

The background of the page is a complex, abstract pattern composed of various hand-drawn elements. On the left, there are several clusters of irregular, blocky shapes in orange and purple. In the center, there are numerous 'X' marks and '+' signs, some in black, some in orange, and some in purple. To the right, there are more blocky shapes in purple. At the bottom, there are wavy, organic lines in black and purple, and a cluster of small, irregular shapes in orange and purple. The overall style is hand-drawn and artistic.

PATTERN BOOKLET

Colofon

Master Thesis - Pattern booklet

June, 2025

MSc Architecture, Urbanism and
Building Sciences - Urbanism Track

Faculty of Architecture and the Built
Environment

Delft University of Technology

Graduation studio:
Metropolitan Ecologies of Place

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2024-2025

Introduction

This pattern language booklet was developed as part of the graduation project Reconnecting Elderly – Interventions for a Just Spatial and Social Environment for the Elderly in Budapest.

The methodology was based on the concept of pattern language, originally introduced by architect Christopher Alexander in 1977. Pattern language provides a structured way of identifying and describing recurring design challenges, along with context-sensitive solutions. It is especially useful for translating complex social and spatial issues into actionable design strategies.

In this project, pattern language was used both as an analytical and a generative tool. Patterns were developed throughout the entire graduation process and were derived from a combination of theoretical research, site analysis, interviews with elderly residents, and iterative design work. Each pattern begins with a hypothesis about a particular spatial or social challenge. This hypothesis is then supported by literature or observations, and illustrated with visualizations to clarify the design intention. This approach allows abstract theory and personal insights to be synthesized into tangible design options (Rooij & van Dorst, 2020).

In addition to identifying individual patterns, the project also focused on mapping the relationships between them. Each pattern was not treated as a stand-alone solution, but rather as part of an interconnected system: a pattern

field. This network of patterns reveals how different design strategies support and enable one another, and how they can be combined in various ways depending on the needs of specific environments or user groups. The development of the pattern field made it possible to identify gaps or missing patterns, offering a broader understanding of the project scope and ensuring that no critical aspects were overlooked.

The patterns presented in this booklet aim to address four main objectives: social connectivity, climate adaptation, urban infrastructure, and agency. These goals guided the selection and formulation of patterns to ensure they respond to both environmental and social dimensions of elderly in the urban context.

The pattern language was specifically developed for the historical urban fabric of Budapest. As such, some patterns respond to location-specific characteristics, such as the spatial layout and socio-cultural conditions of the area. However, many of the identified patterns are broadly applicable and can be adapted for other contexts when designing inclusive urban environments for elderly populations.

Importantly, the pattern language created for this project is not a fixed or universal set of solutions. It is meant to be adaptable, capable of evolving based on context, stakeholder input, and ongoing learning. This flexibility makes it a powerful tool for inclusive and responsive urban design.

Format

<div>Pattern code</div> <div>Pattern name</div>	<div></div>
<div>hypothesis</div>	
<div>theoretical or empirical back-up</div>	
	<div>scale<div>power to implement</div><div>A S B P U O</div><div>top-downbottom-up</div></div> <div>dimensions of caring urbanism</div> <div><div></div></div> <div>pattern derived from</div> <div><div>L</div><div>I</div><div>A</div><div>D</div></div>
<div>practical implication</div>	<div>relation with other patterns</div>
	<div>sources</div>

scale

A S B P U O

A - across scales

S - street

B - block

P - plot

U - unit

O - object

pattern derived from

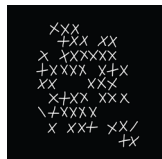
L literature

I interviews

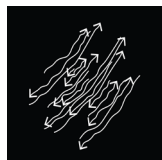
A analysis

D design process

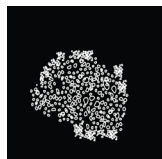
dimensions of caring urbanism



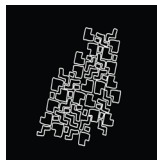
Placing care
- creating urban spaces that are supporting formal and informal care practices



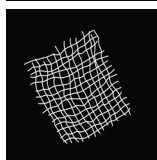
Accessibility as caring
- ensuring physical and social access



Caring urban atmospheres
- considering environmental factors and sensory experiences



Openness and unfolding of care
- encouraging social and physical adaptability



Caring for attachment
- considering continuity and place attachment



Caring for the future
- creating responsible and sustainable urban spaces

Based on the dimensions of caring urbanism from Juliet Davis' The caring city book.

(Davis, J. (2022). *The caring city: Ethics of urban design*. Bristol University Press)

Patterns by theme

Social connectivity

- S1.** Activate the courtyards
- S2.** Activate the empty plots
- S3.** Utilising municipal buildings
- S4.** Intergenerational playground
- S5.** Community garden
- S6.** Community kitchen
- S7.** Quiet zone
- S8.** Elderly club
- S9.** Repair center
- S10.** Community hub
- S11.** Activate the ground floor
- S12.** Shared tools
- S13.** Adopt the green
- S14.** Community kiosk
- S15.** Take a seat

Climate adaptation

- C1.** Connect the green
- C2.** Airflow
- C3.** Permeable pavements
- C4.** Plant the street
- C5.** Remove tiles
- C6.** Cooling water
- C7.** Green walls
- C8.** Pocket park
- C9.** Rain garden
- C10.** Compost spot
- C11.** Put out a pot
- C12.** Add shade

Urban infrastructure

- U1.** A short walk away
- U2.** Clear streets
- U3.** Connect the courtyards
- U4.** Multi-level parking
- U5.** Ground floor for the old
- U6.** Home modification
- U7.** Parking for special needs
- U8.** Entryway help
- U9.** Removing parking spaces
- U10.** Water tap
- U11.** Free toilet
- U12.** Transform the intersection
- U13.** Transform the street
- U14.** Remove fences

Agency

- A1.** Animal companions
- A2.** Let's learn
- A3.** Tech help
- A4.** Volunteering part-time
- A5.** Multigenerational mingle
- A6.** Friendly call
- A7.** Time banking
- A8.** Everyday assistance
- A9.** Voices of the block
- A10.** Street safety
- A11.** Together in motion
- A12.** Know your neighbour
- A13.** Intergenerational housing
- A14.** Let's move in together
- A15.** Open/close

Patterns by scale

Across scales

- C1.** Connect the green
- C2.** Airflow
- U1.** A short walk away
- A1.** Animal companions
- A2.** Let's learn
- A3.** Tech help
- A4.** Volunteering part-time
- A5.** Multigenerational mingle
- A6.** Friendly call
- A7.** Time banking
- A8.** Everyday assistance
- A9.** Voices of the block

Street scale

- C3.** Permeable pavements
- C4.** Plant the street
- C5.** Removing tiles
- U2.** Clear streets
- A10.** Street safety
- A11.** Together in motion
- U12.** Transform the intersection
- U13.** Transform the street

Block scale

- A12.** Know your neighbour
- A15.** Open/Close
- U3.** Connect the courtyards

Plot scale

- S1.** Activate the courtyards
- S2.** Activate the empty plots
- S3.** Utilising municipal buildings
- S4.** Intergenerational playground
- S5.** Community garden
- C8.** Pocket park
- C9.** Rain garden
- U4.** Multi-level parking
- U5.** Ground floor for the old

Unit scale

- S6.** Community kitchen
- S7.** Quiet zone
- S8.** Elderly club
- S9.** Repair center
- S10.** Community hub
- S11.** Activate the ground floor
- S14.** Let's exercise
- S12.** Shared tools
- U6.** Home modification
- A13.** Intergenerational housing
- A14.** Let's move in together

Object scale

- S13.** Adopt the green
- S14.** Community kiosk
- S15.** Take a seat
- C6.** Cooling water
- C7.** Green walls
- C10.** Compost spot
- C11.** Put out a pot
- C12.** Add shade
- U7.** Parking for special needs
- U8.** Entryway help
- U9.** Removing parking spaces
- U10.** Water tap
- U11.** Free toilet
- U14.** Remove fences

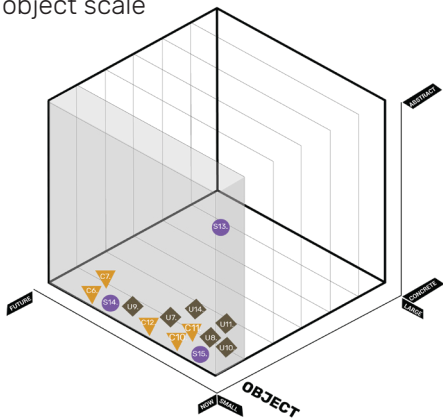
Pattern fields

To gain a clearer understanding of the relationships between patterns, a pattern field was developed. This field maps the patterns according to three key dimensions: the scale of intervention (ranging from object-level to multi-scalar patterns), the temporal aspect of implementation (whether they can be applied now or in the future), and the level of abstraction (from abstract to concrete).

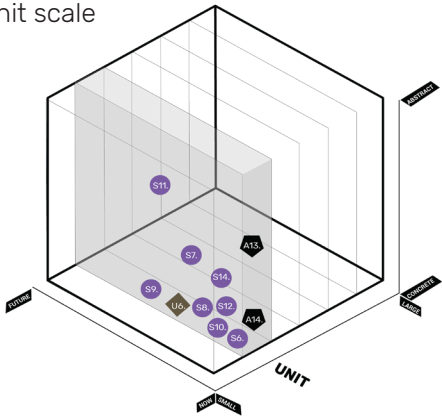
The field reveals that the patterns operate across multiple scales, from small, localized interventions to broader, systemic strategies. It also shows that a significant number of the patterns are immediately applica-

ble, highlighting their practical potential for generating change within urban space. At the same time, the inclusion of more abstract or long-term patterns ensures that the pattern language not only addresses current needs but also supports strategic, future-oriented thinking.

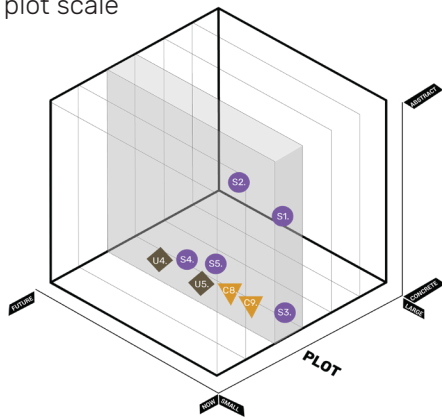
object scale



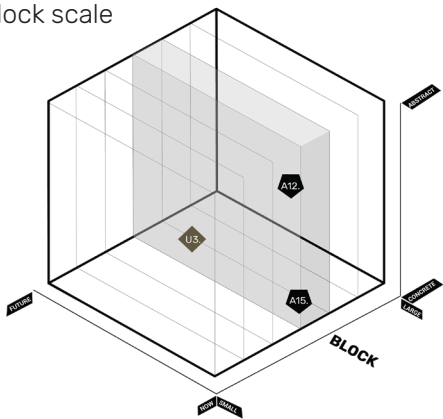
unit scale



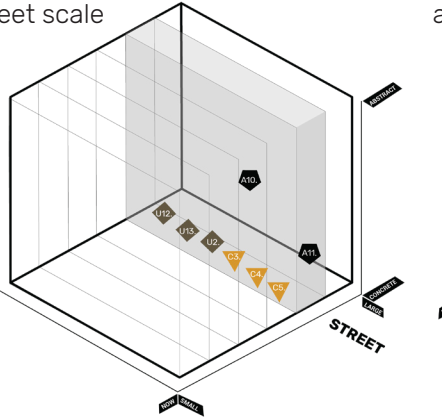
plot scale



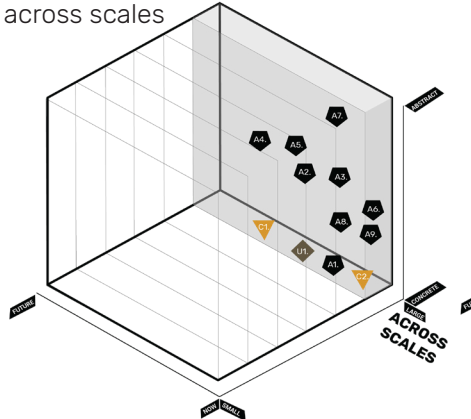
block scale

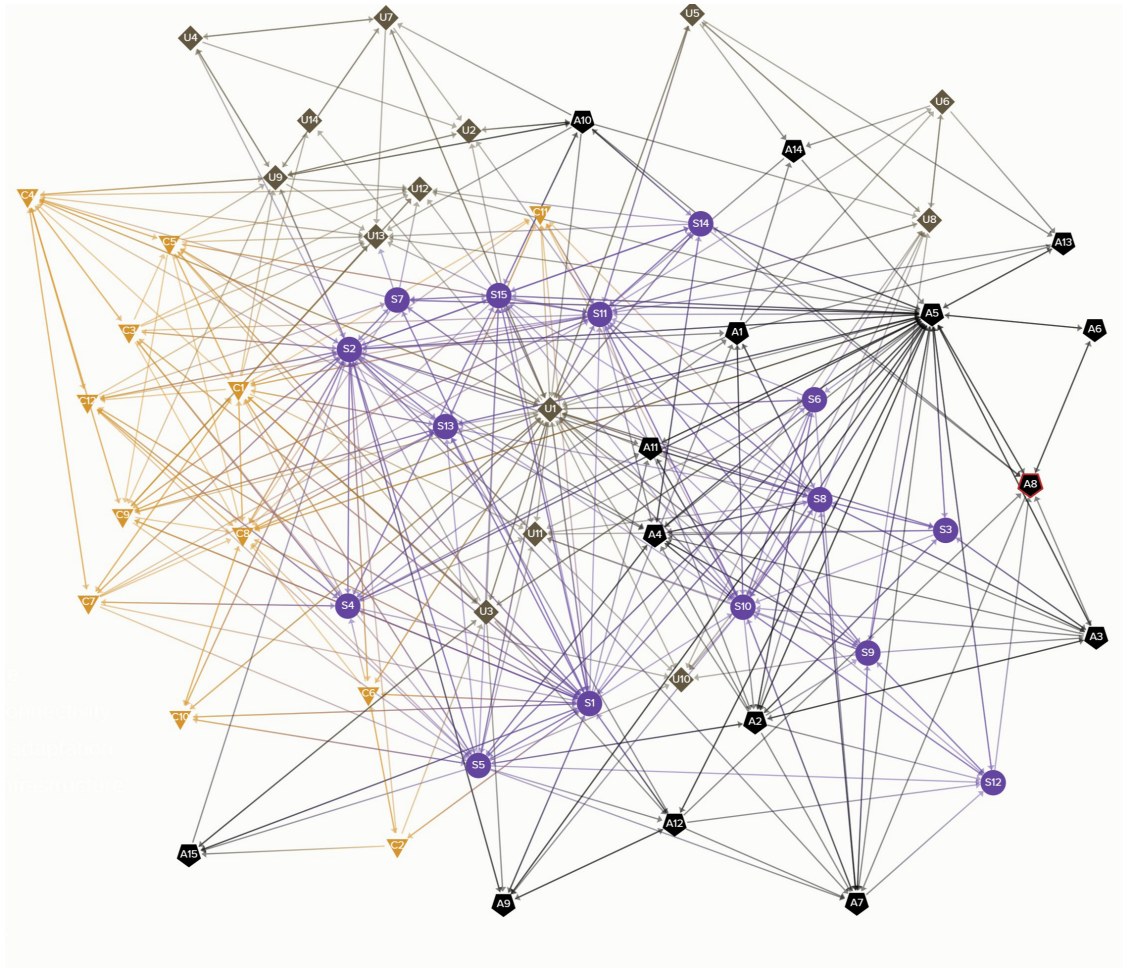


street scale



across scales



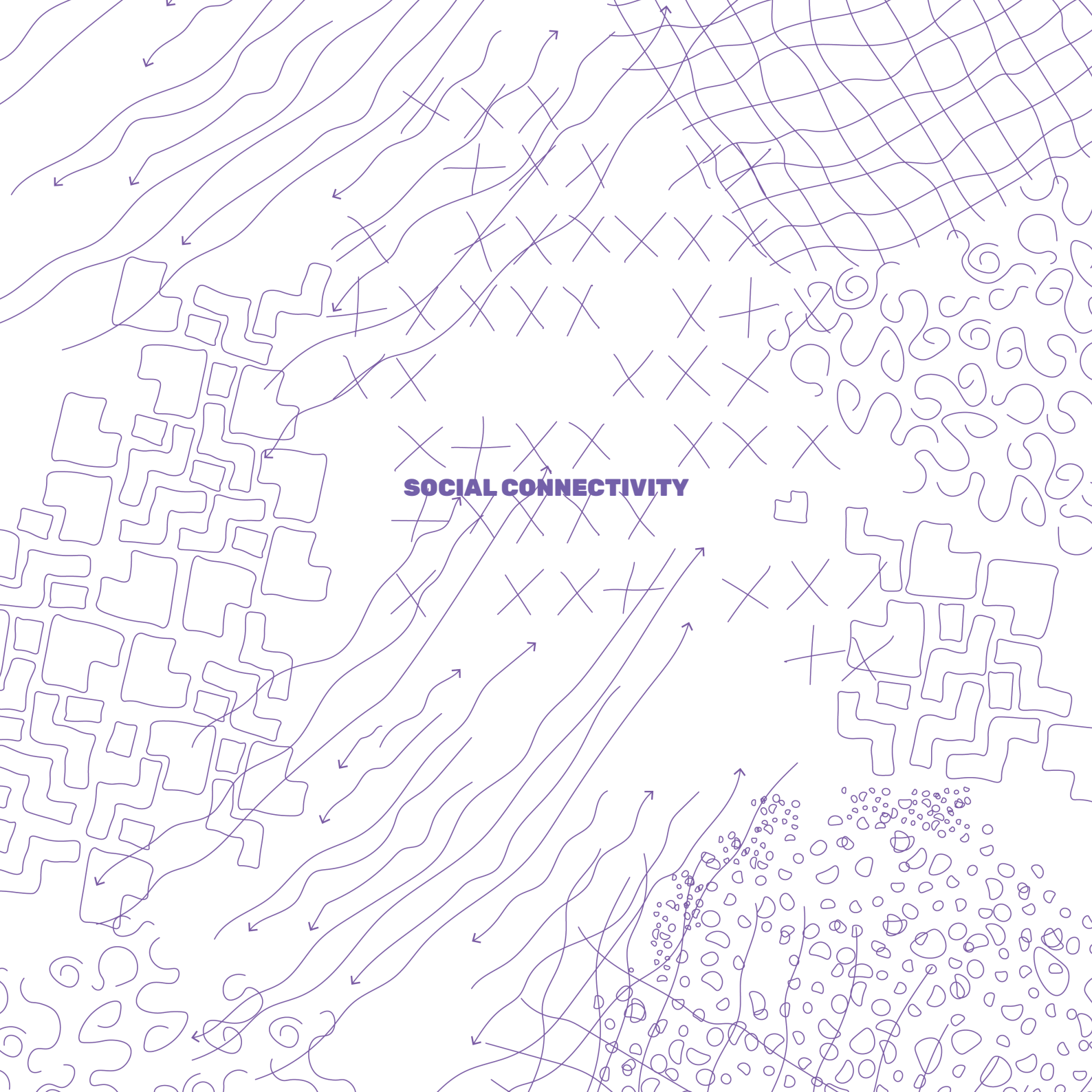


To better understand the structure and implications of the developed pattern language, a visualization was created to illustrate the interconnectedness of all identified patterns. This network mapping allowed for the identification of patterns with the highest number of connections, those that are most central within the system.

The most connected patterns function as key elements within the urban system, as they influence and support the implementation of many other patterns. Their central role suggests that focusing on these can lead to broader, system-wide improvements. These patterns also reflect essential needs and principles for a functional

and inclusive urban environment. In addition, they serve as useful reference points in the design process, helping to guide decision-making and prioritize actions based on their wider impact.

To further analyze this structure, one highly connected pattern was selected from each of the four thematic categories. These selected patterns not only embody the core values and concerns of their respective domains, but also highlight the interdependence across categories. The patterns do not function in isolation but gain meaning and effectiveness when considered in relation to one another.



SOCIAL CONNECTIVITY



S1.

Activate the courtyards

hypothesis

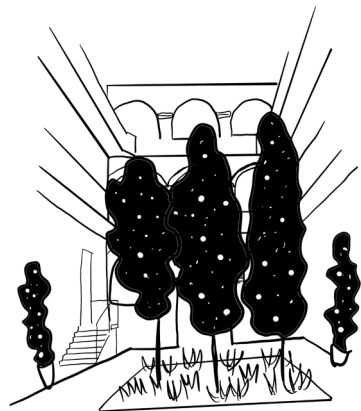
Transforming courtyards into public / semi-public areas that foster community interaction, support intergenerational connection, and enhance resilience to climate extremes.

theoretical or empirical back-up

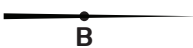
Transforming courtyards into green spaces with integrated water retention improves the microclimate during hot summer months while providing a setting for communal activities. Activating these often-underused spaces, especially when located close to where elderly residents live, creates opportunities for building stronger neighborly ties and fostering a sense of belonging within the block. These green areas not only encourage outdoor activity and environmental engagement but also facilitate informal social encounters, helping to strengthen intergenerational connections. Proximity to gardens and shared green spaces has been shown to support both the physical and mental well-being of older adults (Yari et al., 2020).

practical implication

During summer, courtyards, particularly those rich in greenery, offer naturally cooler environments. By activating these spaces with flexible, adaptable furniture, they can serve as venues for community gatherings or be transformed into resident-led communal gardens. Strengthening connections between courtyards, adjacent streets, and public pathways allows for temporary openings to the broader community. Additionally, incorporating cafés or shared indoor spaces can provide welcoming seating areas for both residents and visitors, further encouraging social interaction.

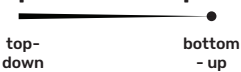


scale



A

power to implement



relation with other patterns

S4; S5; S7; S10; S11; S13; S15; C1; C2; C3; C5; C6; C8; C9; C10; C11; C12; U1; U8; A1; A5; A7; A9; A11; A12; A15

sources

Yari, M., Lee, K., Cassidy, J., & Chen, Z. (2020). Transforming Space into Place: A Person-Environment Interchange Approach for Designing an Assisted Living Facility Courtyard. *Journal of Aging and Environment*, 35(2), 188–206.



S2.

Activate the empty plots

hypothesis

Turning empty plots into spaces of community and climate adaptation.

theoretical or empirical back-up

Vacant plots in dense urban areas present valuable opportunities as rare open spaces, yet they are often underutilized. When activated thoughtfully, these spaces can significantly improve neighborhood livability, fostering social connections, providing ecological advantages, and creating opportunities for local engagement and economic growth.(Anderson and Minor, 2017.)

practical implication

Repurposing vacant plots, previously used for parking or left empty after demolitions, into flexible spaces with modular, adaptable structures that can host seasonal events, community gatherings, or markets. Incorporating green elements such as planting beds, trees, or permeable surfaces to enhance environmental value while supporting social and recreational uses.



scale



power to implement



A

relation with other patterns

S4; S5; S7; S10; S11; S13; S14; S15; C1; C3; C5; C6; C7; C8; C9; C10; C11; C12; U1; U4; U9; U10; U11; A1; A4; A5; A7; A9; A11

sources

Anderson, E. C., & Minor, E. S. (2017). Vacant lots: An underexplored resource for ecological and social benefits in cities. *Urban Forestry & Urban Greening*, 21, 146–152.



NEW HOMES
08 30 325 7727



parkoló

tel.: 08-30-742-2648

garancia: 29 550 Ft
díj: 2 400 Ft
óra: 350 Ft



BÉRLET
ÉRTÉKESÍTÉS

tel.: 08-30-742-2648

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S3.

Utilising municipal buildings

hypothesis

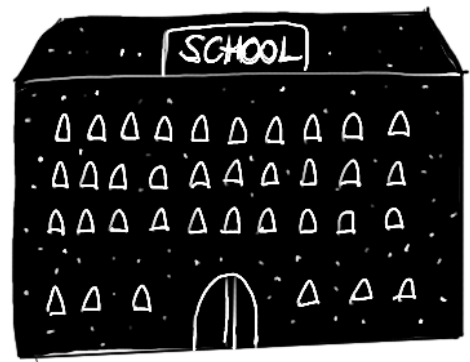
Temporarily utilising the buildings of the municipality or of religious organizations.

theoretical or empirical back-up

Many municipal and religious buildings remain unused outside of specific hours, serving only limited groups. Temporarily opening these spaces to others, such as the elderly, can transform underused infrastructure into inclusive community assets.

practical implication

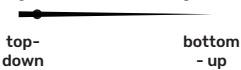
Using churches, schools, nurseries, which have infrastructures that are needed, when the space is empty, to host community activities, workshops and courses where elderly can learn and/or teach.



scale



power to implement



relation with other patterns

S8; S10; U1; U11; A2; A3; A4; A5

sources

S4.

Intergenerational playground

hypothesis

Shared places for casual interaction, physical activity and soacial mixing across generations.

theoretical or empirical back-up

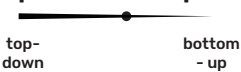
Shared play spaces that encourage interaction between different generations help foster mutual understanding and strengthen social bonds. While these experiences are enriching for children, they are particularly meaning-ful for older adults who may experience isolation or limit-ed contact with family members (Skropeta et al., 2014).



scale



power to implement



relation with other patterns

S1; S2; S15; C1; C3; C7; C9; C12; U1; U10; U11; A1; A5; A11

practical implication

Transforming public spaces into intergenerational play-grounds by incorporating a mix of play elements for all ages. Placeing children’s play equipment near benches or seating areas, allowing adults to relax and engage in conversations while keeping an eye on the children. Integrate adult-friendly features, such as spaces for ball games, fitness stations, or walking paths, to encourage physical activity and spontaneous social interactions.

sources

Skropeta, C. M., Colvin, A., & Sladen, S. (2014). An evaluative study of the benefits of participating in intergenerational playgroups in aged care for older people. BMC Geriatrics, 14, 109

S5.
Community garden

hypothesis

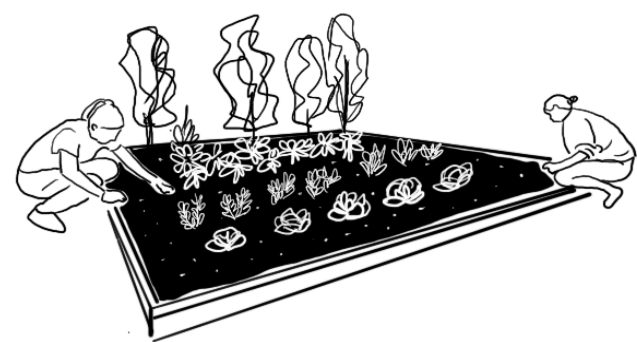
Communal garden space, that is managed by the community.

theoretical or empirical back-up

Community gardens provide a shared space where individuals of all ages can interact, exchange knowledge, and engage in informal socializing, fostering a sense of belonging to the community. Proximity to nature and fellow residents positively impacts purpose and creativity. Gardening, which involves consistent moderate physical activity, enhances well-being and health for older adults (Scott et al., 2020). In fact, gardening has been linked to reduced mortality rates among the elderly (Wannamethee et al., 2009). Additionally, being surrounded by plants and nature encourages environmental stewardship, inspiring more sustainable practices and a greater connection to the natural world.

practical implication

Transforming underused spaces, such as parking lots, vacant plots, or courtyards, into community gardens where residents can grow fruits, vegetables, herbs, and flowers. Incorporating greenhouses or other adaptable structures to accommodate different seasons and climates.. These gardens are managed by the community, fostering a sense of ownership.



scale



power to implement



relation with other patterns

S1; S2; S12; S13; S15; C1; C8; C10; U1; U10; U11; A2; A4; A5; A7; A12; A15

sources

Scott, T. L., Masser, B. M., & Pachana, N. A. (2020). Positive aging benefits of home and community gardening activities: Older adults report enhanced self-esteem, productive endeavours, social engagement and exercise. SAGE Open Medicine, 8

Wannamethee S, Shaper A and Walker M. (2000) Physical activity and mortality in older men with diagnosed coronary heart disease. Circulation



S6.

Community kitchen

hypothesis

A shared cooking space that hosts community meals and social gatherings, combined with a free or low-cost meal service that supports elderly individuals facing food insecurity.

theoretical or empirical back-up

Older adults experiencing food insecurity are at increased risk of nutrient deficiencies, which can lead to a higher likelihood of illness (Souza & Marín-León, 2013). Providing meals through community soup kitchens can support low-income elderly individuals who face financial challenges, especially those forced to choose between purchasing food or medication (Wolfe et al.). It also benefits those who are unable to prepare meals daily by ensuring access to a warm, nutritious option.

practical implication

Repurpose vacant ground floor spaces into community kitchens, where paid staff and volunteers can prepare warm meals on a daily basis. Setting up a delivery service to reach elderly residents who are unable to leave their homes.



relation with other patterns

S10; S11; U1; U10; U8; U11; A2; A4; A7

sources

Souza, B. F. N. J., & Marín-León, L. (2013). Food insecurity among the elderly: Cross-sectional study with soup kitchen users. *Revista de Nutrição*, 26(6), 679–691.

Wolfe, W. S., Frongillo, E. A., & Valois, P. (1997). Understanding food insecurity in the elderly: A conceptual framework. *Journal of Nutrition Education*, 29(2), 92–96.

S7.
Quiet zone

hypothesis

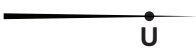
Creating quiet zones for elderly to relax, read or to watch people.

theoretical or empirical back-up

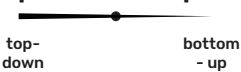
Restorative spaces, such as quiet zones integrated into public areas, provide older adults with a calming environment for reflection, relaxation, and stress relief (Kaplan & Kaplan, 1989).



scale



power to implement



relation with other patterns

S1; S2; S15; C4; C8; U1; U12; U13; A5

practical implication

Design quiet zones within parks and along streets by incorporating comfortable seating and shaded areas that are gently separated from noise and heavy traffic.

sources

Kaplan R., and Kaplan S., (1989) The Experience of Nature A Psychological Perspective, Cambridge University Press, pp. 1-340,

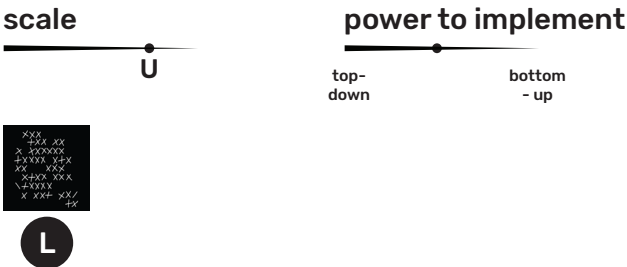
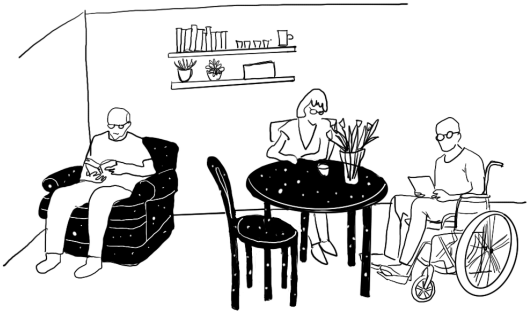
S8.
Elderly club

hypothesis

Communal space for the elderly to host events, work-shops or just enjoy time together.

theoretical or empirical back-up

Many older adults experience social isolation, limited connections, and cognitive decline. Senior clubs offer a space where they can regularly engage in activities, at-tend workshops, or simply socialize with peers. Research shows that older adults who participate in senior clubs tend to experience less cognitive decline in later life (Lee & Kim, 2016).



practical implication

Setting up senior senior clubs in unused ground-floor spaces or allocating specific hours in community centers for older residents can provide accessible and welcoming environments.

relation with other patterns

S3; S10; S11; S13; S15; C11; U1; U8; U10; U11; A1; A2; A3; A4; A7; A11

sources

Lee, S. H., & Kim, Y. B. (2016). Which type of social activities may reduce cognitive decline in the elderly?: A longitudinal population-based study. BMC Geriatrics, 16, Article 165.



S9.

Repair center

hypothesis

Repair centers offer a sustainable opportunity for elderly to engage and exchange knowledge within the neighbourhood.

theoretical or empirical back-up

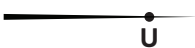
Older adults are at risk of experiencing loneliness and depression, beacuse of the lack of social connections (Crewdson, J. A., 2016). Creating repair centers that serve as communal spaces for individuals with broken items they'd rather fix than discard. These centers provide tools, resources and manuals, offering a welcoming space where people can extend the lifespan of their belongings while giving help and connecting with others in the community.

practical implication

Setting up repair centers in each neighborhood to ensure convenient access, either as new facilities or integrated into existing community spaces. These centers would be managed by a small team of paid staff who oversee operations and ensure a safe environment.



scale



power to implement



relation with other patterns

S10; S11; S12; S15; U1; U8; U10; U11; A3; A4; A5; A7

sources

Crewdson, J. A. (2016). The effect of loneliness in the elderly population: A review. Healthy Aging & Clinical Care in the Elderly, 8, 1-8.

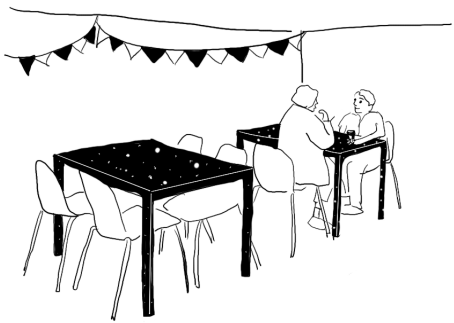
S10.
Community hub

hypothesis

Communal spaces where everyone from the neighbourhood can meet and interact.

theoretical or empirical back-up

Many elderly people don't move around the city as much as they used to, but it's important for them to avoid isolation by leaving their homes occasionally. Getting out helps them stay active and socialize, which is why community hubs can play such an important role in their well-being and overall health. (Tomaka et al. 2006.)



practical implication

Creating community hubs every few blocks that are easily accessible to all, offering workshops or simply a welcoming space to relax, give elderly residents valuable opportunities to engage and socialize.

relation with other patterns

S6; S8; S11; S12; S15; C11; U1; U8; U10; U11; A1; A2; A3; A4; A5; A7; A9; A11

sources

Tomaka, J., Thompson, S. C., & Palacios, R. (2006). The relation of social isolation, loneliness, and social support to disease outcomes among the elderly. Journal of Health Psychology, 11(3), 409-421.

S11. Activate the ground floor

hypothesis

Utilising unused groundfloors.

theoretical or empirical back-up

Ground floors are a crucial element of a building, as they are at eye level and have a significant impact on how we perceive both the building and the street. These spaces play a key role in shaping our overall perception of the environment. Acting as a transitional zone between the facade and the public space, a well-designed ground floor can attract people into the building. (Karssenberg and Laven, 2016) Since ground floors are easily accessible, they offer an ideal opportunity to incorporate communal functions, making them particularly beneficial for elderly residents who may need easy access to social or support spaces.

practical implication

Reactivating closed ground-floor shops to serve as communal spaces, leisure areas, or for a mix of commercial and residential purposes.



scale



power to implement



relation with other patterns

S8; S9; S10; S14; C1; C5; C9; C11; C12; U1; U2; U5; U6; U8; A2; A4

sources

Karssenberg, H., & Laven, J. (2016). The city at eye level. In R. Krier & M. Rojkind (Eds.), *The City at Eye Level: Second and Extended Version* (pp. 64–68.). Eburon Academic Publishers



S12.
Shared tools

hypothesis

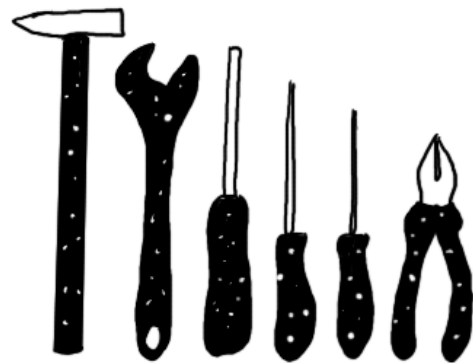
A shared system for borrowing tools and equipment creates easy access and empowers elderly to maintain their homes.

theoretical or empirical back-up

Shared tool libraries within a community contribute to commoning practices by lowering residents’ ecological footprints, reducing the need for personal storage space, and improving access to tools, especially for individuals with limited financial resources (Chakori & Hopkinson, 2021). They can also support older adults in aging in place by enabling them to maintain autonomy through access to tools for basic repairs and upkeep.

practical implication

Creating a shared tool library where the community can collect, borrow, and lend tools, located in an accessible ground-floor space or community hub, can be managed collectively or through rotating volunteers. Hosting workshops or repair cafés alongside encourages skill-sharing, and supports a culture of maintenance and reuse.



relation with other patterns

S9; S10; A5; A8

sources

Chakori, S., & Hopkinson, S. (2021). The role of tool libraries in the new economy: Sharing in an economic degrowth society. In T. Sigler & J. Corcoran (Eds.), A modern guide to the urban sharing economy (pp. 237–253). Edward Elgar Publishing

S13.
Adopt the green

hypothesis

Encouraging residents to take collective care of plants and trees in their neighborhood.

theoretical or empirical back-up

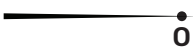
Engaging residents in the care of their local environment can strengthen community ties and enhance social capital, which is associated with improved mental health and a heightened sense of belonging.(Nieminen et al., 2010)

practical implication

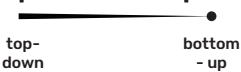
Designating planting areas along sidewalks, building fronts, or shared courtyards where residents can plant and care for greenery. Providing basic tools, water access, and occasional workshops to support maintenance.



scale



power to implement



A

relation with other patterns

S1; S2; C1; C4; C5; C8; C9; C11; A4; A5

sources

Nieminen, T., Martelin, T., Koskinen, S., Aro, H., Alanen, E., & Hyypä, M. T. (2010). Social capital as a determinant of self-rated health and psychological well-being. International Journal of Public Health, 55(6), 531–542.



S14.
Community kiosk

hypothesis

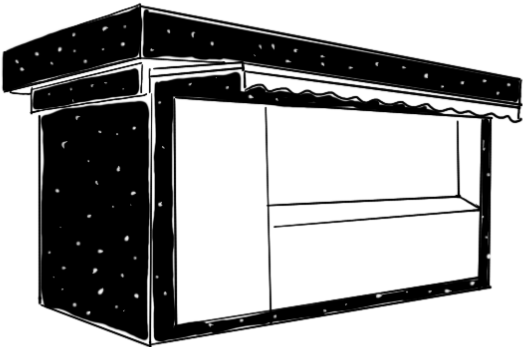
A local kiosk serves as a central point to share information, promote local services and engage locals.

theoretical or empirical back-up

Community kiosks are valuable for the elderly because they offer easy access to local information, services, and social activities in a familiar, welcoming environment. They can serve as social hubs that help reduce isolation, promote community engagement, and support independence by connecting older adults to health services, events, and practical resources, all in one accessible place.

practical implication

Setting up community kiosks at busy street intersections or other central locations to ensure easy access and high visibility for elderly residents.



scale

0

power to implement

top-down

bottom-up



A

relation with other patterns

S11; S15; U1; U12; U13; A4; A5; A8; A10

sources

S15.
Take a seat

hypothesis

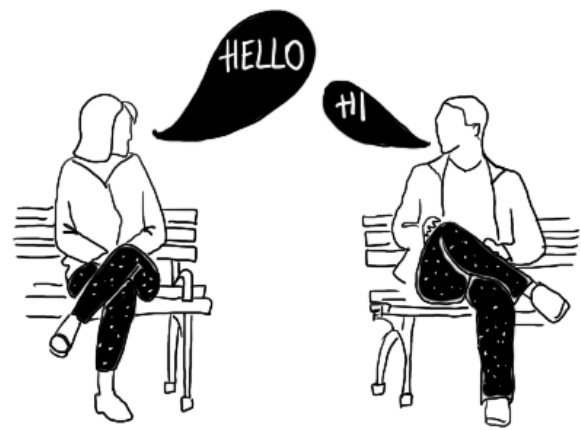
Providing street furniture and clustered seating in public spaces and at public transport stops offers the elderly places to rest when needed and encourages social interaction among users.

theoretical or empirical back-up

Offering outdoor seating in streets and public spaces at no cost creates inclusive environments where older adults can comfortably spend time, fostering opportunities for social interaction. While movement is essential for maintaining both mental and physical health, many elderly individuals feel more inclined to participate in social life when they have the option to sit.(Schmidt et al., 2019) The presence of seating encourages them to leave their homes, engage with others, and remain active in their communities.

practical implication

Installing well-placed public seating throughout neighborhoods, ensuring that benches or resting spots are available within a short 10-minute walk, to support mobility, rest, and spontaneous social encounters.Offering a variety of seating environments, including lively areas for people-watching and conversation, as well as quieter spots. Using weather-resistant materials and features such as backrests, armrests, and sun or rain protection to ensure comfort across different seasons.



relation with other patterns

S1; S2; S4; S7; S11; S14; C8; U1; U12; U13; A5; A10

sources

Schmidt, T., Kerr, J., & Schipperijn, J. (2019). Associations between neighborhood open space features and walking and social interaction in older adults—A mixed methods study. *Geriatrics*, 4(3), 41.



The background is a complex, abstract pattern of thin orange lines. It includes a grid of 'X' marks in the upper center, a series of wavy lines with arrows pointing downwards on the left, a cluster of irregular squares on the bottom left, and a dense field of small circles on the bottom right. The text 'CLIMATE ADAPTATION' is centered in the middle of the image.

CLIMATE ADAPTATION



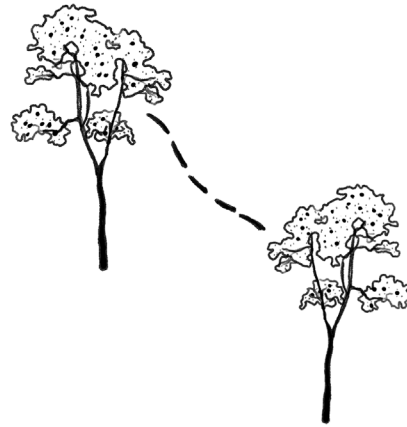
C1. Connect the green

hypothesis

Connecting green spaces to increase biodiversity and foster community spaces.

theoretical or empirical back-up

Creating a continuous network of green spaces within the neighbourhood supports ecological connectivity, enhances urban heat mitigation, and provides inviting environments for community use and enjoyment.



scale

A



A

power to implement

top-
down

bottom
- up

practical implication

Connecting parks, green courtyards, green streets, rain gardens, and plant pots helps form a continuous ecological and social network.

relation with other patterns

S1; S2; S5; S11; S13; C4; C5; C7; C8; C9; C11; C12; U3; U9; U11; U12; U13; U14

sources

C2. Airflow

hypothesis

Designing for wind movement through blocks improves urban cooling and comfort.

theoretical or empirical back-up

Enhancing airflow by keeping the main doors of buildings open and by enlarging courtyards through the strategic connection of adjacent outdoor spaces. This can be done by opening up sections of the buildings, which not only improves ventilation but also promotes better circulation and creates more inviting communal areas for residents. Increased airflow and larger open spaces can help create a cooler environment during summer heat, improving comfort.

practical implication

Opening up and connecting courtyards, along with keeping building entrances open to allow fresh air to circulate.



scale

A



A

power to implement

top-
down

bottom
- up

relation with other patterns

S1; S2; C6; U3; A15

C3. Permeable pavements

hypothesis

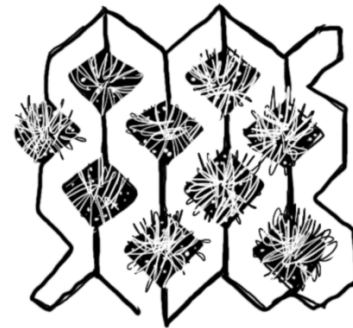
Permeable pavement helps water filtration and reduces heat.

theoretical or empirical back-up

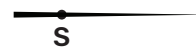
Replacing traditional pavements with permeable surfaces helps manage stormwater by allowing rainwater to infiltrate more effectively into the soil, reducing surface runoff and lowering the risk of flooding. Additionally, permeable pavements help recharge groundwater supplies, decrease pressure on drainage systems, and reduce the urban heat island effect by promoting natural cooling through increased soil moisture.

practical implication

Replacing asphalt and tiles in courtyards and streets with permeable materials.



scale



A

power to implement



relation with other patterns

S1; S2; S4; S5; S11; C4; C5; C8; U12; U13



C4. Plant the street

hypothesis

Street greenery provides shades, cools the environment and creates a pleasant environment.

theoretical or empirical back-up

Street greenery provides valuable shade that helps reduce direct sunlight exposure on sidewalks and roads. This natural shading lowers surface temperatures, which in turn cools the surrounding environment and mitigates the urban heat island effect. Beyond temperature regulation, greenery enhances the aesthetic appeal of streets, creating a more pleasant and inviting atmosphere for pedestrians. It also contributes to improved air quality by filtering pollutants, supports local biodiversity, and promotes mental well-being by offering a connection to nature within urban settings.

practical implication

Removing parking spaces to make room for planting greenery, including trees, shrubs, and other plants.



scale

S



A

power to implement

top-
down

bottom
- up

relation with other patterns

C3; C5; C7; C9; C12; U1; U9; U12; U13



ZÖLD ERZSÉBETVÁROS

HVV-995

BOXER

BNE
WAS
HERE

C5. Removing tiles

hypothesis

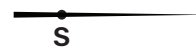
Replacing hard, heat-retaining surfaces reduces heat and supports biodiversity.

theoretical or empirical back-up

Removing tiles can significantly reduce heat buildup in urban areas by allowing the ground to breathe and retain moisture. Permeable surfaces enable rainwater to infiltrate the soil more effectively, which helps manage stormwater runoff by reducing surface flooding and decreasing the burden on drainage systems. Additionally, allowing water to seep naturally into the ground supports healthier vegetation growth, which further cools the environment through shade and evapotranspiration.



scale



S



A

power to implement



top-
down

bottom
- up

practical implication

Removing impermeable tiles and replacing them with permeable pavements, or simply exposing soil.

relation with other patterns

S1; S2; S11; C1; C4; C8; C9; U3; U9; U12; U13

C6. Cooling water

hypothesis

Constructing water fountains and rainwater harvesting areas helps in managing runoff while also adding a cooling feature to the urban landscape.

theoretical or empirical back-up

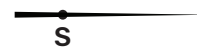
Installing water fountains and rainwater catchment areas helps manage stormwater runoff by capturing and controlling excess water. Additionally, these water features introduce cooling effects to the urban environment, providing refreshing spaces that enhance comfort and contribute to the overall aesthetic and ecological quality of the area.

practical implication

Creating water fountains and shallow pools to capture water in courtyards and vacant lots, accompanied by nearby seating areas.



scale



power to implement



relation with other patterns

S1; S2; S4; C2; C8; U1

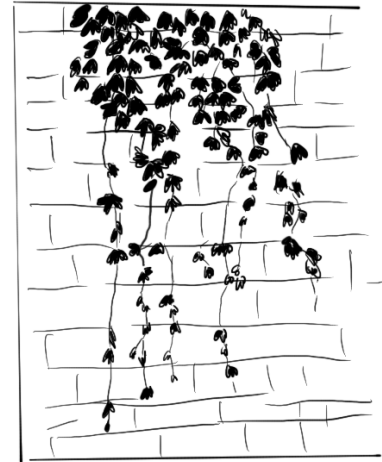
C7. Green walls

hypothesis

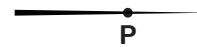
Green walls connect green spaces, increase biodiversity, and enhance the appearance and atmosphere.

theoretical or empirical back-up

Green walls serve as natural connectors between fragmented green spaces, creating continuous habitats that support a wider variety of plant and animal species, thereby increasing urban biodiversity. They also improve the visual appeal of buildings and streetscapes by adding vibrant greenery to otherwise plain surfaces.

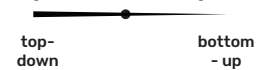


scale



D

power to implement



practical implication

Planting climbing plants on building facades and fire-walls to enhance greenery.

relation with other patterns

S1; S2; S4; S5; S11; S13; C1; C4; C8

C8. Pocket park

hypothesis

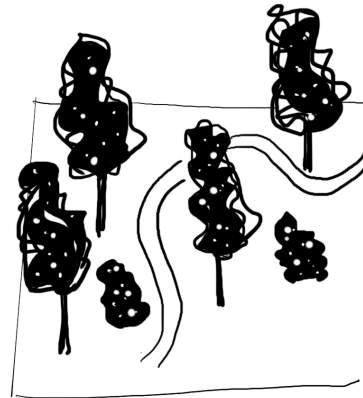
Dense, small green parks help cool the city, improve biodiversity and offer a peaceful environment.

theoretical or empirical back-up

Small, dense green spaces provide peaceful spots for rest and relaxation while creating a cooler microclimate. Their concentrated vegetation offers shade and helps reduce surrounding temperatures, making them inviting refuges from urban heat. These intimate green areas also contribute to improved air quality and promote well-being by connecting people with nature in close proximity to their daily lives.

practical implication

Creating pocket parks in courtyards and vacant lots transforms underutilized spaces into vibrant, green oases.

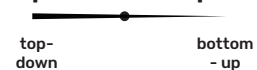


scale



D

power to implement



relation with other patterns

S1; S2; S13; U1; C1; C10; C12; A5



C9. Rain garden

hypothesis

Rain gardens manage stormwater and reduce heat, while increase biodiversity.

theoretical or empirical back-up

Rain gardens help manage stormwater by capturing and absorbing runoff, which reduces the risk of flooding and eases the burden on drainage systems. In addition to their practical function, rain gardens contribute to cooling the surrounding environment by promoting natural evaporation and shading.

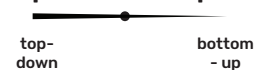


scale



A

power to implement



practical implication

Creating rain gardens along streets, in vacant lots, and within courtyards

relation with other patterns

S1; S2; S5; S11; S13; C1; C4; C8; U12; U13

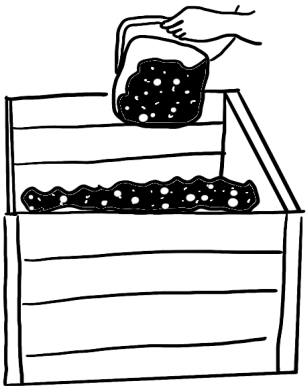
C10.
Compost spot

hypothesis

A shared compost encourages sustainable acts and creates social engagement.

theoretical or empirical back-up

A shared compost system promotes sustainable practices by encouraging residents to recycle organic waste and reduce landfill contributions. Beyond its environmental benefits, it also fosters social engagement by bringing community members together around a common goal.



scale

0

power to implement

top-down

bottom-up



A

relation with other patterns

S1; S2; S5; C8; U1

practical implication

Incorporating composting spots into every block's communal spaces, designed to be easily accessible for all residents

C11. Put out a pot

hypothesis

Encouraging residents to place plant pots outside fosters care for shared spaces.

theoretical or empirical back-up

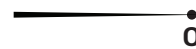
Encouraging residents to place plant pots outside their homes helps foster a sense of care and ownership for shared spaces. This small act of gardening not only beautifies the neighborhood but also promotes community engagement and responsibility. As residents nurture their plants, they become more connected to their environment and to each other, contributing to a more welcoming and vibrant communal atmosphere.

practical implication

Residents putting out and taking care of pots of flowers and plants in the courtyards and in front of the ground floors of the buildings.



scale



A

power to implement



relation with other patterns

S11; S13

C12. Add shade

hypothesis

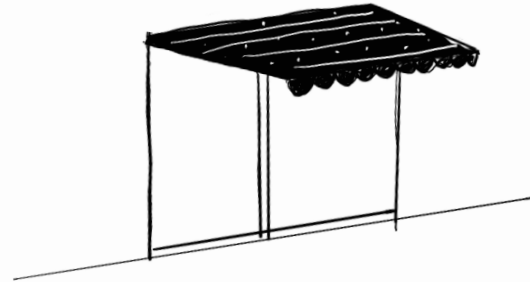
Providing shade through trees, pergolas or canopies increases thermal comfort.

theoretical or empirical back-up

Providing shade with trees, pergolas, or canopies significantly enhances thermal comfort by reducing direct exposure to sunlight. These shading elements lower ambient temperatures, create cooler microclimates, and help protect people from harmful UV rays. In addition to improving comfort, shaded areas encourage outdoor activity and social interaction, making public spaces more inviting and usable throughout warmer seasons.

practical implication

Creating continuous shade by planting trees on the streets and adding shading on the ground floors.



scale

0

power to implement

top-
down

bottom
- up



A

relation with other patterns

S1; S2; S4; S5; S7; C4; C8; U13





URBAN INFRASTRUCTURE

U1.

A short walk away

hypothesis

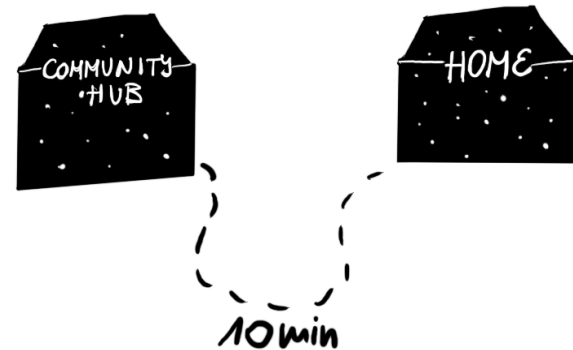
Everyday functions and communal spaces are at a walkable distance.

theoretical or empirical back-up

With aging, many older adults gradually lose the ability to move around as freely as they once did, resulting in a shrinking daily environment. Their immediate neighborhood becomes their primary living space. (Wieringa, 2012). This makes it especially important to design neighborhoods with spaces that support the formation of social bonds and to ensure that essential services and amenities are located nearby and are easily accessible.

practical implication

Establishing community hubs, elderly clubs, and inclusive public or shared spaces within each block allows older adults to connect with peers and interact with other generations. In parallel, ensuring that essential services and amenities, such as shops, pharmacies, and healthcare facilities are located within a 10-minute walking distance.



scale

A



A

power to implement

top-down

bottom-up

relation with other patterns

S1; S2; S4; S5; S6; S7; S8; S9; S10; S11; 12; S13; S14; S15; C4; C6; C8; C9; C10; C11; U3; U5; U7; U10; U11; U14

sources

Wieringa, J. (2012). Better a neighbor nearby than a brother far away? A qualitative study of the relation between loneliness and the social capital of elder elderly in their neighborhood (Master's thesis). Utrecht University.

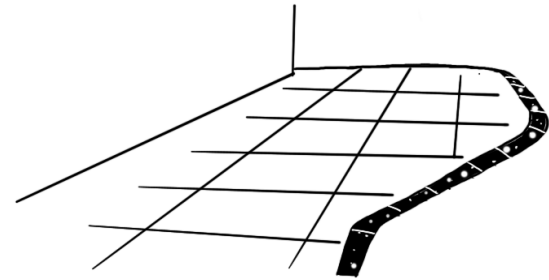
U2. Clear streets

hypothesis

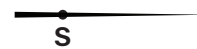
Creating a smooth experience for elderly to move in the streets create a sense of safety and encourages them to walk more.

theoretical or empirical back-up

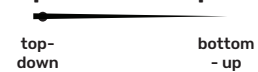
Designing streets that are safe and pleasant to use enhances the mental and physical well-being of older adults by providing opportunities to meet others, stay active, and engage with nature (Care & Repair England, 2016). Therefore, street design must ensure accessibility for everyone, prioritizing safety and minimizing risks such as falls or feelings of insecurity.



scale



power to implement



relation with other patterns

U9; A10

practical implication

Transforming streets that have well-designed street lighting, smooth and even pavements, curb-free pathways, clear signage, and secure pedestrian crossings.

sources

Care & Repair England. (2016). Street design for age friendly neighbourhoods. <https://careandrepair-england.org.uk/wp-content/uploads/2016/09/Age-Friendly-Street-Design-Sept-2016.pdf>



U3.

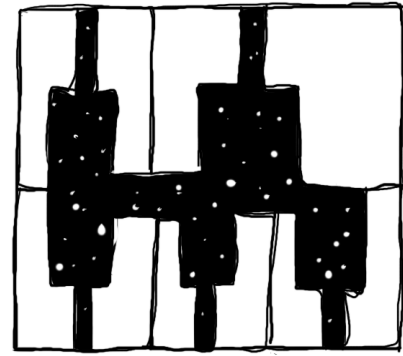
Connect the courtyards

hypothesis

Linking inner courtyards across block to form a continuous network of green and (semi-) public spaces.

theoretical or empirical back-up

Connecting courtyards can create a system of semi-public spaces that are accessible for everyone during the day and closed for the night. By opening up spaces for collective use green connections are also ensured, this way having larger connected green spaces that have a larger effect in mitigating heat.



scale



B



D

power to implement



top-
down

bottom
- up

practical implication

Removing sections of the buildings to create a network of interconnected courtyards, which are then collectively managed by the block community.

relation with other patterns

S1; S2; S15; C1; U1; A5; A9; A12; A15

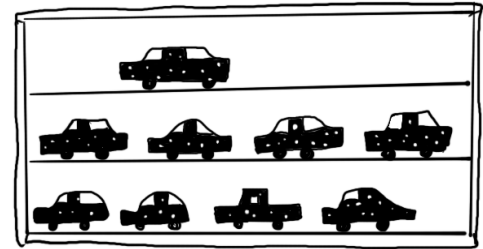
U4. Multi-level parking

hypothesis

Creating multi-level parking helps to free the streets from cars and creates a compact solution.

theoretical or empirical back-up

Creating parking on multiple level ensures an effective use of space, while frees up streets from parking.

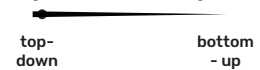


scale



A

power to implement



practical implication

Eliminating street parking and instead utilizing vacant plots or multi-level parking structures integrated beneath or on top of buildings to accommodate multiple vehicles.

relation with other patterns

U2; U7; U9

U5. Ground floor for the old

hypothesis

Prioritising older residents for the apartments in the ground floor support independent living for those living with physical challenges.

theoretical or empirical back-up

Elderly individuals living in multi-story homes without elevators, and where essential facilities like the kitchen are on different levels, are significantly more likely to relocate. (Granbom et al. (2022)) This highlights the need to create single-level, ground-floor housing that is easily accessible and integrated within the local community. In addition to improving mobility and safety, living closer to the street allows older adults to more easily access nearby amenities and fosters a stronger sense of inclusion in everyday urban life.

practical implication

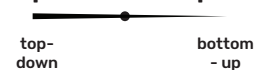
Repurposing vacant ground floors into accessible housing for the elderly, accompanied by regulations that prioritize elderly residents moving into ground-floor apartments.



scale



power to implement



D

relation with other patterns

S11; U1; U8; A13; A14

sources

Granbom, M., Perrin, N., & Szanton, S. (2022). Household accessibility and residential relocation in older adults. *The Gerontologist*, 62(1), 107–115.

U6. Home modification

hypothesis

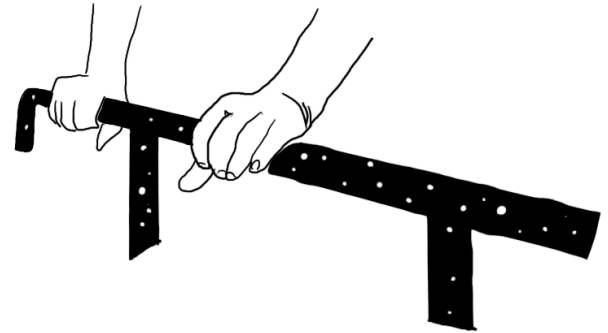
Small targeted home updates significantly improve comfort, safety enabling residents to age in place.

theoretical or empirical back-up

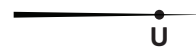
According to Stark et al. (2023), making small home modifications can help older adults remain in their own homes longer by creating a safer and more supportive living environment. These adjustments reduce the need for institutional care and support aging in place.

practical implication

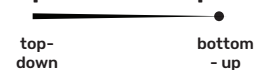
Implementing safety features such as handrails, ramps, and bathroom modifications to reduce fall risks, along with installing medical alert systems for emergency response.



scale



power to implement



relation with other patterns

A13; A14; U8

sources

Stark, S., Keglovits, M., Arbesman, M., & Lieberman, D. (2023). Effectiveness of home modification interventions on the participation of community-dwelling adults: A systematic review. *American Journal of Occupational Therapy*, 77(1), 7701205070p1–7701205070p12.



U7. Parking for special needs

hypothesis

Creating parking options for people who need support getting around.

theoretical or empirical back-up

Creating designated parking spaces for people with disabilities and elderly individuals with special needs ensures they have convenient and safe access to all areas of the city, promoting greater independence and inclusion.



scale

0

power to implement

top-
down

bottom
- up



relation with other patterns

U1; U2; U4; U9; U13

practical implication

Designating parking spaces specifically for the elderly and individuals with physical disabilities, clearly marked with appropriate signage.



U8. Entryway help

hypothesis

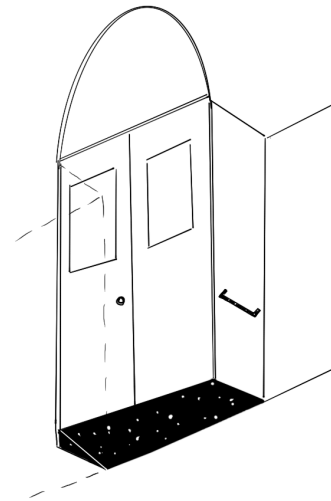
Step-free entrances and handrails help people to access buildings.

theoretical or empirical back-up

Step-free entrances and handrails make entryways more inclusive by removing physical barriers that can prevent people with mobility challenges, such as the elderly or those with disabilities from accessing buildings easily and safely. These features ensure that everyone, regardless of their physical ability, can enter and navigate spaces independently, promoting equal access and a welcoming environment for all

practical implication

Enhancing building entryways with ramps, wider doors, and handrails.



scale

0

power to implement

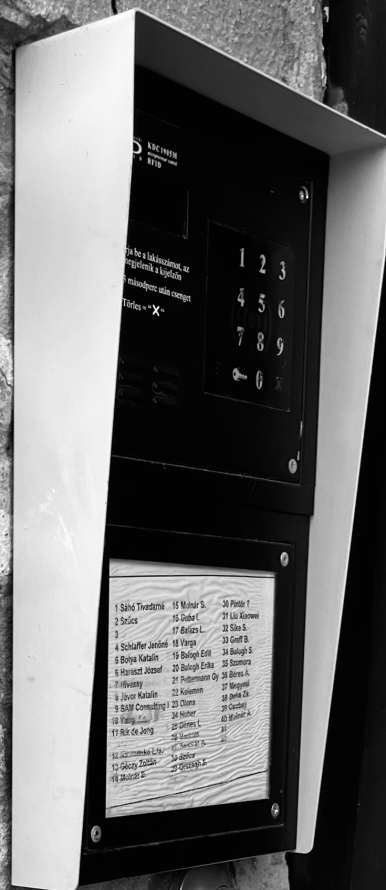
top-
down

bottom
- up



relation with other patterns

S11; U5; U6



5 KÉZIRAT
1970

Ha a lakosunk az
megjelölt a listán
munkáját azonos
Törzs - "X"

1 Sándor Tünde	15 Mária S.	30 Pista T.
2 Sándor	16 Dóra L.	31 László K.
3	17 Béla L.	32 Sándor S.
4 Schaffner János	18 Varga	33 Gábor S.
5 Bolyai Katalin	19 Balogh Erő	34 Balogh S.
6 Horváth János	20 Balogh Erő	35 Somorai
7 Illényi	21 Pálffy János	36 Pálffy A.
8 János Katalin	22 Károly	37 János
9 Bányai Csaba	23 Csaba	38 János S.
10 Bányai Csaba	24 István	39 Csaba
11 Rák Csaba	25 István	40 István S.
12 István	26 István	41
13 István	27 István	42
14 István	28 István	43
15 István	29 István	44
16 István	30 István	45
17 István	31 István	46
18 István	32 István	47
19 István	33 István	48
20 István	34 István	49
21 István	35 István	50

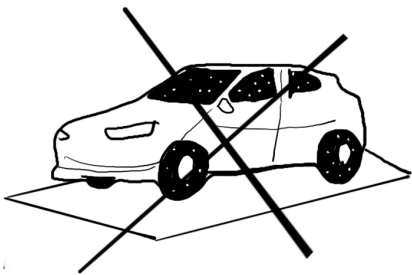
U9.
Removing parking spaces

hypothesis

Replacing car parking with green, pedestrian-friendly space.

theoretical or empirical back-up

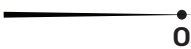
Removing parking spaces can improve the overall atmosphere of streets, enhance safety, and create opportunities for green spaces. These green areas help reduce urban heat and support ecological connectivity within cities.(Croeser et al., 2022)



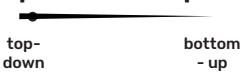
practical implication

Reclaiming parking areas by removing asphalt and installing features such as rain gardens or outdoor seating

scale



power to implement



relation with other patterns

S2; C4; C9; U2; U4; U7; U12; U13; A10

sources

Croeser, T., Garrard, G. E., Visintin, C., Kirk, H., Ossola, A., Furlong, C., Clements, R., Butt, A., Taylor, E., & Bekessy, S. A. (2022). Reducing street parking can free up large areas for urban nature (Version 1). Research Square.

U10.
Water tap

hypothesis

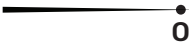
Providing accessible and free public water taps nearby helps older adults feel more included and comfortable in the public realm.

theoretical or empirical back-up

Providing free and easily accessible water taps supports the health of all individuals, particularly the elderly and those with mobility challenges. Accessible water points encourage people to spend time outdoors and participate in community life more comfortably, fostering greater social inclusion and well-being.



scale



power to implement



practical implication

Ensuring that water taps are free and easily accessible in public, communal, and municipal spaces.

relation with other patterns

S1; S2; S3; S4; S5; S6; S8; S10; S11; S14; C8; U1; U11

U11.
Free toilet

hypothesis

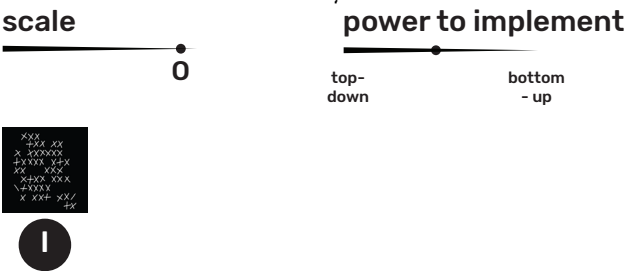
Providing accessible and free public toilets nearby helps older adults feel more included and comfortable in the public realm.

theoretical or empirical back-up

As people grow older, they are more likely to experience health conditions, such as overactive bladder, nocturia, and reduced bladder capacity, that increase both the need and urgency to use the toilet (Song et al., 2024). Ensuring the availability of free and accessible public toilets is therefore vital for enabling older adults to stay active and engaged in everyday urban life.

practical implication

Ensuring free and accessible toilets are available in public areas and cafés, ideally within a 10-minute walking distance.



relation with other patterns

S1; S2; S3; S4; S5; S6; S8; S10; S11; S14; C8; U1; U11

sources

Song, Y., Zhang, Y., Liu, Y., Zhang, J., Lu, J., Wang, X., Zhang, N., & Ma, G. (2024). Analysis on fluid intake and urination behaviors among the elderly in five cities in China: A cross-sectional study. BMC Geriatrics, 24, Article 86.



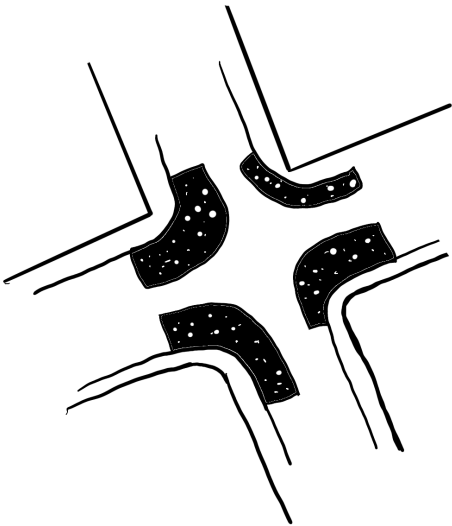
U12.
Transform the intersection

hypothesis

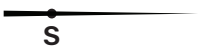
Turning intersections into communal and green spaces.

theoretical or empirical back-up

Intersections function as sub-centers within the block, characterized by active ground floors that generate local vibrancy and social interaction. These nodes can also serve as micro-hubs for climate adaptation by providing shaded areas for rest, social gathering spots, or elements that collect and retain rainwater.



scale



power to implement



practical implication

Redesigning intersections to maximize pedestrian space by incorporating free public seating, allowing restaurants to place outdoor tables and chairs, adding greenery and shade structures, and introducing community kiosks to enhance social interaction and livability.

relation with other patterns

S13; S14; S15; C1; C3; C4; C5; C9; C11; C12; U1; U9; U13; A10

U13.

Transform the street

hypothesis

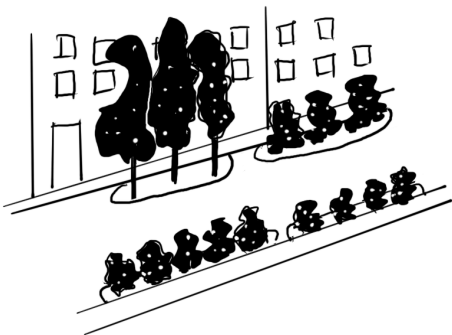
Transforming streets based on a multi-block unit approach improves urban livability by prioritizing pedestrians, reducing traffic, and integrating green spaces.

theoretical or empirical back-up

By limiting through-traffic within the block and applying traffic calming principles, multi-block units enhance safety and comfort for pedestrians while encouraging walking and cycling. The integration of green spaces improves air quality, reduces urban heat, and supports biodiversity, contributing to a healthier environment. These pedestrian-oriented spaces also foster greater social interaction and public life by creating more inviting, multifunctional public areas. Meanwhile, surrounding the superblock with streets designated for all types of traffic maintains mobility and access, ensuring that essential services and vehicles can still operate efficiently. This approach has been shown to significantly improve public health outcomes and urban environmental quality, as demonstrated in the Superblock model implemented in Barcelona (Mueller et al., 2020).

practical implication

Building on the multi-block unit concept, developing pedestrian streets by removing parking spaces and introducing green areas, while restricting access to service and residential vehicles only. In parallel, designating separate traffic streets to accommodate all types of vehicles.



scale

S



D

power to implement

top-down

bottom-up

relation with other patterns

S11; S13; S14; S15; C1; C3; C4; C5; C9; C11; C12; U1; U9; U13; A10

sources

Mueller, N., Rojas-Rueda, D., Khreis, H., Cirach, M., Andrés, D., Ballester, J., & Nieuwenhuijsen, M. J. (2020). "Changing the urban design of cities for health: The superblock model." Environmental International, 134, 105132.

U14.

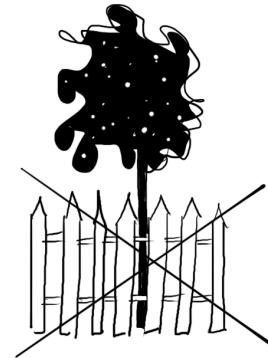
Remove fences

hypothesis

Removing fences around green spaces to create a more open and inviting atmosphere.

theoretical or empirical back-up

Many urban parks and green spaces are enclosed with fences and limited by opening hours, which can unintentionally create a sense of exclusion. By removing these barriers and instead using natural elements as boundaries, neighbourhoods can promote a more open and inclusive public realm that feels accessible and welcoming at all times.



scale



A

power to implement

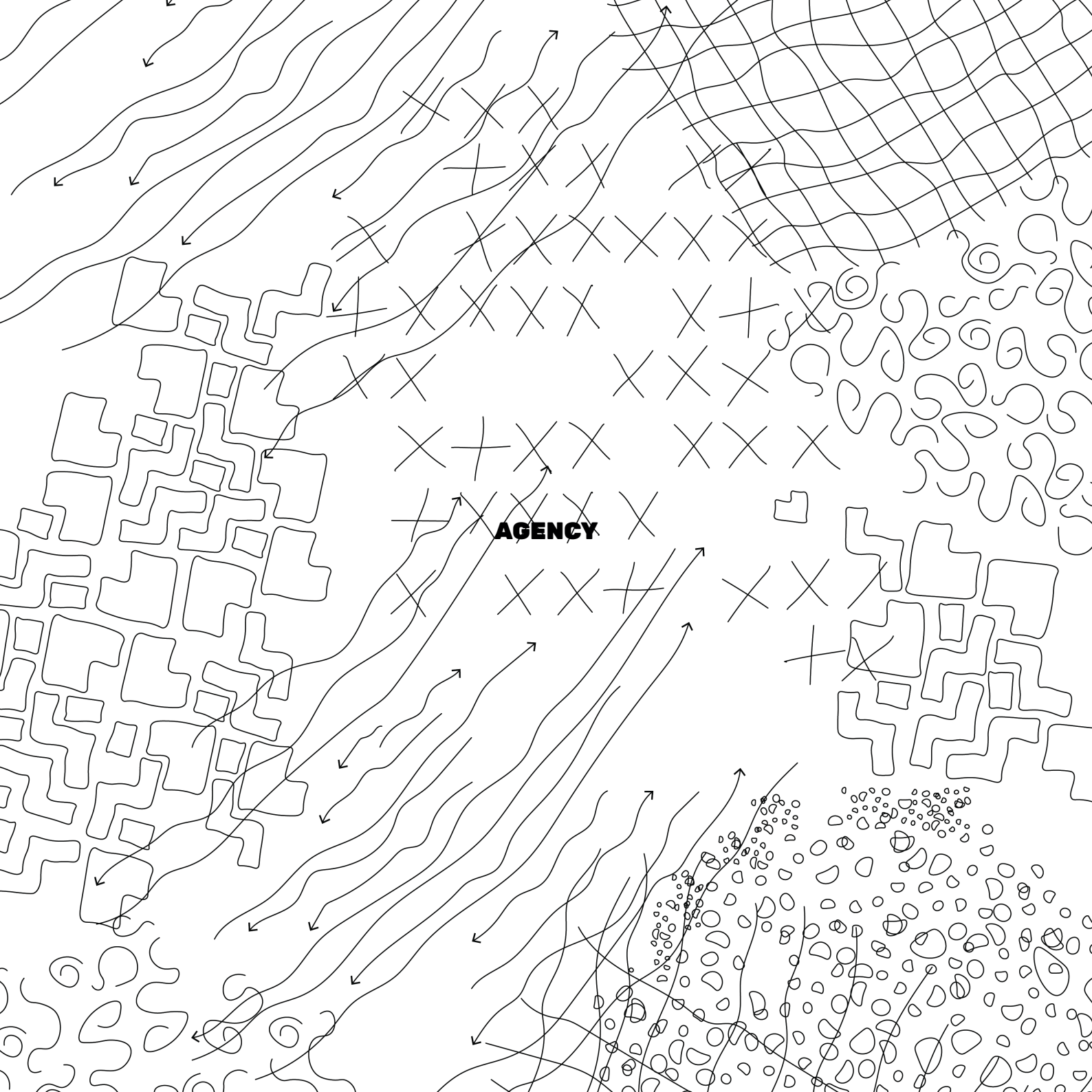


practical implication

Removing fences around parks and green spaces, and instead using plant-based barriers.

relation with other patterns

C1



A1. Animal companions

hypothesis

Supporting elderly to have pets by creating pet-friendly spaces.

theoretical or empirical back-up

Animal companions have been shown to positively impact the mental health of older adults, helping to reduce feelings of isolation and loneliness while also encouraging a more active and engaged lifestyle (Hughes et al., 2020).

practical implication

Establishing regulations that allow elderly individuals to bring their pets into communal spaces and cafés, while ensuring easy access to pet-friendly parks.



scale

A



power to implement

top-
down

bottom
- up

relation with other patterns

S8; S10; A13; A14; U6; U1

sources

Hughes, M. J., Verreynne, M.-L., Harpur, P., & Pachana, N. A. (2020). Companion animals and health in older populations: A systematic review. *Clinical Gerontologist*, 43(4), 365–377.



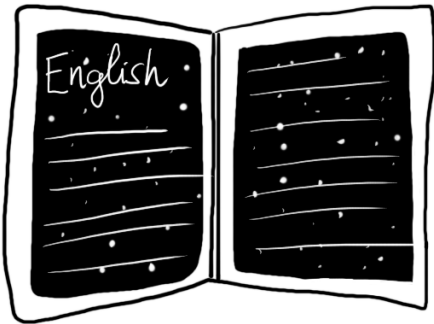
A2.
Let's learn

hypothesis

Offering accessible learning opportunities promotes life-long learning and intergenerational interactions.

theoretical or empirical back-up

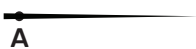
Encouraging older adults to participate in classes and learning groups can help maintain cognitive function while also enhancing their sense of belonging and social connectedness (Noble et al., 2021).



practical implication

Organizing workshops and courses, such as language learning and IT skills, for the elderly in underutilized municipal buildings, like schools or universities, as well as in communal spaces equipped to accommodate participants.

scale



power to implement



relation with other patterns

S3; S5; S6; S9; U1; A3; A4; A5; A7

sources

Noble, C., Medin, D., Quail, Z., Young, C., & Carter, M. (2021). How does participation in formal education or learning for older people affect wellbeing and cognition? A systematic literature review and meta-analysis. *Gerontology & Geriatric Medicine*, 7, 1–15.

A3.
Tech help

hypothesis

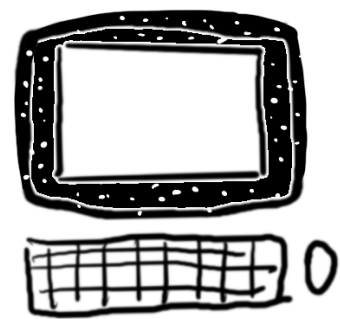
Offering simple tech support from young people empowers elderly to stay connected and involved, while creates connections with younger generations.

theoretical or empirical back-up

Many older adults feel disconnected from younger generations, particularly those who have grown up with technology and possess strong digital skills. Offering technology classes led by young people can help bridge this generational gap, fostering mutual understanding while improving digital literacy among the elderly. (Breck et al., 2018) As more essential services, such as communicating with local authorities or signing important documents, move online, these skills become increasingly important, especially since many seniors feel anxious or uncertain about using digital platforms.

practical implication

Encouraging young people to register as paid volunteers to assist elderly individuals in learning technology, offering one-on-one classes in communal spaces or online.



scale

A



power to implement

top-down

bottom-up

relation with other patterns

S3; S8; S10; U1; A2; A4; A5; A8

sources

Breck, B., Leedah, S., & Dennis, C. (2018). Bridging the digital divide: Findings for older adults in an intergenerational Cyber-Seniors program. Innovation in Aging, 2(Suppl 1), 149.

A4.
Volunteering part-time

hypothesis

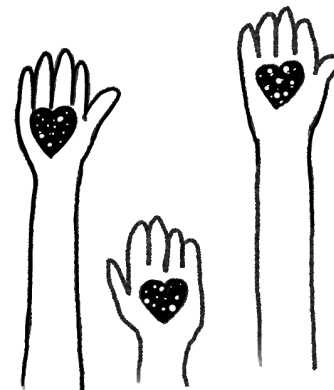
Engaging elderly people in voluntary work keeps them active, valued and socially engaged.

theoretical or empirical back-up

Many elderly feel isolated after losing their partner and having distance with family, which can lead to feeling of isolation and loneliness. By encouraging elderly to join as volunteers, they can build new connections with others as well as have the feeling of being valued. (Mayers et al., 2024) Also having part-time paid jobs can be an additional source of income next to their pension.

practical implication

Establishing a neighborhood-based network to assist elderly individuals in finding suitable volunteering opportunities.



scale

A



power to implement

top-
down

bottom
- up

relation with other patterns

S5; S6; S8; S10; S9; S14; A5

sources

Mayers, T., Eto, S., Maki, N., Araki, A., & Matsuda, H. (2024). Volunteering and its association with depression, loneliness, and lifestyle of older adults: Insights from a Japanese cross-sectional study. *Healthcare*, 12(21), 2187.

A5.

Multigenerational mingle

hypothesis

Creating spaces where different generations can meet and interact.

theoretical or empirical back-up

After retireing many elderly loose their daily purpose as well as many of their social connections, and with physical and mental health declining many of them experience isolaton and mental issues, like depression. (Han et al., 2022) A lot of elderly experience a difficulty in connecting with younger generations, because of the lack of opportunities to connect with each other. By creating public and communal spaces, different generations can meet and interact, which has a positive effect on all age groipis. Encouraging informal interactions and foster intergenerational relations.

practical implication

Creating public, semi-public, and communal spaces in courtyards, empty plots and empty ground floors, that foster informal interactions across different age groups.



scale

A



power to implement

top-down

bottom-up

relation with other patterns

S1; S2; S3; S4; S5; S6; S7; S9; S10; S11; S12; S13; S14; S15; C8; U1; U3; U12; U13; A2; A3; A6; A7; A8; A9; A11; A12; A13

sources

Han, Y., He, Y., Lyu, J., Yu, C., & Bian, M. (2022). Effectiveness of social support for community-dwelling elderly with depression: A systematic review and meta-analysis. Healthcare, 10(10), 1964.

A6.
Friendly call

hypothesis

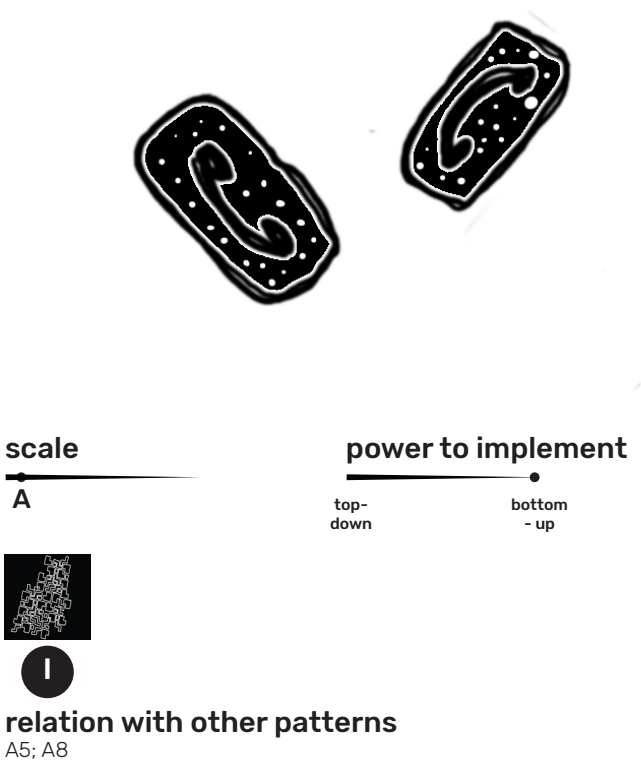
A regular check in call offers social contact and emotional support.

theoretical or empirical back-up

Regular check ups on elderly creates a feeling of being cared for as well as helps to engage with others and feel socially included.

practical implication

Establishing a volunteer network to regularly check in on and call elderly individuals to provide social support and companionship.





A7.
Time banking

hypothesis

A neighbourhood-based system of exchanging help strenghtens community ties, giving elderly residents a way to both offer and recieve help.

theoretical or empirical back-up

Elderly people often lack a reliable support system for everyday tasks such as repairing items or carrying out household chores. By participating in a time banking community, they can both give and receive help, shifting from passive recipients of care to active contributors. (Lunsford & Janes, 2015) This mutual exchange allows them to share their skills, time, and knowledge while receiving the assistance they need. It fosters a sense of belonging, strengthens community ties, and supports aging in place by enabling them to remain independent in their homes with help from others.

practical implication

Creating a network where individuals offer their time, assistance, and expertise to support others in exchange for help from fellow participants.



scale



power to implement



relation with other patterns

S8; S9; S10; S12

sources

Lunsford, B., & Janes, D. (2015). Engaging older adults to build social capital. Journal of Population Ageing, 8(4), 343–359.

A8.
Everyday assistance

hypothesis

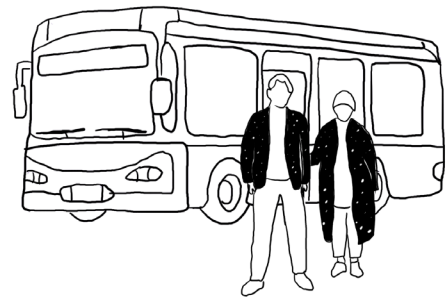
Providing everyday support to older adults enables them to stay independent, navigate their environment with ease, and maintain regular human contact.

theoretical or empirical back-up

Providing everyday support to older adults, such as assistance with household tasks, transportation, or managing appointments plays a crucial role in helping them maintain their independence. This support allows them to navigate their environment more safely and confidently, reducing the risk of accidents and enabling continued engagement in daily activities. Additionally, regular interaction with caregivers, volunteers, or neighbors through this support fosters meaningful social connections, which are essential for emotional well-being and help combat feelings of loneliness and isolation.

practical implication

Setting up a network of (paid) volunteers, who help elderly with errands, carrying heavy items, or getting to medical appointments.



scale

A



power to implement

top-
down

bottom
- up

relation with other patterns

S5; A6; A7

A9.
Voices of the block

hypothesis

Regular neighborhood meetings where residents come together to make decisions and shape the future collectively.

theoretical or empirical back-up

Regular neighborhood meetings provide a platform for residents to come together, share their concerns, ideas, and aspirations, and actively participate in shaping the future of their community. These gatherings foster a sense of ownership and collective responsibility, empowering individuals to contribute to decisions that directly affect their living environment. By encouraging open dialogue and collaboration, neighborhood meetings enhance social cohesion, build trust among residents, and create opportunities for diverse voices to be heard.

practical implication

Organizing regular weekly or monthly forums in communal spaces, such as community hubs or courtyards, where residents of all ages are represented and share equal voice in decision-making.



scale

A



power to implement

top-
down

bottom
- up

relation with other patterns

S1; S2; A5; A12

A10.

Street safety

hypothesis

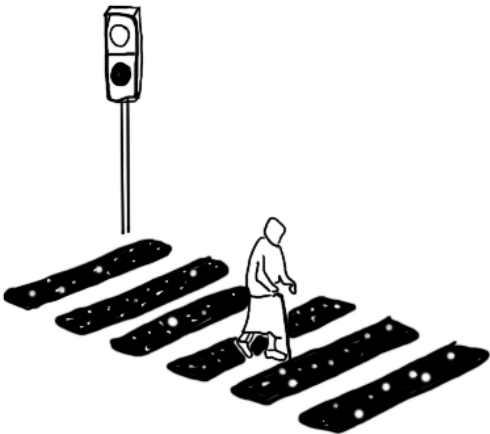
Designing safer streets encourages older adults to use them more frequently and independently.

theoretical or empirical back-up

Older adults are less likely to go outside and engage in urban life if they do not feel safe in their environment. By improving street design and implementing regulations, such as traffic calming measures and safer pedestrian crossings we can create a more secure environment. Additionally, factors like access to services, quality of traffic and pedestrian infrastructure, neighborhood attractiveness, and availability of public transportation play a significant role in promoting physical activity among older adults. (Michael et al., 2006)

practical implication

Lowering speed limit for cars and providing longer crossing time creates safer streets for elderly.



scale



power to implement



relation with other patterns

S14; S15; U1; U2; U7; U8; U9; U13; A8

sources

Michael, Y. L., Green, M. K., & Farquhar, S. A. (2006). Neighborhood design and active aging. Health & Place, 12(4), 734–740.



A11.
Together in motion

hypothesis

Creating spaces that encourage older adults to move supports better health and strengthens social connections.

theoretical or empirical back-up

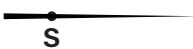
Frequent physical activity is crucial for older adults, as it helps maintain mobility, supports overall health, and reduces the risk of physical and cognitive decline. Regularly dancing in a group setting supports both physical and mental well-being in older adults, as it combines movement, music, and coordination, while also fostering a sense of community and enjoyment with others (Douka, 2019). Additionally, dance helps boost self-esteem by encouraging practice, memorization, and the performance of specific movements. It can also serve as a therapeutic tool for addressing emotional challenges among the elderly (Lindner, 1982).

practical implication

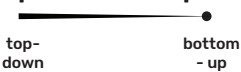
Providing opportunities, such as movement classes in community hubs, shared spaces, or parks , that encourages older adults to stay active through exercise or dance. Creating inclusive public spaces where they feel welcome to move, gather, or simply walk.



scale



power to implement



relation with other patterns

S8; S10; A5

sources

Douka, S., Zilidou, V. I., Lilou, O., & Manou, V. (2019). Traditional Dance Improves the Physical Fitness and Well-Being of the Elderly. *Frontiers in Aging Neuroscience*, 11, 75.

Lindner, E. C. (1982). Dance as a therapeutic intervention for the elderly. *Educational Gerontology*, 8(2), 167-174.

A12.
Know your neighbour

hypothesis

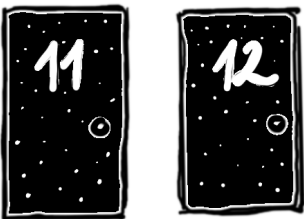
Encouring neighborly bonds builds informal support systems, helping residents to feel safe and more connected to others.

theoretical or empirical back-up

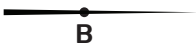
As people age, not only does the physical area they move within tend to shrink, but their social interactions often become limited to those living nearby. Connections outside this immediate neighborhood may diminish, and in some cases, relationships with neighbors become even more significant than those with partners or close family members (Wieringa, 2012). Therefore, it is crucial to encourage residents to get to know their neighbors, build strong local connections, and check in on one another regularly.

practical implication

Encouraging residents to connect by inviting neighbors over and starting shared initiatives, like helping with errands, organizing events, or simply spending time together.



scale



power to implement



relation with other patterns

S1; S12; S13; A5; A7; A8; A9

sources

Wieringa, J. (2012). Better a neighbor nearby than a brother far away? A qualitative study of the relation between loneliness and the social capital of elder elderly in their neighborhood (Master's thesis). Utrecht University.



A13.
Intergenerational housing

hypothesis

Flexible housing units that create a communal living space for people from different generations to combat isolation.

theoretical or empirical back-up

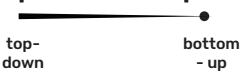
Creating housing units that accommodate multiple generations living together can benefit all age groups by fostering an environment of mutual support. Different generations living side by side encourage connections across age groups, building a community where individuals exchange diverse skills and assistance. The integration of older adults with younger residents enhances social networks and reduces isolation.(Kazak., 2023)



scale



power to implement



relation with other patterns

S5; S11

practical implication

Encouraging individuals from different ages to form shared households with each other.

sources

Kazak, J. K. (2023). Intergenerational social housing for older adults: Findings from a Central European city. Habitat International, 142, 102966

A14. Let's move in together

hypothesis

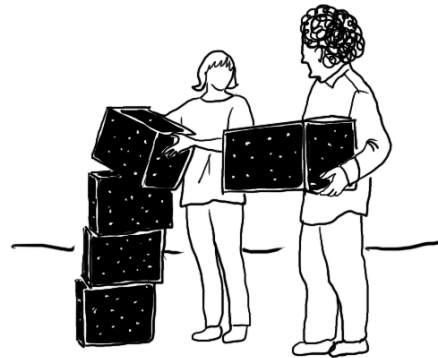
Elderly individuals moving in with each other to combat isolation and to create a supportive environment.

theoretical or empirical back-up

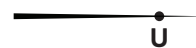
Elderly individuals moving together from their neighborhoods can provide a middle-ground solution for those who don't feel comfortable or safe living alone at home, or who experience loneliness, but don't want to move into a traditional elderly care facility. (Rusinovic et al., 2019) This arrangement creates a household where older residents support each other with everyday tasks and companionship.

practical implication

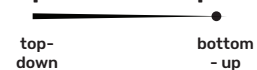
Encouraging older adults who live alone to form shared households with other elderly individuals.



scale



power to implement



relation with other patterns

S11; A5

sources

Rusinovic, K., van Bochove, M., & van de Sande, J. (2019). Senior co-housing in the Netherlands: Benefits and drawbacks for its residents. *International Journal of Environmental Research and Public Health*, 16(19), 3776.

A15. Open/close

hypothesis

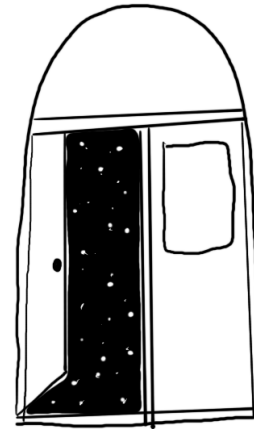
Opening building doors during the day promotes natural airflow and makes shared courtyards accessible to residents, while closing them at night ensures safety and a sense of security.

theoretical or empirical back-up

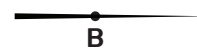
Enhancing accessibility to courtyards by strategically opening doors and fences facilitates natural ventilation, which contributes to passive cooling of buildings and mitigates urban heat effects. This increased airflow helps regulate microclimates, improving thermal comfort for residents. Additionally, by removing physical barriers, these semi-public spaces become more inclusive and inviting, encouraging social interaction and fostering a sense of community among residents.

practical implication

Having someone from the buildings in charge to open the doors in the morning and close them for the night.

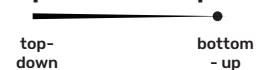


scale



D

power to implement



relation with other patterns

S1; S2; U3



ERZ
17

Small sign on the left wall:
Büyük
Ticaret
Kamusal
Mülkiyet