



From Home to Community Care
Transforming a Community Building as a Spatial Mediator
in Chinese Post-Industrial Contexts

Jingwen Zhang

Chalmers School of Architecture
Department of Architecture & Civil Engineering

Master Thesis Year/ 2026

Examiner/ Liane Thuvander
Supervisor/ Marli Swanepoel



Chalmers School of Architecture
Department of Architecture & Civil Engineering

Program	Architecture and Planning Beyond Sustainability
Profile	Society, Justice, Space
Year	2026
Examiner	Liane Thuvander
Supervisor	Marli Swanepoel
Title	From Home to Community Care: Transforming a Community Building as a Spatial Mediator in Chinese Post-Industrial Contexts
Author	Jingwen Zhang

ABSTRACT

This research explores how spatial design can support ageing in place in Chinese post-industrial urban communities. It focuses on Dongshan Community in Dalian, a university-affiliated residential area developed under the Danwei work-unit system, where long-term residence has fostered strong social ties and a relatively stable neighbourhood structure. With an ageing population and the gradual transformation of the former welfare system, care resources have become increasingly fragmented, and responsibilities for everyday care are shifting from the private home towards the community level.

The research examines how a community building can function as a spatial mediator connecting healthcare support, everyday social interaction, and community activities. The study adopts a co-production approach to understand residents' lived experiences and emerging needs. The research process includes a key information interview with a long-term resident, a community survey, and focus workshops that provide insights into daily life patterns, care expectations, and existing social networks within the neighbourhood.

Based on these findings, the design explores spatial strategies to reorganise the community building and integrate diverse care-oriented and social functions within a shared spatial framework. The project proposes an adaptable community environment that supports health care services, everyday interaction, and collective activities. Principles from Traditional Chinese Medicine inform the design by linking health, daily life, and spatial experience. The research demonstrates how community architecture can strengthen local care infrastructures and sustain ageing in place in Chinese post-industrial neighbourhoods.

Key words:

Chinese Post-Industrial Communities, Ageing in Place, Community-based Care, Spatial Mediator, Adaptive Reuse, Traditional Chinese Medicine

STUDENT BACKGROUND



2024–2026

M.Sc. Architecture and Planning Beyond Sustainability

Chalmers University of Technology

Gothenburg, Sweden

Focus: sustainable design, community planning, care-oriented spatial strategies, and participatory approaches

2021–2022

Design & Communication Coordinator

China Construction Fourth Engineering Division Corp. Ltd EPC Design Institute

Guangzhou, China

Main: urban planning, landscape design, master planning, public communication, and stakeholder coordination

2020

Interior Design Intern

YaRu Construction & Decoration Engineering Ltd.

Shanghai, China

Main: interior design, visual presentation, floor plans, and client communication

2017–2021

B.F.A. Environmental Design

Dalian University of Technology

Dalian, China

Focus: environmental design, landscape architecture, spatial design, and visual communication

ACKNOWLEDGEMENT

I would like to thank my supervisor and examiner for your guidance and valuable feedback throughout this thesis process. I am also grateful to my classmates for their support and thoughtful discussions along the way.

Most importantly, I would like to thank my grandmother and the residents of the Dongshan community. As this project is rooted in a neighbourhood where I spent part of my childhood, your openness, trust, and participation made this research deeply meaningful to me. Thank you for welcoming me into your conversations and participating in the workshops, interviews, and discussions throughout the process. Your daily experiences, memories, and perspectives have been invaluable to this research.

Your stories and experiences became an essential part of this project. They allowed me to better understand the social connections, everyday care practices, and lived realities within the community beyond what drawings or data alone could represent.

This thesis would not have been possible without your support, patience, and generosity. I am truly grateful to all of you.

CONTENT

ABSTRACT	i
STUDENT BACKGROUND	ii
ACKNOWLEDGEMENT	iii
INTRODUCTION	
Background	2
Research Aim & Question	4
CONTEXT	
Chinese Work-unit Community	8
Dongshan Community	10
THEORY	
Theoretical Framework	14
Community Based Care	16
Chinese Medicine	18
METHOD	
Co-production	22
Spatial Analysis	23
Participatory Research	23
Spatial Proposal	25
RESULTS & ANALYSIS	
Site Analysis -Neighborhood Scale	28
Site Analysis -Building Scale	30
Community Building and surroundings	30
Community Park	32
Residential Building	33

ROMOTE FIELDWORK

Key Information Interview	36
Research Perspective	38
Care System SWOT Analysis	40
Community Survey	42
Focus Workshop	44

DESIGN DEVELOPMENT

Design Criteria	48
Reference Project	49
Design Concept	50
Structure Changes	52
Design Theme - Chinese Medicine	55
Floor Plan	56
Visualization	58
Overview	58
Outdoor Space	60
Main Entrance	64
Section	66

DISCUSSION

Context and Challenges	72
Community Building as a Mediator	72
A Layered Approach to Care	73
Delimitations	73

REFERENCE LIST	74
--------------------------	----

FIGURE LIST	76
-----------------------	----

APPENDIX	78
--------------------	----

INTRODUCTION

Background

Industrial Urbanisation in China

The story begins in the late 20th century, during a period of rapid industrial urbanisation in China. Driven by economic reform and industrial development, cities expanded quickly, and large numbers of young workers migrated from rural areas to urban centres (Wu, 1996). In response to this rapid growth, urban areas were developed at a rapid pace. Large numbers of factories, hospitals, schools, and other supporting facilities were constructed within a relatively short period of time, forming the basic structure of many industrial cities (Xie et al., 2009).

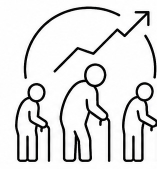
Within this context, the danwei (work-unit) system emerged as a distinctive form of social organisation. Beyond providing employment, work units were responsible for many aspects of everyday life, including housing, healthcare, education, and social welfare. Residential neighbourhoods, public facilities, and workplaces were often developed together, creating relatively self-sufficient communities and strong social networks among residents (Wu, 1996).

Since China's economic reforms of the late twentieth century, many of these welfare functions have gradually been transferred from work units to market-oriented. As a result, the institutional role of the danwei has weakened, while the physical environments and social structures it created have largely remained (Xie et al., 2009).

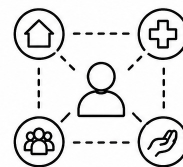
Across many Chinese post-industrial cities, former work-unit neighbourhoods continue to exist as ageing residential communities. Many are now characterised by ageing populations, declining infrastructure, fragmented care systems, and outdated community environments, creating new challenges for everyday life and ageing in place.



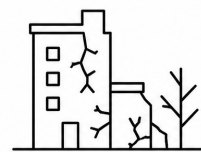
Figure 1. Large-scale urban construction in China during rapid industrialisation, characterised by simultaneous development and dense crane activity.



Ageing Population



Fragmented Care



Declining Infrastructure



Outdated Communities

Figure 2. Current challenges commonly found in Chinese post-industrial neighbourhoods.

A Personal Point of Departure

In 1985, an affiliated residential community of an university was built in Dalian, an industrial city in northeast China. The community was developed under the work-unit system and served staff and their families.

I was born in this community and spent my childhood there. I remember it as a warm and supportive environment. My grandmother often took me to participate in community activities. These everyday experiences shaped my early understanding of collective living.

More than twenty years later, my grandmother still lives in this community. She is now part of the ageing population that this research focuses on. In this thesis, she provided an important entry point for developing a deeper understanding of the community.

Dongshan Community

Although the former welfare system in the post-industrial communities has declined, its social and spatial foundations remain (Xie et al., 2009; Wu, 1996). Dongshan community as a typical post-industrial neighbourhood under the Danwei (work-unit) system, it is currently undergoing a transition in its care model.

Within the community, shared spaces are currently underused, including the community building and surrounding outdoor areas, due to the fragmented and outdated problems. At the same time, long-term residents continue to maintain strong social ties, shaped by shared memories and everyday interactions. These relationships form an existing network of informal support.

Taken together, these conditions suggest that care can be repositioned beyond the private home and re-embedded within the community to better support ageing in place (Zhou et al., 2023).



Figure 3. My childhood memory in Dongshan Community, Dalian. Participating in everyday outdoor activities within the neighbourhood.



Figure 4. The author's grandmother (second from left) with neighbours in Dongshan Community, Dalian.



Figure 5. Dongshan Community in Dalian, residential community constructed during the period of rapid industrialisation.

Research Aim & Question

Within this context, Dongshan Community highlights the community as a critical scale for intervention. As a typical post-industrial danwei (work-unit) neighbourhood, it retains strong social networks and shared spatial resources, yet these remain disconnected from formal care systems and are not fully activated to support everyday needs.

The community building and surrounding shared spaces present a key opportunity. While underused and fragmented, they could act as points of connection between residents, services, and daily activities.

This raises the question of how these spaces can be transformed to integrate care into everyday life. Based on this, the research focuses on the spatial transformation of an underutilised community building in Dongshan Community to explore community-based care.

Research Aim

This research explores the spatial transformation of an underutilised community building in a post-industrial ageing neighbourhood. In a context marked by building deterioration, functional mismatch, and fragmented care provision, the study investigates how the building can function as a spatial mediator that supports healthcare and everyday social interaction. The research develops spatial strategies that support ageing in place, strengthen social belonging, and promote mental well-being within the community.

Research Question

How can the renewal of an community building reframe care as an organising spatial principle, allowing diverse community functions to coexist while supporting ageing in place in a post-industrial neighbourhood?

- How can existing social ties within the community be supported to sustain ageing in place?

- How can spatial design better provide a shared framework for addressing fragmented institutions at the community scale?

Positioning of the Thesis

This thesis is positioned within the broader transition of care systems in post-industrial urban contexts, where the responsibility of care is gradually shifting from family-based structures towards community-level support. Rather than understanding this transition as a linear or complete transformation, the research approaches it as an ongoing and uneven process, shaped by the withdrawal of institutional welfare systems, changing demographic conditions, and evolving social relations. In this context, care is not treated as a fixed service or program, but as a relational condition embedded within everyday life.

The theoretical framework of the thesis draws on the concept of “community as care infrastructure”, which emphasises the role of spatial and social environments in supporting wellbeing beyond formal healthcare systems. This perspective is further developed through a dual understanding of care, addressing both physical and psychological dimensions of ageing. On the one hand, care involves accessibility, proximity, and the provision of basic health-related support. On the other hand, it also includes social interaction, emotional stability, and a sense of belonging, which are closely tied to everyday spatial experience.

Within this framework, space is not considered a passive container, but an active mediator that shapes relationships between people, services, and daily practices. The thesis therefore focuses on how spatial transformation, particularly at the scale of existing the community building and their surroundings, can support new forms of care organisation. By working with existing spatial and social conditions, rather than replacing them, the research explores how incremental and context-based interventions can contribute to the reconfiguration of care within ageing communities.

In this sense, the thesis positions design not as a solution to systemic challenges, but as a means of engaging with ongoing transitions, making visible and enabling alternative ways in which care can be spatially organised in everyday life.

Co-production Approach

This research adopts a co-production approach as its overall methodological framework, emphasising the collaborative production of knowledge between the researcher and community residents. Rather than treating residents as passive subjects, the study understands them as active contributors whose everyday experiences, needs, and perspectives play a central role in shaping the research process. In this sense, knowledge is not extracted, but gradually constructed through interaction and dialogue.

Due to the geographical distance between the research context in China and the location of the researcher, much of the fieldwork was conducted remotely. Interviews, surveys, and workshops were organised through digital communication, often supported by local coordination within the community. While this mode of engagement differs from on-site participation, it also reflects the constraints and realities of conducting transnational research.

This condition introduces certain limitations in terms of immediacy and long-term engagement, but it also highlights the importance of adaptable and mediated forms of participation. Therefore the co-production process becomes not only a methodological choice, but also a negotiated practice shaped by distance, technology, and existing social connections within the community. Building on this process, the research culminates in a design proposal as a spatial translation of the findings, which could ideally be further developed and tested with the community through future collaboration.

Delimitation

This study is limited to the spatial design of care infrastructures at the community scale within Chinese post-industrial urban contexts. It adopts a design-based research approach, focusing on architectural and spatial strategies rather than policy-making, economic analysis, healthcare management, or technical system development. While these aspects are recognised as important background conditions, they are not the primary focus of the investigation.

The research mainly aims to develop a coherent architectural proposal at a conceptual and strategic level. The design outcome includes spatial concepts, programme organisation, and key relationships that illustrate how care-oriented functions and everyday social practices can be integrated within the community. However, the project does not extend to implementation stages such as technical detailing, structural design, cost estimation, or post-occupancy evaluation. The proposal should therefore be understood as an exploratory framework rather than a fully executable project.

Furthermore, the study focuses on a specific type of community context characterised by strong social ties and long-term residency. These Chinese post-industrial communities retain relatively stable populations and existing community spaces, although such resources are often fragmented and spatially disconnected. As a result, the research does not address contexts where social relations have significantly weakened or where care infrastructures are absent. Instead, it concentrates on communities with latent social and institutional capacities that remain underutilised due to spatial and organisational limitations.

CONTEXT

This chapter moves from the broader context of industrial urbanisation to the specific conditions of Dongshan Community. It connects historical development, spatial structure, and current challenges such as ageing and fragmented care. At the same time, it identifies the persistence of social ties as a key potential. Together, these elements form the research perspective and provide the foundation for the theoretical framework.

Chinese Work-unit Community

单位 Danwei

China experienced rapid industrialisation and urbanisation following the implementation of the reform and opening-up policy in 1978. According to the World Bank(n.d.), the share of China's urban population increased from below 20% in 1978 to over 50% by the early 2010s, indicating a dramatic acceleration of urbanisation during the reform era. This shift reflected large-scale population movement from rural areas to cities, and it marked a fundamental transformation in where people lived and worked.

As cities expanded and industrial workforces grew, the danwei (work-unit) system emerged as a central institution for supporting urban development and everyday life. It integrated employment, housing provision, welfare, and social services within a single organisational structure (Xie & Wu, 2009). Under this system, industrial development produced not only factories and infrastructure, but also a vast number of residential communities that continue to support everyday life organised around work.

Within this model, housing was developed as part of institutional infrastructure rather than through individual market choices (Huang, 2004; Wu, 1996). Universities and research institutes, as state-affiliated institutions, functioned as institutional anchors, attracting large cohorts of young workers and professionals to specific urban locations (Wu, 1996). To accommodate this population, extensive residential compounds were constructed in close proximity to workplaces and replicated across cities nationwide, forming a dominant urban residential type.

As a result, danwei communities were characterised by standardised layouts, long-term residency, and relatively stable social networks (Huang, 2004). They were designed to support permanence rather than mobility, embedding daily routines, social relations, and life patterns within clearly defined spatial frameworks.



Figure 6. Collective rhythms of Danwei (work-unit) life during China's industrialisation in the late twentieth century.

Dongshan Community

Location

As an example of a post-industrial Chinese city, Dalian provides an important context for this research. Dalian is a coastal city with a strong industrial base and a major port. Its growth accelerated following China's Reform and Opening-Up policies in the late 1970s. Dalian's port has become a major deep-water harbor in northern China. Its development reflects the integration of China's coastal cities into global trade networks following economic reform (Yin, 2012).

Within this context, Dongshan Community is situated as part of the city's industrial-era urban development.

Development

Alongside the expansion of industry and port activities, Dalian also invested in higher education and technical training. Established in 1949, Dalian University of Technology played a key role in training engineers and technical professionals, and maintained a strong focus on engineering disciplines during China's industrial development and economic reform (Dalian University of Technology, 2019). As an important institutional anchor within the city, the university influenced both the spatial organisation of its surroundings and the everyday life of its staff.

Dongshan Community is one of the residential areas developed under the university *danwei* (work-unit) system for staff of Dalian University of Technology. Constructed in multiple phases between 1985 and 2000, the community reflects a period when housing, employment, and welfare were closely integrated. Its spatial structure was designed to support proximity between living and working environments, as well as everyday social interaction among residents.

Today, Dongshan Community remains largely occupied by long-term residents, many of whom are retired university staff. The neighbourhood therefore retains both the physical characteristics of its original development and the social structure formed through decades of collective living. At the same time, it is increasingly shaped by the realities of an ageing population, including changing daily needs, reduced mobility, and growing demand for community-based support.



Figure 7. Location of Dalian within China, indicating the city in which Dongshan Community is situated.



Figure 8. Dalian University of Technology campus, the institution to which Dongshan Community is affiliated.



Figure 9. Everyday activities in Dongshan Community, reflecting the persistence of collective living and social interaction among residents.

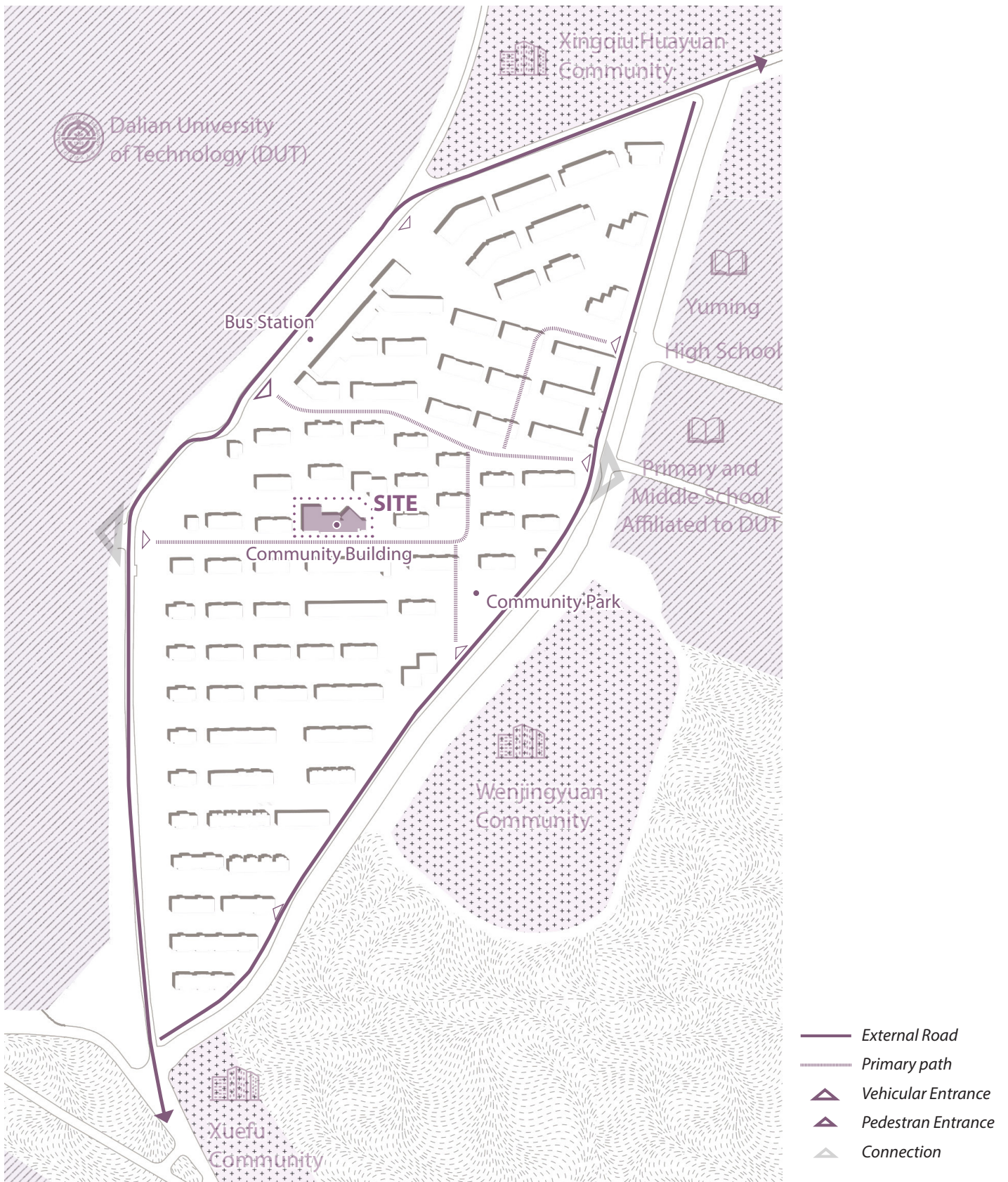


Figure 10. Dongshan Community and its surrounding context

Site

Dongshan Community was constructed in three phases between 1985 and 2000. It has 85 residential buildings in total, with one community building and one community park.

The community building and its surrounding outdoor spaces are selected as the primary site for intervention due to their central role within the neighbourhood.

As one of the few shared facilities in Dongshan Community, this area continues to function as a key support centre for residents' daily needs. Within walking distance, surrounding land uses are primarily educational institutions and residential areas, making the community building an important point of access for everyday services and activities.

Key Elements

Based on the spatial and social characteristics described above, two key elements emerge in Dongshan Community.

On the one hand, the existing care system has become increasingly fragmented, reflected in both institutional arrangements and spatial organisation. On the other hand, strong social ties formed through long-term collective living continue to persist within the community.

These two conditions coexist within the same spatial environment. While fragmentation limits the accessibility and coordination of formal care, the enduring social structure provides a foundation for informal support and everyday interaction. Together, they reveal both the challenges and the latent capacity of the community, forming the basis for further spatial investigation.

Fragmented Care Systems

One of the key insights emerging from the key information interview is that care provision has been maintained through industrial transition. However, it has become increasingly fragmented across outdated institutional structures, informal

arrangements, and community-based services. Former unit continues to provide certain welfare benefits. At the same time, at the spatial level, these facilities still follow earlier functional divisions. Over time, their spatial scale has become mismatched with actual patterns of use. Within a single building, spaces are divided into multiple independent zones. Different actors manage these zones separately. Each zone has its own access control and usage schedule. As a result, spatial connections and coordination across the building are limited.

Care therefore remains present but unevenly accessible. Older residents are often required to navigate multiple uncoordinated services across different locations, institutions, and administrative levels. Many Chinese post-industrial communities face this challenge, which reduces the overall effectiveness of care provision (Zhu et al., 2021).

Enduring Social Ties

Based on the interview, despite institutional fragmentation, this community retains strong everyday social ties because it was developed around the former work-unit system. These ties were sustained through long-term collective living in familiar shared spaces, such as offices, staff canteens, and community buildings. The close spatial integration of housing and workplaces further reinforced these relations. However, after residents retired from the work-unit, they lost access to the convenient public spaces that once supported these social bonds. A gap has since emerged at the spatial level.

Although these ties are not organised as formal care systems, they support everyday informal assistance, mutual recognition, and a sense of belonging. Such forms of support are essential for ageing in place. However, without appropriate spatial and organisational support, this social potential remains underutilised (Yarker, Doran, & Buffel, 2025). Together, these conditions indicate a form of care capacity that exists in practice but lacks a spatial and organisational framework to be effectively activated.

THEORY

Theoretical Framework

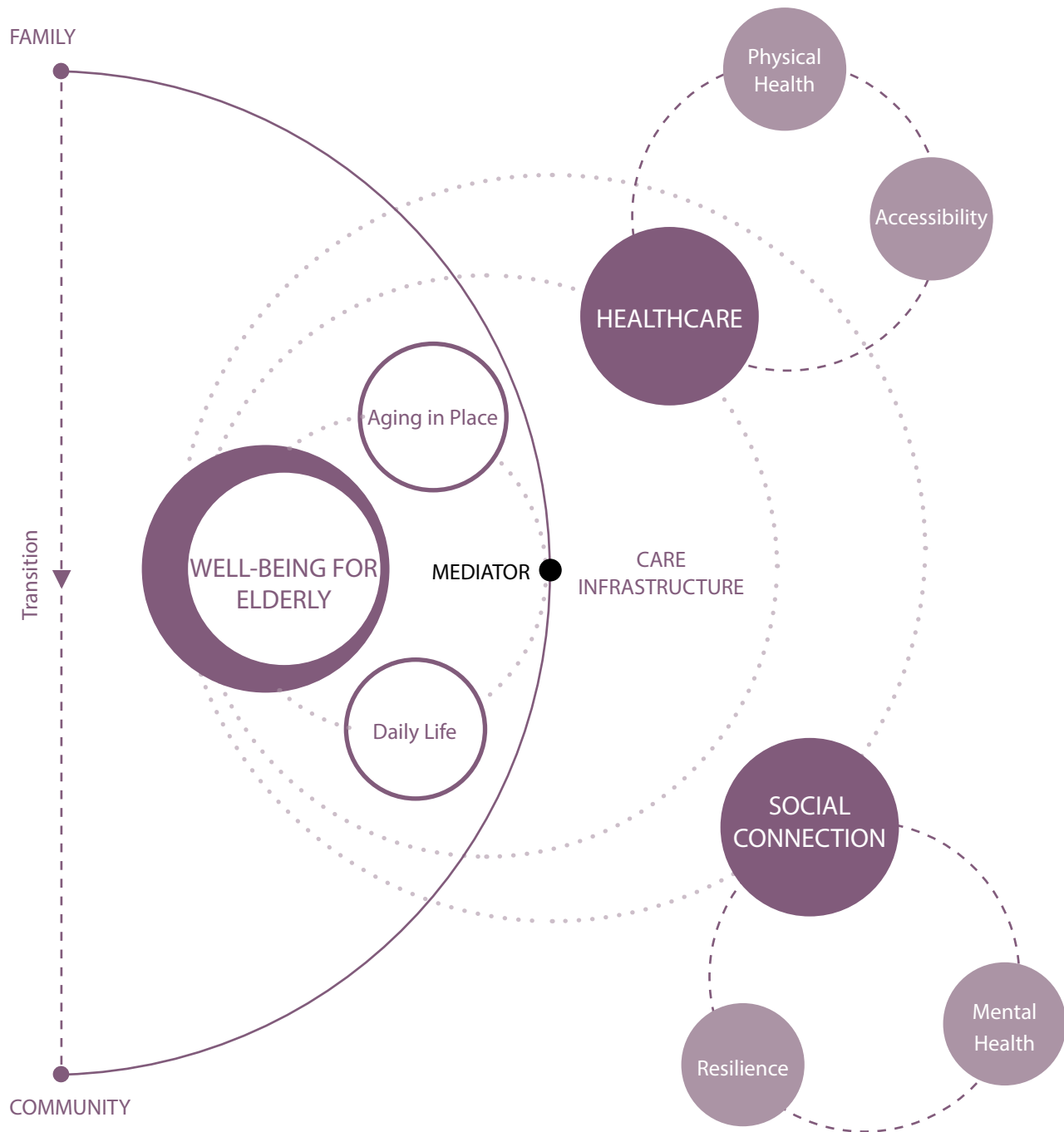


Figure 11. Theoretical framework diagram illustrating the ongoing transition of care, positioning the community as a mediator between healthcare and social connection to support ageing in place.

This research is grounded in theories of health, ageing, and community-based care. Health in later life is increasingly understood as being shaped by both healthcare support and everyday social conditions within the built environment (E et al., 2024). Rather than focusing solely on medical care, this perspective recognises that physical health, social connection, and the quality of everyday environments are closely interconnected. These theoretical perspectives provide the foundation for understanding well-being in later life and guide the subsequent analysis and design development.

This research is also based on the ongoing transition of care systems. As family-based care faces increasing challenges due to demographic change and population ageing, attention has gradually shifted toward the community as an important scale for supporting everyday care. Community-based approaches seek to complement family care by connecting healthcare services, social support, and local resources within daily life.

The study takes the community building as a key mediator and examines how it can support care-oriented functions and social activities in everyday settings.

As older adults constitute a significant proportion of the community, the research places particular emphasis on ageing in place as one of its main entry points. Ageing in place is widely recognised as a critical factor for maintaining quality of life in later life, as it allows older adults to remain in familiar environments, sustain social connections, and retain a sense of autonomy and identity (Zhou et al., 2023). Existing studies emphasise that ageing in place depends not only on access to formal healthcare services, but also on everyday social support and the quality of the built environment that structures daily

life (E et al., 2024). This understanding frames health in later life as a dual dimension condition, in which healthcare support and social connection operate together and are mutually reinforcing. From this research perspective, spatial and community-based conditions become central to supporting both dimensions.

The healthcare support dimension focuses on physical health and access to care in later life. Research on ageing in place highlights that accessible healthcare services are essential for maintaining physical health and managing age-related conditions over time (Zhou et al., 2023). However, access is not limited to the availability of services, but also depends on spatial proximity and physical accessibility. Studies further indicate that the built environment at the community scale plays a critical role in determining how healthcare is accessed in practice, influencing how care is integrated into elderlies' everyday life (E et al., 2024).

The social connection dimension addresses mental well-being and everyday social interaction in later life. In the context of this study, the community is characterised by strong existing social ties. However, research indicates that the sustainability of social ties in ageing communities depends on accessible and familiar community environments that support everyday interaction (E et al., 2024).

The study is guided by this theoretical framework in its subsequent analysis and spatial exploration. It shapes how issues of health, ageing in place, and everyday well-being are understood at the community scale. The following section further explores community-based care as a key theoretical perspective for understanding care within everyday community life.

Community Based Care

Community-based care provides a framework for understanding how care is organised and experienced within everyday life. In post-industrial contexts, where traditional systems are becoming fragmented, care is no longer delivered through a single structure but distributed across multiple actors, spaces, and social relationships.

Within this framework, care is shaped by both social and spatial conditions. It involves not only institutional arrangements, but also everyday interactions, local networks, and the built environment. Based on this understanding, the following sections examine community-based care through three dimensions: ageing in place as the core principle, the actor level of care provision, and the spatial role of the community as a mediator.

Community-based care is grounded in the concept of ageing in place, which emphasises the ability of older adults to remain in familiar environments while maintaining autonomy, social connections, and a sense of identity. Rather than relying solely on institutional care, this approach highlights the importance of everyday living conditions and local support systems. Health in later life is shaped not only by access to healthcare services, but also by social interaction and the quality of the built environment (E et al., 2024).

At the actor level, community-based care involves a range of participants, including families, public services, community organisations, market actors, and informal support networks. These actors operate across different levels and contribute to care provision in diverse ways. In the Chinese context, care often takes the form of a hybrid system, where institutional structures coexist with community-based coordination and informal practices (Zhu, Jin, & Zhu, 2021).

However, these actors are often not well connected. Responsibilities are distributed across different systems, leading to fragmentation and gaps in support. This highlights the need for stronger coordination and integration at the community level.

Beyond actors and institutional arrangements, community-based care is also shaped by spatial conditions. Community buildings and public spaces provide the physical setting where care practices take place. They enable interaction, support everyday activities, and facilitate coordination between different actors.

From this perspective, the community functions as a spatial mediator between formal care systems and everyday life. It connects healthcare, social interaction, and daily routines within a shared environment. This spatial role is critical in bridging fragmented systems and activating existing social networks, forming the basis for design intervention in this research.

Together, these dimensions show that care is embedded in everyday life and shaped by both social relations and spatial conditions. Supporting ageing in place therefore requires not only services, but also familiar routines and community-based practices.

In Dongshan Community, such practices already exist in daily life, especially among older residents. Based on this, the following section introduces Chinese medicine as a way to support health and well-being through everyday spaces and social interaction.

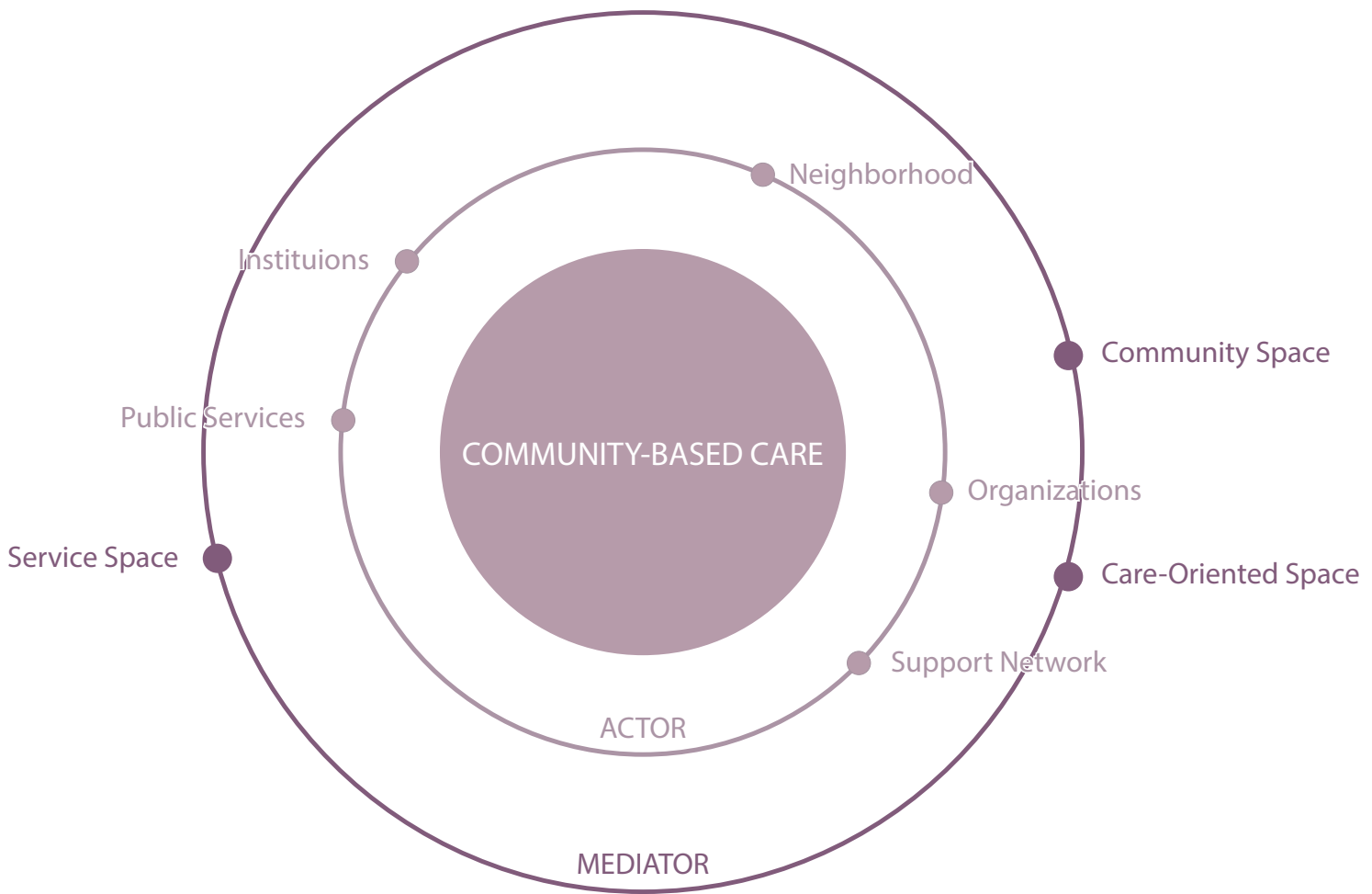


Figure 12. Community-based care framework diagram illustrating key elements at the stakeholder level and the spatial level.

Chinese Medicine

Traditional Chinese Medicine (TCM) offers a holistic understanding of health, where physical condition, emotional state, and environmental factors are closely interconnected (Kaptchuk, 2000). Rather than focusing on treatment alone, TCM emphasises balance, prevention, and the integration of care into everyday life.

This perspective aligns with the concept of community-based care, where well-being is supported not only through medical services, but also through daily routines, social interaction, and spatial experience. In this project, TCM is interpreted as a spatial and programmatic framework that informs how care can be embedded into the built environment.

In Traditional Chinese Medicine, herbs are not only used for medical treatment. They are also integrated into everyday life through tea, soup, food, and other forms of daily consumption. This reflects a preventive understanding of health, where the body is supported gradually through repeated and familiar routines (Kaptchuk, 2000; Beinfield & Korngold, 1991). Herbal use therefore represents a low-threshold form of care. It does not require people to enter a hospital or clinic. Instead, health maintenance can happen through ordinary daily actions, such as drinking herbal tea, sharing food, or choosing ingredients according to seasonal and physical conditions. This perspective is especially relevant for community-based care. It suggests that care can be embedded in informal and social settings, such as cafés, dining areas, or shared kitchens. These spaces can support health not only through what people consume, but also through the social interactions that happen around eating and drinking.

Beyond herbal use, traditional Chinese Medicine also emphasises the relationship between bodily movement, breathing, and internal balance. Practices such as Taiji and Qigong combine slow movements, controlled breathing, and focused attention (Wayne & Kaptchuk, 2008). They are not based on intensive physical exercise, but on gentle and continuous adjustment of the body. This makes body practice particularly suitable for older residents. The movements can be adapted to different physical conditions, and they can be practiced individually or collectively. In this sense, care is not only something received from professionals. It is also something that people actively perform through their own bodies. Body practice also has a social dimension. Activities such as Taiji often take place in shared community spaces, where movement becomes part of collective daily life. This links physical wellbeing with social interaction, routine, and a sense of belonging.

Mental regulation represents a further dimension of Traditional Chinese Medicine. Mental states such as stress, anxiety, loneliness, or restlessness are understood as factors that can affect the body's overall condition. Therefore, care is not limited to physical support. It also involves the regulation of emotion, attention, and inner stability (Sternberg, 2009). Practices such as meditation or simply resting in a calm environment can support this aspect of wellbeing. For spatial design, this suggests the importance of environments that support both activity and withdrawal. A care-oriented community space should not only provide places for social interaction, but also quieter areas for rest, reflection, and psychological comfort.

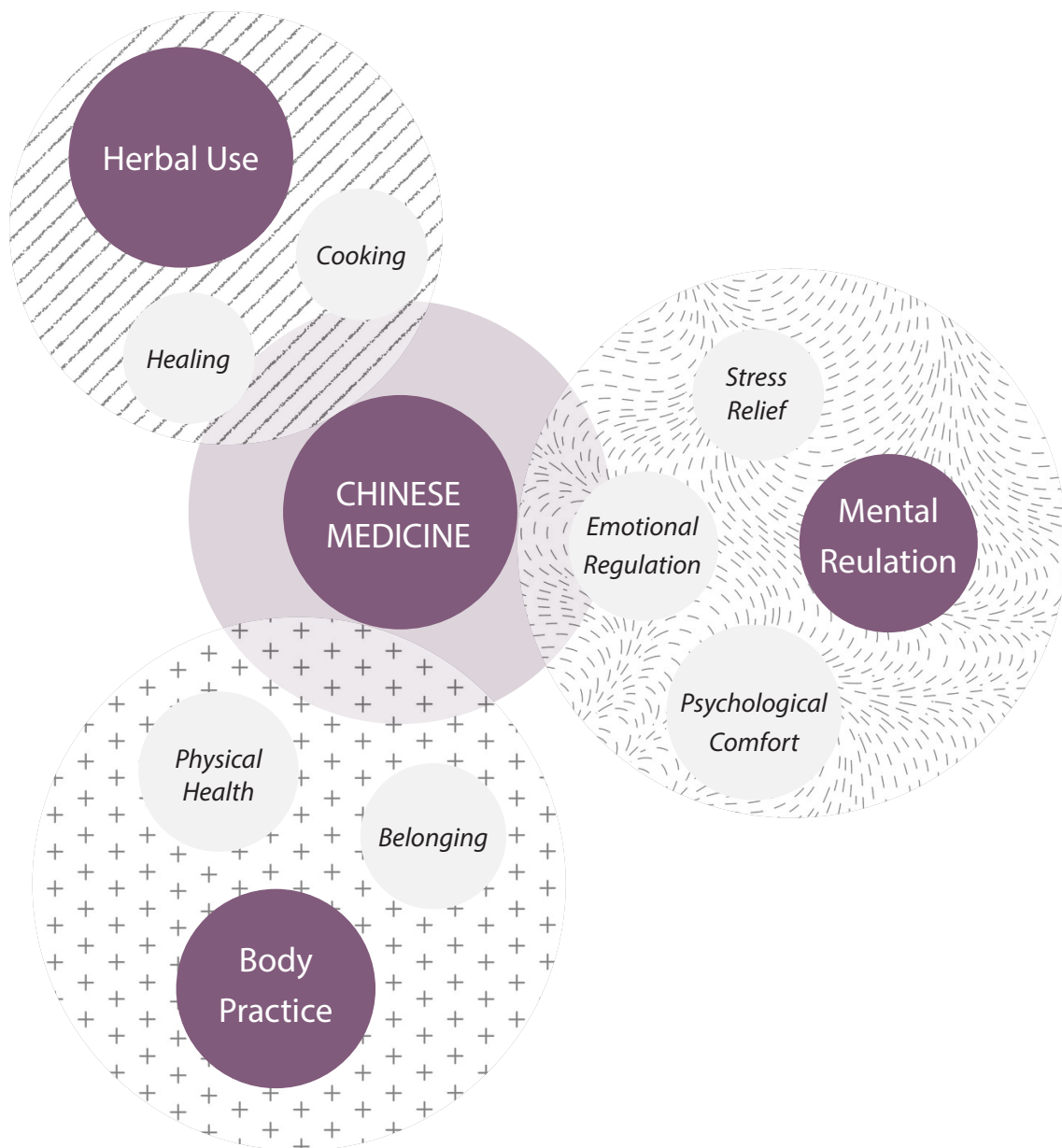


Figure 13. Conceptual framework illustrating key dimensions of Traditional Chinese Medicine, including herbal use, body practice, and mental regulation.

Co-production

The project is organised through the relationship between spatial analysis, participatory research, and spatial intervention. Rather than forming a linear sequence, these parts remain interconnected and continuously inform each other through engagement with the community.

Spatial analysis establishes an initial understanding of the site across neighbourhood and building scales. This is extended through participatory research, where a combination of interviews, surveys, and focused workshops enables ongoing communication with residents. Within this context, everyday practices, memories, and social connections are brought into the study, revealing aspects that are not visible in spatial observation alone.

These insights directly influence the development of spatial intervention. At the same time, emerging design proposals offer new ways of reading the site, allowing earlier understandings to be reconsidered.

Co-production operates within this structure as a connecting condition. It links different forms of knowledge and allows movement between analysis, engagement, and design. Through this, care and ageing in place are translated into spatial strategies grounded in everyday life.



Figure 14. Research process illustrating the main methodological stages of the study.

Spatial Analysis

The project begins with a contextual analysis of the selected post-industrial danwei community. The analysis is conducted at both the neighbourhood scale and the building scale in order to understand the spatial and social conditions shaping everyday life and care practices. It focuses on spatial structure, movement systems, public space networks, demographic change, and the transformation of care systems, examining how historically formed spatial organisations continue to influence ageing communities today.

At the neighbourhood scale, the analysis examines the relationship between housing, public facilities, open spaces, and everyday movement patterns within the community. The existing spatial structure reflects the community's origins within the work-unit system, where housing and public service facilities were organised to support collective living and institutional welfare (Wu, 1996). The study also investigates public space networks, including community parks, activity spaces, and residents' daily movement routes, in order to understand their role in everyday social interaction and community life.

At the building scale, the study focuses on the community building and its immediate surroundings, including accessibility, circulation systems, programme organisation, and spatial connectivity. Existing physical conditions, such as building deterioration, informal extensions, and spatial fragmentation, are also documented as part of the spatial assessment in order to understand how these conditions affect everyday use and community interaction.

At the same time, the analysis is situated within the broader context of demographic ageing and the transformation of care systems. As younger generations gradually move out, the demand for everyday care and community support continues to increase, while care provision increasingly relies on informal networks and individual initiatives (Zhu et al., 2021).

Participatory Research

This research adopts a participatory inquiry approach to understand everyday life in the community. Building on the concept of co-production discussed in the theoretical framework, residents are involved as important sources of knowledge about local conditions and daily practices. (Buffel, 2018; James et al., 2023).

The inquiry focuses on capturing experiences and needs that cannot be fully understood through spatial analysis alone. It aims to reveal how residents use spaces, maintain social connections, and experience ageing within the neighbourhood.

To support this process, three methods were applied: contact person engagement, a resident survey, and a remote workshop.

Key Information Interview

At the initial stage of the research, a key interview was conducted with a long-term resident who is closely familiar with the community's history, daily operations, and social relations. The interview provided an initial understanding of the community beyond spatial observation, revealing how spaces are actually used and experienced in everyday life. It also brought attention to informal organisational patterns and existing forms of mutual support that are not visible in physical analysis alone.

The insights gained from this interview helped to clarify the relevance of the research focus and shaped the direction of subsequent inquiry. It informed the design of the survey and the organisation of later workshops, while also supporting further engagement with residents. In this sense, the interview not only contributed specific knowledge, but also established a connection between spatial conditions and lived experience that continued to guide the development of the project.

Community Survey

The survey extends the understanding of the community beyond what can be identified through drawings and spatial analysis. It focuses on residents' everyday life patterns and lived experiences, capturing aspects that are not directly visible in physical plans (Creswell & Creswell, 2018).

The questionnaire brings together topics including basic information, daily needs in later life, social networks, and memory. These themes reflect initial insights from the key interview, while allowing them to be explored across a wider group of residents. In this way, individual observations are situated within a broader community context.

The survey provides a structured means of understanding residents' needs, routines, and social relationships. It complements the interview findings and helps identify patterns across the community that can inform subsequent workshops and spatial development.

As part of the co-production process, the survey brings multiple resident perspectives into the study and strengthens the connection between lived experience and spatial understanding (Buffel, 2018).

Focus Workshop

The focus workshops create a space for collective discussion within the community, bringing residents together to reflect on everyday life, shared needs, and possible directions for change. Conducted in a setting familiar to participants, it supports open exchange and allows individual experiences to be discussed in relation to others.

Through conversation and interaction, the workshop enables residents to articulate perspectives that may not emerge through interviews or surveys alone. It provides an opportunity to explore shared concerns, identify different needs and expectations, and encourage dialogue among participants.

The workshop also serves as a means of revisiting observations from the spatial analysis and participatory research process. By discussing these observations collectively, participants can provide additional context and contribute alternative interpretations of community conditions.

As part of the co-production process, the workshop links individual experiences with collective reflection and supports the translation of everyday life into spatial considerations. It therefore provides an important foundation for the development of the design proposal.

Spatial Proposal

The spatial intervention translates the design approach into a series of spatial explorations. It responds to gaps identified in the contextual analysis and insights developed through participatory inquiry, while remaining grounded in the idea of community-based care. It operates through a continuous movement between design strategy and design proposal, where ideas are tested, adjusted in relation to spatial conditions and everyday practices.

Design Strategy

At the level of design strategy, the project establishes key directions that guide the transformation. These include the reactivation of underused communal spaces, the improvement of accessibility and spatial continuity, and the integration of multiple care-oriented functions into everyday environments. Existing buildings and open spaces are adapted rather than replaced, allowing the spatial memory of the community to be preserved while introducing new forms of use.

Design Proposal

At the design stage, the identified strategies are translated into spatial proposals through a series of iterative explorations. Different configurations of programme distribution, circulation, and spatial relationships are examined in response to issues identified through the contextual analysis and participatory inquiry. Through this process, design principles related to social infrastructure, wellbeing, and community-based care are explored and adapted to the local context (Yarker et al., 2025; E et al., 2024). The resulting proposals are continuously refined in relation to spatial conditions and residents' needs.

Long-term Evaluation

Evaluation is considered as an ongoing and embedded process rather than a final stage. It reflects on how proposed interventions respond to identified needs, how they support everyday practices, and how they may be adapted over time. While not fully realised within the scope of this project, this evaluative layer frames the design as open and responsive, allowing future adjustments through continued community engagement.

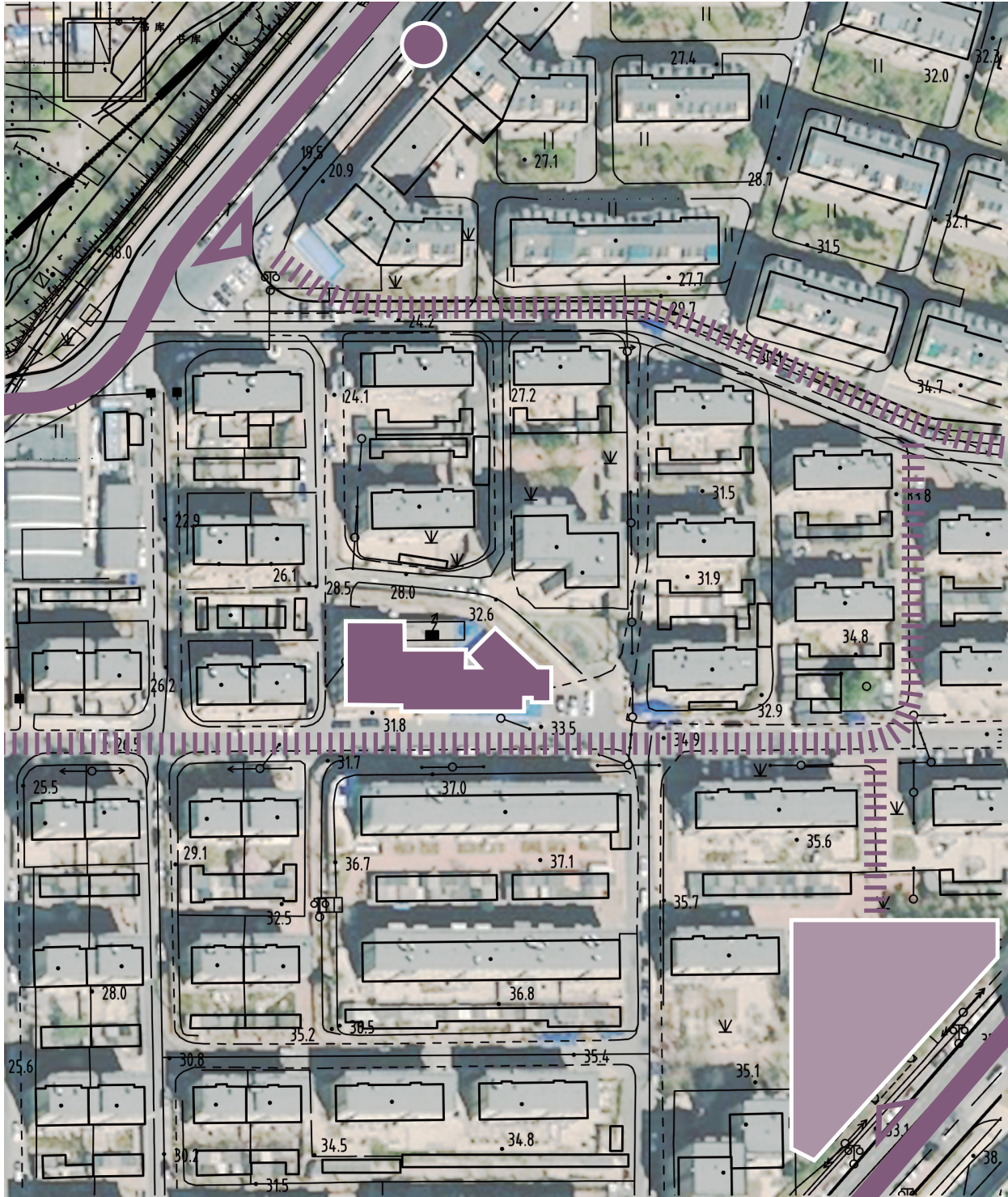
This process can be understood as a form of testing. Design proposals do not simply apply predefined strategies, but explore how they operate within specific spatial conditions. Feedback between different stages allows the intervention to remain adaptable, responding to evolving needs and community dynamics.

Following this logic, the project has adopted an incremental approach. Interventions are implemented step by step, allowing gradual transformation rather than large-scale replacement. This approach supports ongoing participation and enables the environment to adjust over time, reinforcing the role of space as an active mediator within community-based care (Sumner et al., 2021).

RESULT & ANALYSIS

Site Analysis

Neighbourhood Scale



- Bus Station
- ▲ Entrance
- External Road
- ▨ Primary path
- Community Building
- ▨ Community Park
- △ Connection

Figure 15. Site analysis on a neighbourhood scale with Dongshan Community and its surrounding context.

At the neighbourhood scale, the Dongshan community is situated within a self-contained residential environment, where everyday life is shaped by the proximity of housing, local infrastructure, and shared open spaces. The community building sits at the centre of this condition, embedded within surrounding residential blocks and connected to key movement routes and activity nodes.

Connections and Boundaries

The community is enclosed by two main arterial roads, which define its outer boundary and separate it from the broader urban fabric. Within this structure, access is relatively concentrated, with a bus station located near the main entrance on the northern side. While this provides a clear point of connection to the city, it also reinforces a certain degree of spatial separation and inward orientation of the community.

Movement Network

Two main internal roads run along the north and south edges of the site, structuring daily movement within the community. The northern side connects directly to the primary entrance of the neighbourhood, where a bus station is located nearby. This establishes a key interface between the community and the broader urban context, supporting both accessibility and potential inflow of visitors.

Public Space System

To the southeast of the site lies a community park, which functions as an important space for daily activities and social interaction, particularly for older residents. This proximity places the community building within a network of informal social spaces, where outdoor gathering, exercise, and casual encounters frequently occur.

Functional Context

The surrounding neighbourhood is primarily residential, with supporting functions distributed within walking distance. Daily routines are largely localised, and many activities take place within the community itself. This reinforces the role of the community building as a potential hub that can connect different aspects of everyday life.

Conclusion

Overall, the site is embedded within a highly localised and socially cohesive neighbourhood structure. Its central position, accessibility to the main entrance, and proximity to public space provide strong spatial potential. However, the enclosed layout and limited visibility also constrain its current role. This dual condition highlights the opportunity to reposition the community building as a more open and connected node within the neighbourhood, linking movement, social interaction, and everyday support.

Site Analysis

Building Scale

Community Building and Surroundings

At the building scale, the community building is embedded within a dense residential context, shaped by surrounding housing, internal roads, and adjacent open spaces.

The building is surrounded by residential blocks, forming an inward-oriented condition. This supports daily accessibility but limits visibility and public presence. A main internal road runs along the southern edge, providing vehicular access. On the eastern side, a wide pedestrian path allows daily movement and can also accommodate emergency vehicles. Open space is available around the building. The eastern side features a larger green area, offering a more open and natural setting.

Overall, the building is well integrated and accessible but lacks visibility and spatial openness. This suggests potential to activate surrounding open space and strengthen its role as a more outward-oriented community node.

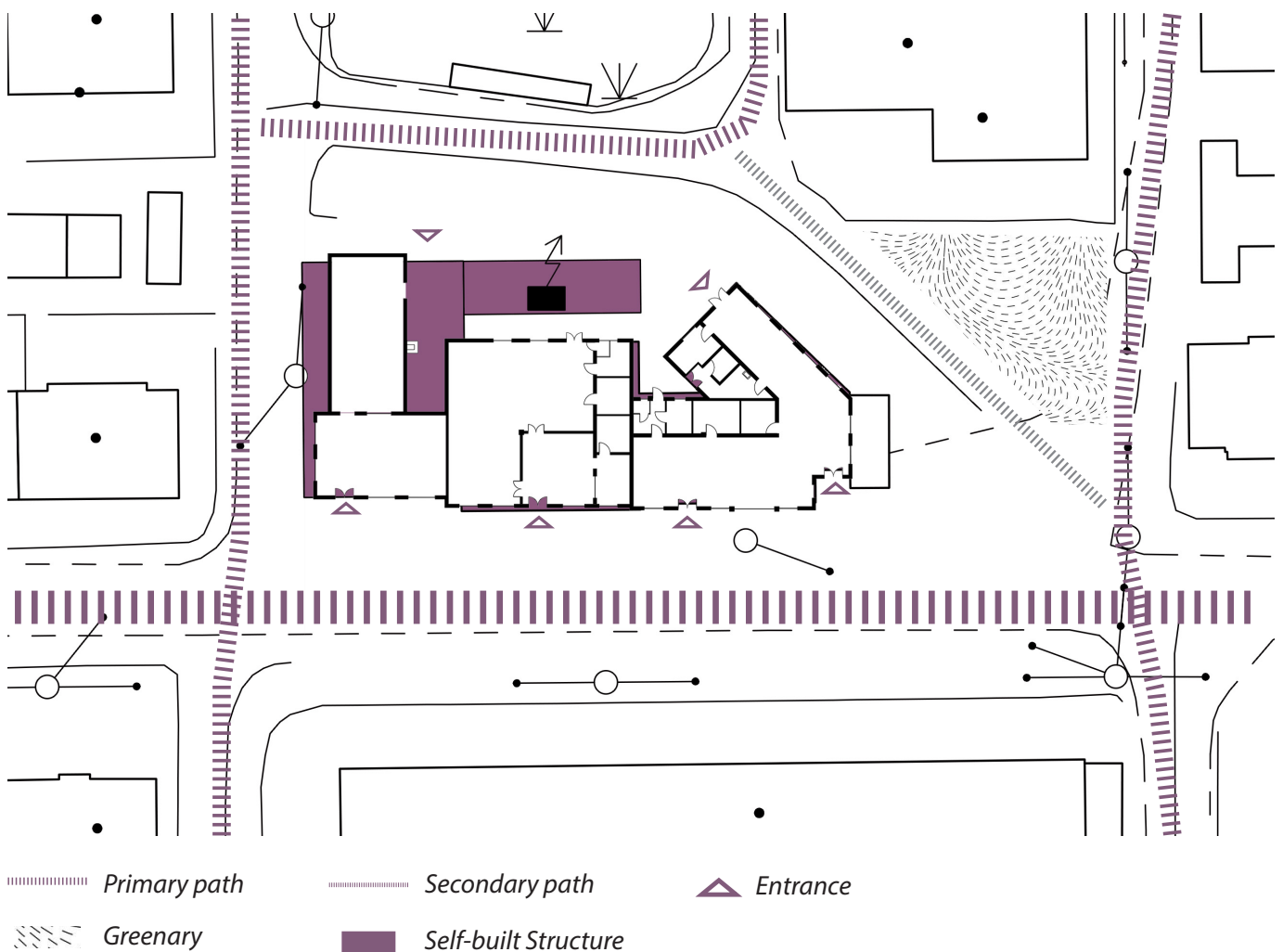


Figure 16. Community building and its surrounding context.

Programmes and Fragmentation



Figure 17. The diagram shows Dongshan community building with four main functions.

The community building of the Dongshan community has long accommodated four main functions: a community activity centre, an after-school care space, a breakfast shop, and a small grocery store. These functions serve different user groups and daily routines. The activity centre provides space for social gatherings, particularly for older residents. The after-school care supports children and families during weekdays. The breakfast shop and grocery store meet basic daily needs and generate regular foot traffic.

However, the functional layout and spatial scale no longer align with current community needs. Each function operates independently with a separate entrance, and there is little internal connection between them. As a result, movement between spaces is fragmented, and opportunities for interaction across different user groups remain limited. The building functions more as a collection of isolated units than as an integrated community space.

Existing Issues



Figure 18. The photos show the existing issues of the community building.

Physical Deterioration

Ageing building conditions and peeling surfaces signal sustained neglect and declining environmental quality.

Poor Connectivity

Separated functions made the community building independently, with isolated entrances and circulation limiting interaction.

Informal Extensions

Informal self-built extensions disrupt spatial order and introduce potential safety risks.

Community Park Analysis

The community park functions as one of the most active public spaces within the neighbourhood. Over time, it has developed into a place with an established pattern of use, where residents regularly gather for outdoor activities.

People come here for daily exercise, social interaction, and informal group events. Activities such as dancing, Taiji, and small group gatherings are commonly observed, reflecting a strong culture of collective participation.

The park also contains elements shaped by residents themselves. Cultural walls are used to display posters, announcements, and self-organized information, showing a bottom-up form of communication and engagement.

In addition, traces of everyday cultivation practices can be found, including small-scale planting and care for greenery. These elements reveal both the vitality of the community and the specific needs and interests of its ageing population.

At certain times, the park also takes on a temporary care function. It becomes a place for basic health services, such as public health education, simple medical consultations, and routine health checks. This flexible use highlights the park's role beyond recreation. It acts as a shared platform that supports both social interaction and everyday care, making it a key space in sustaining community life.

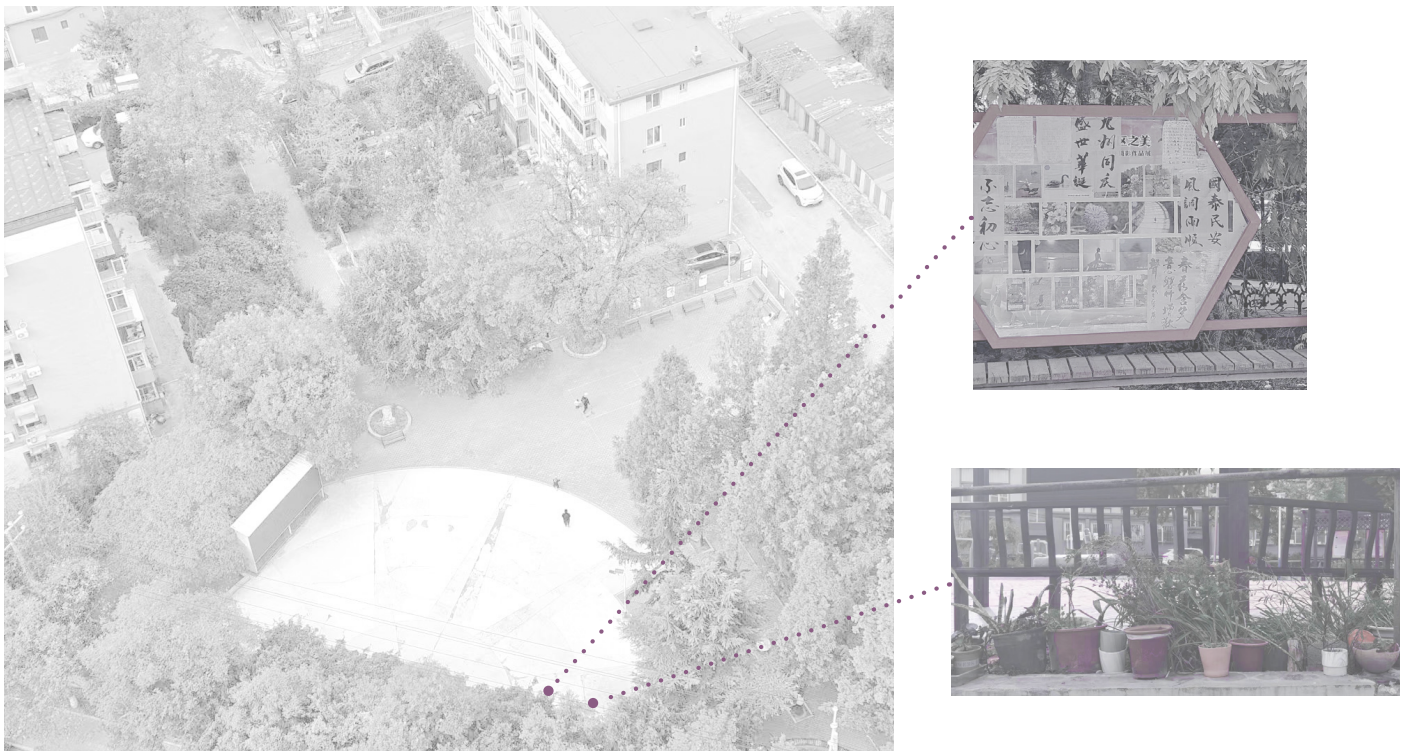


Figure 19. The photos show the existing community park and the community culture within the park.

Residential Building

The residential buildings in Dongshan Community were constructed between 1985 and 2000 as part of the university-affiliated work-unit housing system. Most buildings are five to six storeys high and follow a staircase-type layout, with two households per floor and no elevator access. Originally designed to accommodate young university staff and their families, the housing stock reflects the spatial logic of the danwei system, where housing, work, and welfare services were closely connected.

Today, these buildings remain the primary living environment for a large number of long-term residents. Many households have lived in the community for more than twenty years, contributing to strong neighbourhood ties and a stable social network. However, the ageing of the resident population has revealed limitations within the

existing residential environment. The absence of elevators creates daily challenges for older residents, particularly those with reduced mobility. At the same time, building deterioration, limited accessibility, and ageing infrastructure reduce the suitability of the housing stock for later-life living.

Despite these challenges, the residential buildings continue to play an important role in supporting ageing in place. Their proximity to neighbours, familiar surroundings, and established social relationships provide forms of everyday support that extend beyond the physical dwelling itself. Understanding both the strengths and limitations of the residential environment is therefore essential for identifying how community-scale interventions can complement existing housing conditions and strengthen local care infrastructure.



Figure 20. The photos show the typical residential building in Dongshan Community.

REMOTE FIELDWORK

Key Information Interview

At the beginning of the fieldwork phase, my understanding of the community was mainly based on external observations and preliminary materials. I had not yet gained insight into residents' everyday lives, neighbourly relations, or the actual use of public spaces. For better understand the actual needs of residents in Dongshan community, the key information interview became the start point of the fieldwork process.

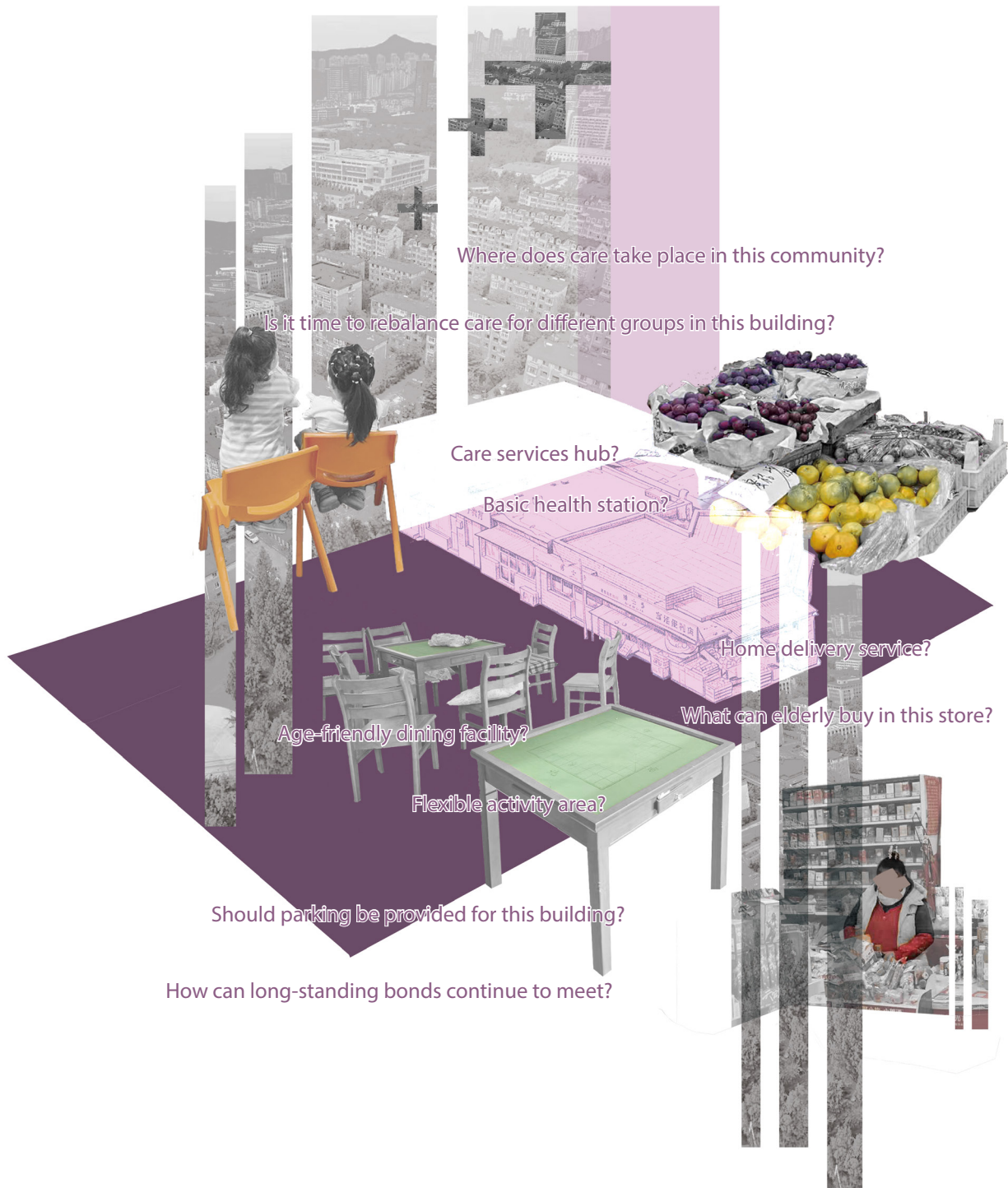


Figure 21. Diagram illustrating the key questions identified through the key information interview with the contact person.

As access to the site in person was not possible, the research adopted a remote fieldwork approach. This constraint shaped both the methods and the process of engagement. To support the research, a local contact person was identified within the community. She was a long-term resident who had lived in the neighbourhood for more than twenty years and had previously worked at Dalian University of Technology. Through her active involvement in community activities and resident organisations, she possessed extensive knowledge of everyday community life and social relations. More importantly, she provided a crucial point of connection between the research and the community, making it possible to access first-hand information, establish communication with residents, and organise subsequent participatory activities.

In this context, an in-depth conversation with the contact person was conducted as the starting point of the project. Speaking from the perspective of an internal community member, she shared not only her own experiences but also broader observations of community life, social networks, and everyday practices. The conversation helped reveal key issues and opportunities within the community while providing an initial foundation for the subsequent stages of the research.



Figure 22. The interviewee of the key information interview, who also acted as the contact person.

Findings

First, residents' living histories and identity backgrounds still reflected strong continuities from the former work-unit system. Factors such as reasons for moving in, length of residence, and whether the dwelling remained their primary home all played an important role in shaping their sense of belonging and level of participation within the community. These elements highlighted the long-term stability of the resident structure and its influence on everyday social dynamics.

Second, everyday support in later life emerged as one of the most pressing concerns. These needs extended beyond medical care and health monitoring to include emergency response, home-based services, trusted caregivers, and small forms of daily assistance. At the same time, strong interpersonal connections were still present among residents. These relationships were largely rooted in shared work experiences and long-term collective life histories rather than recent organised activities. This indicated the existence of a relatively stable and familiar social network within the community.

However, the interview also revealed that these existing relationships were not well supported by current public spaces, particularly indoor environments. The available spaces did not provide suitable conditions for sustained interaction or collective use. As the resident structure gradually changes over time, these socially embedded connections are beginning to weaken, highlighting a growing gap between social needs and spatial provision.

After the key information interview, several key insights were identified that informed the design of the subsequent survey.

Research Perspective

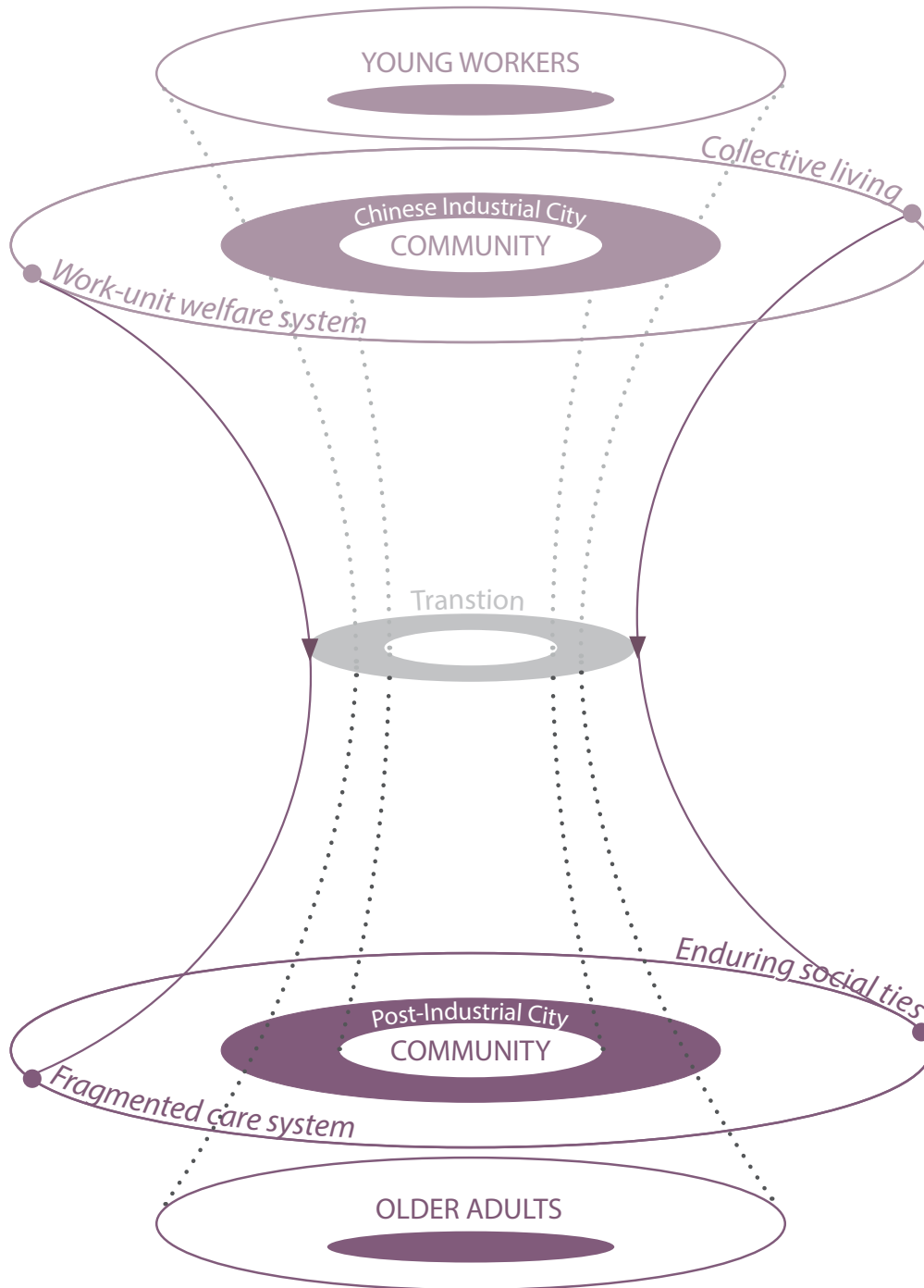


Figure 23. Research perspective on the transformation of care systems and community life in post-industrial Chinese cities.

This research perspective emerged after the key informant interview. And the diagram illustrates the transformation of community structure in the context of China's industrial and post-industrial transition.

In the industrial period, communities were organised around the work-unit system, where young workers lived within a highly integrated spatial and social structure. Welfare provision, daily life, and social interaction were closely connected, forming a stable model of collective living. This model also shaped the spatial organisation of neighbourhoods, where housing, services, and shared facilities were closely linked.

As the system transitions, both the demographic structure and the organisation of care have shifted. The ageing population has become the dominant group within the community, while the original welfare system has gradually fragmented. In Dongshan Community, this shift is reflected in the everyday experience of residents, where multiple services are distributed across different locations and lack coordination. Although formal structures have weakened, social ties formed through long-term collective living continue to persist.

This creates a dual condition in the contemporary community: fragmented care systems on the one hand, and enduring social relationships on the other. In Dongshan, these two conditions are clearly visible in both spatial and social patterns. Formal care remains present but unevenly accessible, while informal support continues through neighbourly interaction and shared routines.

The diagram frames this tension as the key research perspective, highlighting both the challenges and the latent capacity within the community. It also points towards the need to reconsider how spatial design can respond to this condition. In this research, the community building and its surrounding spaces are explored as a potential mediator, aiming to reconnect fragmented systems and activate existing social resources to support community-based care.

In conclusion, Dongshan Community reflects a condition shaped by both its historical development and its current transformation. It was formed within an integrated system of collective living, where work, welfare, and everyday life were closely connected. Today, this structure is gradually changing. The community is increasingly affected by ageing, spatial decline, and fragmented care.

At the same time, important elements of the original system still remain. Strong social ties continue to exist among long-term residents. Shared spaces such as the community building and the park still support everyday activities. These conditions provide a foundation for informal care and daily interaction within the neighbourhood.

This situation reveals both limitations and possibilities. Existing care systems are not well coordinated. Spatial arrangements no longer match current needs. However, the social structure of the community still holds the capacity to support collective life.

This highlights the need to rethink how care can be organised at the community level. It also shows the role of space in connecting people, services, and everyday practices.

Care System SWOT Analysis

Strong social ties

Many residents are sustained neighbours and former colleagues from the same work unit, sharing decades of acquaintance, trust, and a strong sense of belonging.

Central location

Its central location makes it highly accessible to everyday community life.

S

Low utilisation

The building is underused, as its existing functions no longer align with residents' current everyday needs.

No provision for elderly care

Without healthcare-oriented functions, the building fails to respond to the everyday care needs of an ageing population.

W

O

Care activity-space gap

Healthcare-related community activities exist at scale, yet appropriate and convenient spaces remain insufficient.

Resident-led groups

Existing resident groups could, with appropriate space, enhance cohesion and support older adults' social connections and mental well-being.

T

Institutional disconnect

There are two institutions within the neighbourhood operate in isolation: one hosts activities without adequate space, while the other provides space without active programmes.

Figure 24. Care system SWOT analysis of the community.

Based on the key findings from the key information interview, a SWOT analysis of the Dongshan community care system was conducted. It examined strengths, potentials, challenges, and limitations within the current spatial and social conditions, providing a clearer understanding of existing support structures and remaining gaps.

The community benefits from strong and long-standing social ties among residents, largely formed through shared work-unit backgrounds and long-term cohabitation. This creates a stable and familiar social network that supports everyday interaction and a strong sense of belonging. In addition, the central location of the community building enhances its accessibility, making it a potential hub for daily activities and collective use.

Despite these advantages, the current spatial and functional conditions present clear limitations. The community building is underutilised, with existing programmes failing to respond to residents' evolving needs. There is also a lack of elderly-oriented services, and care-related activities are not adequately supported by appropriate spaces. This results in a gap between everyday needs and spatial provision.

Existing resident-led groups and care-related activities provide a strong foundation for future development. With appropriate spatial support, these initiatives could be expanded and better integrated into daily life. The presence of active social networks and accessible location offers the potential to strengthen community-based care and promote more inclusive and continuous interaction among residents.

However, several risks may undermine these potentials. The fragmentation of institutional support systems and the disconnection between care practices and spatial conditions limit the effectiveness of existing resources. If these issues remain unaddressed, the ageing population may face increasing pressure, while long-standing social connections gradually weaken due to insufficient spatial support.

Combining insights from the key information interview and the SWOT analysis, the following section outlines the key ageing-related challenges within the community.

Social and psychological challenges

Although residents in the community share strong emotional bonds, these relationships become more vulnerable in later life. This understanding is informed by insights from the initial interview, which confirmed the presence of strong and long-standing social connections within the community. But the ageing of the built environment and the lack of flexible public spaces gradually reduce opportunities for everyday encounters and activities. As mobility declines and psychological conditions change, insufficient spatial support limits older residents' participation in community life. This challenge is not whether social ties exist, but whether they can be sustained in old age. Without spaces that support daily interaction, long-standing social bonds may gradually weaken. It affects older residents' mental health and sense of belonging.

Institutional and care-oriented challenges

Another challenge identified through the initial interview is the fragmentation of institutions within the community. Although care-oriented activities already exist at a certain scale, they lack appropriate and convenient spatial support. This creates a disconnect between care practices and the built environment. As a result, such activities tend to be temporary, dispersed, or forced to operate outside the neighbourhood. It weakened the possibility of ageing in place. The mismatch between available spaces, ongoing activities, and older residents' care needs reflects a structural issue rather than a lack of local initiative. Consequently, existing resources and care practices remain underutilised, while older residents face increasing pressure as their reliance on nearby support.

Community Survey

Based on interview and analysis, I gained an initial understanding of the community and organised further research and participatory activities. I translated these observations into a survey aimed at elderly residents. The survey was designed to systematically capture residents' residential backgrounds, everyday support needs, social preferences, and patterns of public space use. (The survey is provided in the appendix.)

The survey aimed to explore aspects of residents' everyday lives that are not directly visible through spatial analysis or drawings. The responses were collected and analysed using proportional statistical summaries.

After the questionnaire was completed, it was distributed in two formats. A printed version was placed in the community building for on-site participation. An online version was also created, and a QR code was provided to allow residents to access and complete the survey easily on their phones.



Figure 25. The Photo shows residents completing the survey in the community building.

Results

In total, 62 valid responses were collected through the survey. The results reveal several key characteristics of the community. The residential structure is highly stable. Many respondents have lived in the community for more than twenty years, and most still regard it as their primary residence.

At the same time, the community shows a clear trend of population ageing. Many respondents are over sixty, with a significant number above seventy. Residents also report changes in their physical condition and express a growing need for health care.

Neighbourhood relationships remain important in everyday life. Residents in Donshan community often maintain contact with long-term neighbours or former colleagues. Encounters frequently occur in informal outdoor spaces. However, the community lacks suitable and supportive places for social interaction.

Overall, the findings point to two key conditions: an ageing population and a shortage of supportive public spaces. These insights provide a clear foundation for the subsequent design exploration.



Figure 26. The Photo shows community survey collected from residents.

Key Outcomes

The full questionnaire is provided in the appendix. Two key questions are presented here, as their results informed the direction of the subsequent design. The results are visualised as percentage distributions for each response option to provide a clear and comparable overview of residents' preferences and needs.

For example, there is a strong demand for a community canteen providing meals suitable for older adults. This reflects the importance of accessible daily support within walking distance. In addition, residents express a clear need for technical assistance in everyday life, indicating that small-scale support plays a crucial role in maintaining independence. These findings suggest that care in later life is not only about medical services, but also about integrating practical and routine support into the community environment.



Figure 27. Survey results showing residents' preferred care and social support services within the community.

Focus Workshop

Workshop 1

Following the survey, the first workshop was organised to further explore the findings and deepen the understanding of residents' everyday experiences. Conducted online, the workshop brought together several long-term residents of Dongshan Community. Building on the key themes identified through the questionnaire, discussions focused on community life, daily activities, neighbourhood relationships, and the needs emerging within an ageing population.

Through open conversation and collective reflection, participants shared their personal experiences and provided additional context to the survey results. Residents discussed not only their individual daily practices but also responded to each other's perspectives, revealing both shared experiences and diverse needs within the community. Topics that could not be fully captured through a structured questionnaire, such as sense of belonging, neighbourly interaction, and expectations for the future development of the community, were explored in greater depth during the discussions.

The workshop complemented the survey by providing qualitative insights into residents' everyday practices and social relationships. It helped contextualise the survey findings, identified existing community resources and challenges, and informed the development of subsequent design strategies.



Figure 28. Screenshot from the first online workshop showing the discussion process.

Workshop 2

Workshop 2 focused on a small group interview with five elderly residents who are actively involved in community activities. The participants were selected based on their frequent use of shared spaces and their engagement in daily social and physical activities. All interviewees are women, reflecting the current situation in the community, where active users of community buildings are predominantly female. The workshop used guided questions to explore their needs, preferences, and expectations regarding public spaces.

The responses highlight the importance of both social ties and health support in everyday life. Participants showed a strong interest in movement-based activities such as dance, Taiji, and group exercise, supporting physical well-being. At the same time, regular interaction helps maintain social connections and mental health. These insights point to the need for spaces that support a dual dimension of care, integrating physical and psychological well-being within everyday community life.

The interviewees, aged between 73 and 90, represent an active group of older residents within the Dongshan community. Despite their age, they maintain diverse and regular daily routines. Many engage in physical activities such as Baduanjin, Taiji, yoga, aerobics, and general fitness exercises, often practised either at home or within the community. Others participate in dancing, walking, and singing, while some are actively involved in organising or volunteering in cultural and community activities.

These patterns indicate that older residents are not only physically active but also socially engaged, with strong motivation to participate in both individual and collective activities. Their everyday practices reflect a desire for continuity, interaction, and self-organisation within the community.

Guided Question

Question 1 If I spend my day at the community building, who will be there with me?

Public / Private - Should some space be divided into smaller zones?
- Can some space be combined together?

Question 2 Do I have to go back home during the day? Do I have to bring something for the activity?

Connectivity, Safety, Accessibility - How should the layout be organized?
- Should some space have separate entrance?
Do they need a locker?
Do some areas need access control?

Question 3 Is there anything I'd like to do outdoors if the weather is nice?

Vibrant, Flexibility - Is it possible to break down the boundary between indoor and outdoor spaces?
- More windows? Skylight? Courtyard?
- Is there a potential to let more people be involved in some event?



Ge Yangzong (90)
Wu Guilan (83)
Xu Weiping (73)
Chen Zhirong (89)
Cao Xiurong (82)

Figure 30. Residents who participated in Workshop 2.

Guided questions were used during the workshop 2 to connect residents' everyday experiences with spatial issues. As most participants were not familiar with architectural terminology, the discussion focused on daily routines, activities, and social interactions rather than abstract spatial concepts. By reflecting on familiar situations, residents were able to express needs and concerns related to accessibility, connectivity, flexibility, and social support. This approach helped translate lived experiences into spatial insights and provided a deeper understanding of everyday life within the community.

Through these conversations, several key insights emerged. Residents expressed the need for flexible spaces that support different activities, alongside clear spatial organisation, convenient access, and supportive facilities. The connection between indoor and outdoor spaces was also identified as important for extending daily activities and encouraging participation.

The second workshop focused on the specific context of the community, helping to identify shared needs that shape everyday life.

Together, these findings informed the development of key spatial strategies and an initial design proposal aimed at creating a more adaptable, accessible, and socially supportive community environment.

Figure 29. Guided questions used in Workshop 2 to encourage resident reflection on spatial needs and design possibilities.

DESIGN DEVELOPMENT

Design Criteria

The design criteria are developed based on the theoretical framework of community-based care, which positions care as a spatial mediator to support ageing in place. The diagram is structured through two interrelated layers: the actor layer and the mediator layer. The actor layer focuses on key participants within everyday community life, while the mediator layer translates care needs into spatial strategies that enable interaction, support, and integration.

Within the context of the Dongshan community, the two layers are adapted to reflect local conditions. The actor layer identifies key participants in everyday community life, including older residents, local groups, and care-related actors, emphasising their roles, relationships, and patterns of interaction. It highlights how existing social networks and daily practices shape the foundation of community-based care.

Building on this, the mediator layer translates these needs and relationships into spatial strategies. Approaches such as activating the building, breaking spatial boundaries, integrating outdoor and health-related environments, and strengthening social connections aim to support interaction, improve accessibility, and connect fragmented functions. Together, these layers respond directly to the existing spatial and social structure of the neighbourhood, linking social dynamics with spatial intervention.

At the same time, the criteria are strongly grounded in fieldwork. Insights from participatory research, including interviews, surveys, and workshops, inform the identification of key needs such as daily support, social interaction, and accessible care. These findings ensure that the proposed strategies are not only theoretically informed, but also rooted in residents' lived experiences and everyday practices.

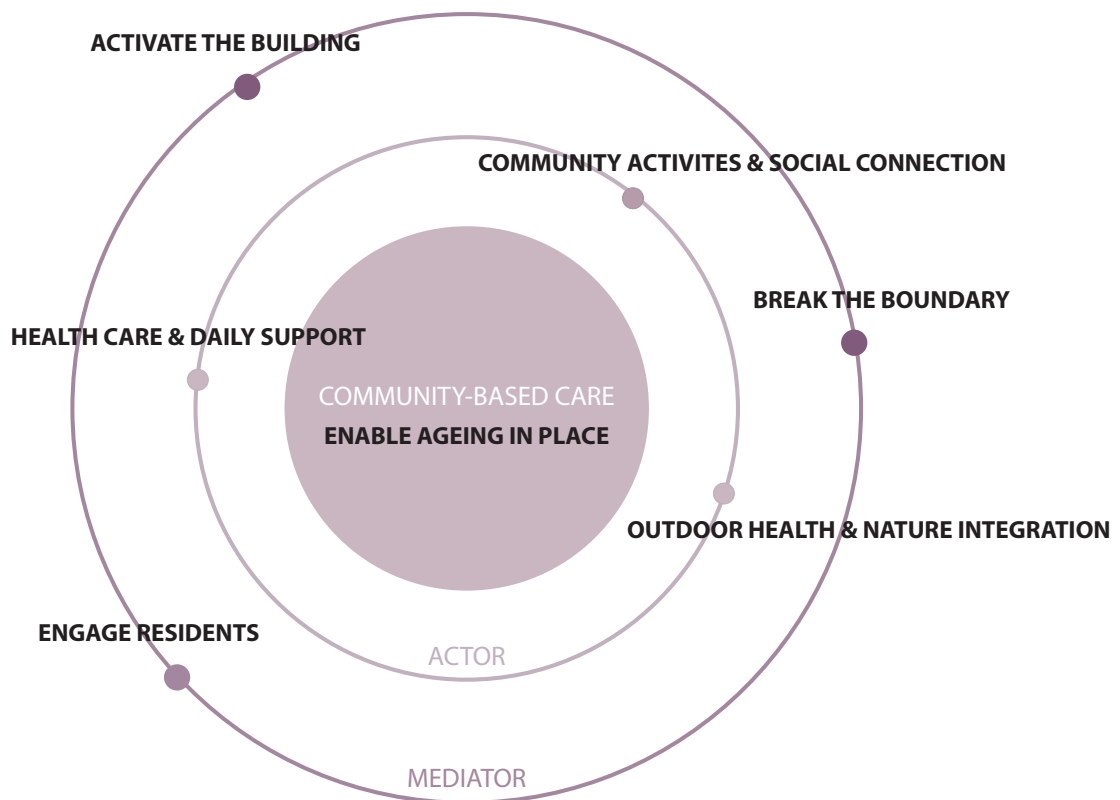


Figure 31. Design criteria developed from the theoretical framework and fieldwork findings.

De Flat Kleiburg



Figure 32. De Flat Kleiburg, Amsterdam. Housing renewal through resident participation and adaptive reuse.

De Flat Kleiburg, located in Amsterdam, the Netherlands, is a community-oriented housing renovation project that demonstrates how existing structures can be reactivated to support everyday life. Rather than demolishing the building, the project adopts a participatory “DIY housing” approach, allowing residents to adapt and personalise their homes. This process strengthens residents’ sense of ownership and belonging.

The project also improves shared spaces and circulation to enhance accessibility and openness. By activating communal areas, it creates opportunities for everyday encounters and informal interaction, reinforcing social connections within the community.

By working with the existing social structure and supporting gradual transformation, the project preserves long-term relationships while enabling new forms of use. It highlights the potential of combining spatial intervention with social dynamics to strengthen community-based living.



Figure 33. Les Grands Voisins, Paris. Community-led activation of underused urban spaces.

Les Grands Voisins, located in Paris, France, is a temporary urban transformation project that demonstrates how transitional spaces can support diverse forms of community life. The former hospital site was reactivated through a mix of social, cultural, and care-related programmes, creating an open and inclusive environment.

The project brings together different user groups, including local residents, social organisations, and vulnerable populations. Through flexible spatial organisation, it enables multiple activities to coexist, encouraging interaction and shared use. Communal spaces such as courtyards and workshops support everyday encounters and informal engagement.

Rather than a fixed redevelopment, the project operates as a transitional condition, allowing space to evolve over time. This approach highlights how temporary use can activate underutilised sites, test new social relationships, and respond to changing community needs.

Design Concept

The design concept is developed from the design criteria identified through the contextual analysis, literature review, and participatory research. The findings highlighted the need to support both physical and psychological well-being while strengthening community-based care. In response, the proposal organises the intervention into three interconnected spatial layers: Peaceful Space, Active Space, and Flexible Space. Together, these layers create a spatial framework that accommodates healthcare support, social interaction, and everyday activities, while promoting ageing in place and community well-being.

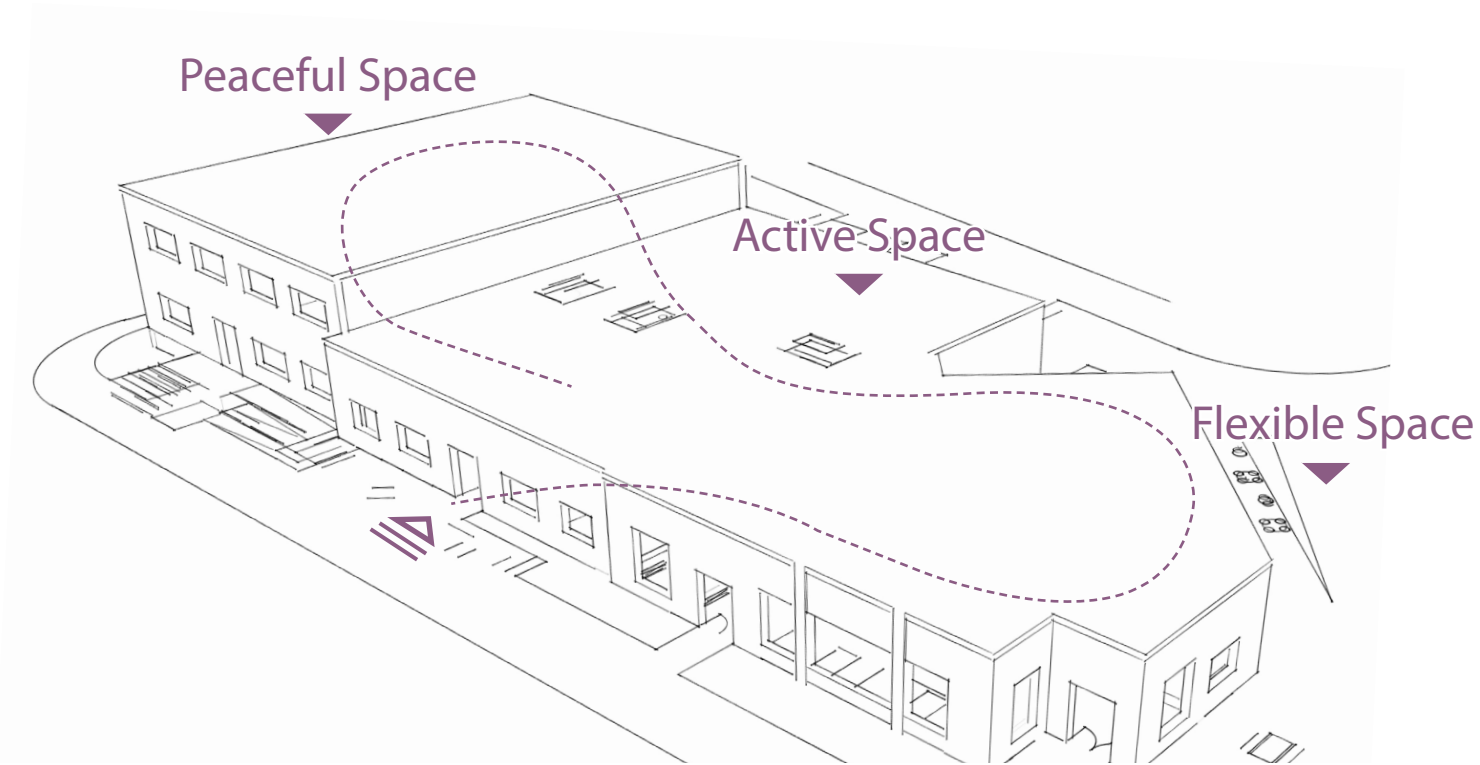


Figure 34. Design concept illustrating the organisation of the community building into three interconnected spatial clusters.

Active Space

This cluster supports daily activities and social interaction through spaces for movement, gathering, and shared use. Facilities such as dining areas, activity rooms, and open social spaces encourage participation, everyday engagement, and neighbourly connection. The design emphasises accessibility and openness, creating an active and inclusive environment for community life.

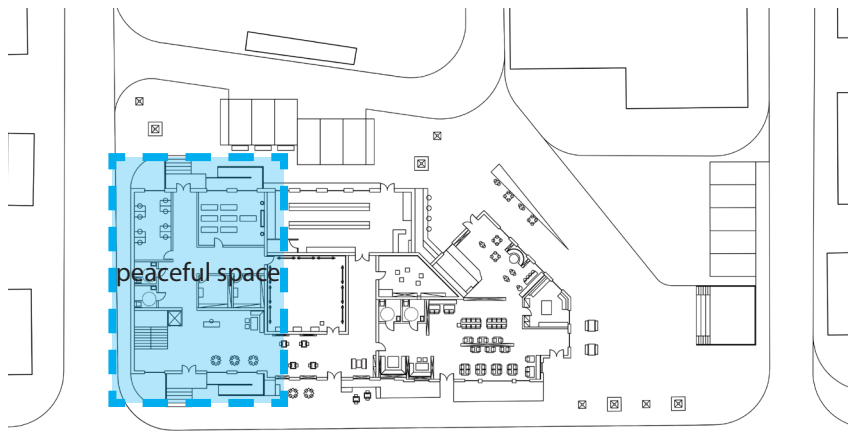
Peaceful Space

This cluster focuses on rest, healing, and mental well-being. It includes spaces for health-related services, relaxation, reading, meditation, and low-intensity activities. The design encourages self-care, health awareness, and daily reflection while providing a calm and supportive environment. Through privacy, comfort, and accessibility, it helps residents maintain both physical and psychological well-being daily life.

Flexiabile Space

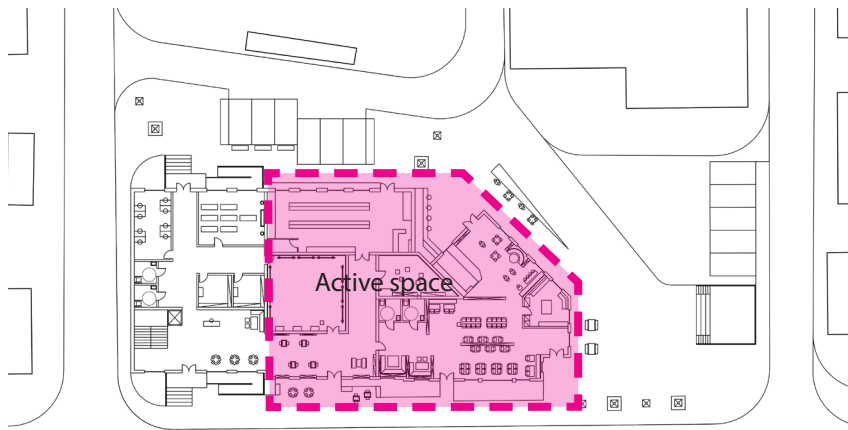
This cluster supports adaptability and changing community needs. It includes multi-functional spaces for workshops, community events, and everyday activities such as dance, music, and Taiji. Through flexible layouts and movable elements, the spaces can shift between active and quiet uses or accommodate temporary functions when required. The design enables efficient use of space while supporting future change and community resilience.

Criterion 1 - Health Care & Daily Support



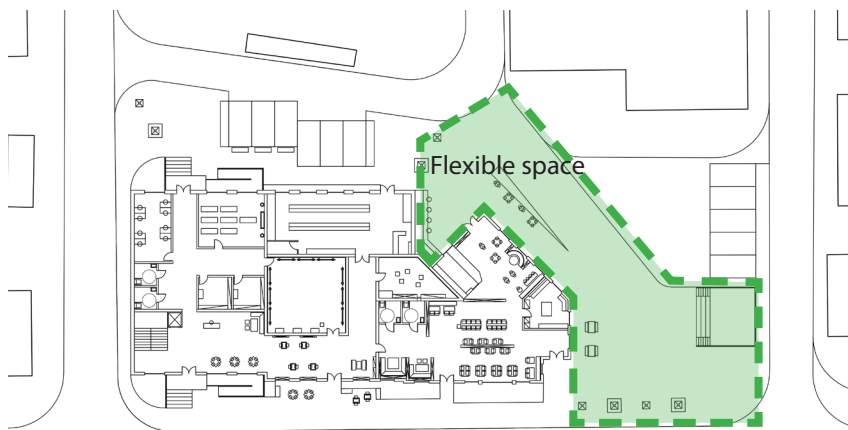
This area supports the physical and mental well-being of elderly residents through accessible healthcare and daily support services. Spaces such as the nurse station, caregiver center, meditation and yoga room, and technology maintenance center provide both practical assistance and a calm environment for preventive care and healthy living.

Criterion 2 - Community Activities & Social Connection



This part of the community center strengthens social interaction and community ties through shared activities and gathering spaces. The multi-functional activity room, chess and card game area, and herbal tea and coffee café encourage communication, participation, and everyday social connection while introducing traditional herbal wellness culture into community life.

Criterion 3 - Outdoor Health & Nature Integration



The outdoor spaces connect daily activities with nature and healthy lifestyles through open-air social and recreational areas. Outdoor dining spaces, resting areas, activity zones, and herbal plant cultivation spaces encourage physical activity, relaxation, gardening, and stronger connections between health, nature, and community life.

Figure 35. Spatial translation of the three design criteria into Peaceful Space, Active Space, and Flexible Space within the proposed community centre.

Structure Changes

The analysis of the existing building revealed a number of spatial challenges, including fragmented functions, limited accessibility, weak connections between spaces, and the gradual addition of informal extensions. These conditions reduce the building's capacity to support contemporary community needs and care-related activities.

To address these issues, the project applies the previously established spatial criteria as a framework for reorganisation. Rather than focusing on isolated interventions, the proposal reconsiders the overall spatial structure of the building, aiming to improve connectivity, accessibility, and flexibility. Through the reconfiguration of functional relationships, circulation patterns, and indoor–outdoor connections, the building is transformed into a more integrated and adaptable environment that can better support healthcare services, community activities, and everyday social interaction.

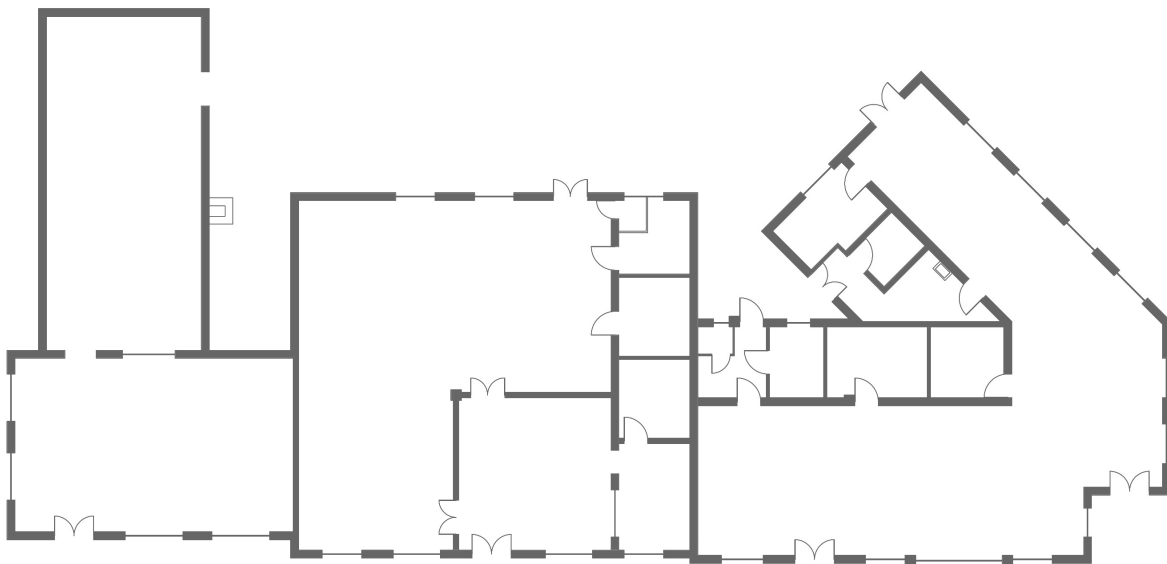
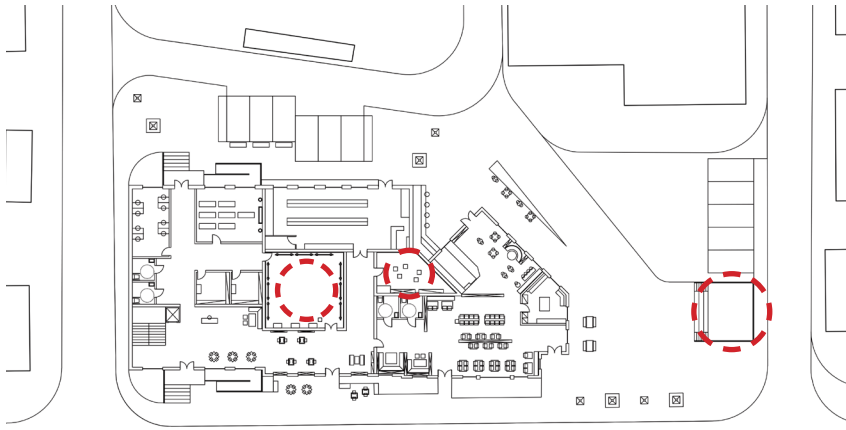


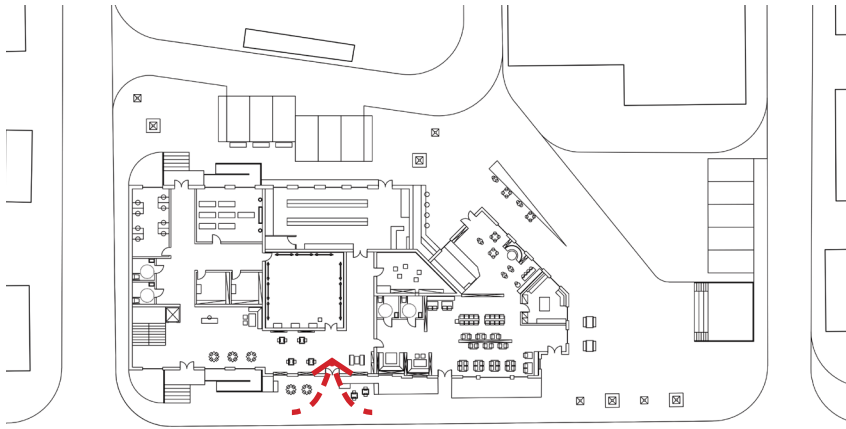
Figure 36. Existing floor plan of the community building before intervention.

Criterion 4 - Activate the building



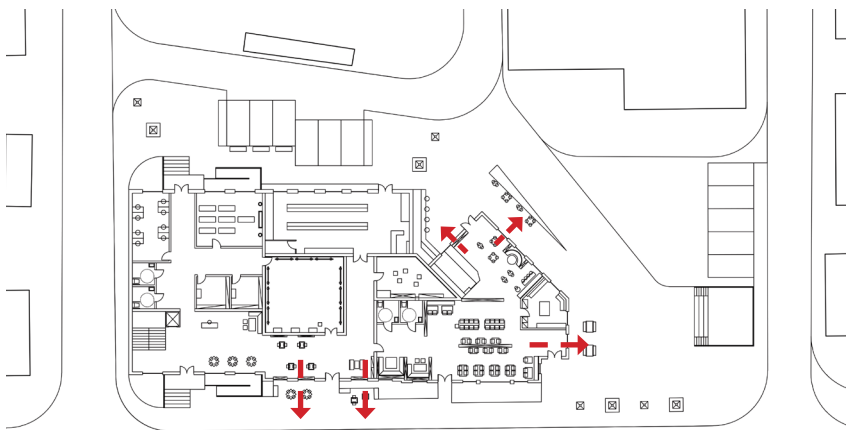
To create a more active and more connected community environment, the proposal is organised around three main program areas. Healthcare support, social activities, and outdoor spaces address different dimensions of everyday well-being while encouraging daily participation, social interaction, and long-term community engagement.

Criterion 5 - Engage residents



To encourage everyday interaction and community participation, the main entrance is designed as an interactive community space rather than merely an access point. Herbal planting areas, game spaces, and small gathering zones provide opportunities for residents to stop, engage, and connect with everyday community life.

Criterion 6 - Break the boundary

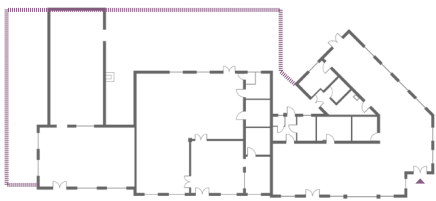


To strengthen the relationship between indoor and outdoor spaces, the design introduces flexible transitions and visual connections throughout the building. These interventions soften spatial boundaries and create a more open and welcoming environment. By improving continuity between different areas, the design encourages movement, visibility, and everyday interaction across the community centre.

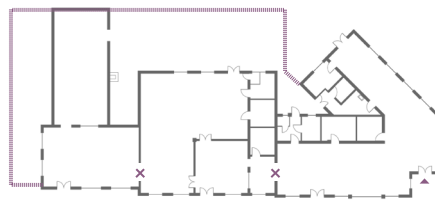
Figure 37. Spatial translation of design criteria into strategies for activation, participation, and connectivity.

The final building structure is the result of a series of spatial criteria that reorganise the existing layout and improve its overall functionality. Through expanding the usable area, improving circulation, and reorganising entrances and access, the building becomes more connected, accessible, and adaptable.

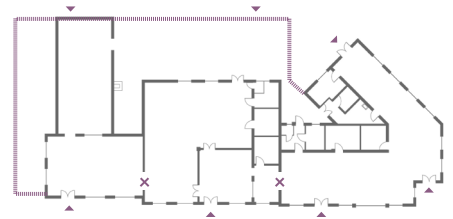
The reorganisation creates a clearer spatial hierarchy and stronger relationships between different functional areas. As a result, the building is better able to accommodate a wider range of community activities while supporting everyday use in a more efficient and integrated way.



Step 1 Expanding the Usable Area

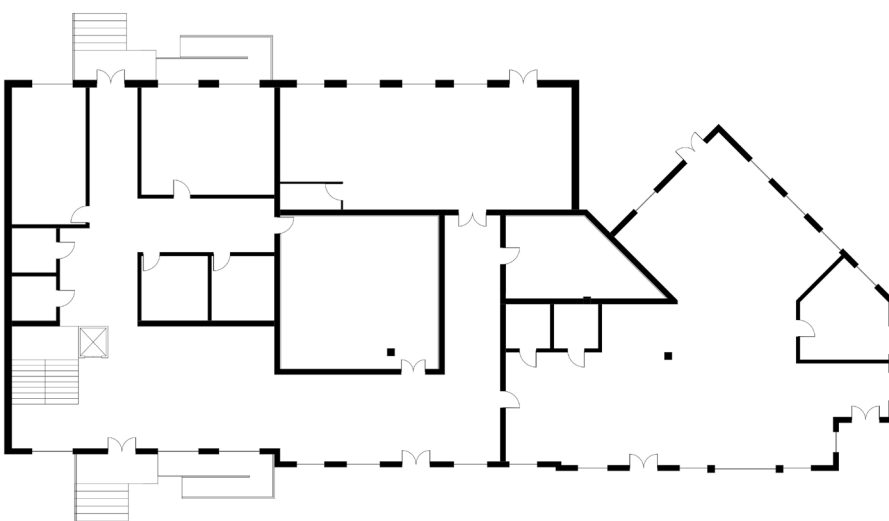


Step 2 Improving Spatial Circulation

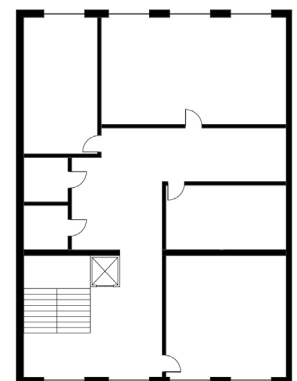


Step 3 Reorganising Entrances

Figure 38. Three-step process of spatial reorganisation.



Floor 1



Floor 2

Figure 39. Final building structure after spatial reorganisation.

Design Theme - Chinese Medicine

Building on the functional framework, Chinese medicine is introduced as a central theme of the design. Its holistic approach to physical and mental well-being aligns closely with the needs of an ageing population. It also resonates with the cultural background of the community, enhancing familiarity and acceptance. In the proposal, Chinese medicine is not only reflected in specific functions, such as consultation and health management, but also extended into spatial elements, including herb gardens, herbal drinks, and related activities. In this way, health practices become part of everyday life, forming a culturally grounded and integrated approach to community regeneration.

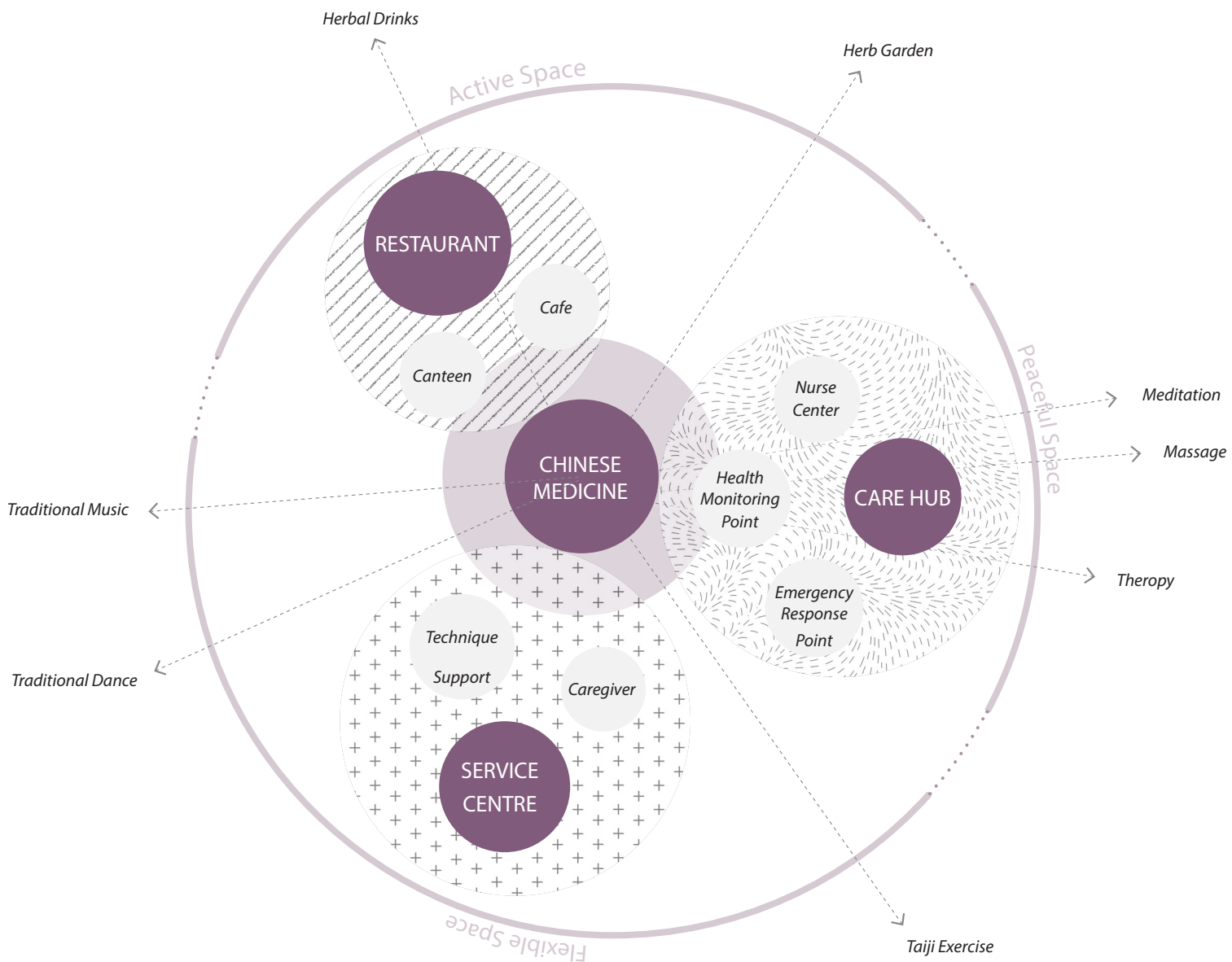
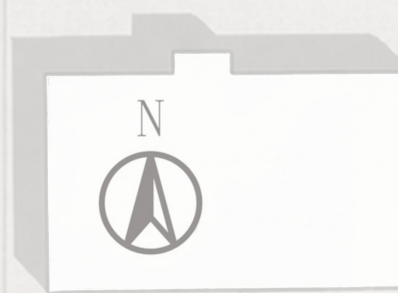


Figure 40. Integration of Chinese medicine as a design theme across different spatial clusters and community functions.

Floor Plan



Figure 41. Proposed floor plan of the community centre and surrounding outdoor spaces.



- 1 Senior Dining Hall
- 2 Herbal Tea & Coffee Café
- 3 Multi-functional Activity Room
- 4 Convenience Store
- 5 Meditation & Yoga Room
- 6 Chess & Card Game Space
- 7 Changing Room
- 8 Reception
- 9 Waiting Area
- 10 Office Area
- 11 Storage Room
- 12 Nurse Station
- 13 Caregiver Center
- 14 Technology Maintenance Center
- 15 Main Entrance
- 16 Secondary Entrance
- 17 Outdoor Chess Area
- 18 Outdoor Activity Area
- 19 Outdoor Rest Area
- 20 Outdoor Stage
- 21 Outdoor Café Area
- 22 Parking Area
- 23 Cultivation Area

Visualization

Overview



Figure 42. Overview perspective of the proposed community centre and surrounding public spaces.



Visualization

Outdoor Space - Activity Square

Tree Seating

Herb Plant Box

Exercise Square



Figure 43. Activity square supporting outdoor exercise, social interaction, and everyday community life.



Herb Plant Box

Community Notice Board



Visualization

Outdoor Space - Seating

Herb Cultivation

Herb Plant Box

Seating



Figure 44. Outdoor seating area integrated with herbal planting to support relaxation, well-being, and everyday social interaction.



Seating

Outdoor Stage



Visualization

Main Entrance

Herb Cultivation

Herb Tea

Chess / Card Game

Muti-functio



Figure 45. Main entrance designed as an interactive community space, engaging residents through games, herbal cultivation, and everyday



onal Activity Room

Chess / Card Game

Herb Cultivation



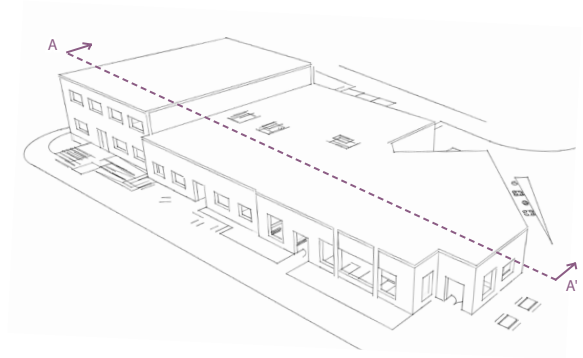
social activities.

Visualization

Section - AA'



Figure 46. Section AA' illustrating the spatial continuity, visibility, and interaction between different community functions.



Herb Tea Cafe

Senior Canteen



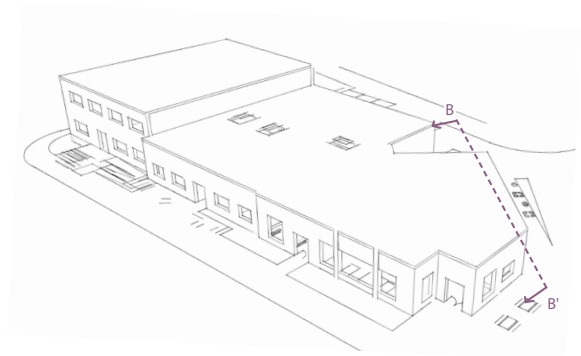
Scale bar 1:200

Visualization

Section - BB'



Figure 47. Section BB' illustrating the Herb Tea Café, where herbal planting and traditional health culture are integrated into everyday social



rtition

Herb Cabinet

Outdoor Seating



activities.



Scale bar 1:200

DISCUSSION

Context and Challenges

Care Transition and Emerging Gaps

The transformation of the Dongshan community reflects a broader transition in many post-work-unit neighbourhoods in China. In the past, housing, daily services, and care were integrated within a collective welfare system, where care was embedded in everyday spatial and social structures. With housing reform and wider socio-economic change, this condition has gradually shifted, and the relationship between space and care has become increasingly fragmented.

As institutional support has weakened and family-based care capacity has declined, the responsibility of care is progressively redistributed towards the community. Rather than a smooth transition, this process has produced a gap between declining formal systems and limited informal capacity. Within this context, community-based care is often framed as a promising alternative. However, its capacity should not be overstated. While the Dongshan community retains strong social ties and shared spatial resources, these informal networks are uneven and not always sustainable.

Strong Social Ties vs Declining System

The Dongshan community is characterised by a strong sense of collective memory and social continuity, shaped by its origin as a work-unit neighbourhood. Long-term residency, shared life experiences, and enduring neighbourly relationships have created a stable social fabric, where everyday interactions and mutual recognition remain an important part of community life. This embedded culture of familiarity and informal support distinguishes the community from more transient urban environments.

At the same time, the community also reflects more general conditions of decline found in many ageing neighbourhoods. Physical deterioration, outdated spatial organisation, and the fragmentation of care provision have reduced the capacity of existing infrastructure to support current needs. The contrast between strong social memory and weakening spatial and institutional support highlights both the challenges and the latent potential within the

Community Building as a Mediator

Positioning the Community Building as Mediator

In response to this condition, the project focuses on the existing community building and its surrounding spaces as a spatial mediator within the neighbourhood. Rather than introducing a new institutional structure, this approach works with the existing spatial fabric, where everyday life already takes place. The community building occupies a central position in residents' daily routines, while the adjacent outdoor spaces support informal interaction and movement.

By engaging both the building and its immediate surroundings, the project frames the site not as a single object, but as a relational space where different forms of care can intersect. In this sense, the mediator is not understood as a fixed facility, but as a spatial condition that enables connections between health support, social interaction, and everyday practices within the community.

Reframing Care through Spatial Intervention

This research argues that the renewal of a community building can reframe care by embedding it within everyday spatial conditions rather than isolating it in institutional systems. By treating the building and its surroundings as a mediator, the project integrates healthcare, social interaction, and daily activities into a shared spatial framework.

In this way, care is supported through proximity, accessibility, and interaction, allowing existing social ties to be reinforced and activated. Rather than replacing institutional systems, the proposal operates within an ongoing transition, offering a complementary spatial structure that supports ageing in place within the existing community.

A Layered Approach to Care

Building on the dual dimension of care, the project translates this framework into a set of design criteria that operate across different spatial layers. Rather than separating physical and psychological wellbeing, the design understands these dimensions as interrelated and embedded within everyday spatial conditions. This is reflected in the organisation of the project from the core to the broader community interface.

At the core, the project focuses on enabling ageing in place through the integration of health care and daily support. This includes the introduction of accessible services and spatial arrangements that support routine activities, ensuring that basic physical needs can be addressed within close proximity to everyday life. At the same time, community activities and social connection are emphasised as essential components of psychological wellbeing, creating opportunities for interaction, participation, and a shared sense of belonging.

Extending outward, the design criteria further engage the relationship between residents and their environment. Strategies such as activating the existing building, breaking spatial boundaries, and integrating outdoor health and nature-based elements aim to support both bodily movement and mental restoration. Within this structure, residents are not treated as passive recipients of care, but as active participants. In this sense, the mediator is not a single space, but a layered spatial condition through which care emerges across scales, from intimate support to collective life.

Delimitations

Implementation Scope

This thesis remains speculative in terms of implementation and does not fully address the long-term economic, managerial, and policy-related challenges involved in community renewal. Due to limitations in time and research scope, resident participation was mainly conducted through interviews, surveys, and workshops, without long-term collaboration or testing in a real-life setting. As a result, the project should be understood as a spatial exploration rather than a finalized solution.

User Groups

The primary target group of the project is the ageing population, which constitutes the majority of residents within the Dongshan community. As long-term inhabitants, older adults are closely connected to the existing social fabric and are most affected by the current mismatch between declining infrastructure and everyday care needs. Their routines, mobility patterns, and social relationships therefore become central to the spatial reconfiguration of the community.

At the same time, current observations indicate that the majority of active users of community space are women. Daily activities, informal interactions, and collective practices are often shaped and sustained by female residents. This gendered pattern of use suggests that existing spatial and social dynamics may not fully engage male residents. In response, the project considers how future design and community transformation can create more inclusive conditions, encouraging broader participation and addressing the needs of both men and women within the ageing population.

REFERENCE LIST

- Beinfeld, H., & Korngold, E. (1991). *Between heaven and earth: A guide to Chinese medicine*. Ballantine Books.
- Buffel, T. (2018). *Social research and co-production with older people: Developing age-friendly communities*. *Journal of Aging Studies*, 44, 52–60.
- Cox, H. (1990). *Roles for aged individuals in post-industrial societies*. *The Gerontologist*, 30(6), 723–729.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.)*. SAGE Publications.
- Dalian University of Technology. (2019). *Dalian University of Technology: 70 years of innovation [PDF]*. Science.
- E, J., Xia, B., Chen, Q., Buys, L., Susilawati, C., & Drogemuller, R. (2024). *Impact of the built environment on ageing in place: A systematic overview of reviews*. *Buildings*, 14(8), 2355.
- Huang, Y. (2004). *Housing markets, government policies, and housing choices: A case study of three cities in China*. *Environment and Planning A*, 36(1), 45–68.
- James, H., Buffel, T., & Phillipson, C. (2023). *Co-research with older people: A systematic literature review*. *Ageing & Society*, 43(9), 1981–2007.
- Kaptchuk, T. J. (2000). *The web that has no weaver: Understanding Chinese medicine (2nd ed.)*. McGraw-Hill.
- MVRDV. (2017). *Kleiburg renovation, Amsterdam, The Netherlands*. MVRDV.
- Plateau Urbain. (n.d.). *Les Grands Voisins*. Plateau Urbain.
- Powell, J. L., & Khan, H. T. A. (2015). *The changing role of care infrastructures in post-industrial societies*. Policy Press.
- Sternberg, E. M. (2009). *Healing spaces: The science of place and well-being*. Harvard University Press.
- Sumner, J., Chong, L. S., Bundele, A., & Lim, Y. W. (2021). *Co-designing technology for aging in place: A systematic review*. *The Gerontologist*, 61(7), e395–e409.
- Wayne, P. M., & Kaptchuk, T. J. (2008). *Challenges inherent to tai chi research: Part I—Tai chi as a complex multicomponent intervention*. *Journal of Alternative and Complementary Medicine*, 14(1), 95–102.
- World Bank. (n.d.). *Urban development in China*. World Bank.
- Wu, F. (1996). *Changes in the structure of public housing provision in urban China*. *Urban Studies*, 33(9), 1601–1627.
- Xie, Y., Lai, Q., & Wu, X. (2009). *Danwei and social inequality in contemporary urban China*. *Research in the Sociology of Work*, 19, 283–306.
- Yarker, S., Doran, P., & Buffel, T. (2025). *Ageing in place: A social infrastructure perspective*. *Quality in Ageing and Older Adults*.
- Yin, Y. (2012). *Dalian: From an industrial city to a globalising port city*. *Urbani Izziv*, 23(2), 45–56.
- Zhou, B., Deng, Q., Zhou, S., & Zhuo, D. (2023). *Health care in future community: Innovatively discover and respond to the needs of today's seniors*. *Frontiers in Public Health*, 11, 1302493.
- Zhu, T., Jin, J., & Zhu, X. (2021). *China's "embedded neoliberal" home-based elderly care? A state-organised system of neighbourhood governance*. *Sustainability*, 13(24), 13568.

FIGURE LIST

Figure 1. Large-scale urban construction in China during rapid industrialisation, characterised by simultaneous development and dense crane activity.

Figure 2. Current challenges commonly found in Chinese post-industrial neighbourhoods.

Figure 3. My childhood memory in Dongshan Community, Dalian. Participating in everyday outdoor activities within the neighbourhood.

Figure 4. The author's grandmother (second from left) with neighbours in Dongshan Community, Dalian.

Figure 5. Dongshan Community in Dalian, residential community constructed during the period of rapid industrialisation.

Figure 6. Collective rhythms of Danwei (work-unit) life during China's industrialisation in the late twentieth century.

Figure 7. Location of Dalian within China, indicating the city in which Dongshan Community is situated.

Figure 8. Dalian University of Technology campus, the institution to which Dongshan Community is affiliated.

Figure 9. Everyday activities in Dongshan Community, reflecting the persistence of collective living and social interaction among residents.

Figure 10. Dongshan Community and its surrounding context.

Figure 11. Theoretical framework diagram illustrating the ongoing transition of care, positioning the community as a mediator between healthcare and social connection to support ageing in place.

Figure 12. Community-based care framework diagram illustrating key elements at the stakeholder level and the spatial level.

Figure 13. Conceptual framework illustrating key dimensions of Traditional Chinese Medicine, including herbal use, body practice, and mental regulation.

Figure 14. Research process illustrating the main methodological stages of the study.

Figure 15. Site analysis on a neighbourhood scale with Dongshan Community and its surrounding context.

Figure 16. Community building and its surrounding context.

Figure 17. The diagram shows Dongshan community building with four main functions.

Figure 18. The photos show the existing issues of the community building.

Figure 19. The photos show the existing community park and the community culture within the park.

Figure 20. The photos show the typical residential building in Dongshan Community.

Figure 21. Diagram illustrating the key questions identified through the key information interview with the contact person.

Figure 22. The interviewee of the key information interview, who also acted as the contact person.

Figure 23. Research perspective on the transformation of care systems and community life in post-industrial Chinese cities.

Figure 24. Care system SWOT analysis of the community.

Figure 25. The photo shows residents completing the survey in the community building.

Figure 26. The photo shows community survey collected from residents.

Figure 27. Survey results showing residents' preferred care and social support services within the community.

Figure 28. Screenshot from the first online workshop.

Figure 29. Guided questions used in Workshop 2 to encourage discussion among residents.

Figure 30. Residents who participated in Workshop 2.

Figure 31. Design criteria developed from the theoretical framework and fieldwork findings.

Figure 32. De Flat Kleiburg, Amsterdam. Housing renewal through resident participation and incremental transformation.

Figure 33. Les Grands Voisins, Paris. Community-led temporary activation of underused urban spaces.

Figure 34. Design concept illustrating the organisation of the community building into three interconnected spatial clusters.

Figure 35. Spatial translation of the three design criteria into Peaceful Space, Active Space, and Flexible Space.

Figure 36. Existing floor plan of the community building before intervention.

Figure 37. Spatial translation of design criteria into strategies for activation, connection, and adaptability.

Figure 38. Three-step process of spatial reorganisation.

Figure 39. Final building structure after spatial reorganisation.

Figure 40. Integration of Chinese medicine as a design theme across different spatial clusters and community functions.

Figure 41. Proposed floor plan of the community centre and surrounding outdoor spaces.

Figure 42. Overview perspective of the proposed community centre and surrounding public spaces.

Figure 43. Activity square supporting outdoor exercise, social interaction, and everyday community life.

Figure 44. Outdoor seating area integrated with herbal planting to support relaxation, well-being, and everyday social interaction.

Figure 45. Main entrance designed as an interactive community space, engaging residents through games, herbal cultivation, and everyday social interaction.

Figure 46. Section AA' illustrating the spatial continuity, visibility, and interaction between different community functions.

Figure 47. Section BB' illustrating the Herb Tea Café, where herbal planting and traditional health culture are integrated into everyday social activities.

APPENDIX

Community Survey

The survey was distributed in two formats. One format was online, and the other was a printed paper version. It was provided in Chinese to facilitate participation among older residents.



(Online community survey distributed through a QR code and mobile questionnaire interface.)



(Paper-based community survey collected from residents during the fieldwork process.)

Part 1 -Resident Basic Information

1. Approximately how long have you lived in this community?

- Less than 5 years
- 5–20 years
- More than 20 years

2. What is your approximate age?

- 18–39
- 40–59
- 60 and above:
 - 60–69
 - 70–79
 - 80 or above

3. What is your current living situation? (Multiple choices allowed)

- Living alone
- Living with a partner
- Living with children or other family members
- Other: _____ (e.g. living with a caregiver)

4. How did you originally come to live here?

- Assigned by a work unit or through a policy
 - Which type of unit/department were you affiliated with at the time?
 - University faculty/staff
 - Enterprise employee
 - Other
- Moved here together with family
- Chose to move here later on my own
- Other: _____

Part 2 -Daily Needs in Late Life

The following questions are intended for residents aged 60 and above who have lived in the community for a certain period of time. The questions may be answered either by the residents themselves or by other household members living with them.

- In your daily life, have you noticed any changes in your physical condition compared to before? (For example, strength, vision, hearing, mobility, etc.)

- No significant changes; daily life is mostly unaffected
- Some impact; requires more attention or caution
- Significant impact; requires assistance from others or supportive facilities

- Due to changes in physical condition or increasing age, what kinds of support or assistance would you like to have within the community? (Multiple choices allowed)

- A community canteen offering meals suitable for older adults
- Regular opportunities to monitor my health condition (e.g. blood pressure, blood sugar, vision)
- The ability to complete basic medical-related procedures within the community when needed, without going to the hospital (e.g. blood tests, infusions, follow-up visits)
- Support or consultation related to dentures or oral health
- Light physical exercise activities guided by trained staff and adapted to my physical condition
- Information and guidance on healthy diets (e.g. chronic disease management)
- Timely assistance or support in case of sudden discomfort or emergencies
- Access to reliable care personnel (e.g. hourly helpers, caregivers)
- Technical assistance for daily life (e.g. appliance repair, plumbing services)
- Door-to-door delivery or errand services within the community
- I currently do not have such needs
- Other: _____

- Would you like the community to provide support or services related to social life? (Multiple choices allowed)

- Open and flexible social activities that you can join or leave at any time
(e.g. drinking tea, chatting; no registration required)
- Interest-based activities with fixed schedules and facilitators
(e.g. dance, singing)
- Low-frequency, relaxed social activities
(e.g. book-sharing or reading groups)
- Self-organised activities based on shared interests
(e.g. table tennis, billiards, band practice, card games, etc.)
- I currently do not have any particular interests or needs
- Other: _____

- Which of the following best reflects your expectation for social platforms within the community?

- I prefer to participate only with people of a similar age
- I prefer to participate with people of different age groups
- Either is fine

- In what ways would you like the community to give more consideration to older adults? (Please briefly mention one or two points)

Part 3 -Social Network

6. How would you describe your relationship with your neighbours?

- Very familiar / close
- Know each other, but do not interact often
- Not very familiar

– *Who do you usually interact with? (multiple choices allowed)*

- Long-term friends / long-term neighbours / former colleagues*
- Newly met neighbours or residents who moved in more recently*

– *Which age groups do you usually interact with? (Follow-up question; multiple choices allowed)*

- People of a similar age*
- People of different age groups*

7. Where do neighbours usually gather or spend time together? (Multiple choices allowed)

- At home
- In public squares or near residential buildings
- In community activity rooms
- Outside the community (e.g. restaurants)
- Other: _____

8. For you personally, how important is it to maintain some level of connection with your neighbours?

- Very important
- Moderately important
- Not very important

9. In your view, what is most lacking in current community life in terms of relationships between people? (Select 1–2 options)

- Opportunities to get to know each other

Part 4 -Memory

10. In your view, what makes this community special or different from other places?

(This could relate to people, atmosphere, daily habits, buildings, or other aspects.)

11. Do you remember any important events, experiences, or changes related to this community? (For example, past forms of collective life, public facilities, or ways of living.)

12. In the past, were there any shared activities or places in the community that carried collective memories, and that people often participated in together? (For example, communal canteens, activity rooms, festival events, or cultural activities.)