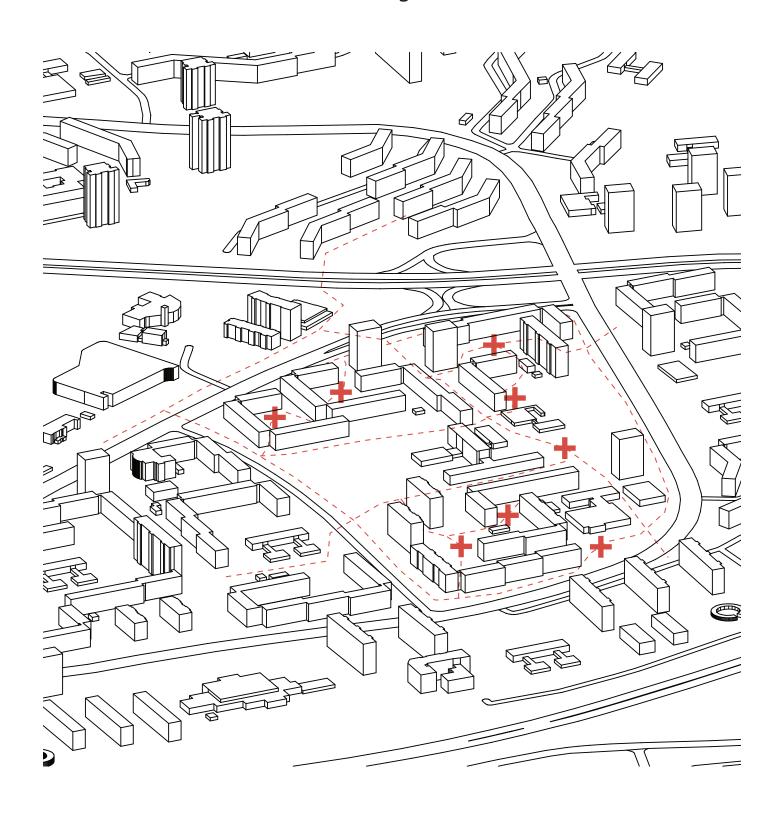
MARGINAL PEOPLE IN

MARGINAL SPACES

Reframing the Role of Public Spaces for Seniors in Post-Soviet Mass Housing Districts



Title Marginal People in Marginal Spaces

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Abstract

By addressing demographic ageing World Health Organization (WHO) released a policy framework guiding governments from a political and policy perspective to foster "age-friendly" communities. The age-friendly city model is based on promoting inclusiveness, health, and security, acknowledging it as a human right for all seniors. Attempts to apply these guidelines resulted in various strategies, depending on the local context and senior needs.

The thesis takes on a rehabilitative approach of transforming post-Soviet mass housing districts into age-friendly communities. The increasing ageing population in Vilnius, with a tendency of older people three times as likely to live in mass housing district after age 65, dictates the need of reframing the role of public spaces for seniors in post-Soviet mass housing districts. Post-Soviet mass housing neighbourhoods are characterized by vast underused spaces, which are understood as residual spaces. As a response, this research focuses on activating residual spaces and adapting them to meet diverse senior requirements of every day.

The research uncovered the spatial and social needs of seniors living in mass housing districts, which led to identifying the challenges and potentials of the imposed spaces in which the elderly live. These findings showed the repetitive structure of mass apartment district's fabric with distances to daily use functions and insufficient maintenance. The final design proposes an alternative distributed approach, rather than a central community point, that builds on the district's communities, adapting to the individual needs of the seniors locally. This research proposes equal importance for public spaces to senior's homes, as it sets the base for social life, establishing an age-friendly city. Through a case study of Lazdynai mass housing district, the thesis investigates and identifies specific patterns and needs of seniors to encourage public spaces that respond to age-friendly principles.

Accordingly, the thesis develops transferrable principles on how similar cases might be reframed to accommodate the needs of seniors. These principles are used as a method to redesign and adapt Lazdynai. The outcome of the research suggests that small purposeful interventions can rehabilitate the district and the communities within. Focusing on the needs of people living in mass housing would help reframe public spaces with a democratic perspective in mind, showing potential to start the chain reaction, which would be beneficial not only for the seniors.

Keywords: rehabilitative approach, post-Soviet mass housing, residual spaces, ageing population, age-friendly, Lazdynai

Preface

If a century could be defined by a building type, then the 20th century would be described by mass housing. Mass housing interest me that no other type of housing holds so much diversity, politics, and conflicts, which is still relevant in the 21st century. It fascinates me how mass housing could be so uniform, yet so diverse at the same time.

In Lithuania, to the public eye, mass housing is often associated with the elderly gazing through their window or having a daily stroll. When mass moving to these districts happened, for a majority of people these neighbourhoods became home and a place for ageing. In my case, mass housing reminds me of my grandmother, who used to live in one of the standard mass housing five-storey buildings, which uniform buildings and open green spaces are all too familiar to me.

During my exchange semester in Seoul, I got to experience a completely different outlook to seniors. In Asia, elderly people are treated with the utmost respect, which is seen in speech, gestures, and even public spaces. There, after retirement people enter a new life phase, which is associated with more time for themselves and family.

As the debate for the future of mass housing is an ongoing question, with this thesis I wanted to open a discussion and investigate the potentials of adapting mass housing public spaces to older people. By designing for marginal people in marginal spaces, it first opens a discussion focusing on the problems which seniors meet on daily basis and then explores possible futures of exploiting it. Ultimately, it's a discussion, which sets the future for every one of us.

Thank You

I would like to say thank you to all the people who helped and were open to a chat during this research. First of all, I would like to thank my supervisor, Dr. Michael Martin, for his advice and irreplaceable guidance. Friends and groupmates who even during the Covid-19 period were open for a discussion. My family, who was my support, and my sister, who was my eyes and legs when cities were closed due to migration restriction.

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Introduction

In this chapter, the overall problem and the aim are presented. It introduces the obscure future for mass housing and proposes a way of addressing these neighbourhoods through reframing it to senior needs, which are an inherent age group in post-Soviet mass housing districts.

The problem field is defined and later supplemented with a global perspective, followed by the implemented approach. Lastly, the research question with objectives is briefly presented.

Chapter 01

Introduction

Problem Field

A need for new approach

The future of mass housing neighbourhoods is a continuous debate, which does not seem to have one right answer. Constant physical wear, social hardship, and government's inactiveness demand a new perspective, how these areas could be reframed. Rather than demolishing mass housing districts, this thesis focuses on a **rehabilitative approach**.

Main problems in mass housing neighbourhoods arise from the social

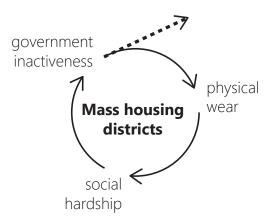
Difficulties in mass housing

background due to lack of social cohesion, despite the homogeneity of the housing type (Edward, 2019). Soviet ideology was conveyed through social and spatial rules presented through urban characteristics in mass housing districts. Although at that time mass housing was understood as a certain utopia, it was also criticized for the extensive amount of neutral and anonymous left-over spaces (Nielsen, 2019). Even though it was designed as an inclusive space for everyone in the neighbourhood, it was not used by anybody (Nielsen, 2019). Now in Lithuania, although the political ideology has changed from a socialist to a democratic one, these public spaces are left the same with vast underused open spaces. These **residual spaces** in this thesis are understood as one of the main characteristics of post-Soviet mass housing.

Dominant age group

Mass housing is the main form of living for the most vulnerable in society. Mass housing is a main type of housing for **people of older age** (Burneika, Ubarevičienė and Baranuskaitė, 2019). In Vilnius, older people are more likely to live in mass apartment districts due to financial reasons and being less mobile, meaning that social structure shifts at a slower pace (Burneika, Ubarevičienė and Baranuskaitė, 2019). With that in mind, the environment in which these seniors live needs to respond to their physical and social needs.

demolition or **rehabilitation**?



Prefabricated blocks mass housing could be seen in former Eastern Bloc communist countries as well as in other European countries. While in Lithuania mass housing was planned in the inner and outer parts of the city, Western Europe built mass housing in the outskirts of the city. These Western mass apartments housed mainly immigrants, whereas, in Eastern Europe, every social class was forced to live in the same type of mass housing buildings.

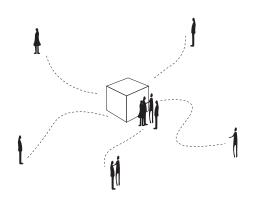
Global Situation

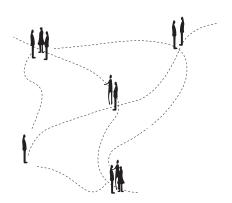
Eastern vs Western

Comparing future strategies for social mass housing districts between Western and Eastern Europe shows contrasting approaches due to its user habits and context (Hatherley, 2019). In the Western part of Europe, the usual practice is demolition, where cases of reconstructing are Contrasting future strategies awarded and celebrated. Contrarily, in Eastern Europe, due to financial reasons and existing mindset, reconstruction of mass housing districts appears to be a more common approach that requires little means (Hatherley, 2019).

The focus of this research is creating inclusive spaces by activating residual spaces, which are an integral part of mass housing districts, and adapts them to the main age group in the districts which are the seniors. Insufficient maintenance of the district, specific mobility needs of seniors, and underused spaces lead to a distributed approach, where residual public spaces are used as a network to build an inclusive community promoting an age-friendly city model rather than a community centre.

Approach

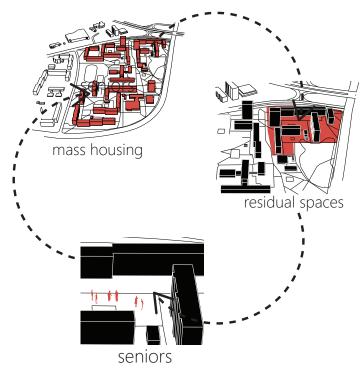




Aim & Research Question

There is little research done understanding and implementing spatial and social needs of seniors to mass housing districts. This thesis aim is to investigate the viability of a rehabilitative approach of mass housing neighbourhoods through promoting the independent life of older age people.

In ageing, maintaining health and independent life is the main goal. This thesis explores how small local spatial interventions can meet the demand of seniors and improve the quality of their everyday life. Ultimately, these reframed spaces have the possibility to not only confront physical health issues but also address problems of loneliness and social isolation.



III. 3. Main parts of the proposed approach

Aim

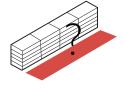
Investigate the viability of a rehabilitative approach of mass housing neighbourhoods through promoting the independent life of older age people.

Research Question

How can utilizing **residual spaces** would increase the quality of life of **seniors** in the context of **mass housing**?

01

What are the **residual spaces** in **post-socialist mass housing** districts?



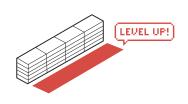
02

What are the **spatial needs** of seniors in public spaces?



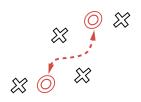
03

What are the **social qualities** of space which would affect the lives of seniors? How these factors could be enhanced?



04

What is the **approach** needed to enhance the quality of life for senior citizens?



III. 4. Research objectives

Literature Review

This chapter gives an outline of the main theoretical themes, which presents a relationship between the theory and applied design. The literature review opens with the framework of an age-friendly city followed by the implications of ageing and anchoring physical and social aspects of ageing, catering to the needs of a community. Then, age-friendly city practises present ways of imparting an age-friendly framework depending on the context and local needs. The importance of the qualitative place is highlighted linking to the residual spaces as a potential catalyst in the area. Consequently, an approach of adapting residual spaces for seniors by applying a network of spaces with small interventions is proposed.

Chapter 02

Age-friendly City

'Age-friendly'

From the political and policy perspective, there is an increased interest in making communities more "age-friendly". It is a continuing move since the launch of the Age-friendly city model when in 2002 World Health Organization (WHO) released a policy framework helping governments to address demographic ageing. The framework proposed eight domains addressing physical environment (housing, outdoor spaces and buildings), social environment (respect, civic and social participation), and municipal services (health services, transportation) (WHO, 2007). Additionally, in 2007 WHO released the Global Network of Age-friendly Cities and Communities (GNAFCC) to promote sharing knowledge between the communities. With older age people being the dominant group, which is expected to only increase in the future, it is crucial to take it into account and start preparing in advance.

Vilnius as Age-friendly city

Vilnius was the first city in the Baltic States to join the WHO international movement in 2018. Considering the importance of the elderly population, Vilnius City Municipal Council in 2016 set up a public commission based on the WHO framework. Now, Vilnius as an age-friendly city is in the process of defining a strategy based on the survey conducted to the 65 and older residents.

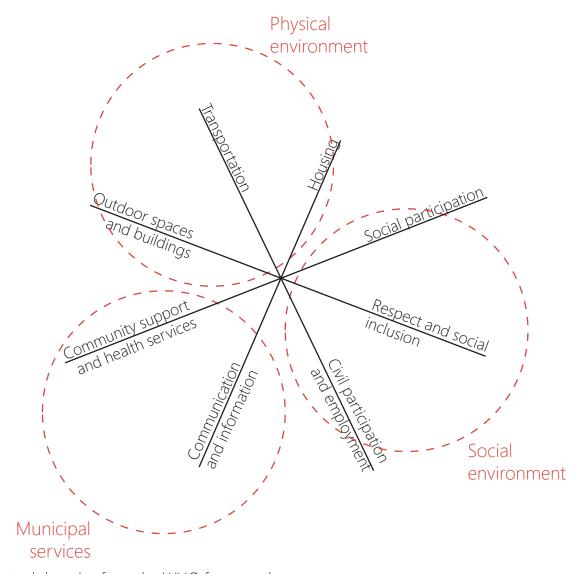
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Statistics

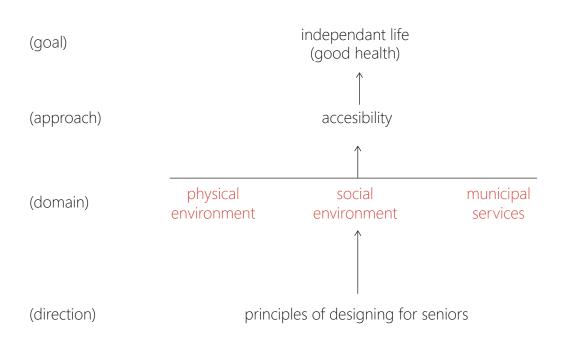
Implications of Age- The increasing life expectancy and decreased birth rate shift county's age towards older age. Together with urbanization, it shows the two big demographic changes the world is experiencing. By 2050, 70% of the world's population is expected to be living in cities, where the percentage of people aged over 65, is expected to grow three times than now, representing 22% of the total population (WHO, 2018). This means that there will be more older people than children under 15 years old (Arup, 2015).

Aging as a right

While ageing is referred to as a societal problem, it is old age that should be a matter of political concern (Walker, 2017). Little has been done to represent older people in the communities. Even after contributing to the community working-age resident often feel excluded when retired. After living in the commune for many years, the inclusion of older people is not only social justice but also a right (Gilroy, 2021). A need to be part of the community does not disappear with reaching a certain age and should not be disregarded because of old age. A desire to act and be valued as part of the community with appropriate knowledge and experience is a right that should be achievable to all ages (Gilroy, 2021). Longer life years allow for more opportunities for people themselves as well as in society. It enables more time for new skills and hobbies in the



III. 5. Adapted domains from the WHO framework



Physical decline

communities (WHO, 2007). However, the extent of these involvements highly depends on the health factor. Ageing is a process of physical decline due to the decrease in cell regeneration. Mental changes might also occur with the physical changes. Although, these shifts are not tied to age and are only indicative (WHO, 2018). As certain abilities decrease, using the same public spaces might become a problem or even inaccessible. Most commonly physical decline happens in muscle, bones, joints, hearing, and sight additionally with diseases such as diabetes, depression, and dementia (WHO, 2018). As a result, the danger of falling increases, making spaces age-friendly an important part of life.

depending on the education, income, health, and family status of the person. The first phase after retirement is 'Honeymoon', in which duration and quality are dependent on the person's education, income, and health level. Next is the 'Big decision phase', where life decisions due to mobility must be made, 'Navigating longevity phase' where health aspects become more important on which housing and health facilities are dependant. Last, the 'Solo journey phase' is when daily support or assistance is needed and is usually when everyday life becomes limited. These phases are not defined by exact age and the transitions in phases could happen abruptly

due to changes in health, income, or other factors (Coughlin, 2020).

Joseph Coughlin (2020) structures life after retirement in four phases

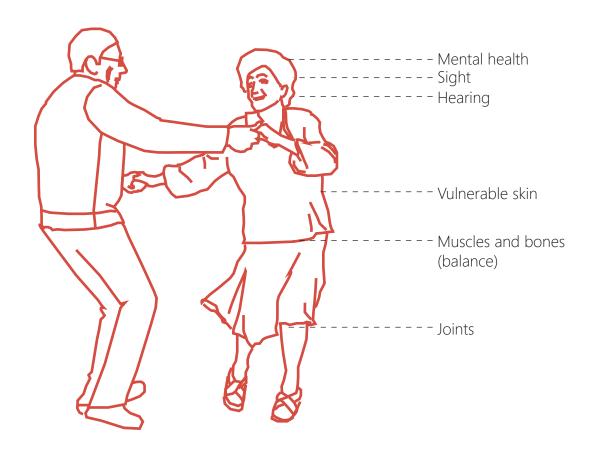
Phases after retirement

With old age, social isolation and loneliness become viable problems (Gilroy, 2021). Although social isolation and loneliness are understood and talked about in unison, it is two distinct problems. Social isolation is an objective situation, when a person has little or no social interactions, while loneliness is a subjective situation where meaningful interactions are missing, although there could be a lot of interactions. Studies show that lack of social aspects is one of the factors that could accelerate worsening health conditions (Braveman and Gottlieb, 2014). Moreover, loneliness is not linked to later age, rather to life transitions, family issues, poverty, or other factors (Office of national statistics, 2018). In later years of life, more life transitions occur, which have a higher chance of leading to social isolation or loneliness (Gilroy, 2021).

Isolation and loneliness

The spatial qualities of the neighbourhood determine the quality of social capital, which is the basis for social sustainability, indicating the importance of urban public spaces for social inclusion (Yoo and Lee, 2016). This leads to an approach that urban design could be a key to reframing the roles of seniors in mass housing buildings. Spatial improvements can tackle some of the complex issues mentioned above resulting that age-friendly cities are generally oriented towards health factor. By implementing age-friendly city characteristics and involving seniors in physical and social spaces has a high chance of maintaining the health of the most vulnerable in our society.

Urban design as solution



Age-friendly Cities in Practice

Empowering the seniors

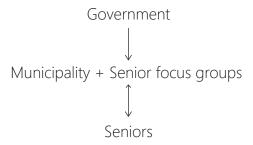
Governance is one of the major aspects of the age-friendly city framework (Lui et al., 2009). Age-friendly cities propose opportunities not only for the participation of the elderly, but also opens a possibility for cooperation between different stakeholders such as the municipality, local businesses, and others. Some cases present age-friendly initiatives through empowering the elderly as the main activator in communities, i.e., Manchester, United Kingdom (Buffel and Phillipson, 2018), while others implementasofterapproach, building on the community strength through the municipality and service networks, i.e. Akita, Japan (Firestone, 2018).

Cases of 'age-friendly' cities

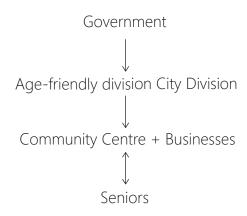
In Akita, the initiative is based on implementing a top-down approach where an age-friendly city division is responsible for addressing ageing problems. In the case of Manchester, the neighbourhood level community was encouraged to take the initiative of proposing projects for the community, which understands seniors as the focus of the community (McGarry and Morris, 2011). This way, Manchester implements a combination of a top-down and bottom-up approach, where the City Council handles seniors, which focuses on an age-friendly approach. The bottom-up approach allows for closer collaboration with the community, analysing the needs of the commune, whereas the top-down approach enables to work strategically (Buffel and Phillipson, 2018).

The good and the bad

There are both advantages and disadvantages of implementing an agefriendly framework. The age-friendly initiative benefits the community by recognizing the need of adapting public spaces for seniors and people with mobility needs, allowing cooperation between different stakeholders and various scale of governance, and, lastly, enabling seniors in lower or medium-income districts, addressing questions of isolation, loneliness, and access to culture (Buffel and Phillipson, 2018). In parallel, the limitations of the age-friendly city initiative include prejudice against older people. Depending on age-friendly initiative alone is a slow process of making people let go of stereotypes, where people are disregarded and excluded from policy-making due to older age (Buffel et al., 2014). Similarly, in cases of urban renewal, seniors are not seen as a possible source of information for reviving the communities (Simpson, 2010). Additionally, age-friendly initiatives are dependent on political sponsorship. The extent of age-friendly initiatives might be demoted if local leaders and political forces would prioritise different approaches, with a goal of higher economic growth and development (Caro and Fitzgerald, 2018). Depending on the community, age-friendly initiatives are likely to have small networks, which leads to little influence in making decisions in essential boards. Lastly, the idea of an 'agefriendly city might be attractive to some cities to show their support to the older population, although if done without lasting resources, it would be making little substantial changes (Buffel and Phillipson, 2018).



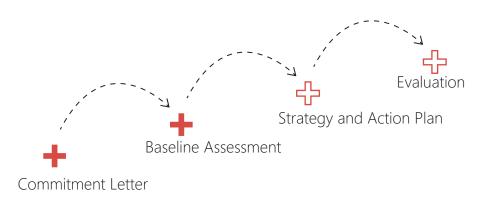
III. 8. Akita age-friendly city model



III. 9. Manchester age-friendly city model

Vilnius as an age-friendly city is still in the early stages. In 2016 the municipality conducting a survey focusing on the quality of life in citizens 65 years old or over (Vilniaus visuomenės sveikatos biuras, 2019). The results were reviewed by concluding these areas of improvement: transportation, outdoor spaces & buildings, housing, social; civic participation, employment, communication and information, community; healthcare, respect; social inclusion. Based on these needs, a strategy and an action plan are being prepared in 2021.

Vilnius as Age-friendly city

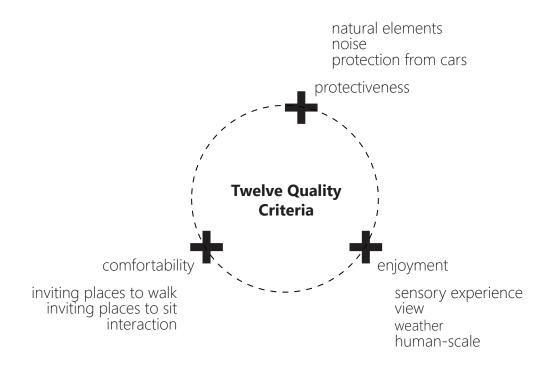


Quality of a Place

Age is an element that affects how a person relates to the surroundings (Gilroy, 2021). With older age, it is more difficult physically, so the quality of a place becomes more important with age. A city is a shared space, where all age groups must be adjusted to (Gehl, 1987). The goal should be to accommodate everyday services and necessities that are accessible for all age groups, including the public spaces, green areas, Physical as a base for social and facilities which offer social inclusion. All these elements are essential for healthy physical and mental health (Gilroy, 2021). Physical space sets the base for social interactions. If a place is not physically maintained, it is less likely to be accessible by seniors and constrained by mobility. This leads to the conclusion that enhancing public spaces might support the physical health of older people as well as address other health concerns such as loneliness and social isolation (Gilroy, 2021).

Evaluating

Urban planners (Corbusier and Boesiger, 1935; Jacobs, 1961; Lynch, 1981) have tried to define the importance of a qualitative space drawing from their experiences and focus. These deductions are highly dependent on the context of time and space (Kamp et al., 2003), so working in a mass housing context allows for new insights. Gehl (1987) in his findings stresses the significance of an in-between space, which sets the stage for social life and interactions. Gehl highlights the importance of walking and its biological benefits, which value is parallel to the one for seniors. Improving the physical quality of a space and making the neighbourhood more walkable creates a more inclusive area for the physically vulnerable groups. Jan Gehl in his tool of Twelve Quality Criteria (2017) evaluates the public space in terms of its protectiveness (lack of protection from cars, noise, and natural elements prevents people from staying in space), comfortability (without inviting places to walk, stand, sit, view and interact, spaces are less likely to be used), and level of enjoyment while there (high-quality spaces create places for sensory experiences, enjoying the view, weather, and allow human-scale features, which prevents people from getting lost). By evaluating the physical aspects of a space, it allows us to understand the quality of it, as well as determine the probability of social interactions in those spaces.



Residual Spaces in the Context of Mass Housing

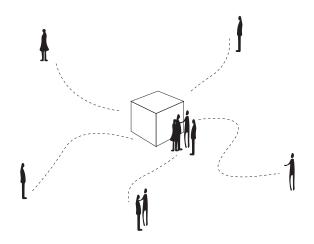
Small intervention

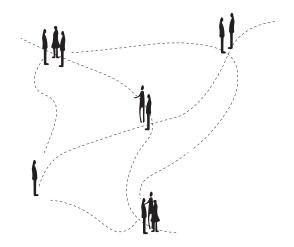
Residual space definition

Though demolition followed by an urban renewal development is highly probable in districts where older age residents are a dominant group (Yung, Conejos and Chan, 2019), this thesis applies a rehabilitative approach. By retaining the characteristics of a neighbourhood and focusing on the needs for spaces of the seniors and by building on established social networks rather than starting anew, gives way for a more sensitive manner. This approach shifts the focus to residual spaces allowing one to concentrate on what is lacking rather than starting from the beginning.

The definition of a 'residual space' is not yet clearly defined. In this thesis, in the context of mass housing districts, 'residual spaces' is translated as first theorized by Ignasi de Sola-Morales 'Terrain Vague' as a marginal and vacant space that is located outside the city's productive spaces and is "mentally exterior in the physical interior of the city" (Solà-Morales, 1995). Residual spaces are understood as what Crawford describes as the "everyday space" in everyday urbanism theory (Chase, Crawford and Kaliski, 1999). The focus of everyday urbanism builds on the effectiveness of daily life. Full transformation of the site is not the goal of everyday urbanism, but rather the strengthening of everyday urban contact between the different stakeholders. It offers a way for local communities and individuals to take back leftover spaces (Walters, 2007).

In mass housing districts one of the dominant criticisms is the vast amount of unplanned or anonymous spaces. These residual spaces have little purpose and have the potential of being used as a core resource for the whole district. Likewise, in housing areas with a high percentage of inhabitants are of senior age, there is a need to ensure that this Residual space in microrayon environment responds to them. Having that in mind, residual spaces distributed in the district allow for proposing a design where spaces for seniors work as a network rather than isolated or lone resource or facility. However, there is little data to show that this approach works, because no one has done it yet. Strategic small interventions have the capacity of enabling social life in place, rather than creating another point to which the seniors must travel.





III. 12. Diagram from central to a network (seniors)

Conclusion

The literature review concludes that spatial design impacts not only the social but also health aspects of a senior's life, which are closely related to one another. Residual spaces inherent to mass housing districts could be utilized for the community by proposing a local network of spaces integrating seniors into public life rather than proposing an individual community centre.

As the age-friendly city model becomes more urgent, policies and implications of aging open a discussion of how important are the everyday spaces and who are the users. By ensuring accessibility, access to nature, and points of identification between the user and the city, would set the scene for an inclusive democratic space.

The challenge is to create an urban environment that supports the rights of seniors as equal stakeholders of the urban space in the context of post-social mass housing.

From Socialism to Democracy

This chapter outlines the context of the research. It starts by presenting the characteristics of mass housing and the conditions which determined them. Limitations and problems are introduced, framing the situation in which people are living right now, connecting to post-socialist housing models in Lithuania, specifically the study case of Lazdynai. Lastly, seniors are defined as a major vulnerable group, which sets the purpose for the research.

Chapter 03

Mass Housing Characteristics

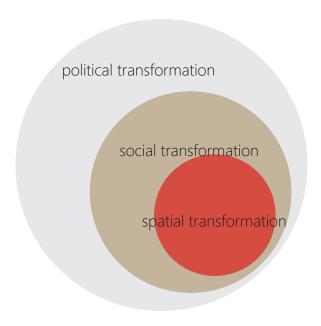
New public space system

During the modern Soviet period, a new system of public spaces in mass housing was proposed based on public, cultural, and service needs. The idea of mass housing reflects the ideological goal of creating a new society and its element - homo sovieticus, which would not be a representative of any nation, but a citizen of the Soviet Union (Statyba ir Architektūra, 2016). By defining points of daily and periodic needs, a structure of a district was developed (Drėmaitė, 2019). Although this approach was considered utopian, it also was criticized for an extensive amount of unplanned or left-over green spaces. These residual spaces have been underused, which holds the potential of layering an additional dimension to the community.

'Khrushchyovka'

Mass housing districts in Eastern Europe mostly consisted of 'khrushchyovka' (five-storey concrete panel apartments, built in the 1960s, when Nikita Khrushchev administrated the Soviet government). These apartments were small with 1-3 rooms, which were mostly walkthroughs. To balance that, spacious outdoor public spaces were emphasized (blue and green areas, sports zones, playgrounds, cloth drying areas). These spaces set the background of social mass housing districts, which set specific repetitive characteristics throughout different Eastern Europe cases:

(1) districts were planned with socialist ideologies in mind (Drėmaitė,



2019). Social control and order were represented through social and spatial qualities expressed by free plan typology. The repetitive structure of the district with buildings and activities represents equal and unified people with a shared sense of morality and a mutual goal of that time.

(1) ideology

(2) local services and functions are distributed equally in the district (Drėmaitė, 2019). The model proposed a new system of public spaces, based on public, cultural, and service needs. Although the district encompasses all possible necessities, due to the size of it and distribution pattern, the distances become subjective depending on the user. This distance for the average worker is irrelevant, whereas for people with mobility or special needs the distance becomes an issue.

(2) planning

(3) built with a goal of high efficiency and low cost (Drėmaitė, 2019). Usually done in standardized design by assembling prefabricated concrete panels. The result is small apartments, where room space is very limited. To counter that, outdoor public spaces were supposed to offer space for the community to gather, although they offered few places to stay or choice of different activities.

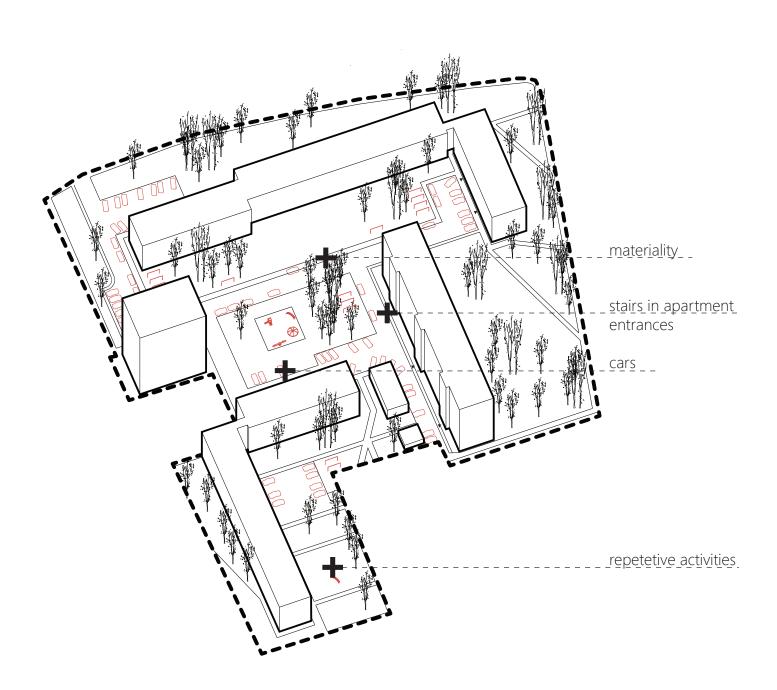
(3) repetition

(4) outdoor spaces were predominantly public with few private spaces. Soviet mass housing districts are criticized for an extensive number of left-over spaces. Neutral and anonymous spaces have no defined user, leading to people being unable to read and connect with the spaces (Gehl, 1987). Now, these residual spaces are still overlooked, because when the political shift happened, households became private property, meaning that collective decisions were hard to plan due to amount of different stakeholders.

(4) residual spaces

Limitations

By looking at the characteristics of mass housing districts, it shows that this housing typology has certain limitations regarding various circumstances and stakeholders. In post-soviet countries, a shift from socialism to capitalism resulted in little physical change in mass housing neighbourhoods (only recently enriching projects were started to be implemented (Vilniaus miesto savivaldybė, 2020)). Instead, it created additional issues such as the excessive amount of cars and physical wear. What is more, buildings are in need of renovation due to high heat loss and inaccessible entrances by people with mobile disabilities (Genys and Leonavičius, 2014). Public spaces need to be reframed emphasizing the changing needs of the people living there, most specifically people of older age, but also considering the needs of young families with children and working class. This, together with the co-operation with the municipality could change the perspective of how mass housing neighbourhood is understood. Ultimately, this research leads to a working case study in Lithuania with a focus on people who have been living there from the very start it was built, and space's ability to adapt to them.



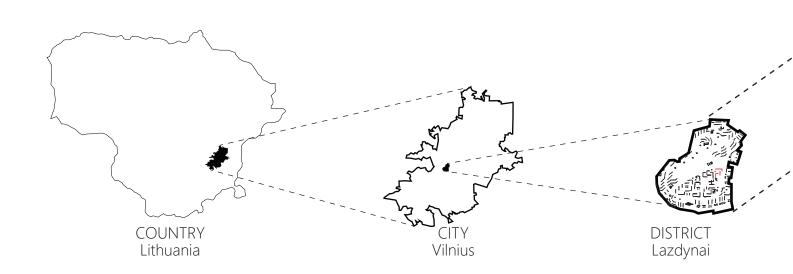
Post-socialist Housing Models in Lithuania

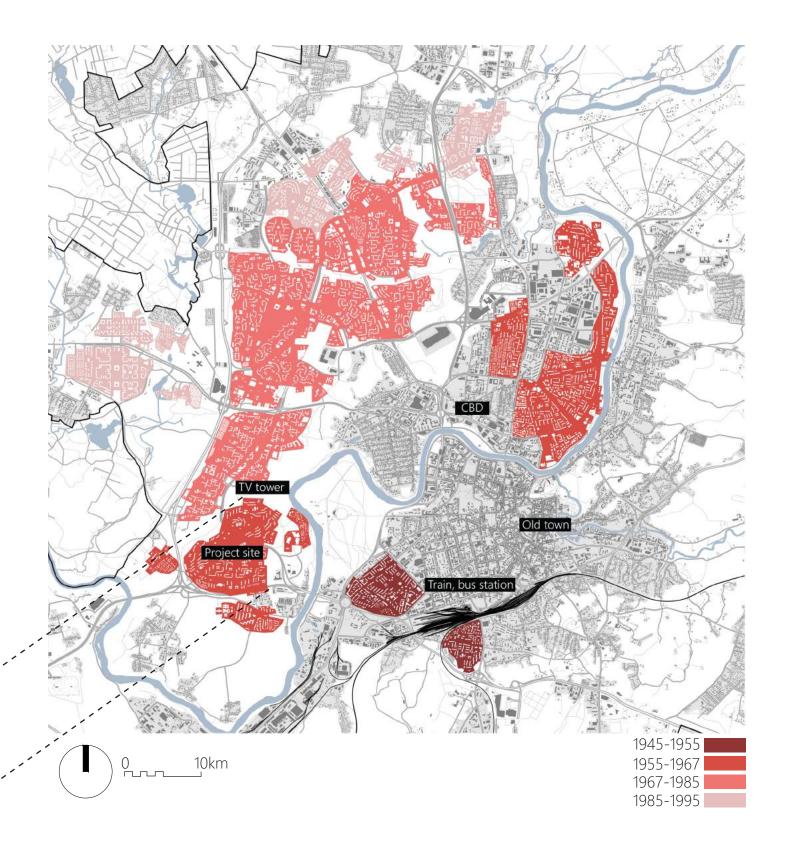
Site location

For this research, post-socialist housing models in Lithuania are explored with the case of Lazdynai. Lithuania is one of the Baltic states, with Vilnius as its capital city. The first mass housing district in Vilnius was started to be built near train and bus station, not far from the historic Old town. With time, as demand for apartments grew, mass housing was continued to be built further from the city centre, first on the other side of the Neris river, later on pushing even farther out (ill. 16). With time, a pattern of a satellite model started to form, starting from Lazdynai district in the south and following along Laisves prospectus up north.

Uniqueness

Despite similar characteristics, different mass housing districts in Vilnius are distinct in their typology, architectural elements, and plan variations. Lazdynai district is individual for its innovative approach of integrating the neighborhood into the natural terrain. It was awarded for urban solutions, rather than architecture, which was unusual at that time.





Lazdynai features

Three features differentiate Lazdynai district from other mass housing districts: (1) the terrain of the geographical location—hilly site, full of forests (the design was integrated into natural landscape); (2) I–464 building series were updated by adding twelve-story towers to the five- and nine-story buildings set; (3) due to site location, type of constructing was adjusted accordingly adapting buildings and infrastructure to the terrain (Drėmaitė, 2019). Together these three features distinguished Lazdynai mass housing district from other Soviet Union large housing areas of that time. Later, the Lazdynai district was used as an example project for further development of mass housing in the USSR (Drėmaitė, 2019).

Heritage of Lazdynai

As an early Soviet modernism district, Lazdynai was accepted as a cultural heritage site due to its urban qualities. Cultural heritage in Lazdynai consisted of: (1) planned structure type and network - a free plan structure consisting of a circular city plan with main streets; (2) districts - the boundaries of districts (microrayons); (3) roads, streets, squares, entrances, passages, paths; (4) natural elements – terrain; (5) structure of volumetric spatial structure; (6) morphology - free-planning footprint: large-panel 5, 9, 12-story residential houses, monolithic reinforced concrete 16-story residential houses, low-rise public buildings; (7) open spaces - spaces formed by groups of various types of residential buildings of free planning, terrain, and existing pine forest, taking into account the proportions of those spaces, functional and visual connection with the environment without losing the "human" scale (Vilnius City Municipality, 2013). These qualities set the base structure of a Lazdynai district.

As the socio-cultural and socio-economic conditions of urban development change, so do the requirements for an urban environment. Open public spaces do not set the space for social life as they did before. User's needs have changed due to age and different contexts which the physical environment of Lazdynai does not accommodate. This leads that some of these public spaces are not viable or usable anymore, and their adaptation to post-social needs demands an appropriate solution (Grunskis and Šiupšinskas, 2012). Urban life is a constant shift, where existing socialist public spaces are not enough for everyday life.

Change in Lazdynai



III. 17. Mass housing districts in Vilnius



III. 18. Typical view in Lazdynai district

Seniors as a Dominant Age Group in Mass Housing Districts

population distribution by age corresponds with the period in which the buildings were built (Burneika, Ubarevičienė, and Baranuskaitė, 2019). People of older age tend to congregate in initial areas where mass housing districts were started to be built (ill.19), citizens around retirement age tend to live in further out districts, and younger citizens reside in outer areas of these districts, predominantly in the city centre and the suburbs. This lead demonstrates that the probability of living in mass housing districts increases with age – people of age 65 or older are three times as likely to live in a mass housing district than in any other type of building (ill. 22). What is more, habitats in mass housing districts are less mobile compared to other neighbourhoods, resulting in why

the social structure shifts at a slower pace (Burneika, Ubarevičienė and

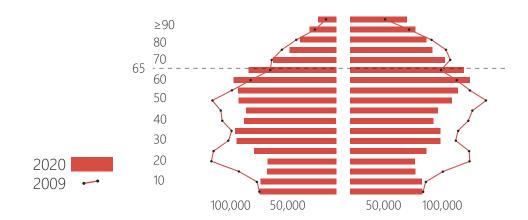
In the case of post-Soviet mass housing districts, in Vilnius, the

Dominant age group

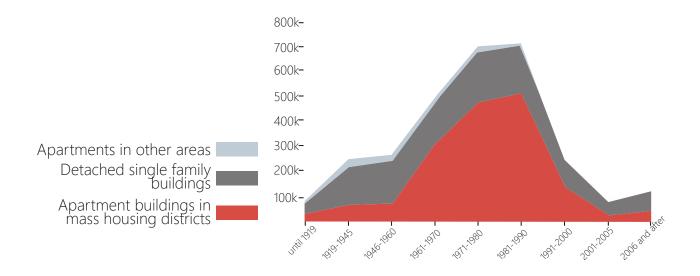


III. 19. Share of residents in mass housing neighbourhoods (Vilnius, Lithuania) (Burneika, Ubarevičienė and Baranuskaitė, 2019).

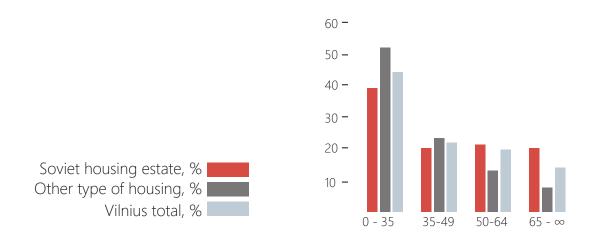
Baranuskaitė, 2019).



III. 20. Resident population by sex and age group, 2009, 2020 (Lithuania) (Official Statistics Portal, 2020)



III. 21. Amount of mass housing compared to other types of housing 1919-2006 (Vilnius, Lithuania) (Burneika, Ubarevičienė and Baranuskaitė, 2019).



III. 22. Age distribution in mass housing districts compared to other types of housing (Vilnius, Lithuania) (Burneika, Ubarevičienė and Baranuskaitė, 2019).

Conclusion

Mass housing districts have been a backdrop of the 20th century. Public spaces which were planned to keep in mind socialist ideologies must face new realities, adjusting socially, spatially, and economically to the public needs. Mass housing districts have reached a point where a new strategy needs to be proposed, setting a new stage for these neighbourhoods, with older residents in mind.

Methodology

This chapter presents a chosen method for how the aim of this thesis could be achieved. Overview outlines the thesis components and relationships between them, followed by the methodology and specifying steps made in the phases. After presenting the aim with the research question, the approach is evaluated, expanding on the methods selected for the analysis, specifying the importance of spatial and social approach.

Chapter 04

Overview

The overview presents a structure of the research setting points of motivation, problem field, and approach. The research question indicated by the aim sets the ground for the methodology and methods used in the analysis. Finally, research is evaluated by the senior, and finished by personal conclusions and reflection.

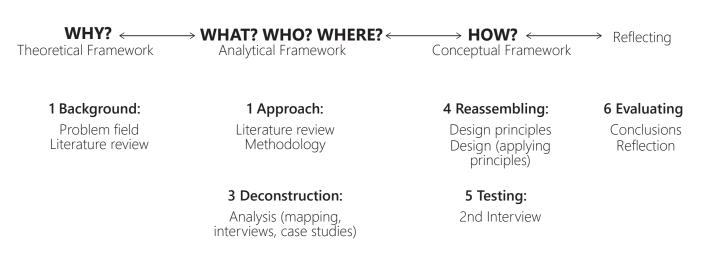
Phases

Organization of phases

Reframing the role of public spaces in mass housing districts by adapting it to people of older age requires a structured framework. This approach is organized in 6 phases: (1) setting the background of mass housing, (2) defining the approach by literature review, (3) focusing on seniors needs on the site, in spatial and social settings, (4) drawing conclusions from the site analysis, interviews and case studies, structuring it and proposing principles and applying to thesis site, (5) testing the design by conducting second interviews with the senior citizens on-site, and lastly (6) reflecting and evaluating on the overall process. These steps correlate with research questions and are done in the iterative approach, varying between the results.

Testing

Reflective practise was implemented through a second interview with the seniors, where the design was tested with the users, leading to alternative conclusions, which are reflected on.



III. 24. Methodology

Phase 1 - Background (Problem field)

The first phase was a starting point for the thesis and focuses on the context of mass housing and understand the problem field. Phase 1 sets the base for the theoretical framework and the research gap.

Mass housing holds an unused potential seen in vast green areas, which in part define the character of mass housing in general, holding a great opportunity for changing the negative outlook in these neighbourhoods. Defining problematic areas makes the approach clearer.

The purpose of this phase is to define the research gap, on which this thesis is built on later. Understanding the context, problems, and practises of working in these areas, allows one to understand the possibilities of what could be proposed. Ultimately, it serves as a guide to defining key theories, aims, and objectives for the thesis.

Phase 2 – Approach (Literature review)

In Phase 2, through literature review, possible approaches are explored. It aims to answer the 'What? Who? Where?' questions by analysing literature and looking at different sources. Understanding what has been done and comprehend what worked, guides to narrow the approach and considers the viability of them. Also, defining the methodology enables reconsidering available resources, determining factors, and highlighting priority goals.

Phase 3 - Deconstruction (Analysis)

In this step, data is analysed by deconstructing it and considering what works and what does not. It aims to answer the 'What? Who? Where?' questions through mapping, interviews, and case studies.

This analysis ensures a solid base for grasping how the thesis site operates on an everyday basis. Mapping provides structured and analytical information of the spatial qualities, from which social qualities are concluded. Interviews present viewpoints of users, which are understood as end-users and having a deeper knowledge of the site. By interviewing different stakeholders, municipality representatives, and seniors on-site, diverse perspectives are uncovered. Case studies provide a broader understanding of successful approaches in similar cases, from which way of approach could be implemented on-site.

Phase 4 - Reassembling (Principles + Design)

In Phase 4, the collected information is reflected on, and an approach is proposed first by deducing transferable principles for creating inclusive spaces for seniors and later making specific design proposals. This phase focuses on a conceptual framework, raising the question 'How?' and looking athow existing conditions on-site could be used to reach the aim of the thesis.

The proposed principles draw from the literature review, age-friendly case studies, interviews, and mapping the site. All these points of perspective provide crucial information determining what is needed for the community and evaluating whether it would work on site. Finally, the design shows a specific example of how these principles if applied throughout the design would manifest in creating an age-friendly city in a mass housing context.

Phase 5 – Testing (2nd Interview)

The fifth phase seeks out to test the design for seniors by seniors. When working in the community, a participatory approach is essential, which due to Covid-19 and seniors being a vulnerable group, was made unavailable. To test out the proposed approach, a second informal interview was done to get feedback from the seniors on site.

Phase 6 - Evaluation

The last phase focuses on concluding and reflecting on the thesis. Looking back and critically reflecting on steps made gives an insight into what other possible approaches might hold potential while working in mass housing neighbourhoods.

Aim and Research Question

Gap of knowledge

There is a gap of knowledge of understanding and implementing the spatial and social needs of the seniors in mass housing districts. This thesis aims to investigate the viability of a rehabilitative approach of mass housing neighbourhoods through promoting the independent life of older age people.

Health-centered approach

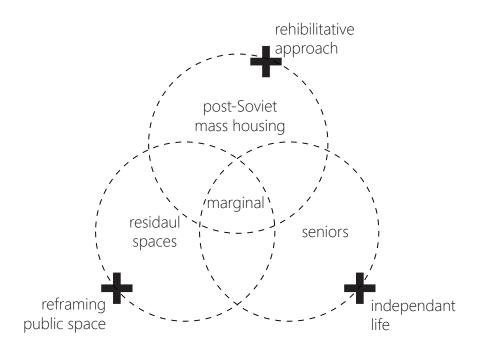
A rehabilitative approach proposes building on already existing qualities. As the age-friendly city model ensures accessibility to the physical environment, social environment, and municipal services, it leads to the conclusion that age-friendly cities are guided towards the independent life of seniors. Independent life is highly related to health, which presumes that age-friendly cities are directed towards a health-centered approach. Ultimately, in ageing, maintaining health and independent life is the main goal.

Reframing void spaces

The defined aim focuses on using existing qualities and reframing void spaces as areas of potential for building an age-friendly community. Ultimately, these reframed spaces have the possibility of not only confront physical health issues but also address problems of loneliness and social isolation.

Working questions

The research question is followed by four working questions, which serve as objectives. The main research question encompasses three theoretical areas: residual spaces, seniors, and a context of post-Soviet mass housing district. The first working question defines the need of understanding the context of mass housing and what are the residual spaces, expanding on the theoretical framework. The second and third working questions indicate the importance of the spatial and social needs of seniors, which is represented in the analysis. Last, the fourth question talks about an approach needed to implement the knowledge with a conceptual framework in mind.



III. 25. Main theoretical areas of the research

The **aim** of this theisis is to investigate the viability of a **rehabilitative** approach of **mass housing** neighbourhoods through promoting **independent life of older age people.**

How can utilizing **residual spaces** would increase the quality of life of **seniors** in the context of **mass housing**?

WHY?

Theoretical Framework

1. What are the **residual spaces** in **post-socialist mass housing** districts?

WHAT? WHO? WHERE?

- 2. What are the **spatial needs** of seniors in public spaces?
- Analytical Framework
- 3. What are the **social qualities** of space which would affect the lives of seniors? How these factors could be enhanced?

HOW?

Conceptual Framework

4. What is the **approach** needed to enhance the quality of life for senior citizens?

Evaluation

Data types

Literature review uncovered that both spatial and social aspects are crucial when planning an inclusive space for seniors. Accordingly, in the analysis qualitative and quantitative methods with their limitations and feasibility were considered, which led to a mix of them both based on their capabilities.

Quantitative analysis

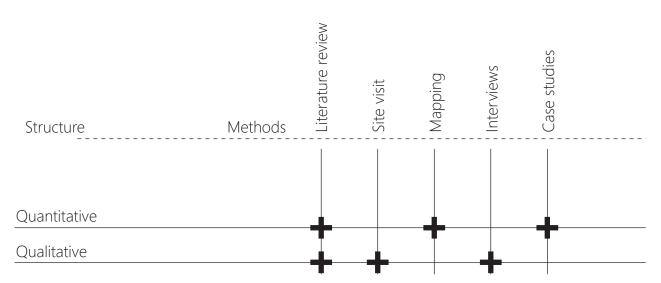
Quantitative analysis expresses data in numbers, which enables us to compare the data. The quantitative method disregards irrelevant factors and presents the data as-is with no interpretation, emotion, or personal preference (Michigan State University, 2019). If applied correctly, the quantitative approach even if applied in small datasets could be transferable to foresee patterns of bigger groups. Limitations of this method include lack of peculiar opinion and details missing which could not be represented with data alone.

Qualitative analysis

Qualitative data allows the assess the situation when just statistical data is not enough. The qualitative method draws from people's personal experiences, with a more detailed point of view which often could be overlooked. This approach enables looking at the topic from different users, which does not always coincide and does not represent the general public (Michigan State University, 2019).

Data Approach

Working in a community a participatory approach is one of the most important parts. As first-hand data from the seniors was not easily available during the pandemic, other sources of data were considered. Second-hand data of continuous work of Rose Gilroy and other researchers were used to get an understanding of seniors and their needs in similar cases.



III. 26. Qualitative and quantitative data distribution in the analysis

Spatial aspects are analysed mainly through quantitative methods. Literature review, data collection, mapping, and case studies build on the quantitative data. This method, with seniors in the centre, focuses on the physical setting. Gathering data on the physical space allows us to make conclusions about how it influences the social environment. A review of existing literature with case studies gave an understanding of past experiences while working in mass housing districts. To avoid subjective data in mapping, the results were compared to gathered literature and similar cases.

The social setting is analysed through qualitative methods. Qualitative data is gathered through literature review, site visits, and interviews, which define the social background. Understanding the social setting enables one to assume how spatial situations might lead to social sustainability. Site visits and interviews allow for first-hand data, which at times have high chances of being too subjective. Contrasting this data with the literature review makes it possible to distinguish or exclude data that is not fit.

Spatial

Social

Conclusion

The methodology seeks to answer raised objectives by implementing suitable analysis. Problems reflected in the literature review are explored by qualitative and quantitative methods with the goal of defining spatial and social problems.

Restrictions of Covid-19 altered a traditional approach with working with the elderly. Although communicating with older people indirectly is complicated, due to limited online reach and the pandemic, additional literature was used as a way to compensate. Conducted informal interviews followed safe guidelines and focused on the senior's perspectives and their reflections, comparing them to the ones found in used literature determining the possible approaches.

Mapping

Interviews

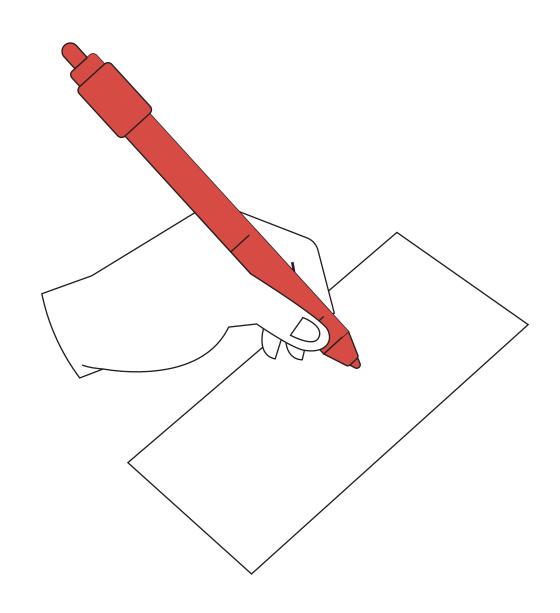
Case Study

Analysis of Senior Needs

This chapter presents mapping, conducted interviews, and case studies, to understand the setting which seniors face every day. Mapping deconstructs the site of Lazdynai, a mass housing district in Lithuania. Here is analysed the structure of the district, spatial and social aspects which are essential for seniors, and residual spaces are located. Interviews give a deeper understanding of the senior's perspective. Both formal and informal interviews were done to grasp the situation from different scales and stakeholders. Case studies look into the feasibility of relating approaches when working with the presented site. This was prepared with the goal of understanding the specific context of the thesis location.

Chapter 05

Mapping



Mapping is structured in 4 categories, scaling from the district to the site. These categories include Structure, Social, Spatial, and Residual Spaces. Later the findings are summarized.

Mapping structure

Structure analysis looks into the spatial structure of the district and its components, revealing the backdrop of the mass housing. Social aspects present the social qualities of the district's need for the age-friendly city model. Furthermore, public transportation and local services are crucial for the senior's basic needs. Subsequently, spatial qualities of a site are presented through mapping parking, pedestrian paths with benches, sun analysis, microclimate, as well as safety qualities – lighting and materiality. The whole of it presents the needs of the seniors in their everyday life. Meanwhile, mapping residual spaces show the multitude of them, which came with the characteristics of mass housing neighbourhoods. It visualizes the unused potential of the space, which could be the main public resource of the district.

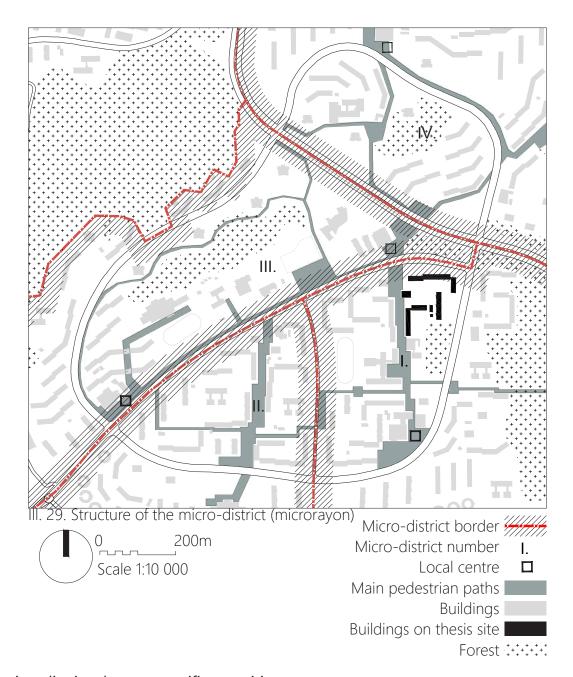
Purpose

Structure District	Structure of a district Communities and building types		Mass housing context
Social District	Public transportation Local services		Age-friendly / Needs of the seniors
Spatial Site	Parking and pedestrian paths Lighting, materiality, safety Vegetation and sun Microclimate	$\longrightarrow\hspace{0.5cm}$	Public spaces / Needs of the seniors
Residual spaces Site	Zones in the community		Spaces for interaction

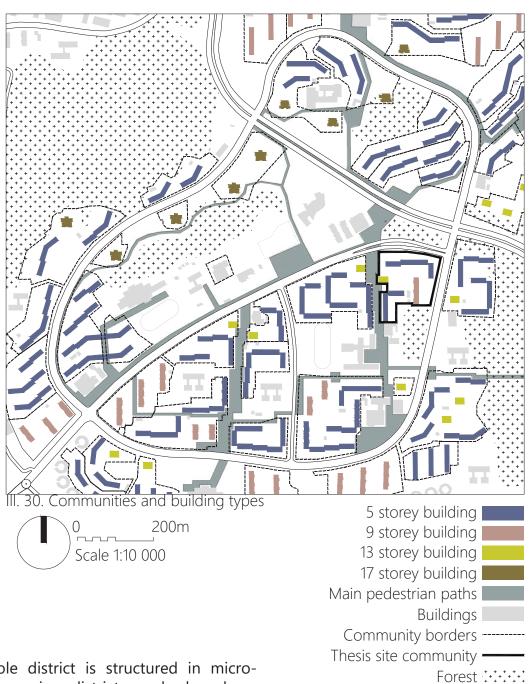
Ill. 28. Structure of mapping

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Structure

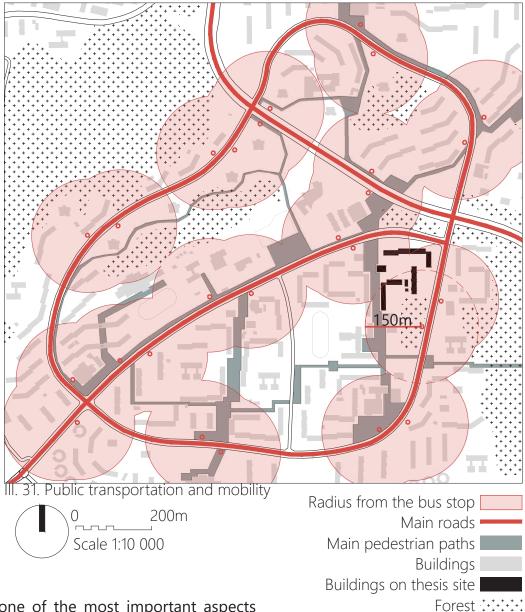


Mass housing districts have a specific repetitive structure, which is reiterated throughout the neighbourhood. Lazdynai district is divided into four micro-districts with their local centres, which vary in size depending on the location. The biggest local centres are located on the south and west side of the district. Main pedestrian paths are planned that acts as arteries, connecting and distributing flows through neighbourhoods. The thesis site is in the first micro-district, which was the first to be built.



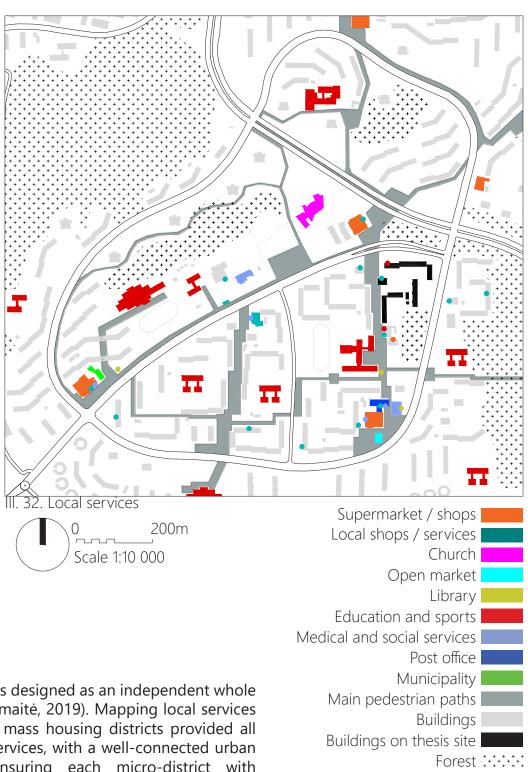
As the whole district is structured in microdistricts, these micro-districts are broken down into smaller communities. Although mass housing apartments were built from prefabricated blocks, buildings varied in height, footprint, and design elements. This meant that all communities were individual while still maintaining the same repetitive characteristics.

Social



Mobility is one of the most important aspects of a senior's independent life. Mapping bus stops with a radius of 150 meters, which takes approximately 4 minutes for seniors to walk, shows that the districts provide good connectivity. Although considering mapped local services, the same distance for seniors than for workers could be more challenging to walk. Making a trip to the supermarket or post office for seniors could make a whole day's trip.

Lazdynai district offers a service of sharing cars (Citbee) and bikes are expected to be available to share in the upcoming year. Proposing an alternative mobility option for seniors to navigate the neighbourhood in a form of a tricycle would include them in a wider community.



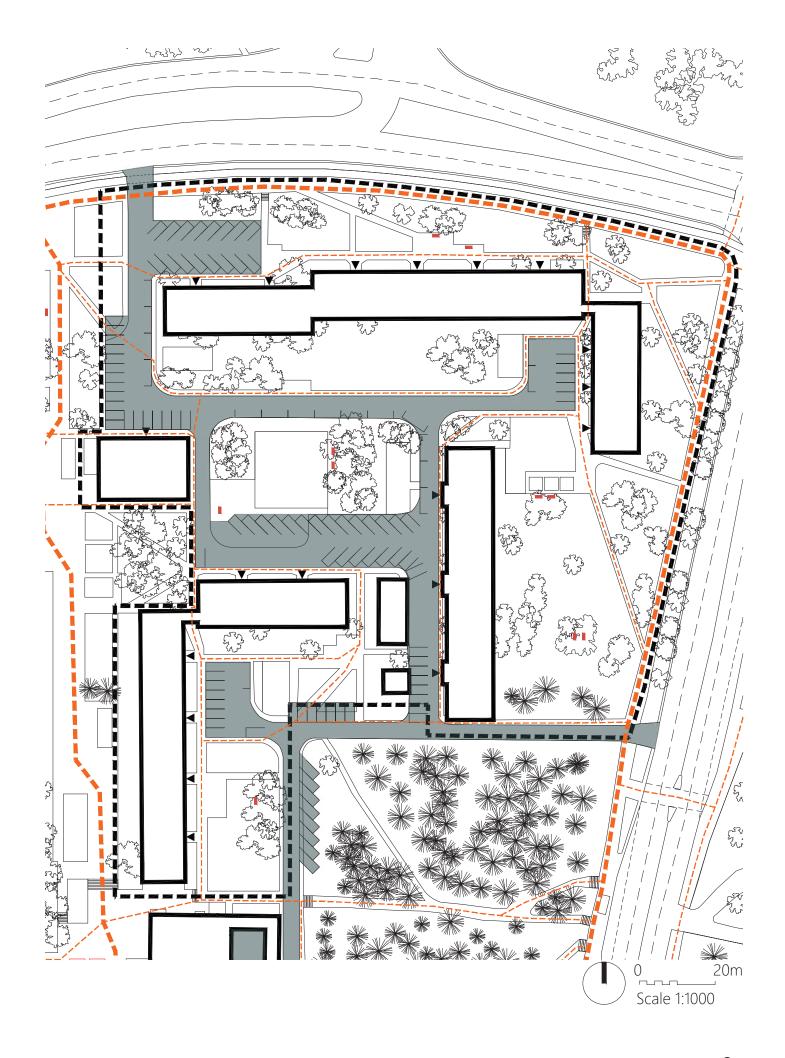
Lazdynai was designed as an independent whole district (Drėmaitė, 2019). Mapping local services shows, that mass housing districts provided all necessary services, with a well-connected urban network, ensuring each micro-district with kindergarten, school, and supermarket. Local centres offered additional services creating vibrant public spaces for people to gather. What is lacking is a community centre oriented to address the need of seniors.

Spatial

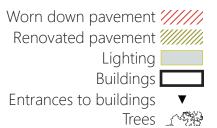
Parking is one of the biggest problems of mass housing neighbourhoods. Initially designed for a small fraction of car users, right now these districts are overcrowded with cars. Children's playgrounds and other open spaces located on the site are used for parking, pushing out the pedestrians. Pedestrian paths have a distinct hierarchy throughout the district, which provides a well-connected neighbourhood. Although the site has a few benches, they have no back support, railings and are overall unadapted to senior needs.

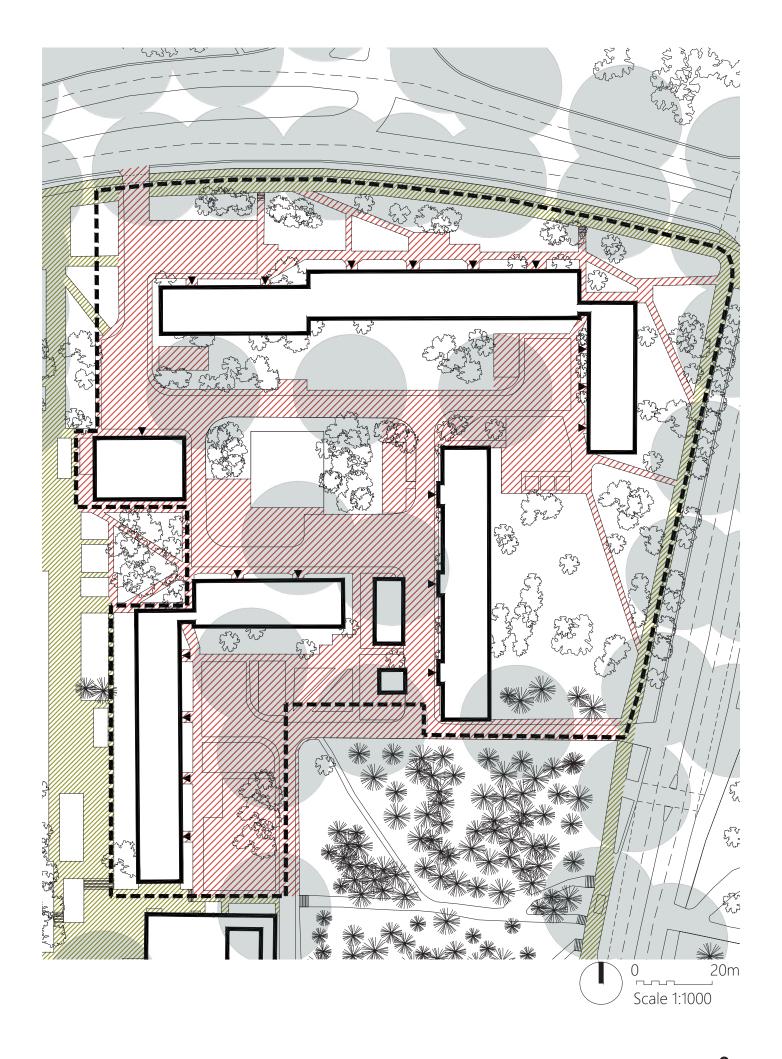
Mapped parking indicates where cars are left on the site, there are no lines indicating car spaces. Cars are parked on paths, which further damages the pavement materiality. Also, due to the naturally hilly terrain of the district, there are a lot of stairs in the area, which do not always offer a possibility of a ramp.

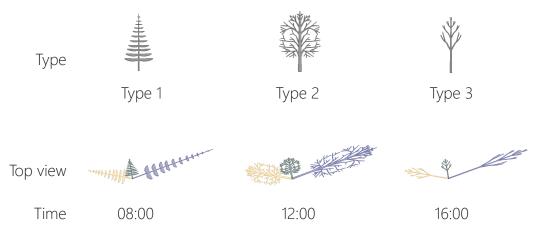




Safety is an important aspect of a senior's life resulting in how often a senior would participate in the community. The inner part of the district with enclosed spaces is not used by seniors due to worn-down pavement and little places to rest. The main used walking route goes around the site, which was newly renovated, providing good materiality, a lit path, and no hidden corners. This results in pushing seniors to walk in the outer area of the community along the main streets when inner parts of the community are used by parked cars. The playgrounds are used just by children of various ages. Moreover, during good weather all the benches are occupied, leaving other seniors to wander around.

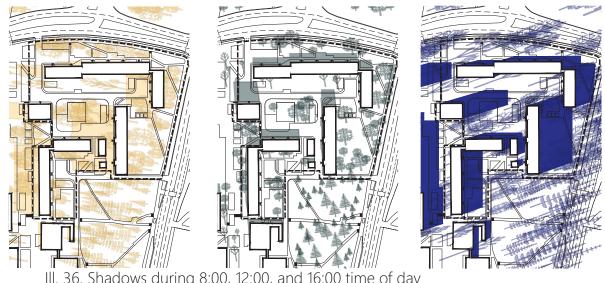






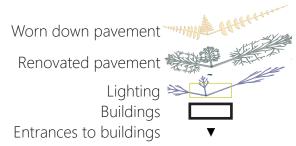
III. 35. Tree types and shadow diagram

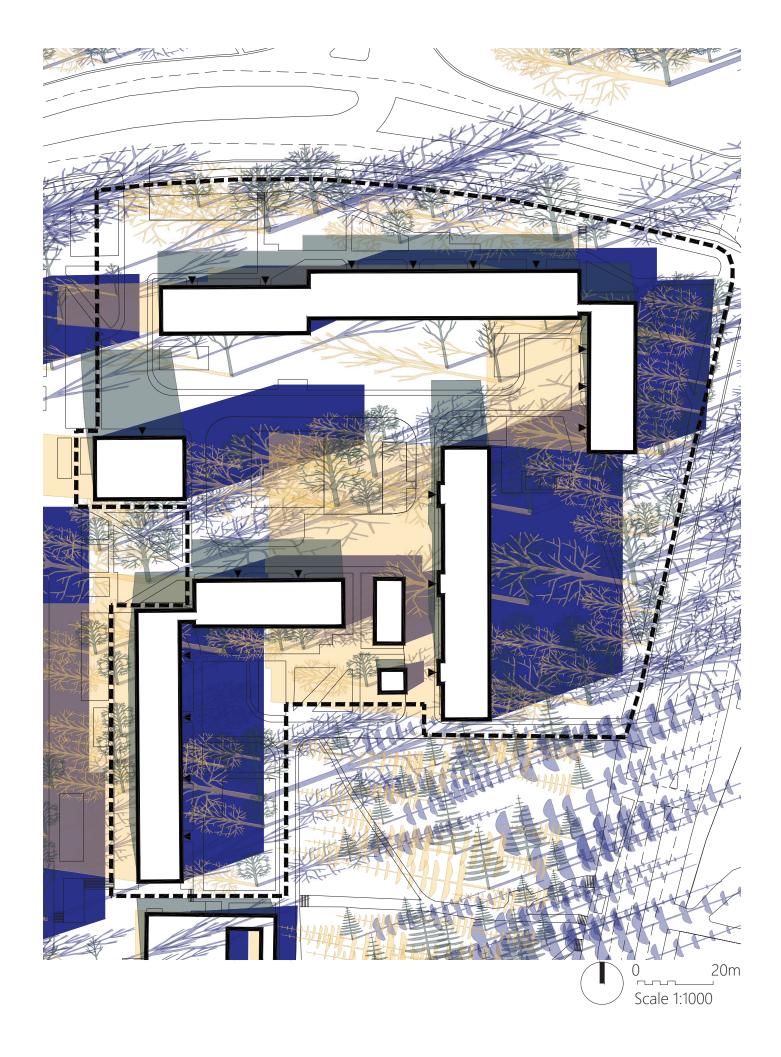
The most common greenery on-site can be categorized into three types based on their leaves and outline shape. Depending on that shape, it provides a different amount of shade. Considering these shadows with respect to the sun, public spaces on the site were analysed, looking into how much sun different public spaces get.



III. 36. Shadows during 8:00, 12:00, and 16:00 time of day

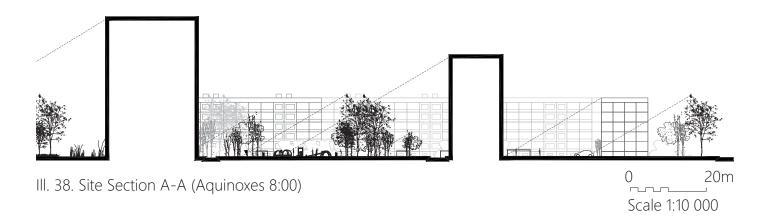
Shadow analysis shows spaces that get the most sun, which is important for a community garden, and which spaces would be more attractive to seniors in the morning or evening.



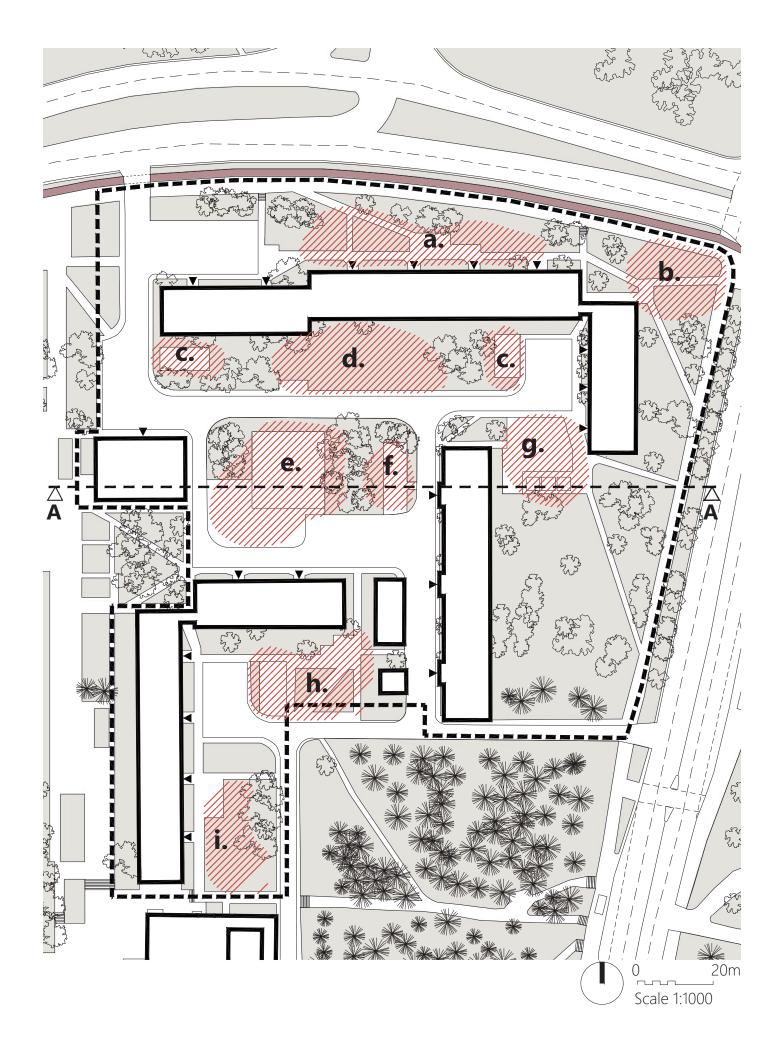


- a. Cool and shady microclimate with a small open area near the apartment entrances, facing the main street.
- **b.** Representative open area, in the intersection between the streets.
- Semi-private areas with drying racks. Sun and shade exposure varies throughout the day, which interchanges between two different spaces.
- **d.** Area with most sun exposure in the community.
- **e.** Open area, formed as a central community area. Shaded in the morning, with the sun during day and evening.
- **f.** Partly open area with parked cars on one side and a tree area on other
- **9.** Enclosed and quieter space. Warm due to morning and afternoon sun.
- **h.** Walkthrough area used by pedestrians. Cool in the morning and sunny in the evening.
- Sunny enclosed area. Shaded in the evening.

Site vegetation, shadow, and microclimate analysis show optimal places for different functions and reconsider different variations of activities. As the dominant wind in this area is from the south and west, public spaces are mostly guarded against the wind. Although the thesis site is not big, it holds a great variety of different spaces, which are adaptable to different needs. Gardening is possible in the upper central area, where it gets the most sun. Benches are also proposed with regard to senior needs, habit patterns, and local micro-climate.







Residual Spaces

Mentally exterior in the physical interior of the city

(Solà-Morales, 1995)

Residual space theorized by Ignasi de Sola Morales in "Terrain Vague" as a marginal and vacant space that is located outside the city's productive spaces and is "mentally exterior in the physical interior of the city" (Solà Morales, 1995), overall understood as "overlooked".

The main zone in the community is open green spaces, which due to their underuse are referred to as residual spaces. These areas hold existing activities in the neighbourhoods (children's playground, cloth drying areas). Existing activities in residual spaces include children's playgrounds and cloth drying areas, which are mostly used by the seniors.

The second major area on the site is parking, which takes up space meant for pedestrians. The thesis site is positioned near the main pedestrian path on the left, which connects it with other micro-districts and local centres.

Parking

Green pedestrian path

Residual spaces

Existing activities in the communities

Buildings

Entrances to buildings

Trees 1



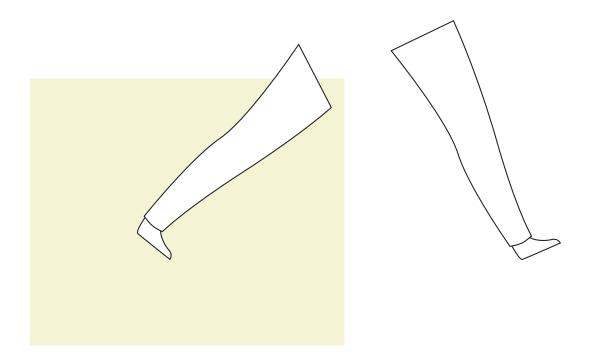
Conclusion

The analysis shows the common repetition for these neighbourhoods in structure, functions, and activities. It also presents that through repetitive structure, the design approach could be multiplied in other neighbourhoods.

Mobility is an important aspect of independent life. As every day trips for groceries become harder, different modes of transport have a chance of solving that. Shared cars and bikes are available throughout the district, adding a possibility for tricycles would propose an option for seniors. What is more, functions are scattered in the district, although there is no community centre to address the needs of the seniors and for them to gather. Parking is a problem in the district as it is prioritized over public spaces throughout the district, which could be solved through policies. Additionally, due to the unsafe materiality, seniors prioritize walking along the street, where the pavement was renewed quite recently rather than using inner parts of the communities. Inner parts are overcrowded with cars, making navigating between them a challenge not only for the elderly. Maintenance is an occurring problem in public spaces and buildings, which needs to be reflected on when proposing a design approach. Therefore, all these problems show how undervalued and marginalized seniors are in public spaces.

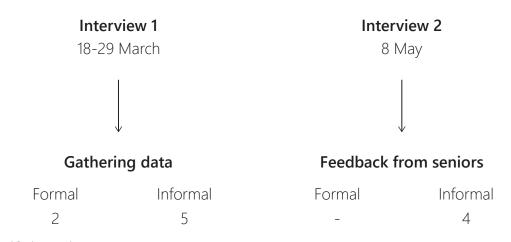
People who use the spaces have grown old, but the spaces are left the same. Also, the majority of spaces are not used or used in limited ways. Gathering data for the analysis shows that some steps have been planned to target the seniors, although they were not fully started to implement. Changed are made by the municipality in small steps, without looking at the bigger picture. Having a vision for these neighbourhoods would give meaning to changes made.

Interviews



III. 41. Interviews

The interview was conducted in 2 phases. The first phase was done before the design, addressing the perspective from the municipality and gathering information from the seniors living on the site. The second phase tested the approach and design by seniors.



Formal

Conclusions from the interviews:

Until now, Vilnius municipality Cityscape subdivision was adhered to the principle of integrity - in the public space, everyone finds an attractive place for both active and quiet recreation. Currently, the city focuses on the even distribution of public recreational spaces, so more attention is paid to the improvement and recreational infrastructure of "sleeping" neighbourhoods. For example, the idea of green islands in living districts is focused on the communication needs of older people.

The Cityscape Subdivision participates in public consultations with the public on the management of public spaces. Informing and involving the citizens usually takes place through elderships and community representatives. Before the pandemic, when the meetings were live, older people were more involved, however, now more young people join remotely, which after the pandemic should change.

- Vilnius municipality, Cityscape subdivision

The seniors feel the need to be included in the community and express the lack of attention to them. Seniors do not voice their opinion in public, only when asked, because they are not used to it. The initiative usually has to come from the administrators or could be heard in community gatherings talking with friends. The Vėtrubgė administrator expressed a need for a place for a community to gather, but due to financial reasons, it is still an ongoing question.

Informal

Informal interviews were conducted in two phases. In the first phase, the first part of the questions was structured based on the age-friendly city model, whereas the second part questions were open-ended (see Appendix). The people interviewed were in the age group of 74-86, most of them live in Lazdynai from when it was built, live alone or with significant others, and go for a walk almost every day (the length of daily walks depends on health).

If you want, you can go to any place in the city from here - to the old town or the botanical garden, you can go everywhere. You just need to find where you want to go and then go. But now, with the quarantine, it is as it is. There are no activities. We just sit and are glad that we can walk around the neighbourhood.

- Senior living in Lazdynai, 74

A friend of mine came to visit me here, in Lazdynai. He was surprised and said that probably very rich people live here, because of the nature and forest. Yes, I agreed, mostly seniors live here.

If at my age I would be living in the city centre I would be sad. We would not be sitting in the nature as we do now. There would be less spaces to enjoy. Of course, there would more culture and events in the centre. In Lazdynai there are no cultural events, there is nothing here.

- Seniors living in Lazdynai, 76 and 68

Every day I eat my dinner and go for a walk. Well, almost every day. Lazdynai was planned circular so it is perfect for walking. If you want, you could walk in a bigger circle, depending on your need. (...) During the pandemic, I live like in a Bermuda triangle – between computer, TV, and the kitchen. What kind of hobbies I enjoy? There are no hobby clubs here, although I spend a lot of time on my computer.

- Senior living in Lazdynai, 73

Lazdynai is a good place to grow old. The city centre is nearby and there is a lot of nature here. (...) My hobby is going to chat with a friend. I would not know what to do with my neighbors. I have my circle of friends. (...) People have become strangers to their neighbours. 20 years back we did not lock our doors. Neighbours knew their neighbours. Now, a lot of new people moved in, mostly young families. (...) Other people move somewhere else, and if they can't, they live here."

- Senior living in Lazdynai, 86

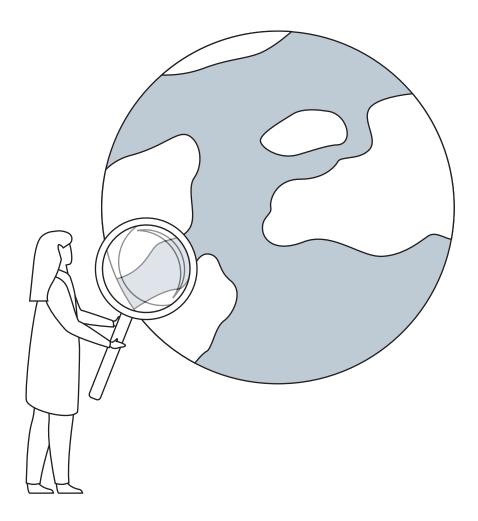
Conclusion

All interviewees agreed that the Lazdynai district is one of the best districts in Lithuania to grow old in. In terms of architectural and urban planning, a large part consists of parks, benches, forests, meadows, it adds great value to the uniqueness of Lazdynai. Overall, citizens living there are happy as it is, some reflect on the past how exceptional it was, some - how improved it is now. The lack of culture and places to gather is clear, although when asked how the district could be improved, there is a discrepancy, saying that the district already has everything it needs.

Living on-site it is hard to distinguish the difference between the "real" world and the "observed" world, which is explained through critical realism. The 'Real' world is as we know and how people perceive it depends on how it is observed. To get the grasp of the "real" world, first theories and structures, which set the interactions in motion. Meaning, that people living on-site do not always have an idea, what is needed, without certain knowledge.

A clear lack in cultural life, which is proposed to deal with through the community center.

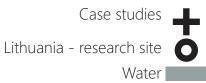
Case Study



These cases were picked out by evaluating their similar context and ways of approaching the problem.

- 1. PUSHousing (Public Space in European Social Housing)
- 2. Manchester Age-friendly City Model
- 3. Akita Age-friendly City Model (Japan)





PUSHousing (Public Space in European Social Housing)



PUSHousing initiative looks into social housing communities to understand how different background people come into contact and look into ways of reducing segregation. The approach is defined in four categories of publicness - heritage, informality, democracy, and policies/practices – in Norway, Denmark, Switzerland, and Italy (PUSHousing, n.d.). Although all cases focus on the Western part of Europe, they present diverse social and cultural backgrounds. The goal of PUSH is to propose and test a new approach to investigating public spaces through the categories of publicness.

Aim

The initiative takes into account different vulnerable groups with seniors as one of them. The area of interest is public spaces and how people of different backgrounds share those spaces. By understanding it, the goal is to promote integration. The exhibition format is used to communicate work in progress and start a broader discussion.

Area of interest

Publicness and Democracy

PUSH seeks to understand spaces, which through democracy connects people. That is done by mapping spaces that promote 'we' rather than 'them' mentality, points of participation (connecting people through similar interest), debating, choosing a representative person, or through fighting for the same goal.

Publicness and Heritage

Housing built after WW2 (World War 2), holds a certain form of socializing, represented through the spatial form. This publicness aspect and change through time is analysed and mapped.

Publicness and Policies / Practices

Focuses on understanding a system on which the housing was built.

Publicness and Informality

As social housing is built on the formal setting such as laws, culture, design, and welfare, it creates a constant conflict between the formal setting and informal use. Focusing on informality, promotes inclusiveness, safety, and belonging.

Manchester Age friendly City Model



Age-Friendly Manchester

Manchester became an age-friendly city in 2010 by joining World Health Organisation (WHO) Global Network of Age-Friendly Cities and Communities and becoming the first UK city to do so (Manchester - Age-Friendly World, n.d.). Initial Age-Friendly Manchester (AFM) was started in 2003 with a strategy in 2009.

Approach

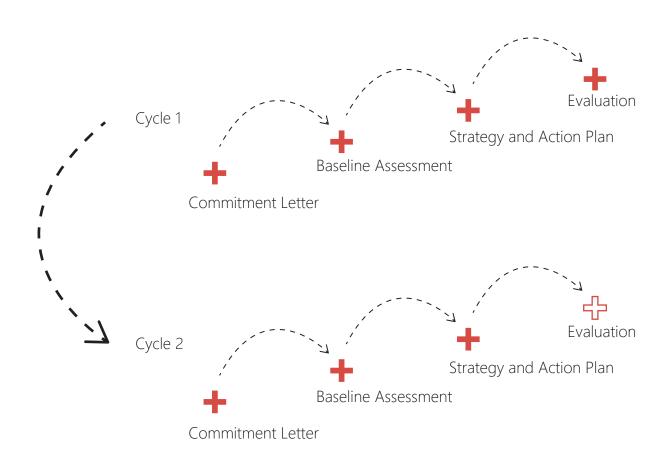
Manchester envisions an age-friendly city through the empowerment of the seniors, where they are encouraged to take the initiative by proposing projects for the community. Manchester implements a combination of a top-down and bottom-up approach, where the City Council coordinates with the seniors (Buffel and Phillipson, 2018). Together with the public partnerships, voluntary and private sectors sets the goal of independent citizens.

Strategy

Manchester is the second-largest metropolitan area in the UK with a growing younger population (Manchester - Age-Friendly World, 2017), resulting in seniors being a minority group in the city. Manchester's strategy prioritizes three areas: (1) age-friendly neighbourhoods (create areas with seniors and their needs in mind); (2) age-friendly services (promote services that employ seniors); (3) promoting age equality (normalizing old age).

Governance

This strategy is governed through Manchester's Older People's Board, Manchester Age Friendly Assembly, AFM Steering Group, Culture Champions, and Age-Friendly Culture Working Group with seniors in leading roles.



Akita Age friendly City Model (Japan)



Age-Friendly Akita

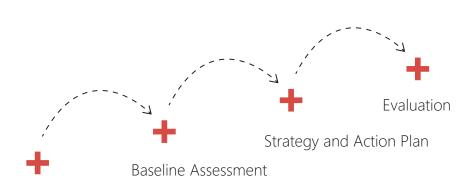
Europe draws practice from Asia, Japan in particular. Akita city was the first one in Japan to join WHO Global Network for Age-friendly Cities and Communities (GNAFCC) in 2011. Akita is a smaller city in a rural region, Japan, and is highly characterized by its demographics. Due to the lack of jobs, younger people tend to migrate to bigger cities, which led that 1 out of 3 people in Akita are over the age of 65 (Firestone, 2018).

Approach

Rather than only focusing on the infrastructure, Akita proposes a softer approach when dealing with ageing and prioritizes building on the community (Firestone, 2018). Akita City Hall has a dedicated committee dedicated to this goal. Intending to improve life quality and encourage active life even in later years, the city's government proposed a community centre as the heart of the community. The Centre acts as a place for gatherings for all members of the community, but especially the elders.

The community centre partnered with the local business to provide not only age-friendly services but also acts as physical and mental support (i.e., milk delivery that doubles as a support service) (Firestone, 2018). Akita's city prioritizes three areas: (1) residents in leading roles; (2) cooperation between the public, private, and business; (3) coworking between different departments in the city's government. One of the reasons for the success of this model is highly dependant on the collaboration between different stakeholders, creating a supportive and productive place to age

Strategy



Commitment Letter

Conclusion

After gathering knowledge through the literature review, mapping, case studies, and interviews, it is possible to identify the following thematic guidelines underlying the design concept of age-friendly public spaces.

Principles of Designing for Seniors

This chapter presents the output of concluding the analysis – 4 principles of designing age-friendly public spaces for seniors. First, how these principles were concluded are introduced, followed by the principles themselves, expanding on them, and is finished by a method of how to launch the design.

Chapter 06

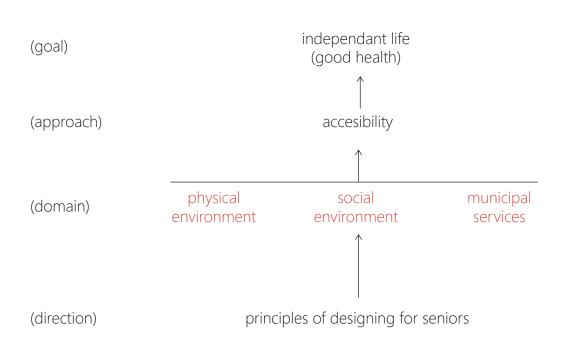
Steps Leading to Design Principles

Defining the principles

After the literature review, mapping, case studies, and interviews it is possible to identify the following thematic principles underlying the design concept of age-friendly public spaces. The age-friendly community approach was conceptualized based on the WHO Global Age-Friendly Cities Project (World Health Organization, n.d.), gathered knowledge from the background research in the literature review, resident's reflection in the interviews, and case study analysis. Reflecting on similar age-friendly city cases, their raised goals, and circumstances, helped define an approach and principles for working with public spaces, which propose an age-friendly way of reframing mass housing districts.

Purpose of the principles

In age-friendly cities, the goal is an independent life and maintaining the health of the elderly for as long as possible. This thesis is achieved through promoting accessibility and points of inclusiveness in a physical environment, social environment, and municipal services. Proposed design principles give the direction of achieving the goal through three main encompassing domains. While working with age-friendly cities, all domains of the age-friendly city model must be considered as they cannot be reflected separately with disregard to age, gender, income, and other variables.



Principles for Age-friendly Public Spaces

Diversity (acknowledge the diversity between the seniors) and flexibility (adapting to changing needs of seniors)

Customization for the users.

Locations and scenarios for different level of activities and socialization. Promotion of health, social and spiritual wealth.

2 Inclusion (opportunity to be included and bring value to the community)

Accessible public spaces, health services, and local functions.

Opportunities for interactions through common interests.

Attainable information through different sources.

Availability of different types and modes of transport (private, public).

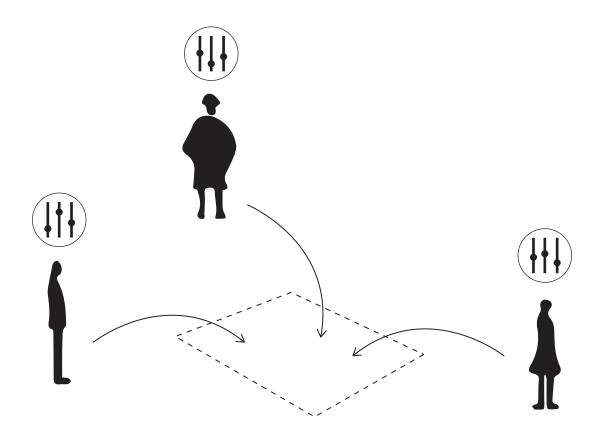
Civic, cultural, and educational inclusion.

Respect (understand and respect senior's decisions)

Communication between the government and the community.

4 Safety and Independence

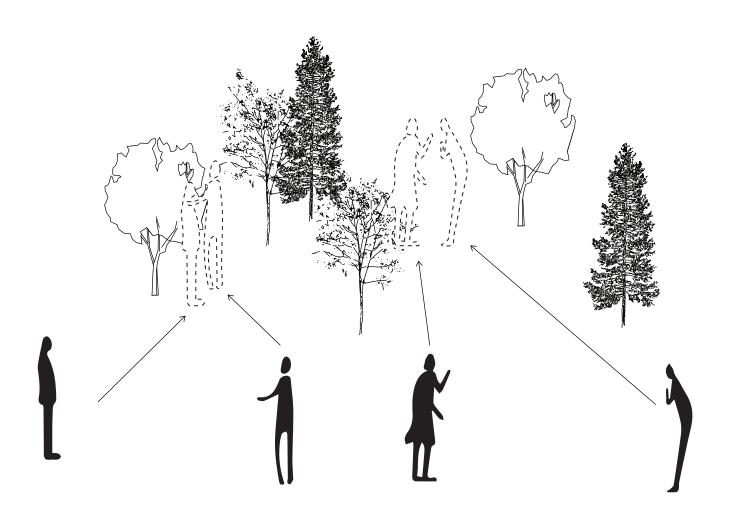
Safe surfaces and materiality.
Safe sidewalks and signage for drivers and pedestrians.
Non-threatening and intimidating spaces.



III. 51. Diversity and flexibility

Diversity (acknowledge the diversity between the seniors) and flexibility (adapting to changing needs of seniors)

The first design principle builds on the idea that seniors as other age groups transition through stages of life and old age should not be generalized as one stage. It also proposes a need for flexibility while addressing these older age stages with different needs. By offering options of customization, with consideration for different options of scenarios for activities and socializing, addresses these different stages of older age and their needs. Additionally, putting forward accessibility for different options of health, social and spiritual wealth, allows for catering to specific needs.

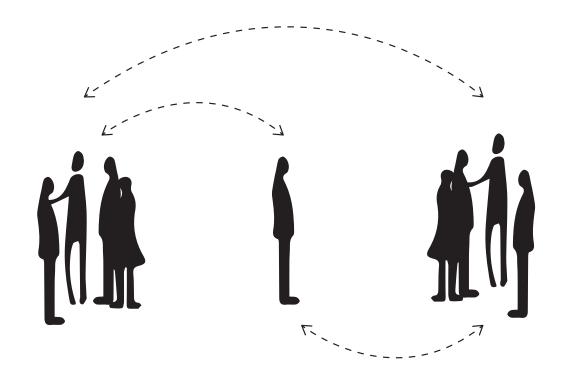


III. 52. Inclusion

2

Inclusion (opportunity to be included and bring value to the community)

The second design principle highlights the importance of inclusion. In later years of life, feeling included and being able to bring value to the community helps to maintain mental health. Maintaining self-sufficiency and being able to access public spaces, health and local services build on independence. By creating a possibility to exchange knowledge, reach needed information, and be mobile guarantees seniors feeling comfortable and continuing of being part of an active community.

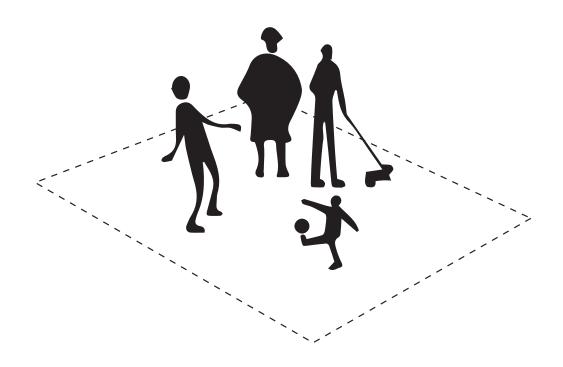


III. 53. Respect

3

Respect (understand and respect senior's decisions)

The third design principle builds on the importance of understanding and respecting the opinion and decision of seniors. The age-friendly city model is closely associated with collaboration between the municipality and older citizens. Maintaining respect and valuing the opinion of seniors must not be forgotten as they have years of experience and practise needed as well as are the ones to use the spaces.



III. 54. Safety and independence

4

Safety and Independence

Last, the fourth design principle emphasizes the need of feeling safe and independent in the neighbourhood. Providing safe surfaces with good materiality, ensuring clear signage for pedestrians and car users, and eliminating spaces that might feel intimidating or unsafe, creates public spaces which motivate the independence of older people.

Method to Launch the Design

Scope of the principles

These public spacedesign principles act as a method to launch the design for senior inclusion. These principles allow re-evaluating decisions made while working with mass housing public spaces. Reflecting on these principles allows basing the design on the spatial and social needs of the seniors.

COmbining principles

Depending on the situation, a single principle could be implemented, although to achieve a multidimensional approach multiple principles should be combined. Implementing these proposed principles has the potential to include not only the seniors in public spaces but also other vulnerable or marginal groups. Basic needs of diversity, flexibility, inclusion, respect and safety are a base for democratic space for all people of the public, not only for the seniors.

Conclusion

The principles encompass multidimensional aspects of age-friendly public spaces. The spatial environment sets the ground for the social environment, same as social environment sets the need for spatial environment. These principles set the expectation for raising basic qualities of public spaces, which are necessary for maintaining the health of seniors by promoting accessibility in all aspects of their lives.

As mentioned in the Literature Review, according to Joseph Coughlin (2020), life after retirement is structured in four phases: The Honeymoon phase, Big decision phase, Navigating longevity phase, and Solo journey phase. In each of the following phases, depending on the health, possibilities for interactions gradually decrease, making the two last phases for the seniors the hardest to maintain inclusion in the community. It is in the third phase that the seniors become dependent on housing and health facilities. As well as in the last, fourth phase, everyday life becomes limited, creating a need for daily support. Having this in mind, not only maintaining a close connection with the community becomes increasingly important in later years, but it also becomes harder. Narrowing the gap between the seniors and the community and making available space for them in their initiate environment, offers more probability of creating a more accessible space.

By implementing these principles, it sets reachable objectives for the community, facilitating additional value to the existing context. Individual users shape the communities, larger districts, and finally a city, forming a densely connected network. Addressing the needs of such diverse networks, first, the requirements of individuals need to be responded to, with a goal to forming a community as a whole.

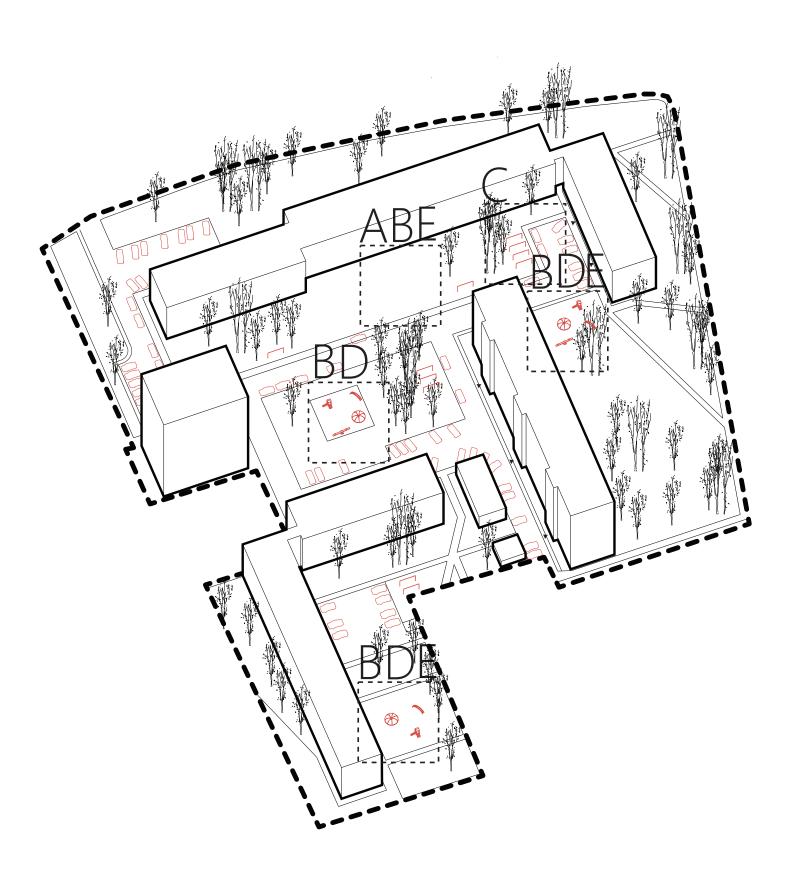
Design for Age-friendly Community

This chapter presents how previously proposed transferable design principles could manifest in an age-friendly mass housing community, in the case of Lazdynai district. Previously proposed principles are applied, showing the potential how with small interventions neglected neighbourhoods have the capacity of functioning as a local community centre also showing potential to start the chain reaction, which would be beneficial not only for the seniors.

Chapter 07

Points of Possible Inclusiveness

Mass housing has distinct characteristics which could be seen in all micro-district in Lazdynai, as well as other mass housing districts. The thesis site holds common activities of children's playgrounds and areas for drying clothes. These repetitive areas, with other spaces, throughout the districts are focus points for creating accessibility with a goal of inclusion. By layering on to these spaces maintains existing context and prioritizes building on the community. Implementing all principles holds the potential of creating an overall age-friendly city model.

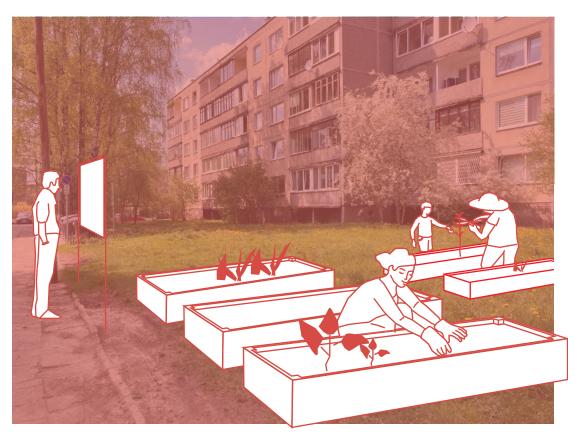


Access to Nature

As mass housing mostly consists of vast open green areas understood as residual spaces, these spaces could be used by the community for gardening. Depending on the sun and microclimate analysis as well as the community's needs, gardening areas could be open or shaded (sheltered).

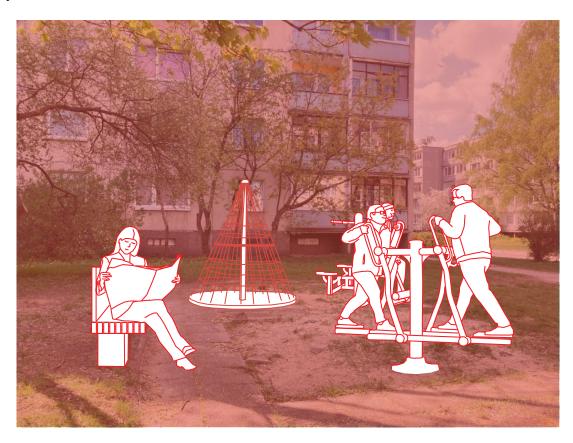
Gardening has a lot of health benefits. It improves mobility, builds strength, and is a form of maintaining motor skills as well as reduces stress (Thompson, 2018). Also, it stimulates not only physically but is therapeutic (Thompson, 2018). People growing edible fruits and vegetables feel more productive and satisfied, maintaining their overall wellbeing. Gardening holds the potential of connecting seniors with the younger generation. Sharing interests and knowledge creates a more connected community, where neighbours know one another.

As seniors have certain needs, these considerations must be included in the design. Skin issues must be taken into account – due to sensitive skin, seniors are more likely to get burned so protection from the sun is important. To address that, the option of movable shelter is proposed, leading to options of shade while working in the public garden. Also, mobility – with decreasing physical abilities, losing balance might be a problem. Anti-slip material with ergonomically comfortable gardening beds would help minimize that. What is more, having close access to water or composting bins reduces physical strain on seniors.



Active Community

Existing playgrounds on-site are adapted just for small children. Providing options of exercise for older people or other age groups would promote active life, offer an option of intergenerational activity, and help change the outlook on seniors in the public. With age people become less likely to exercise, leaving people older than 55 years only 30% active (Sport – European Commission, 2020). Making available local exercise equipment for different seniors ages would improve social inclusion and cohesion of the community, setting the stage for health improvement and sharing knowledge between the generations. Exercise produces physical (increasing muscle strength seniors benefit in mobility, balance, and risk of falling), mental (produces endorphins and improves sleep patterns), and cognitive (stimulates the brain) health benefits (Stenner, Buckley and Mosewich, 2020).



Mundane to Entertainment

Analysis showed that cloth drying areas and places to dust rugs are mostly used by the seniors. To increase the possibility for interactions in these areas board games could be added. While waiting for the clothes to dry, seniors would play board games and chat.

Stimulating physical activity is as important as mental activity. Board games exercise memory, thinking and help improve hand coordination. It is important to address the different needs and abilities of seniors, as not to make pieces too small for seniors to grab or offer multiple types of games. During harsher weather shelter is also important as it provides comfort from the weather. Different board games offer possibilities for inclusion and contact between various age groups.



Sensitive Seating

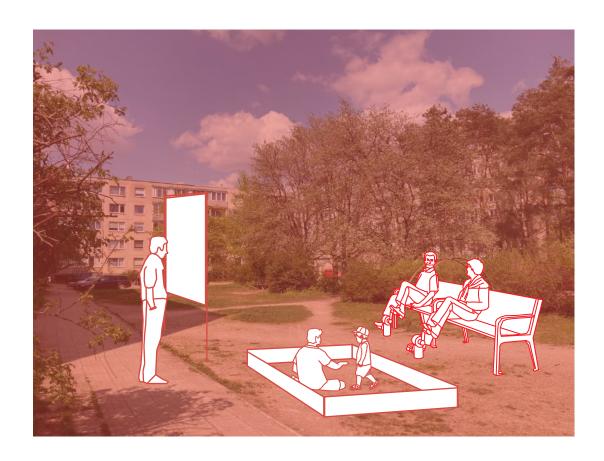
Limited and uncomfortable benches on the site do not offer inclusiveness for seniors. Proposing additional benches with regard to senior preferences, ergonomics, and microclimate could offer more points of contact. These benches should be adapted to seniors with back support and railings on both sides for comfortable use. Additionally, pedals could be implemented proposing an active option for sitting as well as an integrated cane holder would be beneficial for seniors. As a form of customizing experiences, movable benches would propose adaptable elements. What is more, "buddy benches" might be an answer to addressing social isolation.



Ill. 59. Sensitive seating

Staying Connected When all the information could be found online, seniors do not always

When all the information could be found online, seniors do not always have the access to necessary information. Although every apartment block has an announcement board near the entrance, proposing a common announcement place would promote a connected and well-informed community, sharing the same struggles or addressing certain needs. These announcement boards must be in a lighted area with a readable font for the elderly.



Consideration Behind the Design

The proposed design shows how small simple interventions, done in a strategic way, holds a high chance of reaching the determined aim. These design points act as a system rather than alone, where it offers different points of inclusion, depending on the public needs. This system creates a multiplier effect, which might lead to social sustainability.

System of points

By building on points of inclusiveness, it might show to the seniors that ageing should not be experienced alone, rather it is another transition in life, which must be looked at with respect and consideration.

Eliminating the stigma

Agency of Stakeholders

Urban design holds the power of establishing certain programs in the public space. This programming needs to take into account the needs of different stakeholders. Each Lazdynai community has an elected representative who administrates it. People-led management bridges a close connection between the community and the voices of the community, which is important in age-friendly communities to have a deep understanding of the situation. Community counselling is capable of setting in motion an active community, where people are helping people, communicating the needs to different stakeholders, and acting on them. Just a community is not enough, but a close relationship with different stakeholders such as the citizens, administrators, municipality, and local businesses is needed.

Representatives

Conclusions

Principles work as an incentive to create an inclusive community stimulated by a multiplier effect. Repetitive activities, depending on the interests of the community, could be replicated through the district, offering different points of involvement. An active community is important as well as fostering communication between different stakeholders. Partnerships should be made on different scales through community guidance, communities, and with the municipality.

Evaluation by Seniors to Seniors

The chapter presents the process and results of testing the proposed design for the seniors by the seniors.

Chapter 08

Process

The proposed design was presented to the seniors during the second informal interview. Seniors were introduced to the approach and were asked to share their thoughts on it. Later, gathered knowledge was reflected upon, making suggestions for further planning.

I would not use a shared community garden, it is enough to grow herbs or greens in the balcony of the house. I would go to the farm, where my daughter has a garden. I would not trust other people with the garden so open in the public.

- 1 interview

My sport consists of walking indoors and outdoors. I would leave sport equipment to younger people.

I use the drying rack when there are too many things to hang at home. It would be interesting to pass the time outside if the weather is nice.

- 3 interview

I look through the announcements, but the letters a so small so I have to take my glasses.

- 4 interview

Room for Improvements

Building trust

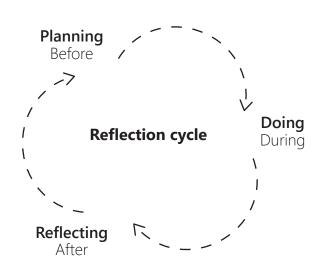
There is no full trust between the people, because the community is not strong, going back that it was better in the past. Bringing the community together would build trust and make public space a safe place.

Building confidence

Interviews showed that seniors often disregard themselves as being incompetent for some activities. Familiarizing them with age-friendly city model principles would include them in the process and allow them to evaluate steps made.

Building safety

In design, some adjustments could be made to ensure senior's well-being in the community garden, separating the spaces more to guarantee the safety of the space.



Conclusions

Employing seniors to evaluate the design ensures that the aim and final goal are reached. It is important to communicate with the elderly as they are the end-users of the space. Also, it is crucial to not only show the results but also explain why it was done so and how it relates to the bigger picture. Educating seniors as they educate on the planners on their needs.

Evaluation

This chapter presents and evaluates the methods and structure which led to reaching the aim of this thesis. First, the thoughts behind the approach are set in place, expanding on the approach. Later, analysis is discussed followed by principles of designing for seniors which set the base for the design. Finally, the design method is reflected upon, finishing with the transferability for future projects.

Chapter 09

Conclusion

The aim

By investigating the viability of a rehabilitative approach in mass housing districts through adapting it to the independent life of older age people, this thesis shows how small interventions can, directly and indirectly, shape the everyday lives of seniors.

Individual approach

Due to political, spatial, and cultural context, the method of working with mass housing might be very individual. The main approach to mass housing districts in the former Eastern Bloc is a renovation or, although it is oriented towards architecture rather than urban design. By implementing rehabilitative principles with a focus on the seniors shows a lot of potential not only for older age people but also for other vulnerable groups, where few interventions are enough.

Evaluating Analysis

Analysis findings

Analysis was oriented towards the seniors, based on the literature review and background research. Findings of the analysis led to the approach and helped to define the principles of reaching it. Shifting analysis through the perspective of a senior's needs presents the spatial and social qualities that the public spaces must provide. Mapping indicates that mass housing neighbourhoods were planned for workers and the distances from home to services are not adequate to seniors. This, in addition to the problem of upkeeping maintenance, proposes a need for points as activities closer to home. Proposed principles act as objectives, guiding the community. Principles imbed the mindset of the approach, transforming it to spatial expression.

Evaluation of the Principles

Purpose of the principles

For the elderly who live alone, the community becomes very important. The distance to the grocery shops or other services influences how dependant seniors become on other people. Proposed principles focus on promoting inclusion and stimulating the social aspect of senior life. By exploiting unused green spaces, it creates an opportunity for more social inclusion. Using it as a form of points for the community to gather, have chances of creating social sustainability. Adapting age-friendly guidelines to public spaces and literature research resulted in proposed principles. Ensuring customization, diversity, safety, and respect in the community for seniors increases the chances of seniors spending their time with other people.

Transferability of the Principles

The goals of a long-term project include adapting more mass housing to age-friendly communities, widening a network of an inclusive community that is welcome for all ages. Set principles hold the potential of transferring attained knowledge to similar cases. The research result that small purposeful interventions can rehabilitate the district and the communities within. Setting senior spatial and social needs help reframe the focus of public spaces, shifting to a democratic perspective, showing potential to start the chain reaction, which would be beneficial not only for the seniors.

Transferability

People with Dementia

Alternatively, the repetitive character of mass housing districts is problematic for people with dementia due to orienting. Using residual spaces to characterize the area would help implement a system of wayfinding, where people with dementia would be able to orient better. Unique details to the communities would propose a new way of orientating people with dementia. Moreover, dementia is an increasing problem, which could be addressed if the principles were applied on a larger scale. Dementia, as well as old age, in the public, is perceived by seeing it in its worst form. It is important to educate the public about the steps leading to it with milder symptoms at the earlier stages, removing the stigma of it, similarly as in ageing.

Similar stigmas

Expectations of the Design

The principles set the objective for outdoor spaces close to senior's homes. The suggested design incorporates the principles in the existing spaces and layers additional inclusive activities.

Layering principles

While for some people groups it stimulates inclusiveness, for other the same design decisions act opposite. Proposed benches with railings on both sides are comfortable for seniors, although they also exclude homeless people as it is not possible to sleep on them. What is more, proposed community gardens do not create a safe feeling for the work that was put in, leaving it open to vandalism. On the other hand, leaving it open at the start, creates curiosity, drawing more people into the process.

Unplanned results

Alternatives for shifting the mundane activities to entertainment could be implemented, proposing dining outdoors, preparing food, or enjoying a sauna together in the community.

Alternative design

Research Conclusions

The outcome of the research suggests that small purposeful interventions hold the potential of rehabilitating the district and the communities within. By focusing on the needs of people living in mass housing districts allow to reframe public spaces with a democratic perspective in mind, showing potential to start the chain reaction, which would are beneficial not only for the seniors.

Outcome

Highlighting the need of the seniors showcases only one group living in the community. It opens a discussion of possible futures in mass housing, proposing an approach, which could be transferable to similar districts. By exploiting the repetitive mass housing character, it enables us to consider alternative possibilities.

Opens discussion

The impact scale of the research expands not only in the context, but also to test the possibilities of working in mass housing as well as vulnerable communities and how that could be catalyzed in searching for sensitive solutions of improving the existing neighbourhoods.

Testing possibilities

Recommendation

Communicating with Stakeholders

Closer cooperation

Due to the Covid-19 pandemic, getting in contact with the seniors or even visiting the site was not always available. As a result, additional safety measures needed to be taken into account when collecting first-hand data from the seniors living in the Lazdynai district. As first-hand data was not fully available at the time, second-hand data from the continuous work of Rose Gilroy and other researchers were used oriented towards working with the seniors. In the future, working in close contact with the seniors would offer more interesting information and findings.

Additional research

During the research, a formal interview was conducted with the representative of the thesis site and the Municipality City division representative. Organizing more extensive interviews, regarding additional policies, past and future projects and local business would provide a broader understanding of the situation. Finally, a meeting with all stakeholders discussing the potentials would provide feasible results.

Scheduling the Thesis

Time planning

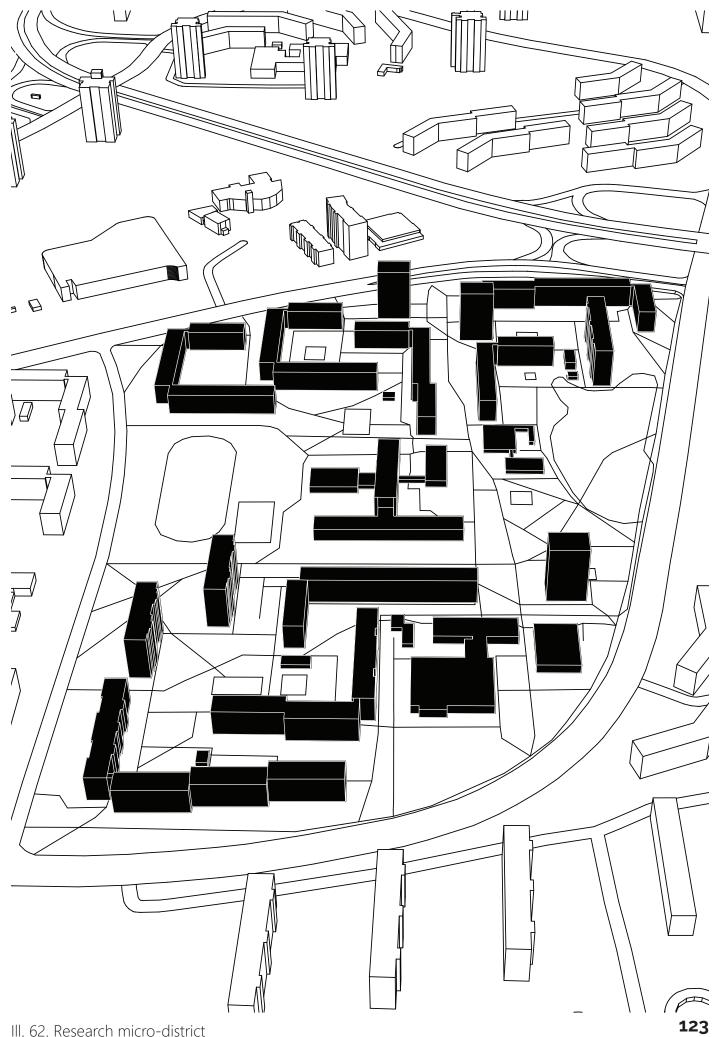
As the thesis has a limited amount of time scheduling the thesis must be taken into considerations. Critically evaluating the objectives and the time resources should be done accordingly. Quickly defining the theme and approach, would minimize delay in other phases. It is important to keep in mind that certain sprints must be done and reflected which would leave more time for testing the design and evaluating the process.

Interviews

Due to the pandemic, a limited amount of interviews were done. In the future, extensive and detailed interviews would hold the possibility of giving more data about the community.

Context

Also, additional research in surrounding neighbourhoods would show alternative approaches. Studying similar neighbourhoods might show, what are people initiating themselves or present other immediate marginal groups.



III. 62. Research micro-district

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Illiustrations

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III. 17. Mass housing districts in Vilnius

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III. 45. PUSHousing exhibition

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III. 46. Age-friendly Manchester logo

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