MEANS OF TRANSFORMING PUBLIC SPACES ACCORDING TO THE PRINCIPLES OF UNIVERSAL DESIGN

—USING THE EXAMPLE OF THE AGING COMMUNITIES OF DONDAYUAN IN HUAI'AN CITY

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02 Current situation analysis and theoretical construction

03 Specific design concept and expression

04 Results Summary and Outlook

01

Research Background and Framework

1.Research Background and Significance

2.Literature review and research status

3.Research Methods and Framework

research background



Given their physical limitations and age-related factors, elderly residents primarily engage in community-based activities within public spaces and surrounding areas. To address this reality, we focus on revitalizing aging communities with high population density, outdated infrastructure, inefficient spatial layouts, and inadequate facilities. By considering the needs of all age groups, we aim to enhance public spaces through practical design strategies, planning concepts, and principles that prioritize accessibility and senior-friendly adaptations.

research meaning

1.To address the "dual aging problem", low birth rate, and shrinking working-age population, we aim to create healthy and age-friendly communities.

In view of the needs of people of other ages in the community, the public space environment of the community is improved. For the series of problems existing in the old community, feasible design strategies, design planning concepts and design principles for the adaptation of the public space of the old community are put forward.

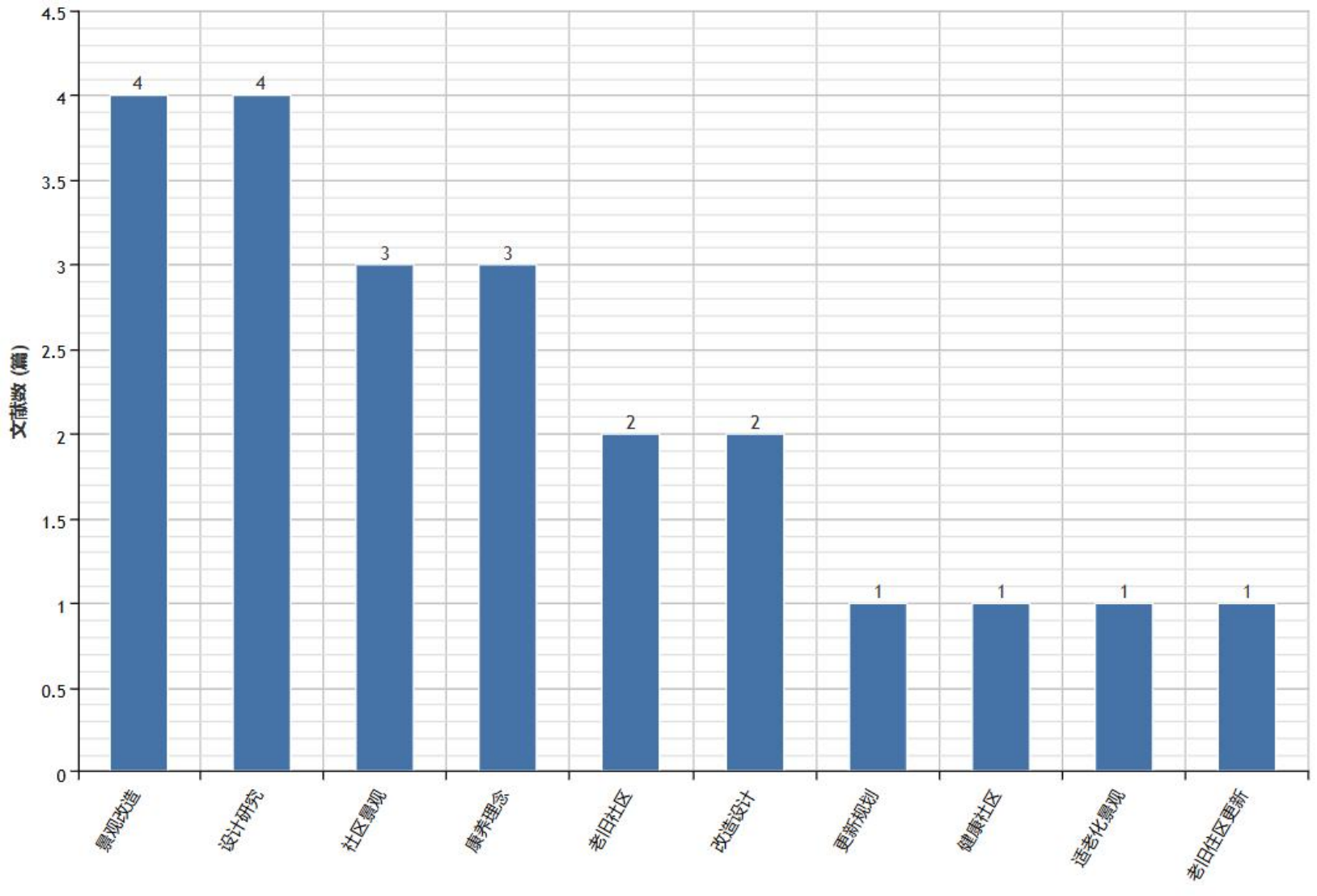
2.It is of great significance to promote the development of regional aging by enabling the old community to integrate into the urban renewal and development

Under the concept of health care, the research on the renovation design of old communities can better improve the health and quality of life of residents, and enhance the sense of belonging and participation of community residents

3.Building a people-centered, comfortable and livable care center that ensures the elderly enjoy happiness, receive care, and access medical services.

Based on the actual needs of community residents and the current environment of the site, the community public space and infrastructure should be improved, and the details of the community and people with different physical conditions should be paid attention to, so as to optimize the barrier-free design.

Current situation of domestic theoretical research



People are no longer satisfied with traditional elderly care models, aspiring to live with greater dignity and fulfillment in their later years. This article focuses on Dongdayuan Community in Huai 'an City as a case study, demonstrating how new elderly care communities are being developed to enhance services and provide seniors with more convenient, comfortable, and safe living environments. The community's age-friendly design embodies a new philosophy of "inclusiveness, friendliness, and sharing."

The current situation of foreign theoretical research

Through extensive exploration and implementation, international practices in age-friendly community public space redesign have reached maturity. These systems now feature well-established policies, comprehensive evaluation frameworks, and a transition from welfare-based elderly care to community-based care models. Existing communities undergo age-friendly adaptations to enhance service systems and optimize organizational structures.。

表 1-1 国外养老模式和社区改造内容

Tab 1-1 Foreign Senior Living Model and Community Transformation Content

国家	养老模式	社区改造内容
美国	以社区养老为主，主要依靠医疗保险制度，其他各种类型的机构广泛参与社区和医疗等方面的服务。	居住区家庭室内环境的适合老化改造、社区公共空间的合理规划和布局。
英国	起初采用福利机构养老，目前正逐步转变为社区养老模式。	提供生活必备物资、生活照料、提供心理咨询和服务、整体关怀。
日本	已经形成一整套完整的养老服务产业链，有完善的养老保险制度。在社区养老层面，非常重视家庭的作用，有多种不同类型和功能的住宅供老年人群选择，配套服务设施齐全。	社区内部环境设施；新型技术、新的养老模式和理念运用于社区养老。
新加坡	以家庭为基础的社区养老模式	完善社区服务和养老模式；加强社区的医疗保健体系；智慧型社区建设。

02

Current situation analysis and theoretical construction

1.Community status survey and analysis

2.Related case reference and enlightenment

3.Building a general design strategy

Survey Analysis: Current Status Overview



situation analysis













Problems in old communities



01 **Building performance degradation**

02 **Lack of age-friendly facilities**

03 **Mixed traffic**

04 **Public space is chaotic and scarce**

05 **Security management is a concern**

06 **Loss of community culture**

case analysis A sense of belonging to an identifiable architect

要点借鉴：

1.安全和舒适性——建筑物的设计考虑到老年人的行动不便和认知能力下降的情况，采用一些易于识别和操作的设施和设备。例如，地面采用防滑材料，门把手、电梯按钮等标识清晰易懂。

2.独立性和社交性——虑到老年人的独立性和社交需求。设置公共区域，如花园、咖啡厅、健身房等，以便老年人参加各种活动和社交活动。此外，每个老年人的住宅也会有自己的独立空间，以满足他们的个人需求。

3.智能化——安装智能门禁系统、智能照明系统、智能监控系统等，以确保老年人的安全和健康。







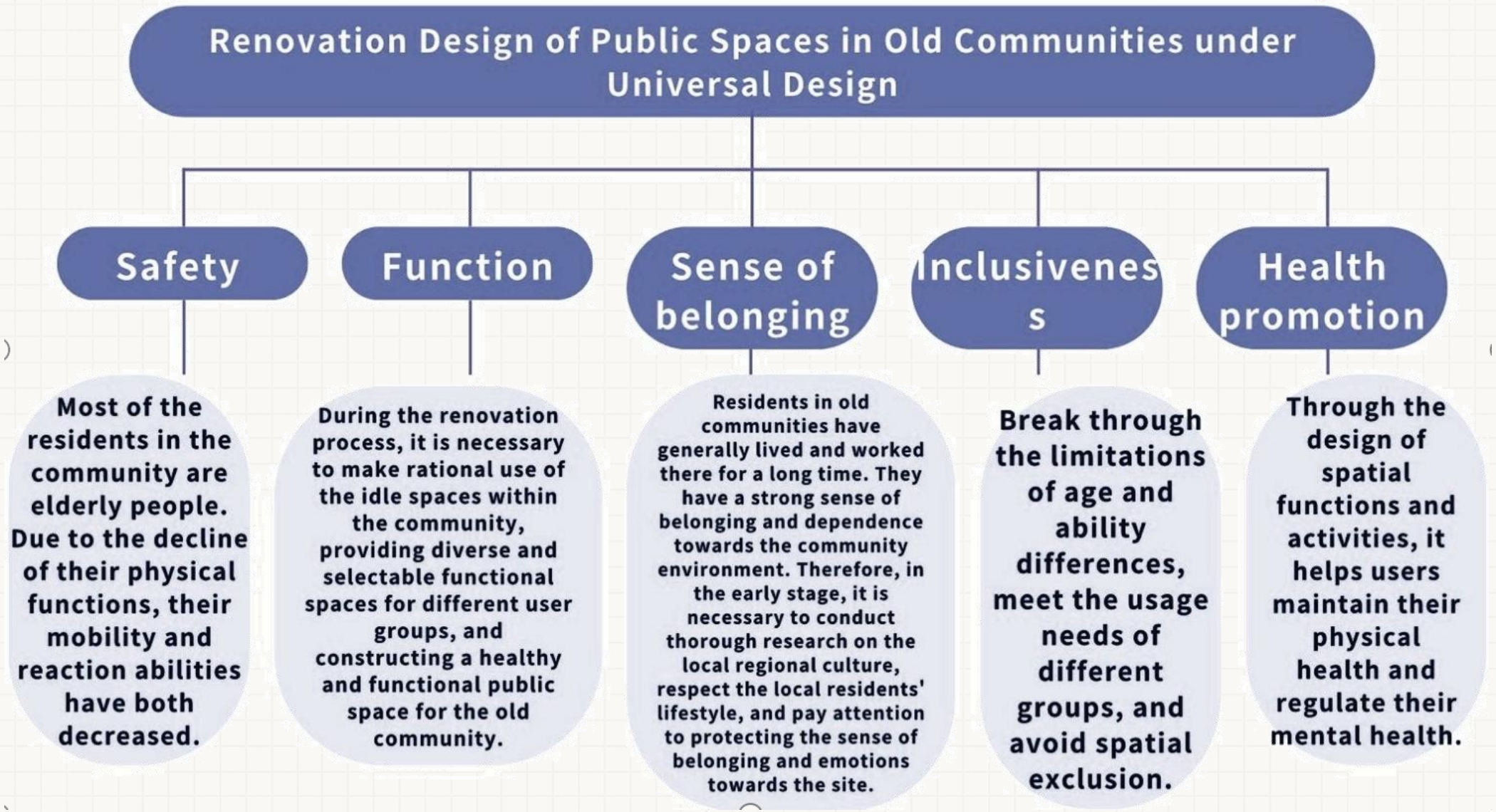








Universal Design Principles



03

Specific design concept and expression

1.Design Positioning and Goals

2.Overall Design

3.Special Design Showcase

design goal

Boost community engagement

Promote communication between people, people and the environment, and people and buildings to enhance vitality





Create "old and young integration""

Focus on family structure and take into account the needs of other age groups to create a harmonious community atmosphere

Aging Care Center

Focus on every detail of the community and people with different physical conditions, and optimize the barrier-free design





Propose the "food plant" model

The integration of various values and resources is of practical significance to the construction of the elderly community service system

拟解决的方法

理论方面：收集与**康养理念相关**的著作及实践资料，深入了解该理论的发展历程及研究现状，并结合对国内外社区适老化景观改造设计的案例分析，归纳出实践案例内可借鉴的**社区适老化公共空间改造的策略及方法**，为本文撰写提供研究思路。

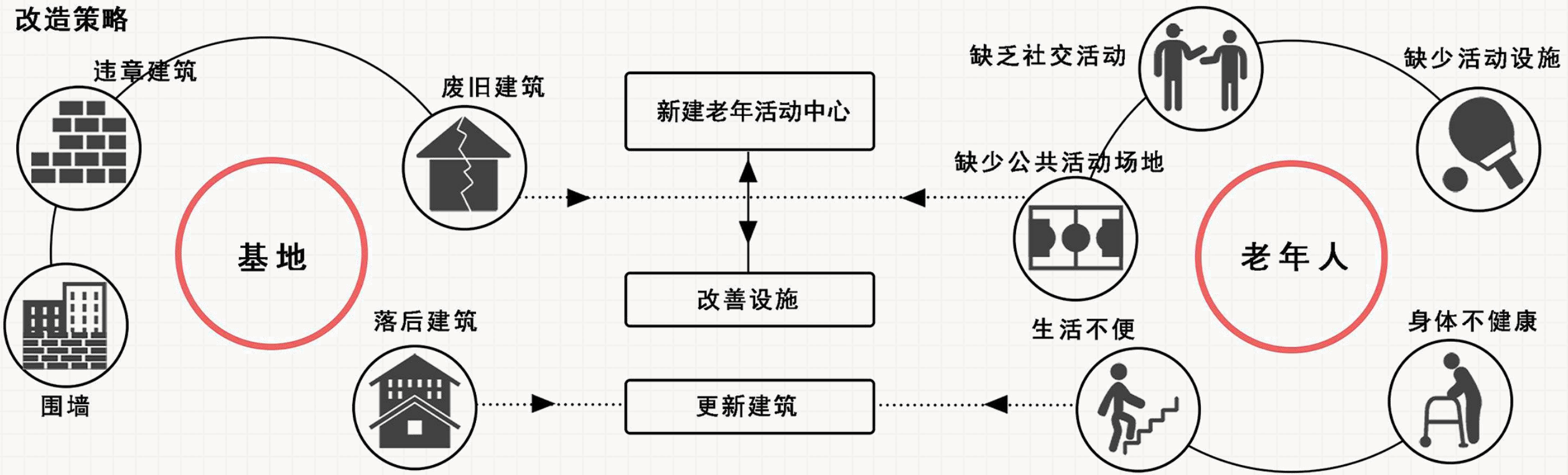
实践方面：在淮安市湖畔康养社区及其周边社区，对开展户外活动的 60 岁及以上老年人进行**问卷调查**。从得到的视频录像中归纳总结老年人进行社区户外活动的动作特点和行为表现，同时利用笔记本记录该活动空间中老年人**参与活动的内容、时长、参与者的数量**等信息，从而**分析他们的潜在需求以及环境支持困难**，寻找活动空间适老化改造的依据，为研究提供客观性的参考。





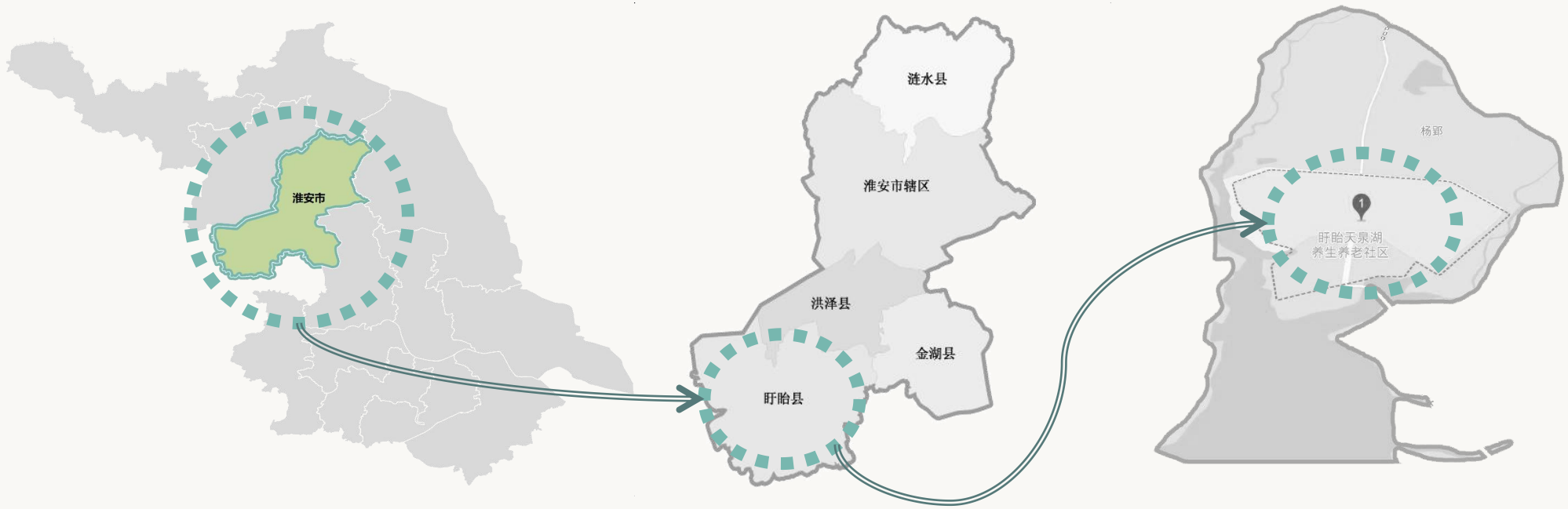


Rebranding Strategy



Improve the service system → barrier free design → Introduce advanced intelligent systems → Strengthen overall planning → Integrate local features

Location analysis



Situated in the Tianquan Lake Provincial Tourism Resort of Xuyi County, Huai'an City, Jiangsu Province, this project spans 3,000 mu (approximately 500 acres) with a planned construction area of nearly 1.3 million square meters. Designed to accommodate 15,000 households (nearly 30,000 residents) for retirement living, it features green hills to the east and crystal waters to the west. The development boasts over 320,000 square meters of built-up area, with housing designs, service systems, and smart facilities specifically tailored for senior citizens. Guided by the philosophy of "people-first, excellence-driven," the integrated mountain-lake environment, barrier-free aging-friendly amenities, community cultural heritage preservation, and "Internet+" systems paired with comprehensive healthcare, dining, fitness, and recreational services will transform Jinling Tianquan Lake into a globally recognized city of immortality, smart living, and wellness.

traffic analysis

The natural reservoir and the advantages of the mountain landscape create a sense of clear comfort

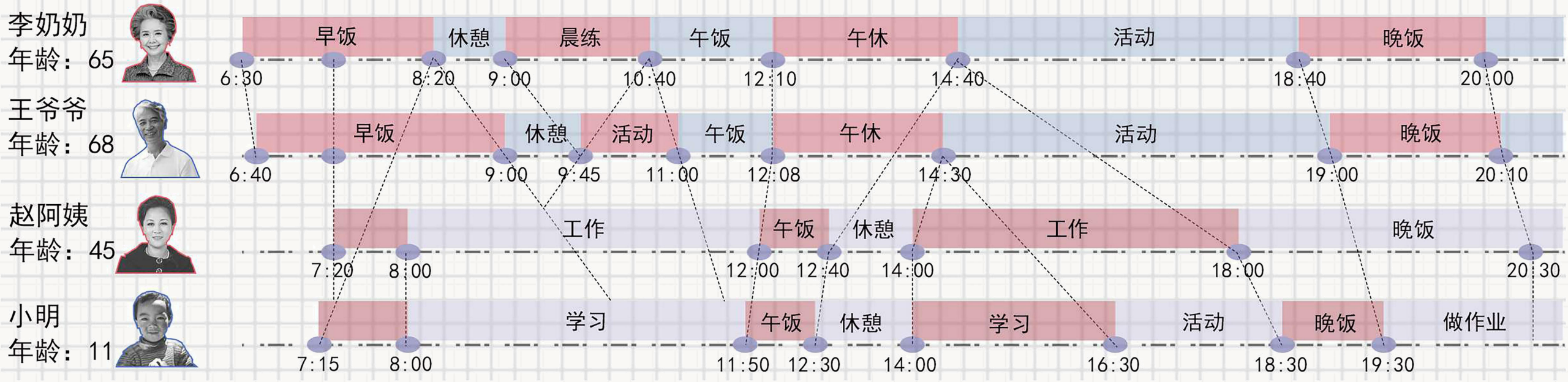
The resort has a more comfortable natural environment and is far away from the noise



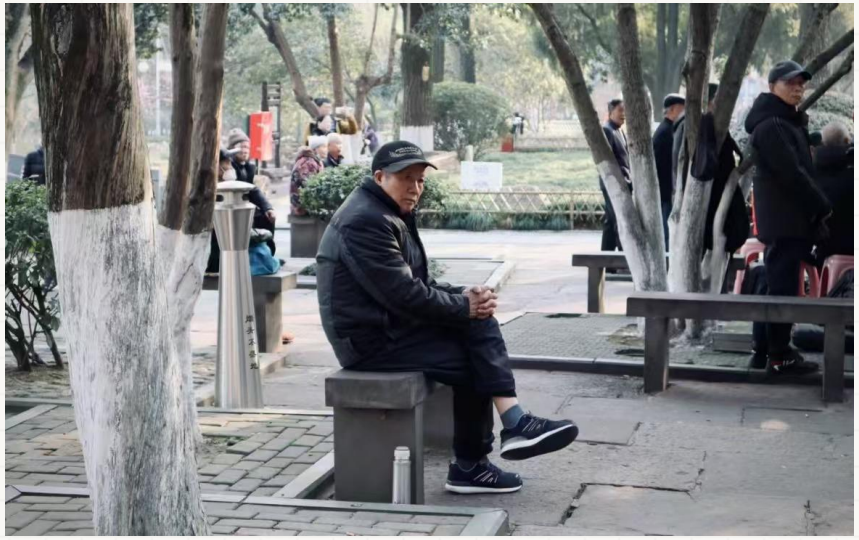
The property is located in a suburban resort area with excellent transportation links, just a 30-minute drive from the city center.

The surrounding land is available for the elderly to meet their own vegetable needs

人群跟踪调查



Most elderly people spend more time in community activities and less time living alone at home. They prefer to communicate, entertain or wait for their families in the public space of the community







innovation point

Life

health and wellness space, leisure and entertainment space, fitness and sports space, cultural exchange space。

Community building

Wellness garden design, wellness facilities, landscape features.



Healthy Living

Mental health, physical health, social relationship health.

Self-Creation

Pay attention to the mental health of community residents and encourage them to engage in social activities.

design philosophy



Guided by wellness principles, we redesign public spaces in aging communities by blending natural elements with humanistic elements to create a livable environment conducive to physical and mental well-being. Through integrated community design, we combine social interaction zones, health facilities, and homecoming pathways. A comprehensive circulation system connects these destinations, establishing a people-centered care center that ensures elderly residents enjoy comfort, fulfillment, and access to medical services.

design discipline



S(SAFETY)

安全性原则

Most of the community are elderly people, and due to the degeneration of physical functions, their mobility and reaction ability are reduced. Therefore, the safety of the environment should be met in the transformation of public space.



F(FUNCTION)

功能性原则

In the transformation, idle space in the community should be rationally used to provide diversified functional space for different user groups, and build old community public space conducive to physical and mental health and complete functions.

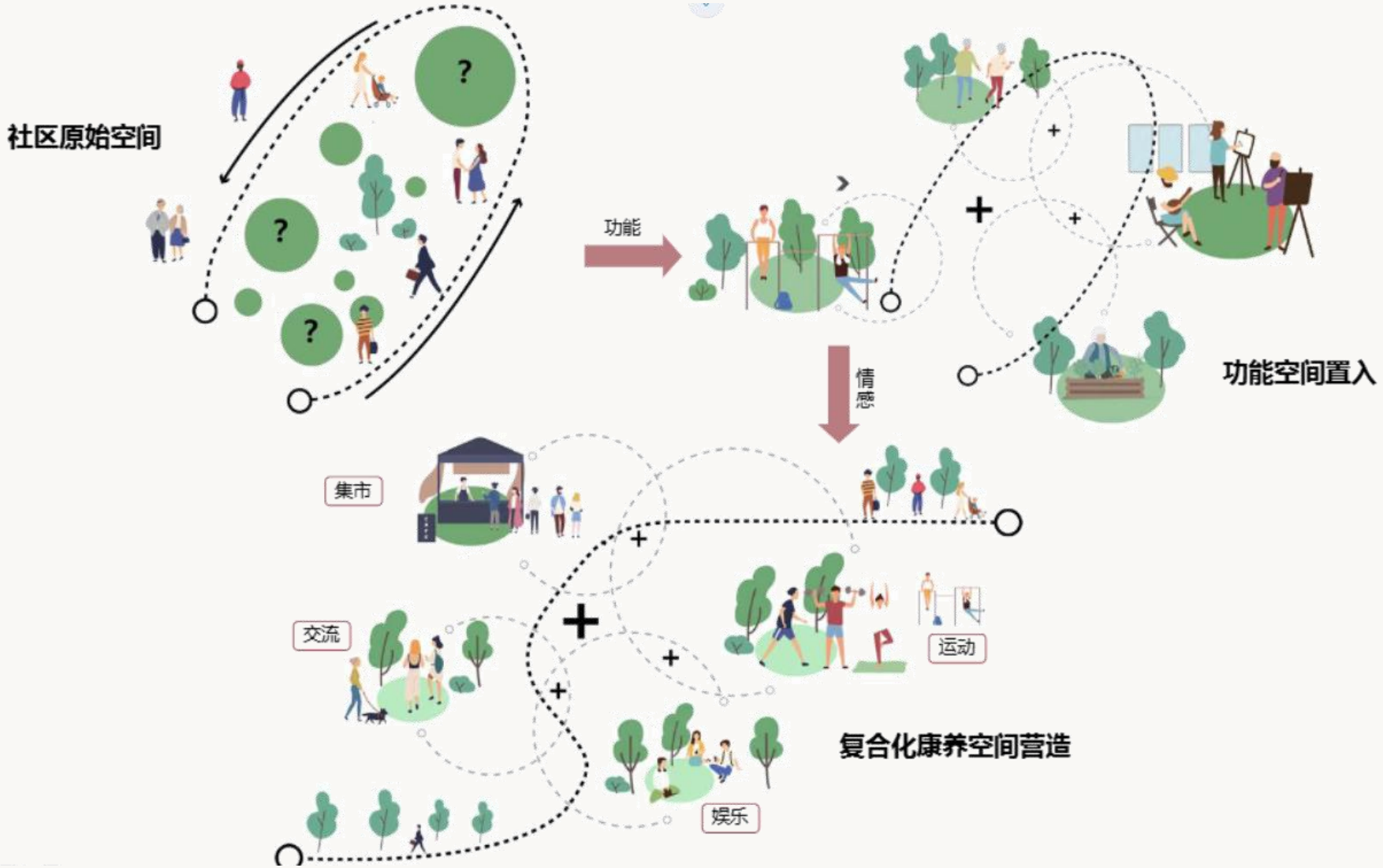


B (BELONGING)

归属感原则

In the early stage, we should fully investigate the local regional culture, respect the local residents' way of life, and pay attention to the protection of the sense of belonging and emotion of the site.

Build a complex health care space



To provide a comprehensive and comprehensive health environment for community residents

Special Design Showcase



Overall aerial view

Special Design Showcase



Share vegetable growing area

Special Design Showcase



Share vegetable growing area

Special Design Showcase



Share vegetable growing area

Special Design Showcase



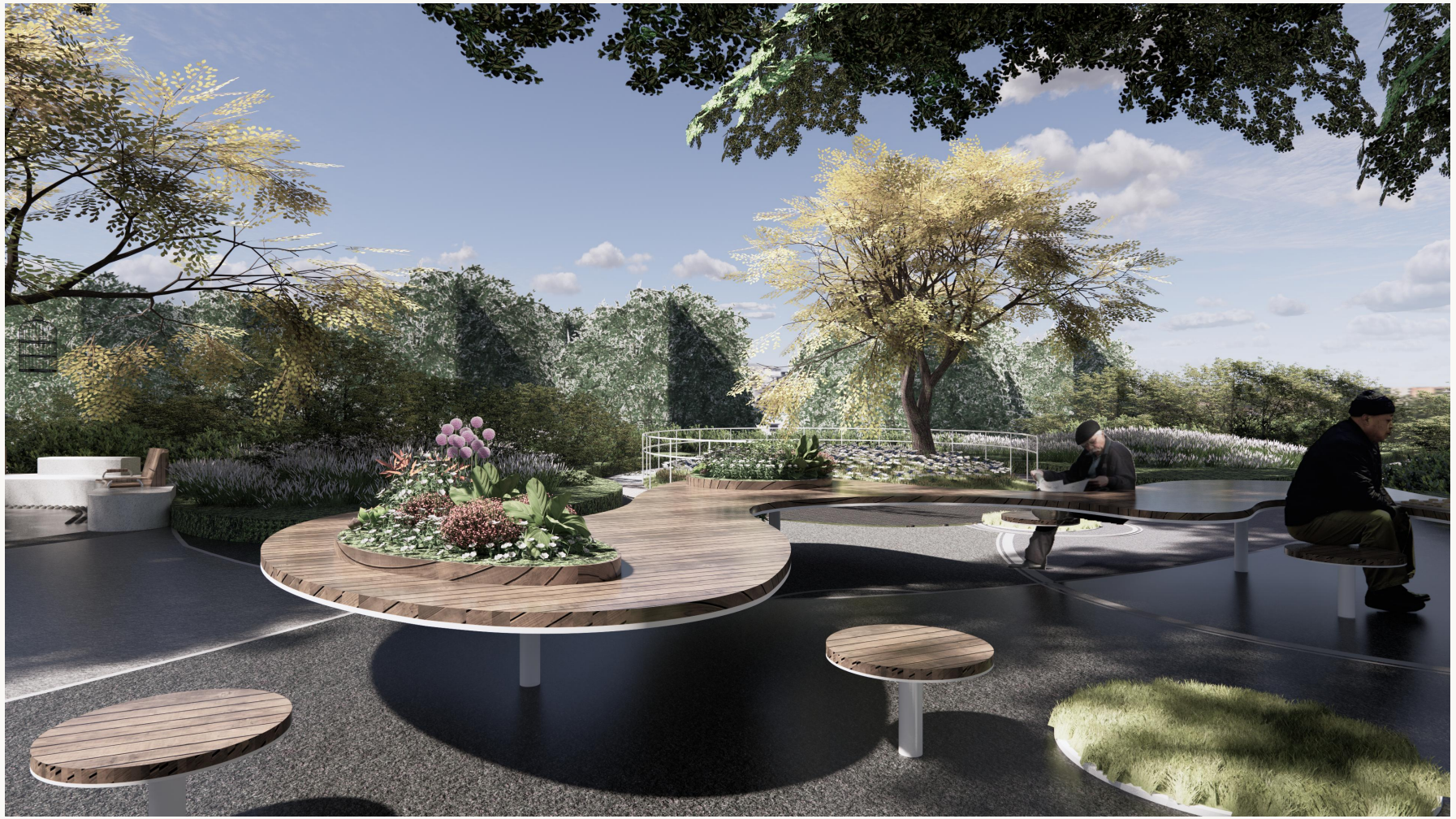
Healing Garden-Rest Area

Special Design Showcase



Herb Trail

Special Design Showcase



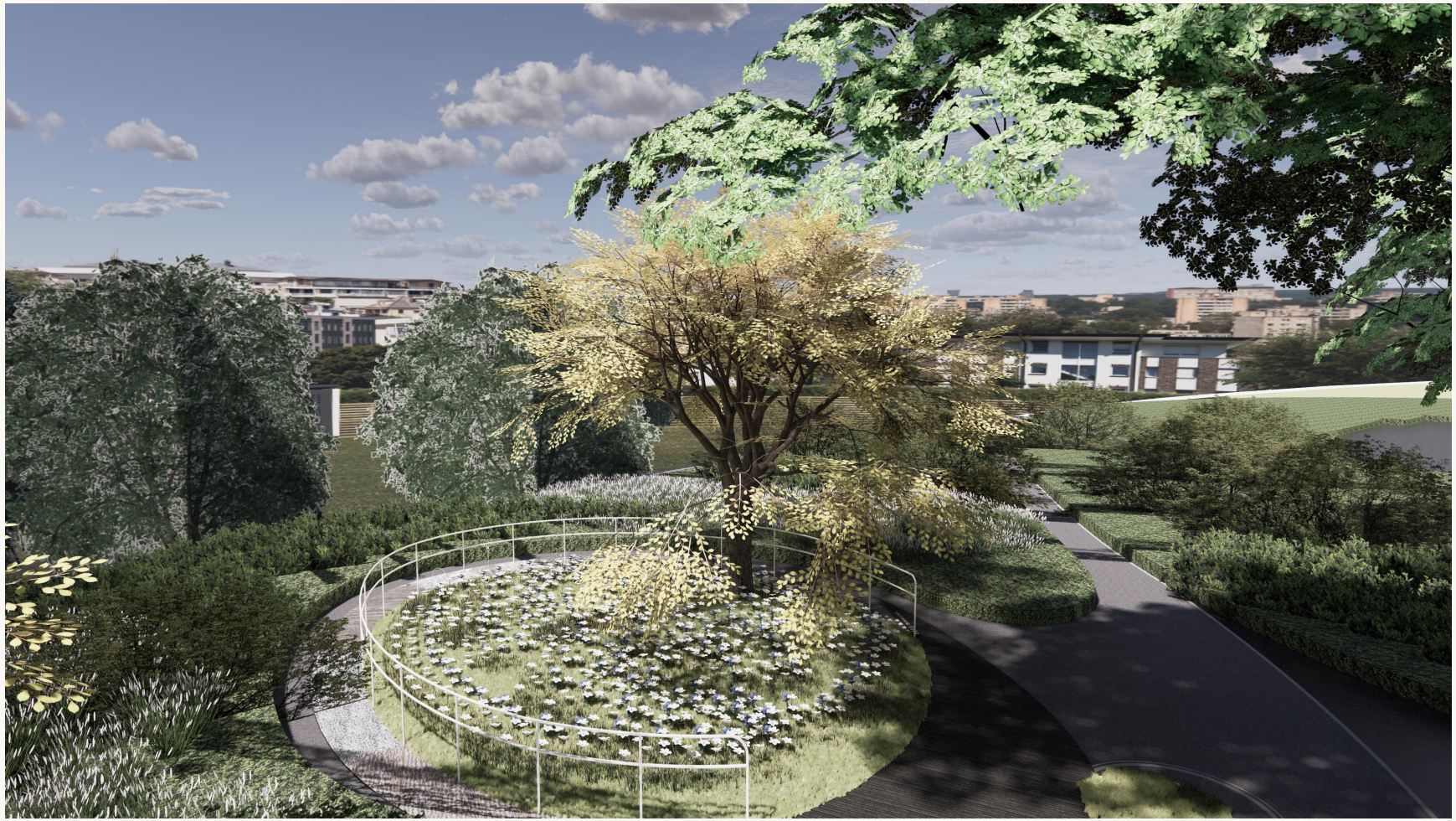
Create a shared floral art space

Special Design Showcase



relax zone

Special Design Showcase



Herb Garden

04

Results Summary and Outlook

1.Research conclusions and results summary

2.Reflections and Outlook

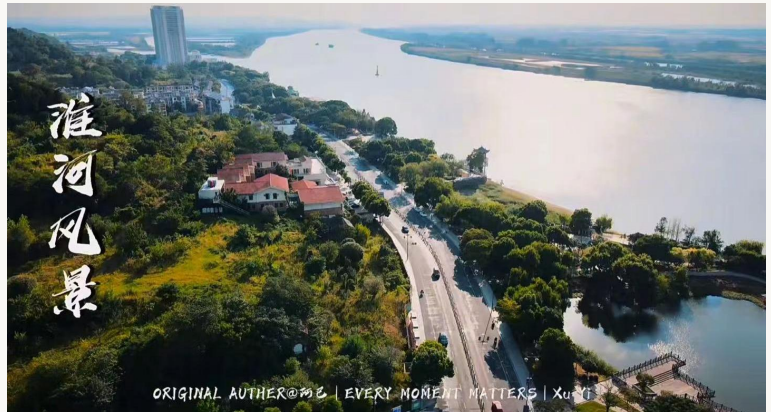
Rebuild the community cultural spirit

Promote the community spirit and create a space environment with community characteristics and cultural heritage

Use relevant elements to convey community culture

Pay attention to the integration of public space and regional culture

Build a community suitable for the elderly with health care as the theme







THANKS