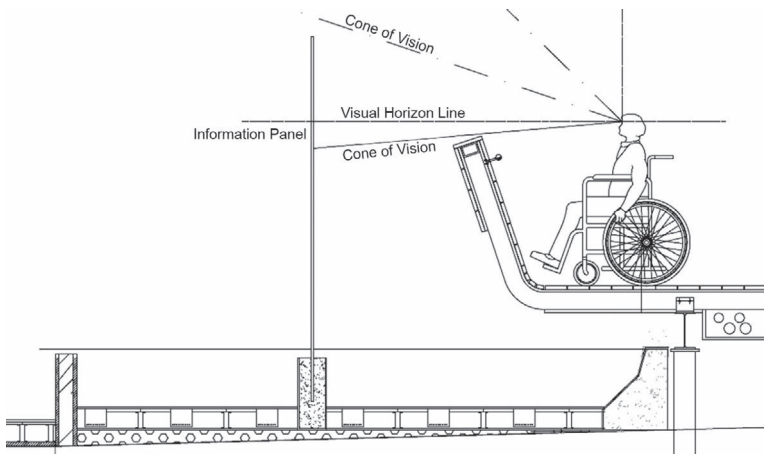



*Figure 10.46* Visual accessibility detail.

*Source:* Levisky Architects and Anna Dietzsch, with additions by the authors.

*Figure 10.47* The old incinerator building and the informational stations.
*Source:* Nathalie Artaxo.

new building was designed for this age group, without steps, with safety bars in the bathrooms (Granconato, 2019), and integrated into the square through a concrete deck. It has its own access, separate from the main access of the square, with ramp and support bars. However, only the gates in the cobblestone square were kept open, and the maintenance of the sidewalks in the surroundings was insufficient, making it difficult for wheelchair users to get around (Moysés & Alvim, 2019).

Despite this, the importance of this social structure for older adults and for intergenerational socialising is evident. In 2005, the centre hosted a workshop that brought together youth and older adults. While the younger ones were taught computer skills, the older ones shared their life stories (Portal Aprendiz, 2005). In 2019, there were several discussions to share it in the best possible way with evening courses for 16–24-year-olds. Older adults were afraid that they would be prevented from using it. Some of them even stated that they would get sick if the activities were shut down. In that year, about 120 seniors participated in free physical and cultural activities promoted by the centre (Granconato, 2019) without any age restrictions: classes in languages, computers, sports, crafts, dance, Yoga, Tai Chi Chuan, Pilates, oil painting on canvas, lectures, and workshops on healthy eating. Many of these activities were carried out using the physical structure of the square in occasional occupations, such as the Yoga mats placed on the open decks and the fixed gym equipment (Figure 10.48). Even the 700-meter wooden path was used for walking (Catraca Livre, 2010).

In the square, intergenerational occupation was facilitated by informal spaces with the potential for diverse uses and improvised seating, generally attractive to young people, and more formal elements, such as benches that meet the needs of older people (Libardoni & Chiarelli, 2021, Figure 10.49). The proposal did the square work together with the senior centre. While the centre is integrated into the intergenerational activities proposed by the square's project, it works as an extension of the centre, offering a quality outdoor space and structure for its activities.

*Figure 10.48* Fixed gym equipment.
*Source:* Nathalie Artaxo.

*Figure 10.49* Living areas where potentiality allows formal occupancy for older adults and informal seating for youth.
*Source:* Nathalie Artaxo.

In a survey conducted in the square by Moysés (2017) with older adults, most of them perceived that using the place improved their autonomy, independence, health, and mood. About 46% of the older respondents came from distant neighbourhoods, and about 37% walked to get to the square, showing the effectiveness of this place in encouraging a more active life. However, with the end of the public-private partnership, the Pinheiros sub-city hall took over the maintenance in full, but in an insufficient manner. From then on, the accumulation of garbage and the need to replace parts of the floor gave the square a feeling of abandonment, making it a less safe place (Moysés & Alvim, 2019). As a result, in March 2020, Victor Civita Square was closed for renovation (Coletivo Praça Vita, 2020), with reopening scheduled for the second half of 2021 (Secretaria Especial de Comunicação, 2021).

**Building scale: proximity as a support for the ageing process**

Physical distance is a complicating factor for people with mobility limitations and those who can no longer drive, such as certain older citizens. Thus, proximity is a key concept. In this sense, proximity to urban centralities and ageing support networks should be considered, whether established by essential services or by loved ones such as family and friends.

Here, the chapter discusses two significant examples of the role of proximity in a healthy ageing process: a social housing complex in Brazil and a portable senior suite in Canada. Both solutions explore proximity in opposite ways. In São Paulo, the housing complex came as an urgent demand for the low-income older population. However, unlike what was being produced in Brazil regarding social housing, this project was located to enable ageing in a consolidated area of a large urban centre, close to a public transportation network, facilities, services, leisure spaces, and a cultural structure. While in Calgary, a housing unit was specially equipped to meet the particularities of the ageing process and provide assisted living facilities wherever the senior wishes to live.

**Social housing *Vila dos Idosos* in São Paulo: new housing for older people in a consolidated city centre**

According to UN-Habitat, around 80% of cities worldwide lack affordable housing options for half of their population. This housing affordability crisis exacerbates urban inequalities, with the most vulnerable groups, such as older adults, living in precarious housing that does not meet their needs or moving to peripheral areas without access to employment, healthcare, public transport, or green spaces (Sharif, 2020). Meanwhile, housing planning for the lowest income brackets of the population in many developing countries like Brazil is characterised by large-scale production of standardised condominiums on the periphery of consolidated urbanised areas (Cantero & Ghoubar, 2010), which aggravates differential access to the city and urban mobility problems.

With the aim of promoting housing solutions in the city centre, the Municipality of São Paulo created the *Morar no Centro* (Living in the Centre) programme. One of its components is a social rental programme (*Programa de Locação Social - PLS*), which innovates by building rental housing units in consolidated urban areas. Since part of the rent is subsidised through government resources, the monthly cost for the resident is low (Anitelli & Tramontano, 2017).

The plan to build a housing complex for older adults answers the demands of groups linked to the Municipal Council for Older Persons. Between 2003 and 2007, the *Companhia Metropolitana de Habitação de São Paulo* – COHAB SP (Metropolitan Housing Company of São Paulo) built the *Vila dos Idosos* (Senior Citizens' Village) to benefit people over 60 who earn between one and three minimum wages monthly.

The architectural design of *Vila dos idosos* is signed by *Vigliecca & Associados*. The complex is located in the Pari neighbourhood, next to the Adelpha de Figueiredo Public Library, with easy access to public transport routes, contributing to its integration into the city centre (Figure 10.50).


*Figure 10.50* Location of the *Vila dos Idosos* in the Pari neighbourhood, São Paulo, near several bus stops.

*Source:* Google Maps, 2021, with additions by the authors.

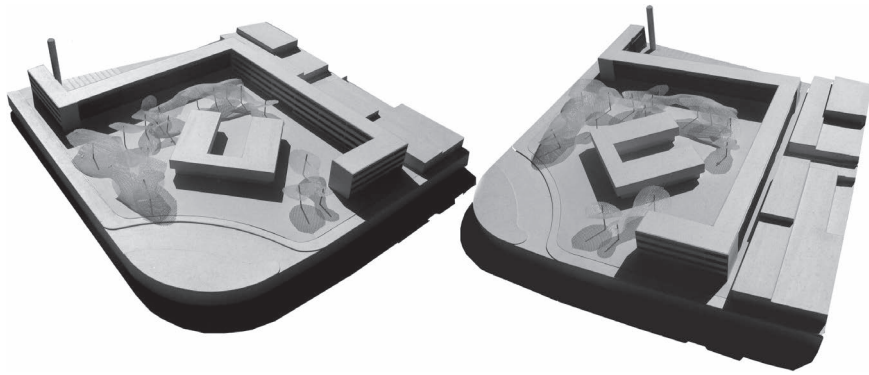


*Figure 10.51* The layout creates a community space around the library.
*Source:* Courtesy of Vigliecca & Associados.

The project broke a historical paradigm by developing a small-scale complex in a consolidated urban network (Anitelli & Tramontano, 2017). From its conception, the proposal considered the place specificities and its layout reveals the architect's intention to encourage a permeable relationship between the surroundings and the complex. Vigliecca intended to boost the community's life by carefully arranging the building volumes around the existing cultural equipment and creating a public access plaza with a fountain in the area between the buildings (Bedolini, 2014) (Figure 10.51).

The concept of integration is evident on the ground floor, which has open spans supported by pilotis, inviting the free movement of the surrounding area's inhabitants (Bedolini, 2014). Thus, even though the complex was designed for only one age group, it aimed for community cohesion, possibly providing opportunities for intergenerational coexistence. However, the original idea suffered a significant alteration since, by the decision of COHAB motivated by security concerns, the complex's surroundings were totally fenced. A gatehouse was installed at the main access, and the others remain closed (Bedolini, 2014). The fence both prevents the permeability intended by the author between the neighborhood and building and separates the square and library (Figure 10.52).

According to Vigliecca, the project aims to promote the greatest amount and variety of neighbourhood contacts within the condominium (Bedolini, 2014). In this way, the programme includes several community areas and activities, such as three rooms for TV and games, a community hall with a kitchen and restrooms, a bocce court, a green area, a fountain, a vegetable garden, and four rooms for multiple uses. The common rooms located on the avenues Carlos de Campos and Pedroso da Silveira were designed to promote different types of contact with the neighbourhood's commercial, cultural, and social life. Later, the *Vila dos Idosos* received an outdoor gym (Figure 10.54).

The complex is organised on four floors, with two vertical circulation areas with stairs and lifts. There are a total of 145 housing units: 88 studio flats of 30 square

*Figure 10.52* The access between the neighborhood and the square is through stilts, as it should have been built without a fence.

*Source:* Google Street View, 2010, edited by the authors.

meters and 57 one-bedroom flats of 42 square meters, of which 25% are already adapted for residents with physical disabilities. In contrast, the other units are easily adaptable. In all of them, there are benches positioned in front of the flat doors, encouraging the use of horizontal circulations as meeting points (Figure 10.55).

The original project also provided solutions aimed at meeting specific characteristics of future residents that were not executed. These included lower windows in bedrooms and living rooms to provide outside views for wheelchair users (Bedolini, 2014).

Considering the budget limitations, the authors opted for standardized materials with high durability and low maintenance needs. The project establishes the simplification of the finishing with an exposed slab, eliminating wall, and floor coverings (Figure 10.56).

The *Vila dos Idosos* is considered a successful social housing model for older adults. Studies report the satisfaction of the actors involved, from those responsible

*Figure 10.53* The fence separates the square from the library.

*Source:* Courtesy of Viglieca & Associados.

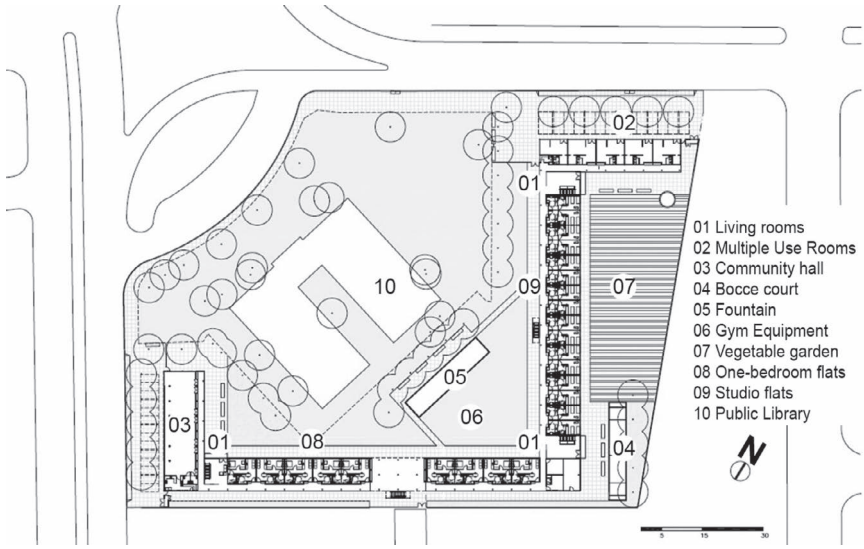



*Figure 10.54* Layout.

*Source:* Courtesy of Viglieca & Associados, with additions by the authors.

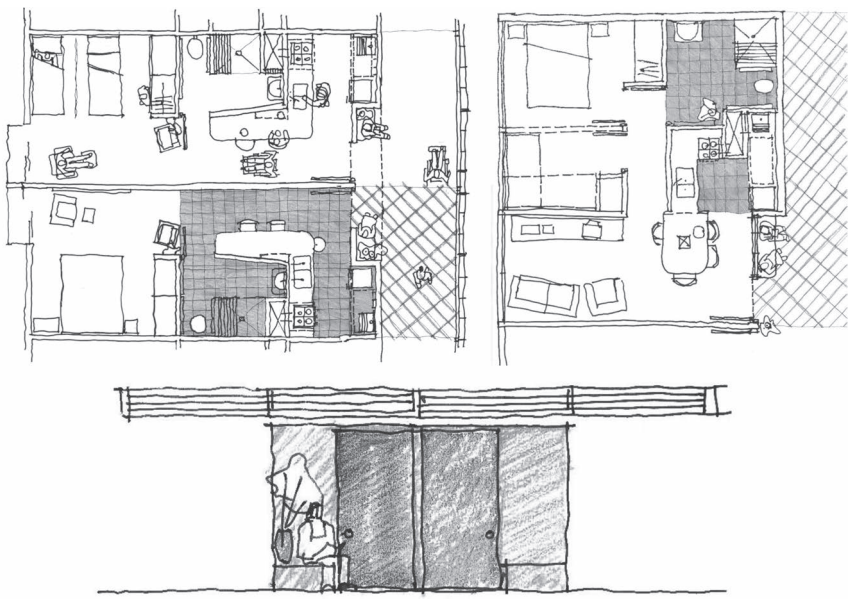


*Figure 10.55* Two available typologies of housing units: studio flats (above) and one-bedroom flats (above). Detail of the benches in front of the flat doors (below).

*Source:* Courtesy of Viglieca & Associados.

*Figure 10.56* Finishing details.

*Source:* Courtesy of Viglieca & Associados.

for the project to the residents. However, it should be noted that if some of the original ideas were respected, the project could have had an even more positive impact not only on the lives of the residents but also on the neighbourhood where it is located (Bedolini, 2014).

### Age-in-place modular homes in Calgary: living and ageing where you want but always in the community

The age-in-place concept is a guiding strategy for meeting the needs of older adults in the context of housing (Lecovich, 2014). It strives to ensure that everyone is able to live in their own homes and communities "safely, independently, and comfortably, regardless of age, income or level of intrinsic capacity" (World Health Organization, 2015, p. 35). However, the ageing process is different for each person. Some older adults are active and healthy, living well and independently in their own homes and neighbourhoods. Still, physical limitations and diseases related to old age sometimes make that impractical or impossible without specialised safety and health support. The individuals can end up living in a care facility before it is medically necessary because there is nowhere else for them to live. Many factors impact the most appropriate choice of housing at this stage of life, such as financial constraints, difficulty in adapting to houses, and sociocultural issues that affect family proximity, leading to the significance of filial care (Faller et al., 2017). Studies report a growing demand for long-term care facilities (Pivodic et al., 2014). Still, the COVID-19 pandemic has brought extra concern since a substantial proportion of related deaths worldwide have occurred among care home residents (Comas-Herrera et al., 2020).

Focusing on the housing option gap between an older adult house and the nursing home, John Brown, Professor of Architecture and Dean of the School of Architecture, Planning and Landscape at the University of Calgary, began a collaboration with the Cummings School of Medicine to look at age-in-community

design strategies. The Aging-in-Place Laneway House Research Project received a Mayor's Urban Design Award in Housing Innovation. The *FabHome* (2020) brand was launched in 2020 and evolved into *Garden Loft* (2020), delivering this innovative solution across Canada. The *Age-in-Place Suite* is a prefabricated, portable, stand-alone living space with assisted supports for an independent life that fits into a family member's backyard (Figure 10.57).

The units are delivered by truck and sit above the ground on adjustable legs to minimise impact. A utility umbilical cord connects to the mechanical services of the house. When the unit is no longer needed, the utility cord is disconnected, and the unit is removed. Thus, the unit is an immediate and temporary solution for those who need or want to move closer to their family without the necessity of buying a new home, undertaking an addition, or being forced into a premature move to an assisted living facility. According to the authors, the city approval process for their product has been straightforward in Calgary as long as the size and shape of

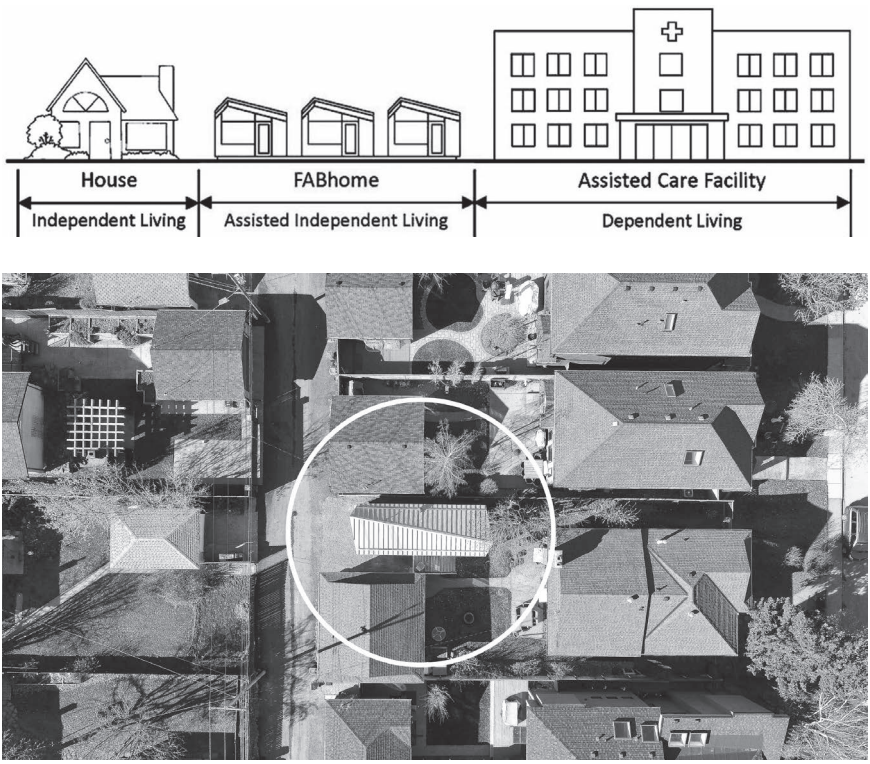



*Figure 10.57 FabHome* as a solution between independent and dependent living (above).
*Source: FabHome* (2020).
The Garden Loft prototype is deployed (below).
*Source:* Courtesy of John Brown (2017).

the lot can accommodate a *Garden Loft* within the required setbacks. However, a feasibility analysis in other cities and regions may be needed.

The *Garden Loft* can be aligned with an existing backyard deck to create a shared outdoor living space for the family. The proximity makes a "family compound" that enables conviviality and assistance while maintaining independence and privacy for both the *Garden Loft* resident and the host family. The front window enables much light into the living room and allows the seniors to oversee grandchildren playing outside (Figure 10.58).

Individual *Garden Loft* units can be aggregated together into small villages with a communal space, to promote integration within the neighbourhood and reduce social isolation. A *FABvillage* can be (a) stand-alone, with age-friendly services within close walking distance; (b) located adjacent to an existing support building, such as a community centre; (c) deployed with a new amenity building in remote communities. In the COVID-19 pandemic context, these individual housing units enabled preventive social distancing and isolation in the event of a disease outbreak, which made them a suitable option for augmenting the capacity of an existing care facility or hospital (Figure 10.59).

*Garden Loft* does eliminate the need for families to undertake major adaptations to the host property to accommodate an ageing family member. Adaptations for accessibility in an existing home can be expensive and challenging to complete. They can also degrade the home's look, impacting property values. With *Garden Loft*, universal design is part of the core concept, producing a cohesive architectural proposal. The physical, cognitive, and medical support features do not compromise the feeling of home while still increasing the independence of individuals needing a wheelchair or walker, as well as those with poor eyesight, limited body movement range, instability, low stamina, self-toileting issues, and mild cognitive impairment. The interior features of *Garden Loft* seamlessly integrate safety and support with high-quality, functional residential design. The size of the unit allows it to fit in many single-family house backyards in Calgary (Figure 10.60).

*Garden Loft* has an intimate residential-scale interior with an open floor plan and lots of natural light. The wood finish on the walls and ceiling gives the space a cosy feel that is reminiscent of traditional Canadian holiday cabins and cottages. Its multifunctional character appears in the central free-standing cabinet that separates the sleeping area from the living areas. The unit supports televisions in both the living space and sleeping area, and has a fold-away eating table that best uses the space. The multifunctionality is also found in the security features. The cabinetry running down one side of the unit has continuous safety grab-rails concealed as a towel rack and features a motion-activated light for safety at night (Figure 10.61).

Fall-safe flooring installed throughout the whole house has a damping system that reduces fall injuries by 43% compared to the typical floor. Downlights near the bed and in the cabinets are motion-activated to assist in getting around in the middle of the night. The bathroom is wheelchair accessible, with a no-step shower and a hands-free washlet toilet.

The ability to be adaptable is an important characteristic of age-in-place housing due to the resident's changing needs over time. To meet this need, *Garden Loft*

*Figure 10.58* Integration into the main house through a social area.
*Source:* Garden Loft (2020).

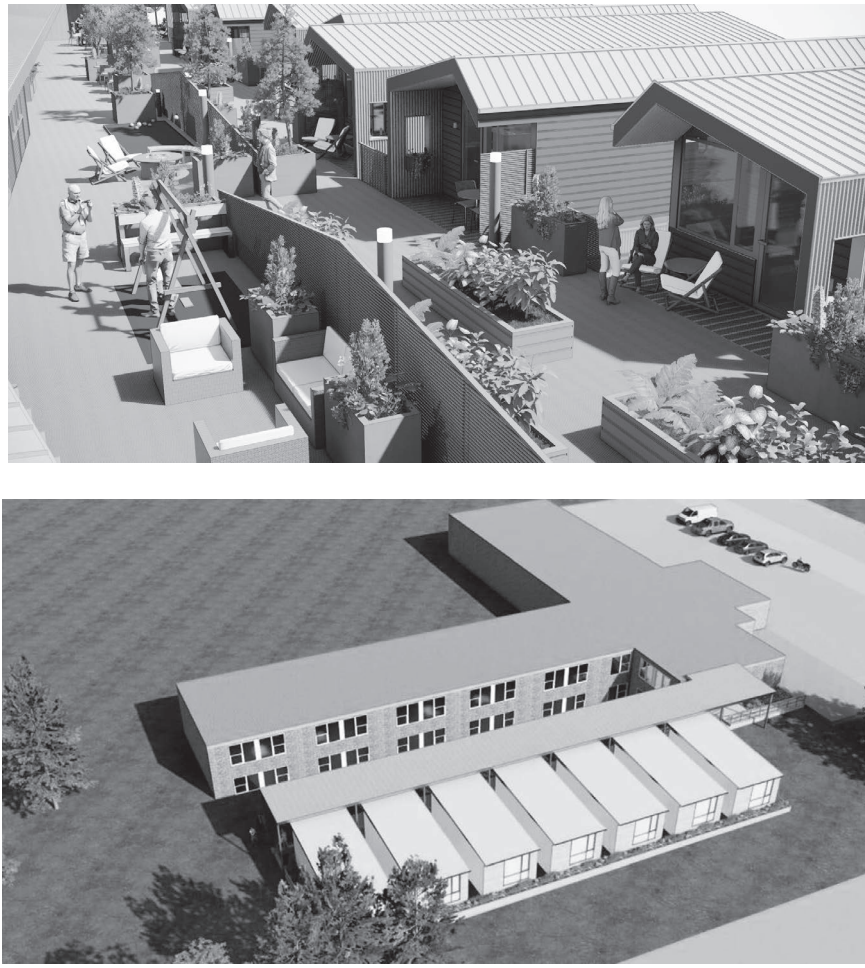


*Figure 10.59* FABvillage (above) and the units as an annexe in care facilities (below).
*Source: FabHome* (2020).

has adaptable support features such as an adjustable bed that can be set for reading, watching TV, giving the legs lift, or changing the sheets without having to bend down; adjustable height kitchen and bathroom counters that can be tuned to fit someone in a wheelchair or a walker (Figure 10.62); a bed headboard with a hidden oxygen concentrator cabinet; a tall bedroom wardrobe with low-set closet rods; and a kitchen with an easy-access pantry and waist-height microwave combi oven.

In the kitchen, the high contrast of white knobs on a black cooktop makes them easy to see, and the cooktop can be shut off automatically if left unattended. The digital system in the house integrates smart home controls with an easy-to-use user interface for the television and streaming services, remote access to activities

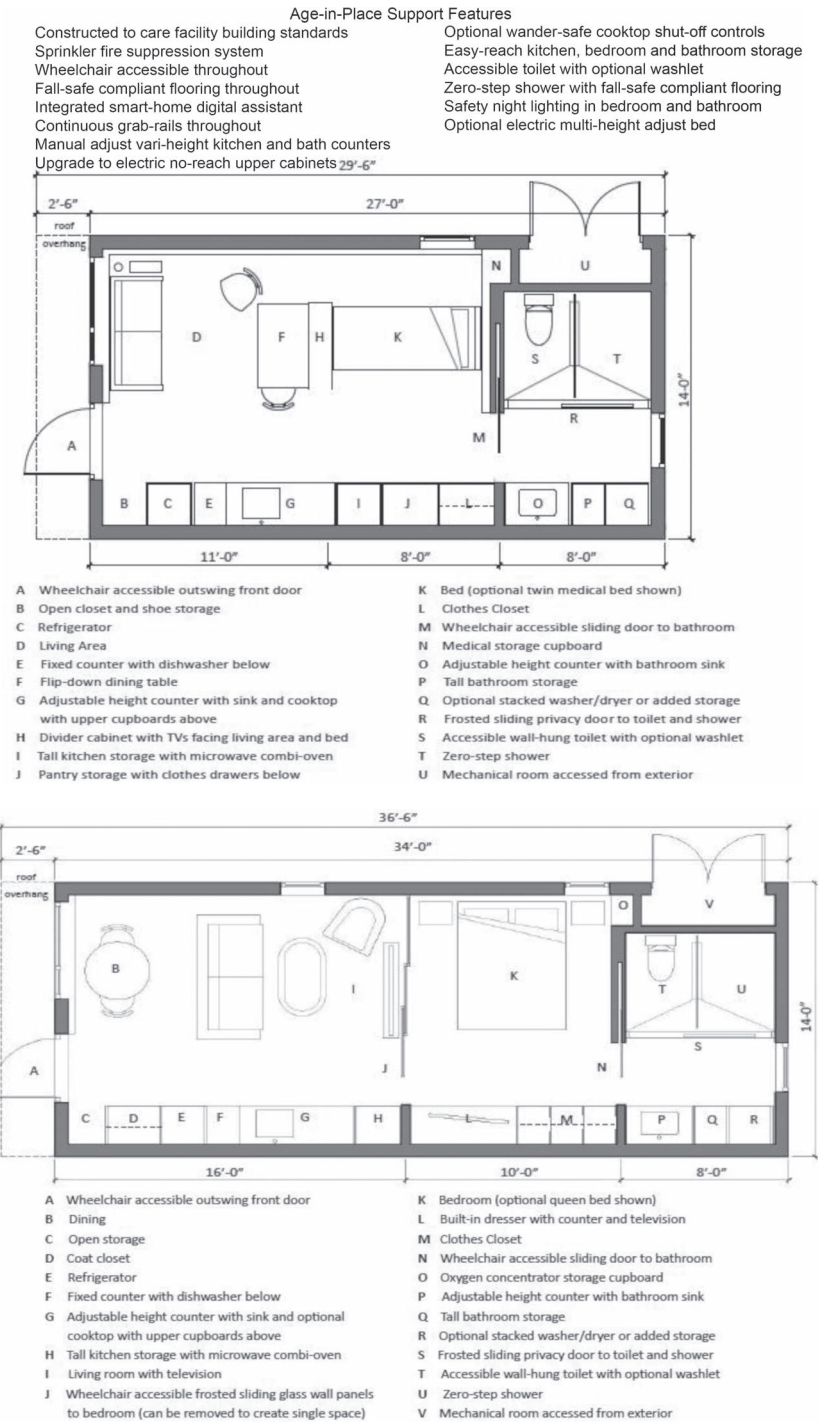



*Figure 10.60* Shows the two size options, 380 sq. ft. (above) and 480 sq. ft. (below).
*Source:* Garden Loft (2020).

*Figure 10.61* Shows the open-plan design and the multifunctionality of features such as the grab-rail.

*Source:* Garden Loft (2020).

*Figure 10.62* The adjustable bed with downlights (above) and the adjustable height bathroom counter (below).

*Source:* Garden Loft (2020).

and group classes for social integration, wellness monitoring updates to nursing staff, a Family dashboard for updates, and remote troubleshooting access. All these details represent an interdisciplinary approach to ageing-in-place design that brings together architecture, gerontology, and high technology.

*Garden Loft* fills a gap in the spectrum of housing options for Canadian seniors. It is designed for the typical North American suburb of single-family houses with a private backyard and converts this housing type into a multi-generational option. The portable nature of *Garden Loft* means that this conversion is not permanent, which reduces neighbour concerns about permanent changes to the neighbourhood.

## Conclusion

This chapter has no pretension whatsoever to present a perfect project or a standardised ideal solution that can be applied to any reality and replicated around the world. The innovations in the projects go beyond global guides and plans, and thus clearly demonstrate the limitations of this focus of policy. While global documents are of great importance in representing a first step towards better ageing planning, they also need to be seen as a first step. They must be followed by endogenous and more specific processes leading to better and more particular actions. Therefore, we portrayed not only the "innovations" of each example but also specific aspects that may become problematic.

When analysing real cases, it became clear that as important as planning for ageing is to govern and implement projects as planned, followed up on, and maintained. Many countries suffer from losing essential and well-planned public social facilities for the older population due to a lack of government maintenance and investment. In this way, public funds are lacking, and the population is deprived of a better quality of life. In addition, the problem of insecurity in certain urban environments can hinder the integration of new projects into their surroundings, limiting their potential to explore various planning scales and benefit the general population while supporting older citizens.

Just like the premises that structured this chapter, the examples portrayed a plurality that must be present in understanding ageing planners so that the solutions correspond to their complexity. This plurality also needs to be recognised at different scales: through individuals in their different stages of the ageing process; in the social issue and its various types of support and family or generational arrangements; in the cultural plurality, which permeates several interpretations and interferes in the acceptance of ideas according to the country or region; in the territorial diversity, in which distances and extensions vary; etc.

Planning for ageing is a multidisciplinary and, especially in the urban context, a dynamic act. More than one scale or target group can be involved in this process. For example, a simple building that has been designed with the needs of people in later life in mind may intensely benefit the daily life of the neighbourhood where it is located, or a municipal demand can be better met if considered within the regional context. That is why, even though the focus here is on planning for ageing, we address the benefit to the neighbourhood, the family, and the other generations on several

occasions. The urban dynamic needs to be integrative so that urban planning should not be compartmentalised. It is up to the planner to absorb as much information as possible, incorporating a sensitive observation of the pre-existing populations, uses, activities, flows, and behaviours in a given area into the planning process.

Throughout the examples, some issues recurred in such a way that it was understood that they could receive special attention from planners and thus help guide successful projects. The integration of older adults has shown that it can be achieved from the most direct form, of active participation in senior centres, in family nuclei, and in performing daily tasks in public spaces, to the most subtle form, such as the visual integration that the vertical and horizontal layout of a building can provide.

Integration is directly linked to proximity, which here has emerged in traditional and more permanent forms, but also innovative and ephemeral, creating portable facilities to bring older people closer to the environments most convenient for them and rethinking the concept of ageing in place. The saying goes that "home is where your family is," so that "place" may be less related to location and more related to familiarity, bonds between loved ones, and care. In this sense, it is important to say that planning for ageing in place deals with subjective, emotional issues that help build and maintain a sense of place, and each decision by the planner can lead to a greater or lesser commitment to them.

From a set of proximities, a centrality can be formed. Multiple centralities help serve a diverse population. Making some of them specially designed to better meet the limitations of an ageing population in no way prevents them from being inserted in contexts of generational diversity that shape the urban dynamics. It is understood that, even if the goal is to plan according to the needs of people in later life, ageing is a process of which we are all apart. In this sense, projects for a lifetime that are adaptable and that seek to foster intergenerationality are highly desirable.

The global level approach also led to the exposure of socio-economic and demographic realities, which are so contrasting that they point to an extreme difference in demands and resources. So that it becomes undesirable and unfeasible to implement standardised actions. There is a need for endogenous intervention processes that respect local characteristics, both in terms of potentials and limitations. It also highlights the great challenge to which we are heading worldwide: to maintain the sustainability of extremely aged, remote, and impoverished communities. The tendency for these communities to have their urban and social systems overloaded is an imminent concern and requires urgent, supportive action. In this sense, even utopian solutions that would be difficult to employ on a large scale can point to important values and principles to be assimilated.

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# Part 4

# Ageing, planning, and the city

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# 11 Challenges to a transformative application of age-friendly programmes around the world

*Pamela Suero and Hind Al-Shoubaki*

## Introduction

In the previous chapters, we journeyed through multiple countries, cities, and local communities around the world that are developing different measures, programmes, and policies to address population ageing and urbanisation trends.

By linking features from the diverse social, cultural, institutional, economic, and political contexts examined, this chapter collects overarching insights derived from a thematic reflection on the cases presented in this book, underscoring key implications for urban planning and policymaking for meaningful urban change.

## Governments are engaging in a variety of policy options in response to ageing

While age-friendly ideals (often influenced by the World Health Organization's [WHO] age-friendly cities and communities [AFCC] framework) serve as an initial reference framework, governments and communities are experimenting with a variety of their own contextualised interpretations of age-friendliness that reflect local political choices as well as cultural, socio-economic, demographic, and institutional particularities and constraints. The pathways towards age-friendliness are not uniform, as cities and communities choose different routes to cater to the needs of their ageing populations with policies that involve diverse stakeholders, processes, scales, and governance arrangements. Actions related to only some of the eight domains of the AFCC are developed, which is consistent with other research that reveals that oftentimes, not all eight domains are evenly covered by age-friendly programmes (Van Hoof et al., 2018).

The WHO has admitted that the age-friendliness of an urban environment is a complex, dynamic and multidimensional concept that is also highly context-dependent and does not easily lend itself to standardisation of measurement (WHO, 2015b). In other words, there is no one-size-fits-all age-friendly strategy: different countries, cities, and communities need to experiment with place-based strategies that are tailored to their unique physical, institutional, policy, and planning settings, as well as social preferences. This approach allows for the development of age-friendly diversity that spans many areas of public policy.

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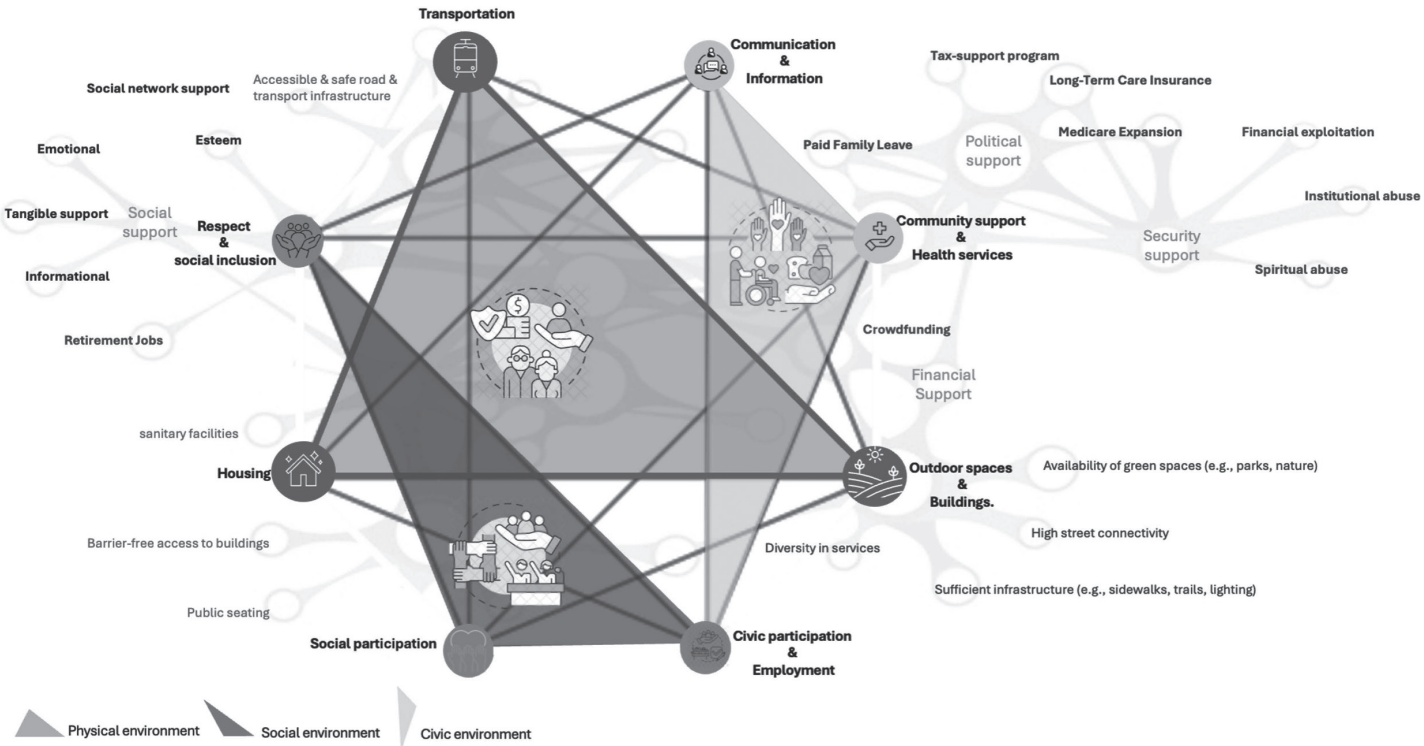


*Figure 11.1* WHO domains and their environments.

*Source:* Drafted by the authors (2024).

The preceding chapters showcased a diverse array of cases, which stretch from locations in Latin America, Africa, East Asia, and Europe, attesting to the fact that the needs of older people vary among regions. This diversity stems from many factors, such as sociocultural nuances, economic disparity, access to resources, social determinants of health, and historical and geographical characteristics, among others (Woolrych et al., 2022). The importance of age-friendly planning that considers the heterogeneity of the older population has been highlighted by Chao and Sun in this book: as there is no typical "older person," there can be no typical answer for creating AFCCs. Thus, successful implementation of the age-friendly framework depends largely on local interpretation, as numerous international experiences demonstrate. In fact, research by Joy (2021) has warned about the pervasiveness of benchmarking and decontextualised AFCC approaches that ignore the everyday challenges of people in later life in diverse settings.

As such, given the diversity of context and the diversification of older age per se, as asserted by Feng and Yu in the case of China, countries must have the chance to "find their own way" for the application of age-friendly strategies. Moreover, as pointed out, contrasting socio-economic and demographic realities across the cases examined exposed extreme differences in demands and resources, as well as revealed the importance of remaining aware of possible forms of socio-spatial exclusion and fragmentation that may emerge against the backdrop of age-friendly development. In this respect, the WHO has recognised the need for actions around reducing inequalities and making the Global Network of Age-Friendly Cities and Communities (GNAFCC) Network more inclusive (WHO, n.d.).

The GNAFCC has grown steadily since its inception in 2010, including over 1,600 member cities and communities across 53 countries by 2024 (WHO (n.d.); Table 11.1). The majority of members (64%) are located in high-income countries in North America and Europe, with Spain, the United States, and Canada leading the way. However, there has been little progress in engaging cities and communities in Africa and Southeast Asia, highlighting the need for more tailored support and advocacy efforts in these regions. On the other hand, the high-income countries in East Asia and the Pacific region have shown significant involvement, particularly in the Republic of Korea, Australia, and Japan. Middle-income Latin American cities and communities are also making strides, with Bolivia's impressive 50 AFCC members standing out, despite the country's recent history of political instability as well as relatively high levels of poverty (the highest in South America). This suggests that local leadership, awareness, and support for age-friendly programmes can flourish even in the face of institutional and socio-economic challenges.

In any case, a slower age-friendly engagement in some regions of the world may suggest there remains a gap for a more specific age-friendly agenda to tackle the challenges, potential, and preferences of cities and communities in low-income countries (Van Hoof et al., 2021). As an example, following the findings presented by Moonga, in this book, Aboderin et al. (2017) have highlighted that in various sub-Saharan African (SSA) nations with fast, mostly uncontrolled urban growth, particularly in informal settlements, there is untapped potential for an age-friendly approach to be embraced. They suggest that the current global AFCC framework

*Table 11.1* Regional distribution of WHO member countries with AFCC registered in the GNAFCC.

| *Region* | *WHO member countries with registered cities and communities in the GNAFCC* | *Gross proportion of initiatives as a share of the total* |
|---|---|---|
| **Africa (0)** | None | 0% |
| **Latin America (413)** | Argentina (18), Bolivia (22), Brazil (35), Chile (214), Colombia (3), Costa Rica (28), Cuba (3), Mexico (87), Paraguay (1), Peru (1), Uruguay (1) | 27% |
| **North America (478)** | Canada (104), United States (incl. Puerto Rico) (374) | 31% |
| **European region (509)** | Andorra (1), Austria (1), Belgium (13), Bosnia and Herzegovina (1), Denmark (1), Finland (7), France (72), Germany (3), Iceland (1), Ireland (30), Italy (4), Lithuania (1), Netherlands (2), Norway (3), Poland (12), Portugal (14), Republic of Moldova (5), Russian Federation (8), Slovenia (13), Spain (254), Sweden (8), Switzerland (5), Turkey (6), United Kingdom (UK) (44) | 33% |
| **South-East Asia (1)** | Sri Lanka (1) | 0.1% |
| **East Asia & Pacific (140)** | Australia (35), China (19), Japan (24), New Zealand (7), Republic of Korea (50), Malaysia (4), Singapore (1) | 9% |
| **Eastern Mediterranean region (8)** | Islamic Republic of Iran (2), Israel (5), United Arab Emirates (1) | 1% |

*Source:* Elaborated by authors based on the WHO GNAFCC Network website, accessed 12 November 2023.

does not include slums and that there is potential for developing an "age-friendly slum" initiative, although it may require significant adjustments to the existing age-friendly format.

Regional and sub-regional experimentation with age-friendly policies is leading to the emergence of unique paradigms in different contexts. Chao and Sun illustrate how cultural characteristics and urban environments in East Asia have resulted in an "Oriental paradigm" for creating age-friendly spaces. In this paradigm, there is a stronger emphasis on top-down approaches and central political leadership, in keeping with traditional institutional culture in East Asia. Similarly, cases from Africa and Asia demonstrate how collectivism, community commitment, and filial piety play a strong role in shaping age-friendly policies.

## A wide range of age-friendly aspirations are being pursued through diverse policy interventions

The cases presented in this book illustrate how various policy interventions are employed worldwide to achieve age-friendly objectives. These objectives primarily

focus on enhancing the quality of life, health, and dignity of older adults while promoting their autonomy, independence, participation and social inclusion. Additionally, the age-friendly agenda reflected in the cases aims to support ageing in place, facilitate intergenerational interaction and integration into the urban fabric, improve accessibility and mobility, fulfil basic daily needs, and prevent social isolation and loneliness.

While many programmes align with the traditional WHO philosophy of age-friendliness by promoting healthy and active ageing, some experts suggest that overemphasising these concepts may overlook diverse ageing experiences. These approaches might prioritise individual choice, lifestyle, and responsibility for well-being instead of the need for collective efforts and policy action to ensure rights and the quality of later life, potentially excluding frail individuals and neglecting issues of social inequality, health disparities, and age relations (Boudiny, 2013; Katz & Calasanti, 2014; Kolanowski, 2021).

To pursue different objectives in different settings, various policy implementation options are available at different spatial scales, including national, regional, city/village, neighbourhood, public space, and buildings. The cases demonstrate a range of policy implementation options, including housing projects, new care service approaches, outdoor urban space developments, adaptation of urban transportation infrastructure, rural community development, social participation and cultural programmes, and dementia-friendly initiatives. These are often deployed through short- and medium-term plans, programmes, and

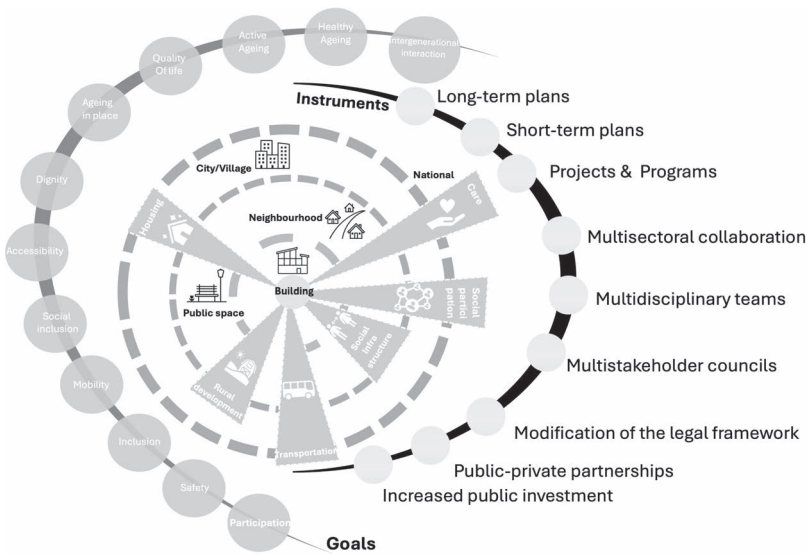


*Figure 11.2* Features in policy development for ageing in the cases.

*Source:* Elaborated by authors based on previous chapters (2024).

projects, as well as the integration of new laws or modifications of existing legal frameworks and/or the incorporation of new institutional arrangements and governance structures.

**Given the intersectoral challenges of ageing societies, integrated place-making strategies are required**

While several of the initiatives presented in the previous chapters gave emphasis only to a specific or a few policy sectors, the cases reflect comprehensive approaches that went beyond policy "silos." These cases integrate various sectors to address the multidimensional aspects related to making places better for ageing and provide valuable insights on planning for the diversity of the ageing experience.

The call to action for planners is to focus on developing transformative initiatives that enhance existing capabilities and foster collaboration between sectors to create solutions that address multiple issues simultaneously. As an example, Barton et al. (2020) point out the multiple impacts provided by vegetation patterns in urban parks and streets, which have complex, interacting effects on mitigating extreme heat and absorbing stormwater while promoting biodiversity, physical activity, and social interactions, which in turn contribute to human well-being. For these authors, we need to find ways to advance health and well-being, equity and fairness in parallel with prosperity, security, and environmental sustainability. Thus, planning must be based on a holistic view of human settlements in a global context.

Joy's research (Joy, 2021, 2023) on age-friendly environments emphasises the importance of creating coordinated policies, programmes, and tools that address the unique and universal needs of individuals in large cities by establishing centralised and coordinated public approaches to AFCCs instead of depending only on small-scale pilot projects. The case study from Switzerland (Libardoni and Drilling in this book) showcases the potential of "Social Regions" as an innovative policy structure for coordinating social and spatial planning among groups of municipalities. This approach adopts a comprehensive view of old-age policy and can be tailored to the specific needs and preferences of the ageing population in each municipality. The Solothurn Region, for example, integrates five "pillars of old-age policy" aimed at promoting independence for as long as possible, including prevention, outpatient services, new housing concepts, progressive care for older persons, and increased networking of services.

According to a recent study conducted by Woolrych et al. (2022), there is an urgent need to implement integrated place-making practices that can better support the ageing population amidst the rapidly changing urban landscapes across the globe. The study suggests that a more comprehensive approach to urban planning, which considers the interdependence between individuals and their environment, can effectively address the challenges of ageing and urbanisation. To this end, Libardoni and Drilling highlight a promising approach exemplified by the multi-agency project Kampung Admiralty in Singapore. This innovative project seamlessly integrates interventions from various sectors, such as housing, health,

social, environment/biodiversity, early childhood development, and commercial sectors, to create a fully public community plaza. The project aims to foster intergenerational connections and cater to diverse lifestyles and needs.

In this book, Dutton, Koshy and Tomaselli also highlight two cases that utilised a multi-sectoral approach to achieve specific policy objectives. In Amsterdam, a team of specialists from various fields collaborated to create a five-year plan aimed at addressing issues related to loneliness, dementia accommodation for older persons, and improving the overall age-friendly environment through spatial strategies. Similarly, in Buenos Aires, the city's Deputy Secretariat of Older Persons has implemented a variety of programmes and initiatives focused on promoting and protecting the rights of older persons, as well as improving their quality of life through social inclusion, access to new technologies, and a range of housing and protection programmes.

According to a study conducted by Gardiner and Webb (2022), one of the primary challenges faced in implementing age-friendly agendas across countries is the complexity of intergovernmental systems. They propose that utilising systems thinking could be key in age-friendly planning, given the interdependence between the various age-friendly domains such as outdoor spaces, transportation, housing, social participation, and health services. The authors believe that age-friendly environments should be viewed as a system of systems (as cities are also often regarded) working together to maximise human health and potential.

Similarly, Barton et al. (2020) argue that spatial planning, particularly the integrated planning of neighbourhoods and towns, plays a critical role in ageing societies due to the often incremental and disjointed dynamics of current urban transformations. They suggest that incorporating healthy planning principles could provide a powerful motivation for all practitioners involved, starting from the premise that the purpose of planning is the health, well-being, and sustainable quality of life of people. The authors emphasise the impact that place has on health and the health inequities that result from disparities in housing, greenspace, access to jobs, and facilities that affect mobility, behaviours, and the sense of community. They also highlight the need for investment in collective health goals embedded in urban planning, as poor spatial planning can lead to health crises that increase healthcare budgets.

The need for prioritising investment in prevention and health promotion as a central element in the life course of ageing societies has also been echoed by Andrews et al., 2007; Chao, 2020; Greer et al., 2021; Scott, 2021; Van Hoof, 2021; WHO, 2020b. From this perspective, there is unharnessed potential for conceiving the city as a place for promoting health and illness prevention and reallocating resources towards favouring sound urban development as a prevention instrument (and thus, a cost-saving mechanism) instead of further increasing investment in curative, over-medicalised health policies. This implies a broad conception of health policy and investment, that is, a reminder, as expressed by Scott (2021), that successful health policy goes well beyond the health sector and that tackling health inequalities requires a much wider range of policies and measures than just healthcare provision, including, among others, the quality of housing stock, air quality, safety, transport policies, public infrastructure, and city planning.

This logic is also featured in studies by Ball and Lawler (2016), who have emphasised that if the aim is to promote healthy ageing, then more investment in public infrastructure that promotes health and prevention, like sidewalks, parks, and civic spaces, needs to be prioritised. For these authors, these elements are not luxuries but tangible, long-term investments in places where health routines can be reinforced in a continuous and passive manner. Nonetheless, they regret that these are often the first areas to get cut when the budget tightens, which illustrates the incapability of administrative systems to assign value to the health benefits of environmental and infrastructure planning as intrinsically tied to lifelong well-being (Ball & Lawler, 2016).

Besides place-based policy innovation, when thinking about and planning urban environments, there is another promising approach to fostering collaboration across sectors when designing urban environments. This approach has been emphasised by Moonga as well as by Dutton, Koshy, and Tomaselli in this book and is gaining attention in a variety of policy and research papers (AGE Platform, 2021; Council of the European Union, 2021; Joy, 2023). It involves the integration of ageing and older age considerations into all sectors of policymaking, commonly referred to as "mainstreaming." For the authors, achieving an age-friendly city is a complex endeavour that requires the coordination of multiple actors across different scales and sectors. A key challenge identified by experts is the uneven distribution of resources among these actors. To address this, there is a need to exert a direct influence on the spatial frameworks of urban planners. This entails a horizontal integration of age-friendly policies across sectors and a vertical integration across scales. By adopting this comprehensive approach, policymakers can ensure that age-friendly policies are effectively designed, implemented, and evaluated within the context of urban regeneration.

### The cases underpin the fundamental role of place in later life, including both its physical and social dimensions

Several of the cases presented in this book capture the many ways in which place matters for older people, and some of the essential spatial features that make a difference in their daily lives. The examples presented serve to illustrate how the sense of place for different older populations around the world is embedded in interdependent and relational ways, physically, socially, and culturally (Woolrych et al., 2022).

Chao and Sun assert that older people in Taiwan tend to have a strong emotional commitment to their communities throughout their lives, consider ageing in place as a virtue, and develop strong place dependence on the community environment (Butcher & Breheny, 2016). For urban planning, this highlights the need to be sensitive to older persons' emotional place attachment and ensure that their voices are included in urban development and regeneration processes, as people in later life are likely to have a strong reaction to the changes in their physical environment.

Moonga points out at evidence suggesting that processes of social exclusion in urban communities affect older people more than other subgroups, because of their

emotional attachment to their place. Similarly, Feng and Yu, in this book, highlight how the changing environment in Ningbo City affects older persons' quality of life. This includes physical facilities, community amenities, access to daily needs, and residential transformation, where sudden alterations may result in the deprivation of their attachment to the area. The study found that older people in the context of urban redevelopment dynamics in Ningbo City were distressed by the deterioration of their neighbourhood's infrastructure, including the lack of elevators, aid services, and parking lots. Despite the worsening physical environment, the older persons interviewed still found meaning in their neighbourhood, as it was a source of social connections for them.

These findings align with Andersen et al.'s (2021) emphasis on the significant role that continued participation in local areas and connections with communities play in older people's quality of life. In this regard, Woolrych et al. (2022) argue that older persons construct a sense of place in their everyday lives through relational and interconnected ways of attachment, belonging, and identity. For them, the development of AFCCs needs to further consider the role of lifetime memories and the historical significance of place, including the ways in which the cultural, social, and physical aspects of place come together, with both the psychosocial and physical dynamics that interplay (Woolrych et al., 2022). Quesada-García echoes this sentiment, claiming that the physical environment's identity, character, and quality are intimately tied to an individual's vital, social, and cultural experiences. Thus, the cultural and symbolic components of spaces have a profound impact on older persons' emotional and cognitive well-being.

However, as indicated by Andersen et al. (2021), even when the importance of the human and social dimensions of urban planning and development – how urban structures affect community life and social interaction and "liveability" in neighbourhoods – has a long history in urban planning policy and urban movements, older people have typically been absent from this agenda.

Against this backdrop, the preceding chapters offer several examples of cities and communities that have taken steps towards creating opportunities for older people to access urban spaces. These cases highlight the critical role that urban planning policy can play in promoting inclusion and enabling fuller participation in city life for people in old age.

A number of features (Figure 11.3) were reiteratively highlighted as desirable within urban development strategies that seek to enhance the experience of ageing and the opportunities that ageing offers in the city:

### *1. Sense of belonging*

When older adults can maintain a sense of autonomy and belonging in their living space, they experience a higher quality of life. This is why it is crucial for residences and homes designed for older adults to create an environment that fosters a sense of belonging and ownership. After all, an individual's personal history, memories, and experiences are interwoven into the spaces they inhabit. Several case studies portrayed in this book, including those from Taiwan, Ningbo City, Pezcueza (Spain),


*Figure 11.3* Key features for planning urban space in ageing societies.
*Source:* By the authors (2024).

Awra Amba (Ethiopia), and the Wah Fu Estate Dementia-Friendly Neighbourhood (Hong Kong), highlight the importance of community, place attachment and the emotional meaning embedded in places to older adults' overall well-being.

***2. Integration into the urban fabric***

The successful integration of spaces for older adults into urban areas fosters a stronger connection to commercial, cultural, and social life. This integration also allows for easier access to transportation networks, health services, green spaces, grocery stores, and other amenities that enhance daily life in the city. Notably, integration was a central focus in several projects, including the St. Petersburg single senior housing development in Russia (see Golubeva and Emelyanova in this book), the Kampung Admiralty in Singapore, the Sugamo Shotengai in Tokyo, the Vila dos Idosos social housing complex in São Paulo, as well as the Victor and Civita Square in São Paulo (see Libardoni and Drilling).

***3. Proximity***

Urban planning for ageing societies must prioritise access to urban centres and ageing support networks, including essential services and loved ones like family, neighbours, and friends. Various examples demonstrate the significance of proximity for older persons. For instance, Vila dos Idosos in São Paulo (see Libardoni and Drilling) was built near public transportation, facilities, services, leisure spaces, and cultural structures. Meanwhile, the Garden Loft, a portable suite in Calgary, Canada, can be adjusted to an existing backyard deck, allowing for shared outdoor living space with family members. Even in a physically deteriorating neighbourhood in Ningbo City, China (Feng and Yu in this book), older persons interviewed appreciated the proximity and convenience of downtown commercial facilities, transportation, healthcare centres, banks, food markets, restaurants, and riverside parks, which provided opportunities for social interactions, recreation, and healthy activities. In addition, a study on the neighbourhood environment in Dongguan, China, indicates that there is a link between positive emotions and the subjective well-being of older adults and neighbourhoods where opportunities and facilities for physical activity with other people, walking, or exercising in their community are available (Liu et al., 2023). Likewise, research by Chao (2020) on Tainan City, Taiwan, suggests urban planning needs to consider the importance of configuring pedestrian-friendly environments, not only because it will benefit healthy lifestyles for older and younger generations and provide opportunities for social interaction in an ageing society but also considering future climate change trends.

***4. Centralities***

As explained by Libardoni and Drilling, a group of proximities contributes to the formation of a centrality, which organises the dynamics of the city and facilitates mobility, with a concentration of services, commerce, leisure, and amenities in specific spaces. Proximity or inclusion of older people within centralities seems to be a desirable aim to facilitate daily living and participation in urban society. For instance, the Kampung Admiralty in Singapore, right in the centre of the neighbourhood, Woodlands East, achieved a new vertical centrality integrated into the neighbourhood, positively changing the daily lives of both older people and neighbours of all ages. The creation of small age-friendly centralities in Canada has been an innovation to address ageing in remote areas, as illustrated by the case of Clarenville. These eastern Canada towns have concentrated facilities that include a regional hospital and long-term care centre, a seniors' village, and an Age-Friendly Park, all of which are located in an area with walking access to the shopping mall, pharmacies, doctors' offices, and green outdoor spaces. The innovative case from the Wah Fu Estate, a Dementia-Friendly Neighbourhood in Hong Kong, was established in an already consolidated centrality of special importance in the city, which respects existing uses, customs, and behaviours while developing actions to meet the needs of people with dementia, but remaining fully open and responsive to the needs of the general population.

***5. Intergenerational cohesion***

Throughout the preceding chapters, numerous instances have been presented where urban planning in ageing societies prioritised fostering intergenerational coexistence and cohesion. The Victor and Civita Square in São Paulo, the villages of Awra Amba in Ethiopia and Pescueza in Spain, social housing in St. Petersburg, Russia, and the age-friendly community of Clarenville in Canada, as well as Japan and Ningbo City in China, are noteworthy examples. Such initiatives demonstrate the potential benefits of incorporating a multigenerational perspective into age-friendly planning, which could garner greater political and social backing for inclusive urban planning. It was reported that the Pescueza case, for example, has even led to job creation, encouraging younger generations to stay in the village and benefiting the entire community. An increasing number of academic and policy studies have highlighted the untapped potential of promoting age inclusivity and reshaping city environments for the benefit of multiple generations. Buffel and Phillipson (2024), Finlay and Finn (2020), Servat and Super (2019), Warner et al. (2010), Warner and Zhang (2022), and WHO (2020a) all emphasise the importance of designing communities that cater to the needs of all ages and abilities, enhancing the capacity of all residents. With the significant demographic shifts that communities are experiencing, the demand for age inclusiveness will only grow. This implies that addressing the needs of older persons, children, and caregivers together can benefit society as a whole and local government in particular. However, it is critical to recognise shared values first and then build political support (Warner et al., 2010).

Drawing from their experience in the United States, Servat and Super (2019) propose age-inclusive cities that aim at boosting well-being across the life course through features such as neighbourhood design and amenities that encourage walkability, intergenerational public spaces, comprehensive transportation networks, street and home safety, affordable and accessible housing, and flexibility for multigenerational housing and accessory dwelling units. From a human rights perspective, HelpAge International (2016) claims that cities must combat discrimination based on older age in all its forms – socially, economically, and spatially – to ensure the rights of older people are protected and promoted throughout their lives. For this advocacy entity, ensuring cities are places where everyone can enjoy the fulfilment of their rights, regardless of their age, is key to creating communities that are inclusive, sustainable, secure, and prosperous.

Furthermore, Finlay and Finn (2020) have argued that more nuanced approaches to contemporary age-friendly efforts can focus on both current and future cohorts of older residents in working towards long-term urban change, since many needs of younger populations overlap those of older adults, including safe and affordable housing, accessible services, and regular social interactions. These scholars contend that regular contact within and among generations, as in mixed-use spaces such as the combination of retail, residential, and recreational sites, for instance, can bring together people of different ages for shared purposes to facilitate organic contact.

***6. Plurality***

Plurality emphasises the importance of urban planners' comprehensive understanding of ageing and its contextual complexities in developing effective solutions. This requires consideration of the broad range of ageing experiences, including the ageing process's different stages, the multidimensional responses required, the various scales and sectors involved, and the multiple stakeholders and cultural values at play. The case of Kampung Admiralty in Singapore (Libardoni and Drilling) highlights the benefits of planning for diversity while respecting particularities, resulting in an egalitarian approach that maintains community cohesion. The architects responsible for the building kept the perspective of older and frail people in mind, but permanently reflected on stereotypes of old age, considering ageing as a process that starts in childhood. Similarly, Tokyo's Sugamo Shotengai demonstrates the power of urban spaces that prioritise diversity and familiarity, allowing older persons to meet their daily needs and practice their faith while staying connected with their social communities over time.

## A negative narrative about ageing and older persons reflects ageist stereotypes that limit urban policy change

Several instances presented in this book reveal the detrimental impact of negative stereotypes and assumptions about ageing as a driver of exclusion in urban development processes. Moonga, in this book, highlights evidence suggesting that older persons are among the most excluded groups from fully participating in economic, political, and social activities within urban communities. According to him, this is primarily due to negative stereotypes associated with ageing, such as being dependent, unproductive, and senile. Additionally, Golubeva and Emelyanova indicate that research has pointed out the "burdensome effects of ageing," including decreased autonomy and increased dependency on others and the state. Feng and Yu emphasise the pervasive assumption that ageing is a "heavy burden," an "issue," or a "problem."

In general, the predominance of ageist stereotypes and prejudice, or negative attitudes and assumptions, in the social construct of ageing and old age, as well as approaches based on needs and assistance, have been identified as a key barrier to the development of policies that advance the human rights of older persons. In this regard, Kesby (2017) has found that dominant and competing narratives of ageing emerging from public policy and gerontological studies, most notably, ageing as a crisis or burden, ageing as pathology, conceptions of successful, productive, or active ageing, and finally, ageing and vulnerability, may be causing neglect and frustrating progress towards the rights of older persons.

In the same vein, in her analysis of the European Union (EU) context, Georganzti (2018) has revealed that older people are consistently problematised, with conceptualisations of ageing and older people susceptible to prejudice, as old age is often considered as a proxy for declining abilities and increasing needs. Further, she finds contrasting stereotypes or "competing paradigms" of old age prevailing across EU policy, which, on the one hand, reproduce a distorted view of older people as burdensome, "senile, unproductive, frail and useless" (the dependency paradigm), and

on the other, dictate that they should remain active, mainly economically (the active paradigm). With such distortions, she claims, EU policy may be "falling into the trap of essentialising" older people as either vulnerable or active instead of supporting them in making autonomous life choices. The expert expresses concern about the de facto vision of old age "as an indicator of incapacity, unproductivity, dependency, impairment, and burden that not only sustains age-based stereotypes and categories but also legitimises age discrimination and marginalisation" (ibid.).

Georganzti (2018) further reflects that the prevalence of ageism is bad for older people and society as a whole, as it impedes people in later life from becoming full agents in their communities. Moreover, according to Huenchuan and Rodríguez-Piñero (2011), under these circumstances, age discrimination can be said to be the greatest problem facing older persons, as it interferes with or blocks the recognition, enjoyment, or exercise on an equal footing of all fundamental political, economic, social, cultural, civic, and other human rights. For these specialists, the distorted narratives about old age often result in the lack of visibility of older people and a failure to value their identity as members of society and their legitimate aspirations and freedoms as citizens. Consequently, Huenchuan and Rodríguez-Piñero (2011) consider that, as a group, people in later life also tend to act as a sector with little influence in the corridors of power and are rarely fully incorporated into relevant spheres of policy action. Therefore, they have limited scope in which to exercise their equality and freedom owing to the existence of explicit inequalities and to the fact that public policies often fail to take their needs into account.

From the point of view of urban development, these structural asymmetries with regard to older persons' engagement in city life need to be taken into account, with city planners and policymakers becoming more aware, sensitised, and educated about the fundamental role of older citizens and their interactions with place, as agents in the production of urban space. HelpAge International (2016) has been emphatic in claiming that older persons have a right to belong in a city regardless of age. According to this advocacy group, cities often fail to protect and promote the rights of older persons and actively discriminate against people in later life socially, economically, and spatially based on older age. HelpAge has argued that negative ageist stereotypes and a lack of understanding of the diversity of later life have kept people as they age on the margins of city life, decision-making, and community activities.

### Traditional policy development often results in spatial fragmentation (urban-rural gaps)

While some examples, such as those in Canada, Spain, and Ethiopia (detailed in Libardoni and Drilling), demonstrate progress in policies that support ageing in rural areas, promote generational renewal, and ensure the sustainability of rural regions, others reveal that rural and suburban areas are being left behind by the age-friendly agenda. Despite the fact that rural populations are also experiencing an increase in ageing, the age-friendly agenda has largely been focused on urban areas, with less attention given to creating age-friendly communities in rural and

suburban areas (Zhang et al., 2019). This has resulted in spatial fragmentation and disparities in terms of locations that prioritise ageing.

According to Chao and Sun's research in Taiwan, older adults living in rural areas may have limited access to public resources and be more socio-economically vulnerable due to lower educational levels and household incomes. Chao and Sun argue that this is due to spatial inequality resulting from the government's uneven distribution of public resources. For instance, although the government aimed to establish a senior daycare centre in every township in Taiwan by the end of 2016, as of 2020, 100 townships, mostly in remote and rural areas, still lacked such centres. Spatial and social inequities are also evident in Russia and Zambia, where rural development initiatives have not fully addressed the needs of older people. Golubeva and Emelyanova's study shows that older adults in rural Russia face limited access to specialised social and medical care and must often travel to nearby towns to receive services or rely on informal support from family or neighbours. Moonga's study highlights the lack of planning for rural areas in Zambia due in part to the vastness of available land and limited planning capacity. However, he suggests an opportunity to create a "rural model of older people's environment" tailored to the country's development stage rather than solely focusing on urban planning, which caters to a smaller population of older persons.

In this book, De Decker sheds light on the insufficient services, particularly for care, available to older residents in suburban areas of Belgium. This results from neglecting long-term demographic dynamics in spatial planning, which still affects spatial policies in the country even as the ageing trend continues. Likewise, research by Zhang et al. (2019) in the United States found that although low-density suburban and rural areas have the fastest growth rate of older adults, planning has been slow in incorporating their needs. These scholars argue that suburban areas often cannot follow urban-biased design guidelines based on New Urbanist principles of density, walkability, and mixed-use. Thus, traditional suburban design needs to be transformed to better meet the requirements of older adults and young families.

The cases presented on Taiwan and Russia highlighted a significant challenge in developing effective strategies and policies for addressing the needs of older people in rural areas: a lack of data and research. Golubeva and Emelyanova note that no research in Russia on age-friendly environments in rural areas is available, highlighting the need for governmental responses, data collection, and scientific analysis.

To create better environments for ageing populations, it is essential to consider the urban-rural divide, spatial disparities, and long-term demographic trends. This must include addressing gaps in services, infrastructure, connectivity, and social interaction spaces, among other physical and social factors that impact older people's well-being and participation in rural and remote communities.

## Further research and information are required as evidence for policy development to support ageing societies

Several cases in the book highlighted a key obstacle to evidence-based, age-friendly planning and policy development: the lack of data and research about older persons

in urban and rural areas. However, some cases demonstrate how information can be leveraged to make a difference in designing policy solutions for ageing communities. For example, in Switzerland's social regions, planners are estimating long-term scenarios of population ageing and social demands. These projections serve as a regional perspective or "Masterplan" of the older society in each municipality, informing housing, care, and health policy development and investment.

Quesada-García explains how advancements in data systems, connectivity, and technological tools contribute to Ambient or Active Assisted Living (AAL) development. This innovative approach aims to provide housing solutions that specifically cater to the unique needs of older populations. Meanwhile, in Wangnong, Ningbo City, China, the authorities responsible for the Ximen Street Ageing In Place Center attribute their success to their comprehensive database of personal information about the older population. This database allows them to identify and differentiate the various age groups, income levels, and family statuses and effectively mobilise community resources to meet the needs of vulnerable groups.

Highlighting the importance of gathering evidence-based information on local older populations before developing action plans, Chao and Sun examine how mixed methods and socio-spatial data tools are being utilised by researchers in Taiwan to inform the allocation of public infrastructure and services. Furthermore, the authors contend that establishing quantitative local indicators to assess and monitor the outcomes of age-friendly programmes early was a crucial enabling factor and an innovation, predating the development of core indicators for AFCC members by the WHO. However, there are still significant gaps in data and research regarding the diverse circumstances, preferences, and needs of older people residents, which are necessary for guiding the development of ageing-related urban development policies. In China, Feng and Yu argue that it is imperative to understand the growing ageing population in cities better and to urgently implement appropriate policies and practical solutions. Moonga asserts that there is insufficient evidence to support urban planning efforts in the context of ageing across Africa and, in particular, Zambia. Golubeva and Emelyanova stress the need to comprehend not just the current older population but also how they will evolve in the future, given demographic projections. However, in Russia, they found that only a few scientific studies related to building age-friendly environments are primarily limited to Moscow and other large cities.

Some scholars believe that very little is still known about the everyday realities and experiences of older people living in different environmental circumstances with varying personal capabilities. Thus, further participatory approaches and innovations in research are necessary to understand what ageing in the right place means for heterogeneous older people and how the physical environment could be improved (Chao, 2020; Grove, 2021). In fact, evidence suggests that older persons are often the last to be involved in decision-making processes within their neighbourhoods (Buffel et al., 2014).

According to Chao (2020), there is a knowledge gap between what we think we know about older people and reality; thus, a key task for urban planners is a new approach to making places by understanding older people first. This presents

a challenge for planners to engage with a wide range of older persons and increase their awareness of the particular challenges faced by different groups, such as those with specific health needs, refugees and migrants, individuals from various ethnic groups, and those living in areas of high socio-economic disadvantage (Finlay & Finn, 2020).

In light of the increasing ageing population in urban areas, it is crucial for urban planning to prioritise understanding and meeting the needs of older individuals. This presents a challenge for urban planners to broaden their knowledge about their ageing constituents while also elevating the value of their input and role in shaping public spaces (Handler, 2018). To achieve this, it is essential to include meaningful engagement of older citizens at every stage of the urban policy cycle, with potential opportunities for co-creation and cooperation in monitoring and evaluation efforts to ensure policy success. Additionally, urban planning and policies must adopt an intersectional perspective towards ageing, acknowledging the diverse experiences and places of ageing, particularly for unheard and traditionally marginalised groups. For example, Dutton, Koshy, and Tomaselli suggest that incorporating intersectionality and gender mainstreaming approaches in urban planning can lead to more relevant and inclusive design decisions that cater to the worldwide feminisation of old age and gender diversity in later life.

**Policy development and investment to support ageing cities and communities are still slow**

The state of policy development in addressing ageing in urban development is concerning. Despite increasing attention to ageing in policy, advocacy, and research, cities and communities are still not well prepared to have support and services for older populations, as noted by Feng and Yu in the case of China. Likewise, Golubeva and Emelyanova conclude that Russia needs to put more effort into organising spaces for people in later life and that ageing needs to be a more central part of the government's strategy on spatial planning.

Age-friendly policies are often seen as small-scale, short-term pilot programmes with limited scope that are not part of the broader urban change agenda (Ball & Lawler, 2016; Joy, 2021, 2023). For Joy (2021), big actions and funding commitments from the different levels of government to meet the housing, health and transportation needs of older citizens are simply not on the table yet. Zhang et al. (2019) argue that there are three main barriers to building and sustaining age-friendly initiatives: lack of knowledge, funding, and practical guidance.

Research has also pointed out that age-friendly urban development is affected by the restrictions related to the political economy of urban communities and that municipalities face limitations in transforming urban environments to benefit multiple generations on their own (Joy, 2021, 2023; Warner et al., 2010). Recognising these challenges, the WHO has recently launched a guide to promote the creation of national AFCC programmes. This initiative aims to achieve wider commitments from states to prioritise ageing in policy and investment, generating support from both top-down and bottom-up approaches (WHO, 2023).

Regarding funding concerns, Joy (2021, 2023) has emphasised the importance of ensuring specific mechanisms for including ageing in strategic planning and resource allocation and for national programmes to create budgeting systems that fund priorities at the multiple scales of policy action required. On this, the WHO has highlighted the example of the Réseau Francophone des Villes Amies des Aînés in France (a French-speaking Network of Older Person-Friendly Cities), which created a support fund for innovative "Senior Territories" in 2021 with government subsidies that provide direct resources to cities and communities for organising themselves and implementing age-friendly action plans. Similarly, older people's councils and offices nationally and locally in Ireland, Brazil, the UK and New Zealand have institutionalised specific funds for supporting age-friendly programmes in their cities and communities (WHO, 2023).

The WHO (2023) has highlighted the need for further commitments to be reflected in strategic planning, normative frameworks and policies to advance age-friendly programmes that drive a vision, direct action, and establish institutional structures and mechanisms to support short- to long-term action and impact. In general, research must further address the need for a more complete and critical understanding of the systematic challenges confronting urban planning to advance age-friendly practices. In particular, gaps in knowledge remain regarding what opportunities and strategies may help drive future commitment, more timely responses and policy transformation in ageing cities and communities.

## Governance structures play a key role in advancing age-friendly progress

The book highlights a range of governance arrangements that promote age-friendly urban development worldwide. Each case study features varying actors, institutions, policies, and coordination mechanisms that shape the governance structure of ageing programmes. For instance, Taiwan and China have implemented policies through centralised political leadership in public institutions, while Canada's programmes are community-driven. In Tokyo's Sugamo Shotengai, the age-friendly initiative was self-organised and involved private and community actors shaping public and private spaces in the neighbourhood. Despite these differences, all cases share a common thread of engaging and mobilising public, civil society, community, and private stakeholders to support ageing populations through community-based approaches. This element is key, if not essential, in all cases.

Upon examining the governance features in the cases examined throughout the book, several reflections become apparent:

### *1. Multistakeholder mobilisation and political action help materialise age-sensitive change in urban development*

The achievement of age-friendly urban development requires mobilisation and political action by multiple stakeholders. The involvement and empowerment of diverse older persons in collaboration with public, private, and social leaders and stakeholders within communities are critical components for inclusive urban development. Multisector steering committees, decentralised community-oriented strategies, and

intersectoral collaboration among community stakeholders are some of the approaches that have been adopted in different countries. For instance, the Vila dos Idosos social housing project in São Paulo (see Libardoni and Drilling) was developed in response to demands from groups linked to the Municipal Council for Older Persons. The Kampung Admiralty project in Singapore was developed through a partnership of public agencies, non-governmental organisations (NGOs), and other stakeholders in fields such as housing, environment, biodiversity, and early childhood development. A multi-sector steering committee oversaw planning and construction. In Hong Kong, the implementation of the Wah Fu Estate – Dementia-Friendly Neighbourhood project relies heavily on intersectoral collaboration among community stakeholders, caregivers, volunteers, private shop owners, and the general public. Centralised approaches to age-friendly urban planning, health, and care have been combined with decentralised, community-oriented strategies in China, Japan, and Taiwan. In Japan, the more decentralised approach, often called "Mochizuki," involves neighbourhood associations and networks playing a crucial role in solving local issues and mobilising local activism, according to Baba and Ooyama in this book.

As discussed by Drilling and Neuhaus (2019), change in cities will not happen overnight unless there is collective participation and activism to push an agenda for change. Several scholars have highlighted the importance of broad multistakeholder commitment and cooperation to promote policy change in favour of ageing (Greenfield, 2018; Joy, 2023; Murtagh et al., 2021; ROSEnet, 2020; WHO, 2020b).

Murtagh et al. (2021) see a potential for the age-friendly concept to help mobilise older people as well as support evidence-based advocacy and programmatic change. In a similar manner, research has considered the pertinence of advancing healthy ageing policies for all ages by building intergenerational coalitions that would contribute to the fiscal and political sustainability of policies over time (Greer et al., 2021; Warner et al., 2010). Joy (2021) contends that political movement building needs to be strengthened as part of the age-friendly agenda to drive change in cities and communities. For her, age-friendly strategies need to be founded on an understanding of older citizens in all their diversity as rights-bearers deserving of collective entitlements and not on the condition of potential human capital burden. She argues that this would require designing programmes with older persons as political actors and that the end goals of these programmes must be deeply political: "They must be about justice, rights and citizenship-building, not about saving money" (Joy, 2021, p. 7).

### *2. Older persons councils or boards are an important model of collegiate governance for achieving recognition and representation of the aspirations of older people*

Within many countries, councils, boards, and commissions have been established to represent and advocate for the needs of older persons. These organisations typically take the form of a central, collegiate body or public and cross-sectoral platform, with the purpose of guiding policy development on ageing and providing representation for the voice of older persons. Some of these institutions also possess executive functions, such as an ascribed technical secretariat or directorate.

Several examples of such organisations are showcased in the book, such as the Municipal Council of Older Persons of São Paulo, the Deputy Secretariat of Older Persons in Buenos Aires, Argentina, and the Random Age-Friendly Communities (RAFC) Board in Clarenville, Canada. It is worth noting that each province in Canada also has a minister responsible for older persons. Municipal councils of older people exist in local territories in Brazil, where they are responsible for developing action plans to address ageing and managing funds for implementation. In Ireland, local and national older people's councils represent older residents and facilitate the development of age-friendly programmes.

Since 2006, a law in Wales has formalised the appointment of an Older People's Commissioner, who serves as a champion and independent voice for older persons and has legal responsibilities of oversight of different national and local institutions. In most Nordic countries, older people's councils are mandated by law. In New Zealand, the Office of Seniors supports communities in developing age-friendly plans. The National Older People's Council in the Dominican Republic, a collegiate body of state and non-state actors, conducts normative and policy development on ageing and manages an executive office for programme implementation.

The WHO has also recognised the "Age-Friendly Older People's Board*"* in Manchester, UK, as a good practice. This platform comprises up to 15 members from different backgrounds, neighbourhoods, and organisations who act as champions for older people in their communities (WHO, 2023). They provide hands-on leadership to age-friendly programming, validate the overall Age-Friendly Manchester Strategy, and develop co-research on age-friendly along with academic partnerships. In Manchester, annual consultations and interactions with policymakers take place during the "Older People's Forums," held at the city hall. The WHO has also highlighted the multisector network achieved in Euskadi, the Basque Country of Spain, which involves 50 local municipalities and the public and private sectors (WHO, 2015a). This network has revitalised older people's associations, raised broad awareness, and improved dialogue between the city council and older citizens.

Some scholars have valued these central platforms as important coordination mechanisms that embody the formal recognition of ageing as a policy concern and integrate the voices and resources of various sectors related to conducting the design of policy and strategies and, in some cases, their implementation (Boudiny, 2013; Joy, 2023). Feng and Yu exemplify this with the Ximen Street Ageing in Place Center, which was led by an older adult who prioritised engaging with older members of the community. Similarly, in Zambia, Moonga recognised the important role that older citizens play in regional land use planning. While these coalitions can be instrumental in implementing policies, there are still concerns about whether they represent the diverse needs of older citizens and their power and ability to truly drive policy changes.

### *3. Broader political commitment is important but remains a challenge to the sustainability of policies that favour ageing*

The promotion of political commitment has been identified as an essential factor in facilitating planning and policy change in ageing societies. Notably, in the case of

Taiwan, strong leadership at both national and municipal levels enabled successful cross-departmental collaboration, leading to the engagement of all 22 cities and communities with the age-friendly agenda within a decade. However, academic and policy research has shown that securing political support for age-friendly policies remains a significant challenge in many countries, with leadership changes, political dynamics, and resource constraints often hindering progress (Greenfield, 2018; McDonald et al., 2019; WHO, 2023). The WHO has found that electoral cycles and political shifts are significant barriers to the effective implementation of age-friendly programmes in many cities and communities.

Academic and policy research has further highlighted the need for specific strategies to develop and sustain political leadership to ensure the continuity of ageing programmes (Joy, 2023; WHO, 2023). These strategies include securing support from politicians at various levels, engaging with political parties to prioritise ageing, and institutionalising political champions at national or subnational levels. As the trend towards population ageing continues to shape political dynamics and policy choices, recognising the political role of older persons and the potential positive spillover effects of age-friendly policies on society could facilitate dialogue with political actors. Lipp and Peine (2022) argue that ageing represents a resource and driver of progressive politics, creating opportunities for rethinking established political rationales and for embracing ageing as a fruitful policy concept for new ideas about how to organise future societies.

However, in general, research has found that the complex interplay between political, economic, and organisational factors that influence the governance and implementation of age-friendly initiatives remains underexamined (Joy, 2023; McDonald et al., 2019). To advance age-friendly development fully, the underlying values, power dynamics, and capacities of local organisations, institutions, and actors must be better understood. According to Joy (2021, 2023), moving forward, age-friendly governance should be profoundly political, institutionalised, and rights-based, with further research needed to fully understand the complexities of this issue.

#### *4. Capacity building for age-friendly governance is necessary*

Capacity building, which involves enhancing the resources, skills, and knowledge of key actors across the city, is essential for advancing policies on ageing (Joy, 2023; WHO, 2023). For instance, research by Joy (2023) has established that, especially in big cities, there is a need for centralised ageing offices that have a budget, are staffed, and have the capacity to enforce ageing policy. Education has been identified as a crucial element in promoting ageing-related initiatives, as discussed in the book. For instance, in Hong Kong, the Wah Fu Estate has implemented various educational programmes to promote active ageing and improve the well-being of older adults. Similarly, the Comprehensive Community Care (CCC) initiative in Japan focuses on educating caregivers and healthcare providers on the best practices for providing quality care to the older population. In Ningbo City, China, the Ageing in Place programme has been successful in providing seniors with the

resources they need to maintain their independence and live comfortably in their homes. In Ethiopia, the Awra Amba village has established an educational system that promotes intergenerational learning and encourages seniors to play an active role in the community. In Brazil, Victor Civita Square has implemented programmes that promote physical activity and social engagement among older adults. The importance of education on age and ageing has been emphasised by the WHO, which aims to transform the way people think, feel, and act towards others based on their age. This includes city staff, practitioners, and the broader community. By promoting education on ageing-related issues, a more enabling and supportive urban society that values the contributions of older adults can also be fostered.

### 5. *A shared vision of collective responsibility is desirable to promote change in ageing societies, but over-reliance on non-public actors should be avoided*

Research has been emphatic about the need and challenge of realising a collective responsibility towards effectively tackling social exclusion in later life (ROSEnet, 2020). Advancing innovation and action in policy to address the critical issues of ageing societies could benefit from resource integration, partnerships, and a shared commitment to cooperative action that fosters collective ownership and legitimacy. This approach would involve developing coordinated, holistic approaches that engage multisectoral (urban development, housing, long-term care, transport, housing, health, social protection, etc.) articulation and multistakeholder platforms, dialogue, and mobilisation between governments at the national, subnational and local levels, civil society, the scientific community, private enterprises, older people and their organisations, younger people, families, caregivers, etc. (ROSEnet, 2020; Russell et al., 2019; WHO, 2020a). Responsibility and accountability for such a collaborative endeavour would mostly require deliberate action and the leadership of governmental actors. Many of the cases in this book illustrate strategies that seek to advance multistakeholder initiatives to address ageing, especially community-based programmes related to care and ageing in place, as were presented in examples from China, Japan, Taiwan, and the foster family programme in Russia.

In certain instances, policies that rely heavily on family, neighbours, and volunteers for their execution have been implemented, reflecting cultural preferences related to the role of non-state actors in the community. For instance, the tradition of filial piety was mentioned in the case of China, while the solidarity of neighbourhood associations in Japan was highlighted as a secondary safety net on top of the government in providing care support. Feng and Yu argue that in the case of China, the people residing in the neighbourhood play a crucial role in the success of age-friendly planning, and without their dedication and involvement, programmes are doomed to fail. However, they also note that insufficient public services and heavy reliance on the family's role in the care of older populations are posing significant challenges for older adults in Ningbo City, China, especially for those who lack sufficient family care resources.

Just as De Decker in this book warns that "the promotion of ageing in place may be framed in a neoliberal thinning of the state mentality," several studies have

been critical of the heavy reliance on non-state actors in ageing in place and other age-friendly policies (Finlay & Finn, 2020; Joy, 2021, 2023; Russell et al., 2019). For Russell et al. (2019), while it is understood that programmes often seek to remain true to the grassroots intention of the global age-friendly agenda, consistent over-dependence on volunteers and committees' limited capacity could lead to burnout, limiting the extent to which communities can truly become age-friendly and the sustainability of programmes.

Even when collective responsibility in planning and policy implementation for ageing societies may be a desirable feature, caution must be exercised to avoid over-dependence on non-state actors. The promotion of ageing in place must not lead to delegating fundamental public roles to individuals and their families. In conclusion, while community-based programmes are essential in addressing ageing, a balance must be struck between relying on volunteers and non-state actors and ensuring sufficient public services to meet the needs of older adults. Collective responsibility should not become a potential age-friendly "fix" (Finlay & Finn, 2020) that reduces the role of the State, particularly of the public sector, in enabling the rights of older people in the places and communities they call home.

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# 12 Ageing in a transforming city

## The challenges and opportunities for planning

*Matthias Drilling, Pamela Suero, Hind Al-Shoubaki, and Fabian Neuhaus*

### Introduction

Creating age-friendly cities has become an increasingly important priority for urban planners, architects, and policymakers. The urban narrative in building age-friendliness involves recognising the significance of the socio-spatial environment for ageing well and addressing the nuanced needs of older people across all their differences (Yang et al., 2022). This requires a comprehensive grasp of the interdependence between each space's social attributes and physical features. However, population ageing is not an isolated phenomenon but rather a part of a larger set of global changes that are happening simultaneously. Rapid urbanisation, growing inequalities, heightened digitisation, and the impact of climate change are transforming cities worldwide (UN, 2020b).

Planning is a modern problem-solving technique (Low, 1991). In this manner, the discourse towards creating age-friendly inclusive cities which calls for "leaving no one and no space behind" requires urban planners to adopt a more holistic approach to ageing. It's crucial to account for the diverse necessities of older individuals in all contexts and situations. This involves embracing a comprehensive outlook on ageing that acknowledges the everyday transformations that occur over time and engages with the urban environments that older persons depend on for their daily routines (Tripathi & Tiwari, 2011). Such an approach transcends a pure market lens. It goes beyond mere accessibility and mobility, recognising the need to truly comprehend the realities of older adults' lives to create inclusive and age-friendly cities (Szewczenko, 2020). This highlights the discourse on the role of urban planning as a mediator between space, people, and politics.

The concluding chapter delves into the broader trends shaping urban societies, posing a significant challenge to urban planning's reassessment of its core principles and developing more innovative approaches to tackle the complexities of an ever-evolving terrain and societies. This is necessary to effectively address the intricacies of an increasingly dynamic landscape, where ageing populations and urban expansion must finally find a way to coexist.

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**Ageing in growing cities and its invisibilities**

Cities are home to most people worldwide, especially to an ever-increasing ageing population (UNDESA, 2018). This may imply that older populations are increasingly shaped by and shaping cities and urbanisation. Despite the already significant and growing number of older urban residents, studies reveal that people in later life are often invisible, absent, excluded or "erased" from urban development policy efforts, even in their own neighbourhoods (Chao, 2020; Finlay & Finn, 2020; Kelley et al., 2018). As noted by Andersen et al. (2021), within the realms of urban planning, architecture, and design, the discourse frequently lacks consideration for framing opportunities that enable older individuals to access urban spaces. Even when urban planning does acknowledge the imperative to address demographic changes, the emphasis tends to be predominantly on the physical placement of older persons. There is, however, a notable absence of focus on empowering them as citizens with the inherent right to engage in social life and actively participate in city life within their neighbourhoods and local communities.

Further, research has identified that decades of public investment have ignored increasing longevity, without consideration of the needs, wants, and desires of changing bodies and minds among urban residents (Ball & Lawler, 2014). Consequently, physical barriers that affect ageing populations are now deeply embedded in the built environment, and policy barriers that affect the rights of older people are deeply embedded in public institutions and the social environment (Ball & Lawler, 2014).

According to Chao (2020), urban planners will be developing plans for a group that was never considered the main user in planning history, and we know very little about the spatial demands of older adults. This neglect of older persons in urban planning practice suggests that, to a certain extent, historically, urban development could have been limited by ageist bias. As stated by Fabian et al. (2019), studies show that age-related planning of living environments is often shaped by internalised stereotypes, which hamper the willingness of decision-makers to regard the participation of older residents as a possibility and a valid approach. For Handler (2018), some of these stereotypes often regard older persons as a monolithic, homogeneous, dependent, or frail group, having declining competence, less productivity, and, in general, less positivity. According to the Center for Better Ageing in the United Kingdom (UK) (2021), this narrative frames an ageing population as a drain on public resources, shifting the emphasis away from the need for society to organise itself differently to allocate resources across and within generations equitably. Therefore, the treatment of ageing and older people in urban planning has tended to be distant from a citizen-based approach, and there have been limited possibilities for older people's agency in the formal production of urban space.

Given the significance of current trends in urban growth and ageing, among others, a more coherent response from planners would require shifting stereotypical notions and narratives of old age and embracing renewed integrative approaches

that will make room for the plurality of ages, enabling older adults to stand out as place makers (Torku et al., 2021). Buffel and Phillipson (2024) have reiterated the need for a stronger adoption of a citizenship- and rights-based narrative of ageing, one centred on values of equality, community empowerment, and spatial justice. From a spatial justice perspective, such a shift will consider the life worlds of current or future residents and their right to the city, addressing social inequalities and engaging diverse citizens with their needs, aspirations, and knowledge as a key planning resource. For Chao (2020), it is an era in which planning for ageing is planning for our common future, with benefits for present and future society at large.

**Box 12.1 Policymakers in planning domains "must know" about population ageing trends**

- The world's population above the age of 60 is expanding, both in numbers and as a share of the total, more rapidly than the population below that age.
- By 2050, the world is expected to be a "super-aged society." Between 2022 and 2050, the proportion of people 65 years of age and over will nearly double from 10% to 22%.
- The share of people aged 65 and above worldwide will increase from 1 in every 10 persons today to 1 in every 6 by 2030 and 1 in every 5 by 2050; this is an increase from 779.7 million in 2022 to 994 million by 2030 and 1.6 billion in 2050.
- Older persons are the fastest-growing age group worldwide and the most heterogeneous of all age groups.
- The number of people aged 80 years or over is rising even faster than the number aged 65 or above. Within the next 30 years, worldwide, this population is expected to almost triple, to an estimated 459 million persons.
- World population aged 65 years or over already outnumbered children under age five for the first time in 2018.
- Most older people live in low- and middle-income countries (69%), and by 2050 this proportion is expected to increase to 80%.
- Since women live longer than men on average, the majority of older persons are women, especially at the highest ages: 55% among persons aged 65 or over, 62% among those aged 80 or over, and 81% of the world's centenarians.
- There were approximately 34.3 million older migrants in mid-2020, accounting for 12.2% of the international migrant stock.
- Globally, older female migrants outnumber older male migrants. Women constitute 56% of all international migrants aged 65 or older.
- In the European Union (EU), 26% of older migrant individuals and 28% of very old migrants (age 75+) live in a state of relative poverty, which is a higher percentage than their native-born counterparts (19% and 22%, respectively).

- Foreign-born older people in the EU and Organisation for Economic Co-operation and Development (OECD) saw a 4% increase in poverty rates over 10 years, while native-born older people rates slightly decreased.
- By participating as workers, caregivers, consumers, and volunteers, among other roles, older people support a significant share of global employment and economic activity. It is estimated that almost one in four older persons aged 65 and above are active in the labour force globally, with a higher participation in low-income regions. More than 60% of adults aged 55–64 participate in the labour force on average (compared to 78% of adults age 25–54).
- Estimates indicate that between 2015 and 2030, the population aged 60 and above will generate over half of all urban consumption growth in developed countries and 19% of urban consumption growth globally.
- An estimated 142 million older people worldwide (or 14% of the total) are unable to meet their basic needs and demand care for accomplishing daily life activities.
- Both in developed and developing countries, older people are more likely to live in poor households than working-aged people.

*Source:* Elaborated by authors on the basis of (AARP, 2020; OECD/EU 2018; UNDESA, 2018, 2023, 2022, 2020; UN, 2020; WHO, 2020a; World Bank, 2023).

**Longer lives but persisting disparities in health and well-being**

Extended life expectancy is widely regarded as a remarkable accomplishment of humanity. It has numerous benefits that go beyond the older population and also has a positive impact on their families and communities. It has been argued that this prolonged lifespan may usher in a new era for humanity, with new opportunities for personal and communal growth, as well as progress towards more inclusive citizenship (Kalache et al. 2022; Scott, 2021; UNDESA, 2023; Walsh et al., 2021; WHO, 2020b). However, it's important to note that living longer does not necessarily guarantee improved health and well-being during one's later years. Furthermore, older persons, especially older women, are affected by health and social protection inequalities. As a result, without appropriate planning policies and serious consideration of the state of older women in the modern city, being "a woman, old, alone and poor" could become all too common.

In addition, it is important to note that while many older adults worldwide do not require long-term care, a significant portion – roughly 142 million individuals – struggle to meet their basic needs within their current environment. These individuals may require assistance with tasks such as dressing, managing their medications, and more. These challenges highlight the need for supportive environments in the home and community, which can help promote well-being in later life (WHO, 2020b). The

COVID-19 pandemic has further exposed weaknesses and inequalities in health and long-term care for older adults and has emphasised the need for fundamental reforms. According to UNDESA (2023), factors such as poor quality and underfunded care systems, inadequate support for care at home, low wages and precarious conditions for paid care workers, and a lack of protocols to prevent COVID-19 transmission within health facilities have all contributed to a high death toll among older adults.

Another growing concern for older adults is dementia, which is now recognised as the seventh leading cause of death and a significant cause of disability and dependency worldwide (WHO, n.d.). Studies have shown that individuals living with dementia, particularly those who are older, may face several challenges that hinder their ability to participate in their local environments. These challenges may include cognitive and behavioural changes, social and spatial isolation, and stigma (Tournier & Vidovićová, 2021). HelpAge International (2016) has cautioned that the increasing numbers of people living with dementia require careful consideration during urban planning and that greater investment in raising public awareness, accessible spatial conditions, and community-based supports are vital for creating inclusive communities.

Moreover, with changing patterns in family structures and living arrangements, widening levels of social isolation and loneliness are presenting health risks for older people. According to the WHO (2022b), isolation and loneliness are widespread and associated with higher mortality risk, with some countries reporting that up to one in three older people feel lonely. Awareness about the role that place could have in promoting better health for people of all generations; both the built and social environments in cities are highly influential in people's health, in the way ageing is experienced and in the opportunities that ageing could bring for diverse people.

Urban planning is critical to promoting better health and quality of life for city dwellers. The physical and social environments in cities significantly impact people's health, ageing experiences, and opportunities. Unfortunately, the relationship between places and health, including illness prevention and autonomy promotion, has been largely overlooked in favour of more curative approaches to public investment. Therefore, future urban development policies and strategies must prioritise strengthening the connection between spatial planning and public health to maximise the potential of places and spaces in the city. Additionally, planning should prioritise inclusivity for people with diverse abilities, going beyond the traditional functionality-driven approach to spatial development.

## Ageing in a context of inequality

According to the World Inequality Report 2022, global inequalities remain extremely pronounced in all regions worldwide after increasing deregulation, liberalisation, and financial globalisation in the past 30 years. The report notes that current inequalities are about as great as they were at the height of Western imperialism in the early 20th century and have been intensified by the COVID-19 pandemic (World Inequality Lab, 2021).

Reflecting on this trend getting a lot worse, Savage (2021) underpins the broader deleterious connotations of what inequalities tell us about our world and how we are at a crucial historical point. For Savage (2021), inequalities reflect the result of a mainstream economic world order that prioritises growth, capitalist accumulation, and the power of elites, not distribution. He argues that inequality constitutes a challenge to the coherence of liberal democratic nation-states, which is fracturing social bonds and aggravating cultural, social, and political conflicts. As such, he considers inequality to be returning us to the past and reviving political conditions we thought we had moved beyond: empires and dynastic elites, explosive ethnic division, and metropolitan dominance, among others. Examining the changing inequalities of cities, Savage (2021) claims that they are no less modernistic and dynamic "than receptacles for sedimented capital" and considers large cities, in particular, as not just products but drivers of inequality.

Low- and middle-income countries face even greater challenges in addressing their systemic inequalities and adopting age-friendly policies (Gardiner & Webb, 2022). For instance, it is estimated that one out of three urban residents in the so-called "developing world" still lives in slums, where lack of access to essential infrastructure and services is a daily struggle for many disadvantaged households (World Bank, 2024). When urbanism is often associated with economic growth urbanism may be taking place without it, thereby resulting in higher urban unemployment and increased poverty. In such contexts, additional international support to address basic infrastructure investment and specific strategies may be required to target multiple, and often more profound, aspects of old-age exclusion related to cumulative disadvantages over the life course. This could help pave the way for progress in age-friendly policy development and prevent further global fragmentation, but it inevitably means a slower adoption of Age-Friendly City models (like age-friendly cities and communities [AFCC]) per se or the need for an "adapted" AFCC paradigm for communities in developing nations.

With regards to the causes and consequences of inequalities confronting urban environments and possibly frustrating age-friendly aspirations, research has pointed at the significant cuts in support from public services, the loss of physical and community assets, financial pressures on community and voluntary sector organisations, environmental problems, gentrification, reduced availability of affordable housing and the political economy of the 21st century embedded in neoliberal rationality (and exacerbated by the impact of COVID-19), which have created the basis for new risks and forms of exclusion within the older population (Buffel et al., 2019; Phillipson 2017; Woolrych et al., 2022).

Research has found that there is a need to incorporate the issue of social inequality and old age exclusion as part of the age-friendly debate (Buffel et al., 2019). Approaches to age-friendliness in planning need to be rethought in the context of increasingly unequal and unstable societies, accelerated urban development, climate change, rural decline, and older people displaced by the effects of war. In this context, specific programmes of action that address economic and social inequalities and mitigate the effects of rapid changes affecting communities will need to be developed.

**Neoliberal planning rationality**

Several studies have shed light on how neoliberal governance has too often tended to limit spatial and social opportunities for people in later life and affected the advancement of age-friendly policies. For Yeh (2022), repressive aspects of modern society (e.g., urbanisation, gentrification, neoliberalism) reflected in the lived space and changing urban conditions affect ageing experiences and reveal tensions between the gerontological ideal of an age-friendly environment and the reality of living in one. She argues that even though older adults "should have a right to an age-friendly city, the urban political economy commodifies city life itself and the quality of every day and later life" (Yeh, 2022, p. 107).

Discussing from the perspective of the new political economy of ageing introduced by Carroll Estes in the 1990s to address society's treatment of the aged as a "problem group," Phillipson (2017) explores new types of inequality affecting people in later life, pointing out a post-welfare state agenda and the broad implications of neoliberalism for the life of older people. He considers the tension between longevity and conditions of austerity, which are transforming ageing into one of the unwanted risks and hazards of contemporary life. Later on, Grenier and Phillipson (2018) introduced the concept of precarity to draw attention to insecurities in later life in the context of global economic and social change, that result from globalisation, neo-liberalisation and declining social protection.

Indeed, as highlighted by Greer et al. (2021), over the last decades, especially after the 2008 financial and economic recession, welfare spending growth has slowed down and overall inequality has risen. Substantial cuts in some forms of benefits have occurred, while others have been "recalibrated" to meet new needs. According to Van Hoof et al. (2021), the impact of these austerity measures included significant cuts to several programmes supporting older people, as well as the loss of physical and community assets, and financial pressures on community and voluntary sector organisations, and thus, represented one of the first major setbacks for the development of age-friendly work. As Buffel and Phillipson (2024) stated, this includes the "hollowing out" of social infrastructure vital to neighbourhoods and daily life for ageing in place, with the closure of libraries, day and community centres, and other community support and recreational facilities. In this sense, criticism has emerged from Finlay and Finn (2020) and Joy (2021) regarding how the age-friendly movement could be embedded in implementing neoliberal practices that further scale back the state's role by minimising its obligations to older citizens.

Finlay and Finn (2020) reject the ideals of "active ageing" and "ageing in place" as ways of passing on public health, long-term care, and social welfare costs and responsibilities back to older persons themselves and/or their families (especially the women in them), thereby absolving the state of the fundamental role it has in service provision. Thus, in what they call "the privatisation of old age and retirement," the rise of neoliberal ideals and practice in social policy act by cutting state finance, minimising welfare services, and forcing older people to use their private funds to manage housing and welfare. As a result, when older

people cannot pay for these services themselves, they will be excluded from access to basic rights regarding housing, vital services, care, and participation in civic life.

As such, questions arise as to what extent proposals for promoting ageing in place and care as a collective co-responsibility with increased community involvement may mask pervasive pretensions of neoliberal governmentality instead of aiming at mobilising social change and the advancement of rights in old age.

## Housing exclusion

The United Nations Human Settlements Programme (UN-Habitat) reports a daunting estimate that nearly 80% of cities worldwide lack affordable housing options for half of their population. This housing crisis is exacerbating urban inequalities, with the most vulnerable groups, including older adults, living in precarious housing or moving to peripheral areas without access to employment, healthcare, public transport, or green spaces. These tendencies have often been associated with an increased demand for housing in cities as a result of global population growth and urbanisation trends, changing spatial structures shaped by economic activity shifts, gentrification, urban renewal projects, tourism, transnational and internal migration flows, housing market speculation and rigidities, as well as inadequate responses from policy (Greer et al., 2021; Hochstenbach & Musterd, 2018; UN, 2022).

According to the UN Independent Expert on the enjoyment of all human rights by older persons (UN, 2022b), many cities are facing difficulties in coping with the speed of urban growth, experiencing threats to the affordability of urban housing, and lacking appropriate policies to respond to the housing needs of older persons and other groups in vulnerable situations, which in turn is contributing to spatial segregation and increasing informal settlements. The expert considers spatial segregation as a violation of the right to adequate housing that is forcing low-income populations, including older persons, to move to poor neighbourhoods, informal settlements, and outskirt areas where housing costs are more affordable to them, with older persons in situations of economic insecurity being especially exposed to the risk of this form of segregation.

Spatial segregation effects have been recognised even in formal public social housing projects. The projects ensure that older adults have access to affordable housing, but often encourage segregating the generations by excluding young adults. Meanwhile, in many countries, housing planning for the lowest-income populations is characterised by the large-scale production of standardised condominiums on the periphery of consolidated urbanised areas, aggravating differential access to the city and urban mobility problems. Aside from concerns about violations of the right to housing, HelpAge International (2016) has condemned broader conditions of neighbourhood deprivation affecting older people in cities. According to the advocacy group, older persons in cities are too often subject to systematic social, economic, and spatial marginalisation, as they face traffic-dominated streets, air pollution, limited public transport, unsafe green spaces, social isolation, insecure incomes, poor health, inaccessible buildings, and insecure or inappropriate housing, all of which deny them their right to lead safe, dignified, and independent lives. Such issues indicate that in specific urban

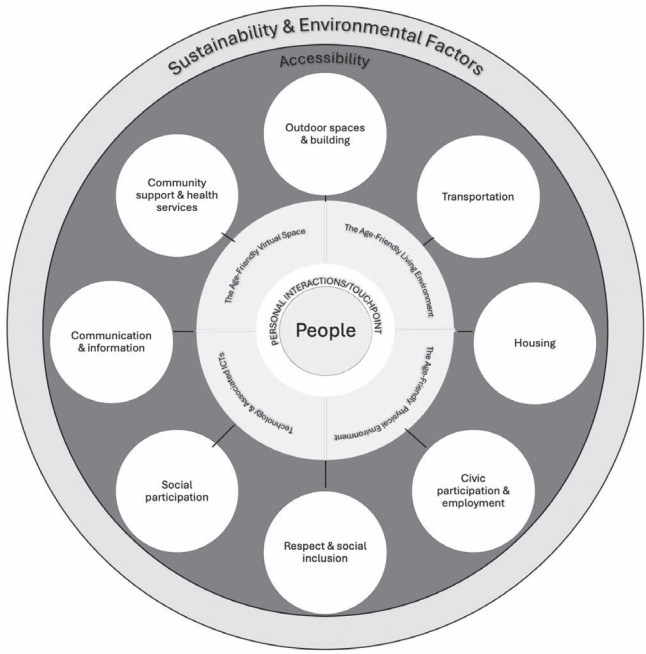
environments, insecurity can hinder the development of age-friendly policies, such as integrating new projects into the surroundings, limiting their potential to benefit the general population while supporting older citizens.

## Ageing in an increasingly digitalised city

Research has emphasised the need for age-friendliness to consider further intersections between the three global trends of population ageing, urbanisation, and digitalisation (Kalache et al., 2022; Li & Woolrych, 2021; Van Hoof et al., 2021; Reuter et al., 2020). Marston and Van Hoof (2019) argue that cities cannot be fully age-friendly without considering technology as a facilitator or hindrance. The authors regret that even though technology is becoming increasingly important for urban ageing, it was not explicitly considered in the eight-domain model by the WHO. Acknowledging this gap, Marston & Van Hoof (2019) and later on Marston et al (2020) proposed a "smart age-friendly ecosystem framework" (see Figure 12.1) incorporating technology features across the initial eight


*Figure 12.1* Models of how to create age-friendly urban environments.

*Source:* By the authors 2024.




Age-Friendly Ecosystem in a Post-Pandemic Society (Marston et al. 2020)

*Figure 12.1* (Continued)

domains of age-friendly cities. They underline the importance of engagement and co-production of technology by integrating older people and further investigating the impacts that technological developments may have on urban planners, architects, governments and, more importantly, the residents.

In their analysis of the "age-friendly future" in the context of the Fourth Industrial Revolution, Kalache et al. (2022) identify opportunities brought about by the unprecedented fusion of hyper-connectivity and new technologies across the digital, physical, and biological domains, but warn about the need of recognising that technology is never politically neutral and that the potential effects of digital exclusion must be addressed. They argue for greater solidarity between technology-rich and technology-poor communities to avoid further socio-economic, intergenerational, and international fragmentation.

Likewise, the UN Independent Expert on the enjoyment of all human rights by older persons (UN, 2022b) has highlighted digital technologies' opportunities and challenges for ageing societies. Acknowledging that digital solutions can contribute to autonomous and independent living for older persons, at home or within the community, she claims that technology can also be a source of social exclusion if older persons do not know how to make use of it, considering several other challenges such as financial and technical accessibility and the potential risk it

can represent to the privacy of the person using them. Even when the notions of "SmartHome" and Ambient or Active Assisted Living (AAL) have the purpose of introducing technology-based services and assistance that enable older people to have a healthier, safer, and more comfortable life in their home environment for as long as possible, one of the main barriers is related to how older people perceive, use, and interpret technology at this time.

With regard to these issues, AGE Platform Europe (2021) has stressed the need to tackle the digital divide and digital poverty, which increase the risk of social exclusion and create further inequalities. This should encompass funding support and initiatives to improve infrastructure (access to electricity and broadband coverage). According to Reuter et al. (2020), as cities and communities become increasingly digitalised, there is a need to reconsider the scope of "urban citizenship" and reframe the potential role of older adults as "digital citizens" shaping age-friendly cities. In this respect, there seems to be untapped potential for enabling participation of older people in urban planning strategies and efforts through the use of digital technologies. In addition, both Van Hoof et at (2021) and Chao (2020) identify the potential for integrating smart city initiatives into age-friendly urban development.

As digital skills and up-to-date technological tools become more essential to participate in public life and exercise basic human rights, concerns remain about the obstacles older persons face in an increasingly digitalised world in developed and developing countries. For example, in the case of mobility, the "smarter" and more complex public transportation is becoming, the more difficult it will be for older adults to use the services, while this is often accompanied by the attrition of staff, who could otherwise provide individualised attention to older adults.

In relation to the divide between developed and developing countries, there is also a concern that the majority of smart city initiatives have progressed mostly in the Global North and that cities in low- and middle-income countries may inevitably lag behind in harnessing the potential benefits of technological innovation. For Chao (2020), there may be untapped potential for smart city planning instruments to assist decision-making about optimal infrastructure resource distribution for service provision to older persons. Ultimately, the extent to which smart technologies can solve urban challenges and enable opportunities for strengthening citizenship, without leaving more people behind in ageing cities and communities, remains a key challenge to address in an inclusive urban development agenda.

### Ageing amidst environmental degradation and climate change

With the expansion of cities expected to triple land cover by 2030 and traditional models of urbanisation causing significant impacts on land use, biodiversity, energy demand, health and lifestyle, critical questions are raised about the sustainability of urban transformations and its governance (Hölscher & Frantzeskaki, 2021). Concerns about the risks to health, society, and the environment presented by rapid unplanned urbanisation have also been acknowledged by the WHO (2023).

For Ayalon et al. (2021), climate change is a powerful and ongoing presence in the lives of older persons that is both creating and exacerbating vulnerabilities, because it is threatening the basic prerequisites for well-being, including clean air and water, food supply, and the adequacy and security of shelter. For these scholars, as the effects of the climate change crisis become more pronounced, there is a need to integrate the areas of older people and environmental sustainability to ensure that the rights of the older population are preserved, which also requires that this group be taken into account in the development of key international climate instruments. Kalache et al. (2022) go beyond and link this issue to inequality when they state that "widening social disparities worldwide are not only contaminating the present but also defining the future of an ageing planet."

For Grey et al. (2023), a more profound understanding of the relationship between ageing and the co-evolution of people, places, and ecosystems may teach us about our past, present, and future and help us grow towards inclusive and sustainable communities. The WHO (2022c) emphasises that the combined effects of climate change and rapid population ageing on the health and well-being of older people – those now and in the future – will have to be much better understood and addressed urgently by policymakers and planners everywhere.

Meanwhile, some of these effects are already becoming evident. For instance, the European Commission (EC, 2019, 2020) has claimed that, as older populations are more sensitive to the effects of climate change, natural disasters, and environmental degradation, including heatwaves and pollution peaks (which often occur in cities and may become more frequent with climate change), cities need to be prepared to provide suitable coping mechanisms and support services. This organism has also referred to concerns about the possible impact of rising pharmaceutical use on the environment due to population growth and health policies (EC, 2019).

Studies by Rhoades et al. (2018) showed how climate change could overwhelm older adults' adaptive capacity. They highlighted the need for support services to provide safeguards, drawing specific attention to urban areas that deal with similar climate stressors and socio-economic conditions of the inhabitants. Among the most harmful human-made environmental degraders, air pollution has stood out as a major threat to the quality of urban environments (Barton et al., 2020), causing more than 7 million deaths a year and affecting health for both young and old generations but disproportionally harming older people (HelpAge International, 2016).

Both the UN (United Nations, 2017; UNDESA, 2019) and HelpAge International (2016) recognise the role of spatial planning in building resilience and reducing disaster risks in cities. They refer to evidence that has shown that rapid urbanisation and population growth drive to a large extent the impact of natural (and human-made) disasters and that the way cities are planned, financed, developed, built, governed, and managed has a direct impact on sustainability and resilience to climate change.

As such, climate resilience becomes a crucial issue for urban planners, given that most cities in today's world are vulnerable to some form of climate-related shock and that the number of reported disasters has been growing in the world over the last decades, with more cities expected to face greater risks from extreme weather

shocks in the future, especially in the less developed regions or low-income countries (UNDESA, 2019). For example, evidence shows that in the last three decades, Asia had the highest number of geophysical, hydrological, and meteorological disasters; Africa experienced the highest number of biological disasters (disease epidemics and insect/animal plagues) and droughts; and Europe had the highest number of climatological disasters (ibid.).

For the WHO (2022c), older people need to be considered among key agents of change in actions for the climate and for the social transformations necessary to adapt to, mitigate and build resilience to different climate change scenarios. There seems to be more room for both further research and consideration of climate and environmental aspects within the AFCC agenda. In such a planning shift, Grey et al. (2023) suggest that older people would be recognised first as important stakeholders for their knowledge and lived experience and second as key contributors to intergenerational engagement and co-creation. Local knowledge and ecological and nature-based wisdom of place should be curated, protected, and incorporated into key development policies.

## Ageing and displacement

As globalisation continues to shape our world, the number of older people who are migrating or displaced has increased (Johansson et al., 2013). This means that they must constantly adjust to new places as part of their daily lives, adapting to different customs, languages, and beliefs about ageing and the roles of older people in society. Additionally, navigating different access to social resources and welfare, building relationships across borders, and developing mixed or transnational identities can be difficult (Božić, 2006; Lewis, 2009; Patterson et al., 2006). Ageing in a foreign environment with different sociocultural backgrounds can also pose physical and emotional challenges for displaced populations (Sadarangani et al., 2015). Similarly, older refugees who have already endured substantial trauma in their home countries and during the resettlement process often encounter additional marginalisation. Despite residing in a country for an extended period, they may feel disconnected and as though they are gradually losing their sense of belonging (Lewis, 2009, p. 376).

In the migration context, there is a lack of information regarding the needs of older individuals who have been left behind (Global Migration Data Analysis Center (GMDAC), 2024). The United Nations High Commissioner for Refugees (UNHCR) identifies older internally displaced persons (IDP) as a particularly vulnerable group, referring to them as "persons with special needs" along with those who are chronically ill, disabled, or have experienced high levels of trauma (UNHCR, 2018a). Research and data from HelpAge and Internal Displacement Monitoring Centre (IDMC) (2012) indicate that older people are often overlooked in humanitarian efforts and policy, with their specific needs not being integrated into general programming and their input rarely being sought in IDP operations.

Both refugees and migrants experience significant spatio-temporal dimensions related to ageing and displacement, which can have far-reaching implications for

their social, economic, and political well-being. Displacement can lead to repeated socio-spatial dislocation, resulting in a loss of sense of place and difficulty creating a new sense of belonging (Rúa, 2017). This poses a challenge to the widely held assumption that ageing leads to social isolation, as indirect forms of displacement, such as feelings of exclusion and non-belonging, can also contribute to a loss of sense of place and a reduced ability to assert one's right to the city (Mah, 2023). The ageing process of refugees and migrants is distinctive and diverges from that of the broader population due to their displacement and migration (Sakti, 2022). Due to ageing in a foreign country, individuals encounter unique temporalities that affect their connections with loved ones, communities, and government entities (Sheftel, 2022).

Understanding the different dimensions of displacement is crucial for equitable planning initiatives that address these temporalities' impacts and promote inclusive and just development. This can be achieved through various means, including but not limited to research, policy development, and community engagement. Scholars such as Blaskow (2023) and Ekoh et al. (2022) have emphasised the importance of this work, highlighting the need for a nuanced and comprehensive understanding of the impacts of displacement to promote social justice and sustainable development. In this domain, the Global Compact on Refugees (GCR) calls for a strong partnership and participatory approach to response to refugee movements, including older persons (UNHCR, 2018b).

**How would urban planning respond?**

As examined in the previous sections, we live in an era of major change unprecedented in human history, in which converging megatrends are fundamentally transforming the world. What critical questions does this reality raise for present and future urban development and the role of planning? We argue that this juncture reaffirms the need for cities to become a source of solutions rather than exacerbate the challenges already faced. Research has amply demonstrated that urban environments can offer prospects for fostering human health, quality of life, and resilience. However, this correlation is highly dependent on well-planned and well-managed urbanisation, which underlines the key role of urban planning as a powerful tool for timely and adequately addressing the broad social, economic, political, and environmental pressures affecting cities worldwide.

In this context, the dominant structuralist, performance-oriented paradigms, and the classic technocratic culture and rigidities related to the methodological toolkit of conventional spatial planning may have already reached obsolescence. As societies worldwide face unparalleled urban change, a more nuanced and transformative response from policy and planning is required. One in which urban systems are reimagined physically and philosophically, including rethinking the principles, narratives, and governance structures. One in which planning is revitalised beyond an applied technical science, embracing its role as a political practice, and called to create meaning out of space distribution and optimise the complex relationship between changing places and people.

The idea that the competence and expertise of urban planners require a transition towards more transformative understandings and approaches in the face of the increasing complexities of contemporary socio-spatial systems is not new. In fact, it has been highlighted in both scientific and policy discourse for more than a decade (de Roo & Boelens, 2016; United Nations 2017). The New Urban Agenda adopted at the United Nations Conference on Housing and Sustainable Urban Development (UN HABITAT III) called for an urban paradigm shift, stating that rethinking the way we plan, design, build, govern, and manage our urban spaces is not an option but an imperative at this critical juncture in human history. The development of age-friendly cities and communities could be regarded as an example in that direction of change, but even with increased knowledge and tools to enable action, in general, this shift in the urban paradigm has yet to be materialised, while the global trends we have discussed seem to be reinforcing the imminence of a turning point in cities worldwide.

Of course, no single prescription or one-size-fits-all strategy for improving urban development exists. Nevertheless, we believe that today's urban planners and policymakers can no longer postpone meeting the socio-spatial challenges and opportunities of present and future demographic shifts. Indeed, this must be on their priority list. Planning must incorporate a response to ageing as a central feature of urban society. Convinced that cities can help enhance the benefits of greater longevity for individuals, families and society at large, we conclude this book with the following reflections about ideological and institutional changes needed to imagine a more age-responsive future for urban planning that harnesses the potential of ageing populations in the city.

### *1. Rethinking principles for urban planning*

Urban planning has always embodied a normative vision, framing various notions of successful living and a life with dignity, each with corresponding planning approaches. Throughout its history, urban planning has taken advocacy-oriented positions, retreated solely to basic structures, or abstracted itself entirely from the current societal situation to devote itself to a future vision. However, regardless of how planning was connected or separated from prevailing forms of governance and power structures, it could never disassociate itself from the responsibility for the emergence of socio-spatial inequalities. Regardless of its professional positioning, historical framing, or political understanding, planning is also accountable for shaping life chances.

It's important for a diverse group of people, including urban planners, practitioners, public and private actors, and citizens of all ages, to come together and reflect on the values and principles that will shape the future of our cities. This process should go beyond the traditional idea of the "urban citizen" and involve everyone in a shared vision for urban development. Despite differing perspectives and tensions, the challenge for urban planners will be to realise this collective commitment to creating an environment that fosters place belonging, human capabilities, livability, conviviality, plurality, and other shared goals and values.

This implies raising moral and ethical questions around the dominance of techno-economic and neoliberal policy ideals, within which urban planning has too often been positioned. Framing urban development in such ideals has contributed to a commodification of city life, focusing the policy agenda around aims of profit and growth and displacing the importance of rights-based and citizenship-based principles, even when they are often regularly explicit in the legal framework for public planning.

The UN-HABITAT III New Urban Agenda has established international consensus on a vision of "cities for all" to achieve cities where all persons enjoy equal rights and access to the benefits and opportunities that the urban environment can offer. From this perspective, urban development has a role in fostering people's ability, no matter their age or generation, to participate fully in society and live with dignity. As such, future urban planning must be adequately framed in more holistic aspirations for enabling citizenship and promoting socio-spatial justice in ageing societies.

### *2. Rethinking the narrative about ageing and older persons that influences urban planning*

Urban planners need to be mindful of the extent to which narratives around ageing and old age influencing their views and actions are stigmatising and discriminatory. We learned that too often negative deep-seating notions about ageing, which privilege functionality and working-age populations and regard older persons as a burden for society, have been hindering age-friendly planning and limiting the advantages cities could generate for people in later life. In addition to a problematising and fatalistic view of old age, urban planning has had a blind spot for the wide heterogeneity that characterises ageing populations, and some processes of urbanisation have contributed to intensifying social and spatial inequalities affecting diverse older people.

Future planning, thus, needs to incorporate a more comprehensive understanding of ageing and the effects of urban development decisions on diverse generations and within them, especially reconsidering predominant values around old age. This implies making sure that processes of urban development, including regeneration, rebranding, renewal and others, do not increase the risks of social and spatial exclusion and isolation for people in later life, creating further segregation of older populations and undermining their access to infrastructure, resources, services, and mainstream urban life.

In fact, the 2030 UN Sustainable Development Goals (SDGs) establish the objective of inclusive urbanisation, containing a call for ensuring that older persons participate in planning, decision-making, and managing cities worldwide. This ideal is also coherent with a rights-based culture that would address discriminatory aspects of urban development, which could prevent older people from becoming full agents in their cities and communities and affect their contributions to urban life and the potential for society as a whole.

In this sense, we argue that urban planning could benefit from adopting a life course approach, which underscores the importance of policies and investments

that promote quality and dignity over the many stages of life and overall well-being for both young and old generations. Instead of an age-segregated perspective, under this age-integrated approach, old age is an inherent stage of the human process of ageing, and age-friendliness would involve making cities a better place to age, and considering the many stages of the lifespan, from early childhood to later life, and within multiple generations. As such, incorporating a life course lens in urban planning shifts the emphasis from problematising assumptions related to old age towards a more unifying, intergenerational view about the opportunity of transforming the way cities are organised to distribute benefits more equitably across generations.

Life course thinking underpins inequalities that affect the quality of life as the ageing process advances, and may involve emancipatory processes to tackle cumulative disadvantages affecting life outcomes. It is, thus, also closely related to universal accessibility and the need to avoid health inequities, prioritise preventative healthcare investment, and harness the potential of urban planning as a social determinant of health and as a key policy tool for promoting healthy ageing. In this respect, future urban planning needs to mainstream ageing, ensuring that the interests of diverse older people, particularly of traditionally excluded groups, are reflected in all city policies, programmes, and projects.

### *3. Rethinking the governance of urban planning*

Under renewed principles and values about ageing, a transformative path for urban planning will only materialise if a model for action enables real policy, institutional, organisational, and systemic change in cities. We argue that future urban governance should contribute to amplifying the visibility, voices, engagement, and power of people in later life to influence meaningful urban change, enabling a process in which spaces are transformed for, with, and by older residents.

It is an integrative, multi-level governance approach that makes room for the plurality of the ageing experience. It enables older adults to stand out as place makers, with their needs, aspirations, talents, and wealth of knowledge as key planning resources with untapped potential. This implies a shift away from traditional command-and-control urban governance regimes, with a focus on the transformation of space by experts planning in hierarchical organisational structures, towards a more shared governance that transforms the process and conditions by which space is shaped, thus reconfiguring the roles of the actors involved in urban policy development.

In this governance framework, the urban planner's role also includes that of a transition or change manager, whose key purpose might be enabling the conditions for inclusion and meaningful participation of all relevant stakeholders in urban development. Planning's goal shifts towards enabling the spaces and means for getting together, sharing, and co-creating. This entails incorporating diverse knowledge sources and managing central elements such as information, dialogue, collaboration, collective decision-making tools, corresponsibility, reflexive learning, and agency in a co-evolutionary approach to place design.

A fundamental challenge is then how to ensure inclusive conditions for the participation of people of diverse ages, identities, capabilities, and perspectives in the setting of the agenda for transforming neighbourhoods, cities, and communities. Developing urban spatial frameworks that build trust and accountability, allowing for new partnerships and social innovation to emerge, and mediating collaborative action among the different actors, sectors, disciplines, and generations shaping urban life are key to accomplishing a shared vision of governance for future urban development. Another challenge is nurturing and sustaining leadership, capacity, political commitment, and investment to address ageing in the city. Earlier chapters referred this could be accomplished through awareness raising, the expansion of available data for evidence-based policymaking, intergenerational coalitions, multistakeholder mobilisation, and the institutionalisation of adequately resourced permanent platforms for cooperation, such as local (and national) older persons councils, boards or national committees on ageing. Moreover, an integrative framework for urban planning would rely on intersectoral articulation arrangements that mainstream ageing for more holistic approaches to policymaking that incorporates the multidimensional aspects of later life in the city.

For instance, regarding the policy mix and desired strategies for enhancing the experience of ageing and the opportunities that ageing offers, the cases discussed in the book pointed at options for age-responsive design in a multiplicity of sectors and scales, especially housing, outdoor spaces, transportation, care, and community development. Planning for these sectors should facilitate the provision of accessible and well-connected infrastructure and services, reinforcing the integration of people in later life into the urban fabric, enabling proximities, centralities, and multiple uses of spaces, and encouraging intergenerational interaction, cohesion, and plurality.

Ageing is a significant global trend that presents a new stage for humanity and human settlements, encompassing both challenges and opportunities for urban planning. It poses a challenge for planners and decision-makers to confront outdated values, practices, policies, and stigmas concerning age, space, and exclusion. Transforming existing urban systems is necessary to improve quality of life in different places, and how planners respond to ageing will determine the outcome. We believe that the challenge of an ageing population should be welcomed as it presents an opportunity to reimagine spaces with older persons as new protagonists in urban life and to strengthen the urban planning discipline technically and politically. It also offers a chance to adopt more audacious leadership, promote equitable ownership of urban space, and create a community with diverse people of different generations. Longer lives can be harnessed as a valuable resource for societies if planning practice becomes more aware, reflexive, and responsive to the unprecedented multifaceted changes that lie ahead. Ultimately, this will create a new shared identity in the urban fabric.

However, developing effective urban policies for older refugees requires a comprehensive approach that includes (1) conducting thorough research to gain a deep understanding of the social networks and support systems available to older adults in refugee situations (Ekoh et al., 2022); and (2) supporting the multigenerational

development of cities with a focus on accessibility. This includes increasing mobility, reducing congestion and traffic, developing and integrating policies on public, private, and shared transport, and promoting pedestrian safety (Pinto & Akhavan, 2021); (3) incorporating the Participation for Policy for Older Adults (PAR4POA) approach and leveraging smart city data to facilitate the inclusion of older adults' perspectives in the process of data collection and policymaking decisions; (4) integrating eHealth applications, community generation, and physical interactions to support independent living and well-being of the older people in urban spaces (Kurian et al., 2019); and (5) forecasting the supply and demand of older people care institutions based on the behaviour of the older people and the interaction between actors and the environment (Zhu, 2022).

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