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MEANS OF TRANSFORMING PUBLIC SPACES ACCORDING TO THE PRINCIPLES OF UNIVERSAL DESIGN (USING THE EXAMPLE OF THE AGING COMMUNITIES OF DUNDAYUAN IN HUAI'AN CITY)

Qualification work for obtaining the SVO «Master»

in the specialty B2 Design OPP «Design of the architectural and landscape environment»

The qualification work contains the results of own research

The use of ideas, results and texts of other authors must be referenced to the appropriate source. _____ Zhou Mengxiao (Luna)

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ABSTRACT

Zhou Mengxiao (Luna). Means of transforming public spaces according to the principles of universal design (using the example of the aging communities of Dundayuan in Huai'an city)

The community environment is one of the fundamental units of urban environments, and its quality directly affects residents 'physical and mental health as well as their quality of life. In recent years, with the growing awareness of health and the popularization of wellness concepts, integrating wellness landscape ideas into community renovation designs has become an effective way to improve environmental quality and promote residents' physical and mental well-being. Wellness concepts aim to meet people's multifaceted needs by creating healthy, comfortable, and safe environments that facilitate healing, enhancing physical health, mental health, and social adaptability, thus injecting vitality into sustainable urban development. Therefore, incorporating wellness concepts into the renovation of old communities can improve residents' quality of life and happiness, while also creating better conditions for sustainable urban development.

To implement the concept of health and wellness in practice, especially in the renovation of Dong Dayuan Community in Huai 'an City, this paper first analyzes and summarizes relevant research findings both domestically and internationally, exploring how to integrate the concept of health and wellness into the renovation of old community environments. Secondly, through the analysis of related cases, it summarizes the design principles that should be followed for the renovation of old communities under the guidance of health and wellness concepts. To verify the scientific validity and effectiveness of the design strategies for public

space renovation in old communities guided by health and wellness concepts, this paper selects Dong Dayuan Community in Huai' an City for renovation based on these concepts. Starting from the research approach of identifying problems, analyzing problems, and solving problems, it conducts an in-depth analysis from multiple perspectives, including the historical development of the site, its location overview, and current issues. Finally, under the guidance of health and wellness concepts, this paper updates the design of community public spaces according to the design principles and strategies.

The object of the study is the design of public spaces in China.

The subject of the study is the principles of universal design in the formation of public space, taking into account the requirements of the Dong Dayuan community in the city of Huai'an.

The structure of the work consists of an introduction, two sections, conclusions, a list of sources used and appendices.

The introduction defines the relevance of the study, formulates the goal and objectives of the study, and outlines the object and subject of the study, the methods used, the scientific novelty of the work, and the theoretical and practical significance of the work.

The first section analyzes the source base on the topic of the study and modern practical studies that describe the issues taking into account domestic research and the results of scientific explorations by foreign researchers. Based on the synthesis of the results of the analysis of these sources, the main groups of principles for the formation of universal design of public space were formed.

The conclusions to the first section highlight the main ways to solve the specified problem in scientific articles by domestic and foreign researchers.

The second chapter describes the main aspects of the design of public spaces in the elderly communities of Huai'an City (China). Based on the concept of improving health and well-being, a design project for the design of public spaces in the elderly communities is proposed. The project aims to create a livable environment that meets people's physical and psychological health by combining nature and culture. The following functional zones are proposed in the community life scenarios: a communication zone, a therapeutic zone for improving health, and a zone that provides a comfortable and safe return home, combining various destinations with a rich system of natural components to build a care center that is people-oriented, comfortable, livable, pleasant for the elderly, and meets their needs for care and medical services.

In the conclusions of the second chapter: 1. *Specific strategies for optimizing space are provided.* 2. *It is noted that the concept is based on the principles of universal design, namely*: barrier-free access: 1) All aisles are at least 1.2 meters wide and doorways are at least 0.9 meters wide, facilitating the passage of wheelchairs and walking aids; washbasins in toilets are equipped with adjustable height. 2) Innovations in social scenarios "Intergenerational Kitchen": a U-shaped countertop with different heights (a higher section for standing users and a lower section for wheelchair users) is designed and cooking activities for parents and children are organized. 3) Memory Sharing Zone: Install old photo scanners and oral history recording booths to encourage older people to record their life stories and create digital archives for public use. 4) Pet-friendly area: Special corners for small pets are equipped with water fountains and excrement bags to promote interaction and healing between people and animals.

Keywords: environmental design, healthcare concept; reconstruction of old communities; age-friendly design; renovation of public space.

АНОТАЦІЯ

Чжоу Менсяо (Луна). Засоби трансформації громадських просторів відповідно до принципів універсального дизайну (на прикладі старіючих громад Дундаюань у місті Хуайань). Громадське середовище є однією з фундаментальних одиниць міського середовища, і його якість безпосередньо впливає на фізичне та психічне здоров'я мешканців, а також на якість їхнього життя. В останні роки, зі зростанням обізнаності про здоров'я та популяризацією концепцій оздоровлення, інтеграція ідей оздоровчого ландшафту в проекти реконструкції громади стала ефективним способом покращення якості навколишнього середовища та сприяння фізичному та психічному благополуччю мешканців.

Концепції оздоровлення спрямовані на задоволення багатогранних потреб людей шляхом створення здорового, комфортного та безпечного середовища, яке сприяє загоєнню, покращує фізичне та психічне здоров'я, а також соціальну адаптацію, тим самим надаючи життєву силу сталому міському розвитку. Тому включення концепцій оздоровлення в реконструкцію старих громад може покращити якість життя та щастя мешканців, а також створити кращі умови для сталого міського розвитку.

Щоб впровадити концепцію здоров'я та оздоровлення на практиці, особливо в реконструкції громади Донг Даюань у місті Хуайань, у цій роботі, по-перше, аналізуються та узагальнюються відповідні результати досліджень як на національному, так і на міжнародному рівнях, досліджуючи, як інтегрувати концепцію здоров'я та оздоровлення в реконструкцію старого громадського середовища. По-друге, шляхом аналізу пов'язаних випадків, у ній підсумовано принципи проектування, яких слід дотримуватися під час реконструкції старих громад відповідно до концепцій здоров'я та благополуччя. Щоб перевірити наукову обґрунтованість та ефективність

стратегій проектування реконструкції громадських просторів у старих громадах, керованих концепціями здоров'я та благополуччя, у цій статті обрано громаду Донг Даюань у місті Хуайань для реконструкції на основі цих концепцій. Починаючи з дослідницького підходу, що полягає у виявленні проблем, аналізі проблем та їх вирішенні, проводиться поглиблений аналіз з кількох точок зору, включаючи історичний розвиток ділянки, огляд її розташування та поточні проблеми. Нарешті, під керівництвом концепцій здоров'я та благополуччя, у цій статті оновлено дизайн громадських просторів відповідно до принципів та стратегій проектування.

Об'єктом дослідження є дизайн громадських просторів Китаю.

Предметом дослідження є принципи універсального дизайну у формуванні громадського простору з урахуванням вимог громади Донг Даюань у місті Хуайань.

Структура роботи складається зі вступу, двох розділів, висновків, списку використаних джерел і додатків.

У ***вступі*** визначено актуальність дослідження, сформульовано мету та завдання дослідження, а також окреслено об'єкт і предмет дослідження, методи, що були використані, наукову новизну роботи, теоретичне та практичне значення роботи.

У ***першому розділі*** здійснено аналіз джерельної бази за темою дослідження та сучасних практичних досліджень, що описують проблематику з урахуванням вітчизняних досліджень та результатів наукових розвидок закордонних дослідників. На основі синтезу результатів аналізу даних джерел сформовано основні групи принципів формування універсального дизайну громадського простору.

У висновках до першого розділу висвітлено основні шляхи щодо вирішення зазначеної проблеми у наукових статтях вітчизняних та закордонних дослідників.

У ***другому розділі*** охарактеризовано основні аспекти формування дизайну громадських просторів у старих громадах міста Хуайань (Китай). Ґрунтуючись на концепції покращення здоров'я та благополуччя, запропоновано проєкт формування дизайну громадських просторів у старих громадах. Проєкт має на меті створити придатне для життя середовище, яке відповідає фізичному та психологічному здоров'ю людей, поєднуючи природу та культуру. У сценаріях життя громади запропоновано такі функціональні зони: зону комунікації, терапевтичну зону для покращення здоров'я та зону, яка забезпечує комфортне та безпечне повернення додому, поєднуючи різні місця призначення з багатою системою природних компонентів, щоб побудувати центр догляду, орієнтований на людей, комфортний, придатний для життя, приємний для людей похилого віку та задовольняючи їхні потреби в догляді та медичному обслуговуванні.

У висновках до другого розділу: 1) Наведено конкретні стратегії оптимізації простору. 2) Зазначено, щодо розкриття концепції на основі принципів універсального дизайну, а саме: ***безбар'єрний доступ:*** 1) *Усі проходи мають ширину* щонайменше 1,2 метра, а дверні отвори – щонайменше 0,9 метра, що полегшує прохід інвалідних візків та допоміжних засобів для ходьби; умивальники в туалетах оснащені регульованою висотою. 2) *Інновації в соціальних сценаріях* «Міжпоколіннєва кухня»: спроектувано U-подібну стільницю з різною висотою (вища секція для стоячих користувачів та нижча секція для користувачів інвалідних візків) та організувати кулінарні заходи для батьків та дітей. 3) *Зона обміну спогадами:* встановити сканери старих фотографій та кабінки для запису усної історії, щоб заохотити людей похилого віку записувати свої життєві історії та

створювати цифрові архіви для громадського користування. 4) Зона, дружня до домашніх тварин: спеціальні куточки для маленьких домашніх тварин обладнані фонтанчиками для води та пакетами для екскрементів для сприяння взаємодії та зціленню між людьми та тваринами.

Ключові слова: дизайн середовища, концепція охорони здоров'я; реконструкція старих громад; дизайн, зручний для людей похилого віку; ремонт громадського простору.

INTRODUCTION

Research purpose. Activate the intrinsic vitality of public spaces in aging communities; promote communication among people, between people and the environment, and between people and buildings; enhance the vitality of the elderly, promote their physical health, and increase humanistic care for the elderly; explore how community spaces can improve or guide the healthy lifestyle of the elderly.

This work conducts a research and analysis on aging communities in Huai'an City, summarizes the problems of public spaces in old communities, the activity needs and characteristics of the elderly, and explores the spatial creation of old communities under the concept of health and care by drawing on excellent design cases at home and abroad.

Through on-site empirical research in communities in Huai'an City, combined with the concept of health and care, it analyzes the contradictions between the current use of internal spaces in old communities and the basic usage methods and behavioral needs of the elderly. It summarizes the shortcomings of old communities. Many public spaces in old communities have many problems, such as aging facilities, unreasonable layout, single functions, and lack of greenery, which are difficult to meet the elderly's needs for a safe, convenient, comfortable, and healthy living space.

Taking the Dongdayuan Community in Huai'an City as a design practice, based on the design practice, it proposes corresponding design strategies and principles for renewal and transformation, and puts forward corresponding design strategies. Through the adaptation design of public spaces in the Dongdayuan Community for the elderly, it provides specific design suggestions for the healthy and elderly-friendly transformation of community public spaces.

At the same time, in today's era when the concept of health and care is increasingly deeply rooted in people's hearts, the transformation of public spaces in old communities needs to keep up with the times and integrate the concept of health and care to provide the elderly with more comprehensive and professional health and elderly care services. Let the elderly enjoy healthy and comfortable elderly care.

Research task.

1. *Improving the quality of life for community residents and creating a harmonious situation where the young and the elderly coexist.* Optimizing spatial layout: Addressing issues such as the unreasonable layout of public spaces and unclear division of functional areas in old communities, through re-planning and design, to optimize the spatial layout and ensure that the elderly can conveniently reach and use public spaces. Facility improvement and renewal: Updating old and damaged facilities, such as seats and fitness equipment, and ensuring they meet the usage habits and safety requirements of the elderly. At the same time, adding barrier-free facilities, such as ramps and handrails, to facilitate the elderly's travel and activities.
2. *Promoting the physical and mental health of the elderl.*：Increasing greenery and recreational spaces: By expanding green areas and creating recreationalspaces, a comfortable and peaceful environment is provided for the elderly, which helps them relax and relieve stress. Green vegetation also

purifies the air and supplies oxygen, which is beneficial to their physical health.

3. *Promoting social interaction.* Designing public spaces with interactive and social features, such as communication areas and activity zones, encourages the elderly to go out and interact with others, thereby enriching their spiritual life and reducing feelings of loneliness.
4. *Balance the overall development of the community and the diverse needs of residents：* integrate the concept of health care and community culture: In the renovation design, combine the concept of health care with community culture to create distinctive community public spaces. This not only enhances the overall image of the community but also strengthens the sense of belonging and identity of residents. Meet the diverse needs of residents: In addition to paying attention to the needs of the elderly, other age groups should also be taken into consideration. For example, setting up children's play areas, youth sports areas, etc., to meet the usage needs of residents of different age groups.
5. *Focus on sustainability and environmental friendliness.* In the renovation design, pay attention to the environmental friendliness and sustainability of materials, avoiding the use of materials that cause pollution to the environment. At the same time, through energy-saving measures and the application of green technologies, reduce the energy consumption and carbon emissions of the community.

Research significance

From a practical research perspective. Due to physical and age-related factors, the activity range of the elderly population mainly consists of community public activity spaces and surrounding areas. In today's society, issues such as the "double-old problem", low birth rate, and reduction in the number of working-age population have become increasingly prominent. Compared with those in foreign

countries, the domestic community aging renovation is relatively late in starting. Too many renovations are basically uniform, and it is at the stage of learning from and referring to excellent cases and renovation models. Therefore, based on the current social situation and the actual needs of the elderly population, old communities with a high degree of aging, long construction years, unreasonable community spatial layout, and lack of necessary infrastructure should be selected for renovation. While taking into account the needs of other age groups in the community, improve the public space environment of the community, and propose feasible design strategies, design planning concepts, and design principles for the elderly-friendly renovation of public spaces in old communities for the series of problems existing in old communities. Improve the relevant theories of elderly-friendly renovation of public spaces in old communities, broaden the renovation thinking, and provide design ideas and theoretical support for similar old community renovations in the future.

The research on the design of renovation for old communities under the concept of health care can better improve residents' healthy life and quality, enhance their sense of belonging and participation in the community, improve the spatial status quo of old communities, and play a promoting and guiding role in the better development of community public space construction under urban renewal. It is of significance for promoting the development of the aging cause in the regional scope. At the same time, through the renovation design practice of the public space of Dongdajuan Community in Huai'an City, it provides some solutions and implementation measures for the renewal and development of community space and the future. The design of elderly-friendly renovation of public spaces in old communities under the concept of health care promotes better promotion of both physical and mental health senses.

At present, the elderly in China mainly rely on family care and community care for their elderly care. The methods and effects of renovating old communities

are mostly similar, lacking good integration with local cultural characteristics and scientific method guidance. The basis for the renovation is mainly derived from on-site research, reference to existing cases, designers' subjective ideas and experience summaries. Based on this, the author will start from the overall space and humanistic environment of old communities in Huai'an City, reasonably divide the community functional zones, combine the actual needs of community residents and the current environmental conditions of the site, improve community public spaces and infrastructure. Pay attention to every detail of the community and people with different physical conditions, optimize barrier-free design, and build a care center that is people-oriented, comfortable, livable, where the elderly can have fun, be cared for, receive medical care, etc.

In terms of practical design, through on-site research in the old communities of Huai'an City and by combining with the renovation design examples of old communities in Huaiyin District, the local interpretation of community aging-friendly design in Huai'an City was carried out, and relatively universal design principles were proposed, providing specific design suggestions and corresponding aging-friendly renovation strategies for the renovation of community public spaces. During the renovation process, the historical and cultural characteristics of the old communities in Huai'an City were explored and integrated into the design, such as setting up cultural walls and landscape sculptures, to enhance the sense of belonging and identity of the community. The unique historical sense of the community was retained and reproduced, such as the Zhou Enlai Memorial Hall, Guoshi Pagoda, Han Xin's Hometown, and Zhenhuang Tower in Huai'an City. Images or other elements could be extracted and integrated into the community's cultural construction, innovating and re-presenting the spirit of the place, so that the old communities can regain new vitality and vigor.

In terms of theoretical research, the renovation design of public spaces in old communities under the concept of health care is currently in the initial stage of

development. This article mainly takes the health care perspective as the starting point, explores the construction dimensions of community elderly-friendly public spaces and community attributes, and hopes to promote the physical health of the elderly through methods such as horticultural therapy, active fitness, and communication forms, combined with offline fitness activities, community academies, community stations, community health care centers, landscape vegetation, etc., to promote the intellectual recovery of the elderly and improve their ability to accept new things, thereby promoting the healthy development of the elderly. Pay attention to studying the aging of healthy community public spaces from three angles: community environment, community services, and community activities.

Research methods.

Theoretical aspects:

- *Analysis and synthesis method.* Collect works and practical materials related to the concept of health and well-being, deeply understand the development history and current research status of this theory, and combine it with thematic research on landscape design of community aging on-site at home and abroad;

- *method of summarizing* the obtained information and relevant visual material. *Practical aspects:*

- *transformation method:* proposed to solve the problems of shaping the design of public spaces of aging into places that can be learned from practical cases, providing research ideas for writing this paper;

- *questionnaire method:* takes into account the responses of people aged 60 and over who participate in outdoor activities in the Dong Dayuan elderly care community in Huai'an city and surrounding communities. Summarizes the characteristics of the movements and behaviors of the elderly during outdoor

public activities from the obtained video recordings, using a notebook to record information such as the content, duration, and number of participants of the elderly activities in this space, thereby analyzing their potential needs and difficulties in physical and environmental support, finding a basis for the transformation of aging in place activity spaces, and providing objective references for research.

Theoretical and practical significance of the study.

From the point of view of theoretical research, the content of the work primarily considers the provision of recommendations regarding promising measures to improve the health and well-being of people, regarding research on the dimensions of the construction of public spaces suitable for aging communities and the attributes of communities. The recommendations are aimed at shaping public space design tools to strengthen the physical health of older people through horticultural therapy, vitality and communication methods. The work aims to enhance the intellectual recovery of older people and their ability to perceive new things by attending fitness events, community schools, public spaces, health centers, etc.

Solving the "twin problems of the elderly" through design: declining birth rates and shrinking working-age workforce, creating healthy and age-friendly communities. Based on the current social conditions and the real needs of the elderly population, this study selected elderly communities with high aging rates, a long history of construction, irrational community planning, and the lack of necessary infrastructure for reconstruction. Taking into account the needs of other age groups, the study improved the environment of community public spaces.

Considering a number of existing problems in elderly communities, the study

1. proposed appropriate design strategies, planning concepts, and principles for the age-friendly renovation of public spaces in these communities.

2. *Providing elderly communities with the opportunity to integrate into a renewed space and a culturally and socially renewed city, which plays a significant role in promoting the development of aging initiatives on a regional scale.* This study on the design of the renovation of elderly communities based on the concept of health and well-being can better improve the health and quality of life of residents, strengthen their sense of belonging and participation, and improve the existing spatial conditions of elderly communities. It also promotes and guides the development of community public spaces within the framework of urban renewal, and has a significant impact on promoting the development of anti-aging initiatives in the region.
3. *Provide a proposal for the construction of a people-oriented care center with the creation of comfortable and convenient living conditions for the elderly*, where they can enjoy life, receive medical care and care for themselves.

Research on the Transformation and Design of Public Spaces in Aging Communities under the Concept of Health and Wellness: A Case Study of Dongdayuan Community in Huai'an City. The elderly population, due to physical and age-related reasons, primarily focuses their activities within community public spaces and surrounding areas. In contemporary society, issues such as the "double elderly problem," declining birth rates, and a reduction in the working-age population are becoming increasingly prominent.

Compared to international standards, domestic community aging modifications started relatively late and are largely uniform, still in the phase of referencing and learning from exemplary cases and modification models. Therefore, starting from the current social situation and the actual needs of the elderly population, it is necessary to select older communities with a high degree

of aging, built during an earlier era, with unreasonable spatial layouts, and lacking necessary infrastructure for renovation. Balancing the needs of other age groups within the community, improving the public space environment, and addressing a series of issues present in older communities, we propose feasible design strategies, planning concepts, and principles for the adaptation of public spaces in older communities to be more elderly-friendly. We aim to refine the relevant theories of public space adaptation in older communities, broaden the scope of renovation thinking, and provide design ideas and theoretical support for future similar community renovations.

I. Existing Problems in the Community. During the rapid process of urbanization, old communities, as one of the most vulnerable links in urban renewal, are confronted with rapid growth in social economy, culture and population. As a result, the development and renewal of old communities have become more difficult and complex. At the same time, old communities are more prone to health problems, such as backward infrastructure, high population density, chaotic traffic flow, and environmental pollution. These problems are not conducive to the healthy life of residents and have a negative impact on the sustainable development of the entire city. Therefore, applying health and wellness landscape strategies in the renovation of old communities can reduce health problems within the community and provide residents with a better living environment.

II. Design Principles Combining Health and Wellness Concepts.

1) From the perspective of people's physical and mental health development, conduct in-depth research on the construction and development of old communities. During the process of urbanization, old communities are often neglected and various problems exist, such as the lack of landscape, traffic congestion, and the absence of community culture. These issues can have a

negative impact on the physical and mental health of residents in old communities. Therefore, based on the current environmental conditions and cultural atmosphere of the old mining community in Jingxing, Hebei Province, this paper summarizes and refines the aspects of community landscape environment renewal and community culture creation, and proposes the entry points for the coordinated development of old community environment renewal and regional culture. By exploring and promoting the characteristics of regional culture, the renewal and development of old communities can be achieved. In addition, in the process of community environment renewal, apart from providing a healthy landscape environment, attention should also be paid to the health of residents' social relationships to enhance their physical and mental health levels.

2) This paper analyzes the renewal of old communities from the perspective of health influencing factors and proposes systematic design strategies for the landscape transformation of old communities and the creation of health and wellness landscapes. In the landscape transformation of old mining communities, methods such as preserving, renovating, and innovating industrial cultural elements are adopted to create community landscapes with industrial characteristics. By integrating industrial culture with the natural environment, a more diverse health and wellness experience can be provided for residents, promoting the transformation of old communities into healthy communities and improving the quality of life and happiness of community residents.

III. Wellness Landscape. Wellness landscape is a landscape design based on the concept of health. It creates a livable environment suitable for people's physical and mental health and health preservation through natural and cultural landscapes, thereby exerting a positive influence on people's physical and mental health and promoting the formation of a positive lifestyle. The audience of wellness landscapes includes the elderly, the sick, sub-healthy people, and healthy people. People can relieve mental stress and regulate physiological functions by enjoying

the scenery, meditating, enjoying hot springs, and experiencing picking. Wellness landscapes present various forms,including urban green spaces, healing gardens, urban parks, elderly care communities, and hot spring resorts. These forms of wellness landscapes can provide different types of wellness experiences, such as nature therapy, plant therapy, and horticultural therapy, to meet the health needs of different groups. Regardless of the form, wellness landscapes are dedicated to focusing on people's health needs and achieving the ultimate goal of stabilizing emotions and maintaining physical and mental health through interactive experiences of both the body and mind. Through the design of wellness landscapes, a natural environment beneficial to physical and mental health can be created, allowing people to feel relaxed, comfortable, happy, and peaceful, and improving their overall health levels. Wellness spaces refer to landscape functional spaces designed based on wellness concepts, aiming to provide a place that integrates health preservation, entertainment and relaxation, quality elderly care, and various other activities for people of different age groups, including children, teenagers, middle-aged people, and the elderly. These spaces should be continuous (sustainable) and dynamic (flexible), and should include various types and levels of wellness facilities and functions.

CHAPTER I. A REVIEW OF DOMESTIC AND FOREIGN LITERATURE

1.1. State of research on the topic.

1. *Overview of modern research on health care concepts*.

• ***State of domestic research***. Research on the concept of health and wellness in China is still in its infancy. Although there are few relevant documents and materials, the research content covers multiple aspects including the concept of health and wellness, target populations, models, practical explorations, health and

wellness landscapes, trends in the development of the health and wellness industry, construction of health and wellness towns, design of health and wellness tourism products, and the establishment of evaluation indicators for health and wellness. Currently, domestic research on the concept of health and wellness mainly focuses on three areas: health, wellness, and elderly care. On August 26,2022, the School of Tourism at Sun Yat-sen University and a publishing house jointly released the "Health and Wellness Blue Book: China's Health and Wellness Industry Development Report (2021)." The blue book clearly states that the concept of health and wellness exhibits characteristics of diversified models and diverse target populations. Compared to traditional concepts, the new era's health and wellness philosophy, guided by the Healthy China strategy, has expanded its scope, making more people of different ages aware of the importance of nationwide health and wellness. In 2021, the main search hotspots related to "health and wellness" became rehabilitation equipment, elderly care training, health and wellness products, facilities, and landscapes. This change reflects the development of the health and wellness concept towards professionalism, systematicness, and popularization. According to Baidu, the age group primarily interested in health and wellness in 2021 was between 20 and 40 years old, with a decline among the elderly, indicating a trend toward younger target populations. The younger demographic for health and wellness also broadens the development models of the health and wellness market ("health and wellness+" model) and drives the emergence of related industries.

Professor Zhu Kaibin, Dean of the Health and Wellness Industry Research Institute at Wuhan University of Light Industry, believes that wellness is not only about health and longevity but also a way to maintain physical and mental well-being. Wellness is not just about the needs of the elderly after retirement; it is also a rigid demand for people with chronic diseases and those in sub-health conditions. He suggests that individuals over thirty-five should regularly undergo phased

professional health maintenance. Physical and mental health are essential conditions for pursuing a happy life.

In Cao Bo's[3]master's thesis from Nanjing Forestry University, the concept of health and wellness was integrated into the design of mountain forest resort areas. The study also considered relevant national policies and development needs, identifying existing issues under the guidance of health and wellness principles in these resorts. These issues include overly simplistic health and wellness products and a lack of scientific research and technical support. This highlights the inadequacies in research on health and wellness resort concepts and the ambiguity and scarcity of understanding regarding health and wellness principles and designs.

In Huang Lili's[8] master's thesis from Fujian Agriculture and Forestry University, four primary factors influencing health and wellness were selected: negative ion concentration, noise level, green space ratio, and human comfort. Using a combination of qualitative and quantitative research methods, she conducted a detailed quantitative analysis of the health and wellness indicators in the surveyed suburban park greenways, yielding corresponding research results. The study elaborates on six aspects: plant configuration, plant color, accessibility of greenways, service facilities, signage, and the harmony between plants and the environment.

In Chen Hui's master's thesis from Xi'an University of Architecture and Technology, based on the concept of health and wellness, she delves into the needs of target groups for health and wellness behaviors. From the perspective of landscape design, she analyzes the demands of health and wellness enthusiasts for landscape spaces. The research integrates interdisciplinary approaches. The findings enrich the ideas and methods for landscape design in similar health and wellness resorts.

In Mo Xinyi's[20] master's thesis from Jiangxi Agricultural University, the correlation between health and wellness concepts and nursing home landscapes is emphasized through methods such as questionnaire surveys, IPA analysis, horticultural therapy, and healing environment theory. The study employs both qualitative and quantitative digital analysis methods, proposing principles and methods for landscape design in nursing homes based on health and wellness concepts, thereby achieving a seamless integration of health and wellness with treatment and care.

In his doctoral dissertation, Wang Jiantao[29] of Xi 'an Academy of Fine Arts combined the concept of healing environment with health care space to carry out design research, analyzed the special psychological needs of users of health care space in today's society, and made a detailed discussion on the connotation, function and design principles of health care space.

In Zeng Chenglin's[41] master's thesis from Sichuan Normal University, the focus is on analyzing the fitness needs of elderly people in health and wellness institutions in Panzhihua and the supply of health and wellness services. Data were collected and analyzed through literature review, questionnaire distribution, field research exploration, mathematical analysis, and logical analysis. The study ultimately found that older adults have a higher demand for health and wellness services, that the content of fitness activities in these institutions is relatively monotonous, and that the integration of services and resources within these institutions is not comprehensive. According to the above review of domestic health and wellness concepts, research on these concepts in China is still in its infancy. The health and wellness industry and models have yet to form a systematic framework, and relevant national policies are being actively formulated and issued in an orderly manner. In terms of theoretical research, domestic scholars have categorized health and wellness concepts as a unified term encompassing health, wellness, and elderly care. This area of theoretical research remains at the

foundational level, with only a small portion of studies adopting a combination of qualitative and quantitative methods in recent years.

The depth of theoretical research needs further enhancement, and the design research that integrates health and wellness concepts into practical applications is still in the exploratory stage.

1.2. Current situation of overseas research.

Through the analysis of foreign health and wellness concepts, it is found that research on these concepts is relatively early and mature abroad. Foreign countries define health and wellness as a positive attitude towards life pursuits, aiming to prevent and treat diseases, improve physical health, enhance quality of life, and ultimately achieve a happy life. It is evident that the target audience for health and wellness is defined as the general public, with an inclusive meaning, distinguishing it from traditional concepts of health, wellness, and elderly care. The relevant research results of health care concept in foreign countries are mainly concentrated in Germany, Japan, South Korea, the United States and other developed countries.

The specific research contents and situations are as follows:

In the 1840s, the term "wellness" first appeared in **Germany**, where it was articulated primarily as an approach to improve human health and prevent and treat diseases through high-quality forest environments and healthy green forestry products. The German wellness model employs "prevention, treatment, and care" as its means, integrating this model into the national social security system and health insurance.

Japan, as one of the earliest countries to enter an aging society, has established a strategically significant concept of health and wellness through legislation, recognizing that "health and wellness is not only a responsibility of families but also a shared responsibility of the state and society." It has also

enacted a series of health and wellness policies and laws, implementing strategic health and wellness planning. With the improvement and adjustment of Japan's social security policies, it has further established a comprehensive health and wellness service system covering the entire life cycle from infancy to old age. After a long period of development, Japan's health and wellness service system has met the diverse needs of seniors at different consumption levels, particularly focusing on the development of various health and wellness products tailored to senior needs. The characteristics of Japan's health and wellness policies are mainly reflected in three aspects: First, the provision of inclusive services to better meet the demand for health and wellness facilities among seniors.

Second, standardized service quality to ensure safety and quality control for people with different income levels when using these facilities; Third, diversified demand protection, which involves specialized design based on the specific needs of different groups, and legislative guarantees that ensure all groups have the right to use health and wellness facilities and services.

Research on health and wellness in **South Korea** primarily focuses on the construction of wellness facilities. Studies have found that the development of these facilities stands out in three aspects: First, they are extremely safe, with rooms scientifically and reasonably designed based on the physical characteristics of elderly residents; Second, the caregivers have high levels of education and possess extensive knowledge in wellness care as well as medical emergency response capabilities. These caregivers are often passionate and dedicated individuals from within South Korea who make it easier for seniors to feel warmth, happiness, familiarity, satisfaction, and fulfillment; Third, the operational management systems of wellness facilities are highly standardized. In South Korea, if significant issues arise during operations, the government has the authority to terminate the facility, and the remaining costs and processes are

covered by the state. This ensures the interests of the elderly population, and such a mature operational model is worth emulating by many countries.

1.3. Research status of renovation of old communities at home and abroad

- *Overview of domestic research status.* Professor Wu Liangyong[30] creatively proposed the design concept of "organic renewal" in urban planning and construction research, which aligns with the laws of urban texture and development, achieving organic urban construction. In his book *Old Beijing and Juer Hutong*, he applied organic renewal to make partial adjustments to the existing environment, protecting the current layout while enhancing spatial quality, thus achieving the goal of organic renewal.

Jiang Yubo[10] (2019) guided by the theory of sustainable and progressive organic renewal and based on the existing spatial structure, he transformed the public space of old communities from four aspects: texture repair, progressive renewal, humanistic continuity and public participation. While improving the physical environment, he continued residents' memory and sense of place and realized humanistic care.

Yang Yuxing[36](2019) takes the organic renewal theory as the main idea of transformation in his master's thesis, which improves the infrastructure configuration and enhances the cultural characteristics of the community on the basis of retaining the spatial texture and living atmosphere of the original community, so as to realize the sustainable development of the community.

Song Ruochen[22] (2019) guided by the "micro-renewal" theory in his master's thesis, he addressed the deterioration of urban physical environment such as functional inadequacy, environmental decay, and aging facilities in old urban communities through micro-renewal of functions and environment, as well as the

decline of humanistic environment such as low vitality in communities andweakened neighborhood relations, so as to enhance the vitality of cities.

Ding Yiwen[5] (2019) in his master's thesis, from the perspective of micru-pdates, transformed the physical and social environment of public space in existing communities. Through the integration of ecological environment, optimization of service facilities, reshaping of humanistic spirit and promotion of community development, the spatial environment, activity space and road space were optimized and improved to create a livable urban environment.

Yang Lisheng[37](2019) compared and summarized three types of micro-updates in his master's thesis, and promoted the sustainable and healthy development of communities through multi-participation, planner intervention and environmental narrative.

Peng Runhua[21](2020) in his master's thesis, the micro-update model combined with the scale, environment, residents' needs, cultural perspective and other principles to clarify the direction of renovation of old community public space, so as to achieve the goals of quality improvement, structural repair, landscape optimization, residents integration and cultural context protection, and ensure the long-term stable development of the community through the establishment of management mechanism.

Wu Qiong[23] (2018) explored the ways and methods of outdoor space renovation in old communities from three aspects of material environment, humanistic environment and sustainable development based on the experience and theory of organic renewal and transformation in his master's thesis, so as to improve the quality of residents' living environment, retain urban texture and continue urban context.

- *Overview of foreign research status.* Foreign countries began the reconstruction of urban space very early. The Paris reconstruction plan led by Osman was aimed at alleviating the contradiction between the rapid development of the city and its relatively backward functional structure by widening the road width, building large parks and improving municipal projects, so as to make Paris one of the most beautiful and modern cities in the world at that time.

Jacobs argues in his book *The Death and Life of Great American Cities* that urban renewal through simple demolition and renovation would be a tremendous waste of urban resources. The vitality of a city lies in its diversity, so it is essential to approach urban transformation and construction with care, understanding the complexand varied processes that shape a city, rather than resorting to crude and simplistic methods. Jacobs believes that good social communication through public spaces (streets, sidewalks, parks, and squares) facilitates interaction among people from different social classes or age groups, thereby promoting harmonious and stable social development.

F. Schmeichel believes in the book Small is Good that large-scale urban development has inevitable disadvantages and limitations, which will bring about inevitable urban problems. Urban development should adopt "human scale production mode" and "optimal appropriate technology", encourage small-scale urban development, and promote urban regeneration through small repair projects.

Australian scholars M L, Booth, N, Owen et al. explored the more desirable communities for the elderly from the perspective of functional facilities, and described the four aspects of food acquisition, park space, medical services and civic participation, which provided a clear direction for the construction of elderly-friendly communities; Duany, Plater-Zyberk and other scholars put forward the concept of lifelong community based on the concept of elderly-friendly

community, that is, residents can complete their life cycle in the community regardless of their age.

1.4. Research status of public space renovation in elderly care communities at home and abroad

Overview of domestic research status.

In 1992, Southeast University studied the living environment of the elderly in cities, marking the beginning of the attention paid to the aging problem in architecture. Until 1999, the "Code for Design of Buildings for the Elderly" first put forward the concept of "elderly residential community", which marked the gradual rise of the academic attention and research on the public space of old-age care communities.

Xie Zhiyu[33] proposed design principles, concepts, and key points for public spaces in elderly care communities, applying them to the practical planning of such communities. Scholars like Zhang Guangping summarized the development of existing comprehensive elderly care communities in China, gaining a deep understanding of their current status and needs. Based on an analysis of the characteristics of the elderly, they proposed design strategies, emphasizing that design should focus on meeting the actual needs of the elderly, rather than merely constructing public spaces according to the designer's ideas.

Liu Yihang[15], through the investigation and analysis of elderly people, comprehensively summarized design factors related to outdoor public spaces. His research found a close relationship between design factors and the elderly's experiences in outdoor public spaces. By integrating the concept of active aging with positive psychology, he explored key points in public space environmental design and methods for creating an atmosphere. He proposed design strategies and finally applied them to practical projects.

He Nanqian's[9] research starts from the whole and makes a comprehensive analysis of the planning and construction of the elderly community. Her research not only covers the site selection and layout, residential design, but also includes the demonstration of public service facilities. In summary, before the planning standards and norms for elderly care communities in our country were established, experts and scholars explored various fields, including macro social development, meso planning strategies, and micro design practices. However, research on the planning of public space systems that are primarily relied upon by the daily activities of the elderly remains relatively scarce. This indicates that there is still significant value and room for exploration in the field of elderly care community planning. Further in-depth discussions are needed to understand the impact of public space systems on the lives of the elderly and how to optimize their planning and design.

Overview of foreign research status. The West divides elderly residential areas into multiple living modes, with research covering aspects such as senior housing, community planning for the elderly, and welfare facilities for seniors. By reviewing relevant literature, the development ofresearch on public spaces in elderly-friendly communities can be traced back to the early functional planning stage, where "elderly architecture" was a representative subject of study.

Theoretical aspects primarily focused on how building spaces could better meet the living needs of the elderly, with designs tending towards functional planning for elderly buildings. As government policies have been gradually implemented and the pressure of aging has increased year by year, scholars have begun to shift their focus to the external environment of elderly-friendly communities, particularly in the design and planning of public spaces.

The book "Site Planning and Design for the Elderly (Site Planning and Design ForTheElderly)," published in 1985, is a representative work in this field. It

focuses on the external space design of elderly-friendly communities, emphasizing the necessity of age-appropriate site design and offering solutions and improvement suggestions. These recommendations provide crucial references for creating a more suitable community environment for the elderly, meeting their diverse needs in physical, psychological, and social aspects, and further promoting the development and improvement of elderly communities.

Claire Cooper Marcus et al. summed up some key design points through the study of urban and community public space for the elderly, including how to meet the needs of comfort, safety and accessibility in the planning of public space, fully considering the psychological and physiological characteristics of the elderly, so as to ensure the adaptability of the community environment.

Lain K.Crombie et al. conducted a sample survey of 409 elderly individuals and used regression analysis to identify 11 factors that significantly impact outdoor activities for seniors. These factors include lack of interest, absence of comfortable places, and physical limitations. Such factors need to be fully considered in community planning and design to enhance the quality of life and happiness of the elderly.

In summary, foreign scholars' research on public spaces in elderly care communities mainly focuses on spatial utilization, structures, activities for the elderly, and influencing factors. Overall, the studies pay close attention to detailed design, incorporating the psychological and physiological characteristics of the elderly to conduct multifaceted analyses of public spaces in elderly care communities.

Most studies are based on statistical surveys, using time geography methods to track outdoor activities of the elderly over long periods, summarizing the regular patterns of their usage behaviors. Such studies are predominantly empirical, yielding many valuable conclusions. Lain K. Crombie et al. conducted a sample

survey on 409 elderly people and used regression analysis to identify 11 factors that significantly affect the outdoor activities of the elderly. These factors include a lack of interest, a lack of comfortable human-made places, and physical exhaustion, etc. Such factors need to be fully considered in community planning and design in order to improve the quality of life and happiness of the elderly.

Conclusions to the first chapter

1. A review of the relevant literature suggests that the development of research on public spaces in age-oriented communities can be traced back to the early stage of functional planning, where “architecture for the elderly” was a representative subject of research.
2. It is proven that theoretical aspects mainly focused on how building spaces can better meet the living needs of the elderly, and projects tended to functional planning for buildings for the elderly.
3. It is determined that as government policies are gradually implemented and the pressure of aging increases year by year, scholars have begun to shift their attention to the external environment of age-oriented communities, in particular the design and planning of public spaces. The book "Site Planning and Design ForTheElderly", published in 1985, is a representative work in this field. It focuses on the design of outdoor spaces for elderly-oriented communities, emphasizing the need for age-appropriate site design and offering solutions and suggestions for improvement.
4. All the recommendations mentioned in the scientific literature contain important references for creating a more suitable environment for the elderly, meeting their various needs in physical, psychological and social aspects, and further promoting the development and improvement of elderly communities.
5. It was found that Claire Cooper Marcus et al. summarized some key design points through a study of urban and community public spaces for the elderly,

including how to meet the needs of comfort, safety, and accessibility when planning public spaces, fully considering the psychological and physiological characteristics of the elderly to ensure the adaptability of the community environment. Lane K. Crombie et al. conducted a sample survey of 409 elderly people and used regression analysis to identify 11 factors that significantly affect outdoor activities. These factors include lack of interest, comfortable places, and physical limitations. Such factors should be fully considered in community planning and design to improve the quality of life and happiness of the elderly.

6. In summary, foreign scholars' research on public spaces in elderly care communities mainly focuses on space use, structures, activities for the elderly, and influencing factors.
7. It is proven that in general, studies pay close attention to detailed design, taking into account the psychological and physiological characteristics of the elderly to conduct a multifaceted analysis of public spaces in elderly care communities. Most studies are based on statistical surveys, using time geography methods to track the outdoor activities of the elderly over long periods, generalizing regular patterns of their usage behavior. Such studies are mainly empirical and provide many valuable conclusions.

CHAPTER II. DESIGN PROPOSAL FOR THE FORMATION OF PUBLIC SPACE FOR THE DONG DAYUAN COMMUNITY IN HUAI'AN CITY (taking into account the principles of universal design)

CONCEPT

Based on the concept of improving health and well-being, the renovation project of public spaces in old communities aims to design a livable environment that is suitable for people's physical and psychological health by combining nature and culture. In the community life scenarios of our renovation project, we can integrate the following functional areas: a communication area, a therapeutic area for improving health, and an area that provides a comfortable and safe return home, connecting different destinations with a rich system of natural components to build a care center that is people-oriented, comfortable, livable, pleasant for the elderly, and meets their care and medical needs.

- *The innovation and characteristics of the project.* In terms of theoretical research, the renovation design of public spaces in old communities under the concept of health care is currently in the initial stage of development. This article mainly takes the perspective of health care as the starting point, explores the construction dimensions of community-friendly public spaces and the attributes of the community, and hopes to promote the physical health of the elderly through methods such as horticultural therapy, active fitness, and communication forms. By combining offline fitness activities, community academies, community stations, community health care centers, and landscape vegetation, it promotes the intellectual recovery of the elderly

and enhances their ability to accept new things, thereby promoting the healthy development of the elderly.

It focuses on studying the aging of health community public spaces from three perspectives: community environment, community services, and community activities. In terms of practical design, through on-site investigations of old communities in Huai'an City and combined with the renovation design examples of old communities in Huaiyin District, the aging of the community is interpreted in a Huai'an local context, and relatively universal design principles are proposed to provide specific design suggestions and corresponding aging renovation strategies for the renovation of community public spaces.

During the renovation process, the historical and cultural characteristics of old communities in Huai'an City are explored and integrated into the design, such as setting cultural walls and landscape ornaments, to enhance the sense of belonging and identity of the community. The unique historical sense of the community, such as the Zhou Enlai Memorial Hall, Guoshi Pagoda, Han Xin's Hometown, and Zhenhuang Tower in Huai'an City, can be extracted or integrated into the community's cultural construction. The spirit of the place can be innovated and re-presented to make old communities regain new vitality and vigor.

In terms of design strategies, the residents of old communities in Huai'an City are the main focus. The survey data is analyzed and studied, fully considering the physiological and psychological needs of local elderly residents, providing a convenient, comfortable, and safe living environment. Emphasizing the interconnection between communities, encouraging the elderly to participate in the renovation and maintenance of community public spaces, and enhancing the sense of value and belonging. In terms of space and function, for the problem of loose and fragmented layout of public spaces in Dongdaiyuan Community, scientific and reasonable planning and design can be carried out to make the space

more compact and connected. At the same time, intelligent technology applications can be introduced, such as advanced aging-friendly equipment from abroad, and other excellent cases from other regions can be applied to the economic introduction conditions of Huai'an City, creating an unprecedented aging-friendly community public space renovation in Huai'an City. The integration of all models in a regular pattern is a systematic innovation.

By exploring and **promoting the characteristics of regional culture, the renewal and development of old communities** can be achieved. In addition, in the process of renewing the public environment, in addition to ensuring a healthy landscape environment, attention should also be paid to the health of the social relationships of residents to improve their physical and mental levels. Systematic design strategies are proposed for the landscape transformation of old communities and the creation of health and well-being landscapes. The landscape transformation of old mining communities uses methods such as: preservation, reconstruction and implementation of industrial cultural elements, to create public landscapes with industrial characteristics.

By **integrating industrial culture with the natural environment**, more diverse health and well-being experiences can be provided for residents, promoting the transformation of old communities into healthy communities and improving the quality of life and happiness of community residents.

The next task is **Wellness Landscape** - a landscape design based on the concept of health. It creates a livable environment suitable for people's physical and mental health and preservation through natural and cultural landscapes, thereby positively influencing people's physical and mental health and promoting the formation of a positive lifestyle. The audience of wellness landscapes includes the elderly, the sick, people with reduced health, and healthy people. People can

relieve mental stress and regulate physiological functions by enjoying the scenery, meditating, enjoying hot springs, and harvesting.

Wellness landscapes come in various forms, including urban green areas, healing gardens, urban parks, nursing homes, and hot spring resorts. These forms of wellness landscapes can provide various types of wellness experiences, such as natural therapy, herbal therapy, and horticultural therapy, to meet the health needs of different groups. Regardless of the form, wellness landscapes aim to focus on people's health needs and achieve the ultimate goal of stabilizing emotions and maintaining physical and mental health through interactive experiences of both body and mind. Through the design of wellness landscapes, it is possible to create a natural environment that is beneficial to physical and mental health, allowing people to feel relaxed, comfortable, happy and calm, and improving their overall level of health. Wellness spaces are landscape functional spaces designed based on wellness concepts, aimed at providing a place that combines health maintenance, entertainment and recreation, quality care for the elderly and various other activities for people of different age groups, including children, adolescents, middle-aged and elderly people. These spaces should be continuous (permanent) and dynamic (flexible), and should include different types and levels of wellness services and functions.

Conclusions to the second chapter

The following are specific strategies for optimizing space:

I. ***Deepening functions: from a single space to complex scenarios.***

1) Dynamic functional zoning: Transformable furniture system (folding tables and modular sofas are used to support rapid space switching) (for example, as an activity area during the day and a temporary rest area at night).

2) Vertical health and well-being space: Vertical green walls (with air purification and garden therapy functions) are installed on the walls or height-adjustable fitness equipment is installed (according to different physical abilities).
3) Multi-sensory experience corner: Tactile boards (with different materials, textures), olfactory boxes (with natural essential oil aromas) and auditory corners (with natural white noise devices) are added to the rest area to stimulate the sensory functions of the elderly.

II. **Closed-loop health management.**

1) Health data visualization: Install smart screens in the exercise area to display participants' real-time heart rate and step count, and connect to the public hospital system for automatic notifications of abnormal data.
2) Rehabilitation support area: Cooperate with medical institutions to set up physiotherapy rooms equipped with low-frequency pulse therapy devices and balance training equipment, and provide post-operative rehabilitation recommendations. Nutrition intervention corner: Cooperate with nutritionists to develop a "Healthy Food Bar" offering low-sugar and low-salt dishes and conduct diet education courses.
3) Detail optimization and humanized design. Improved details for a design that is user-friendly for the elderly.
4) Lighting system: Anti-glare lamps are used, and night lights with motion sensors are installed in key areas such as stairs and bathrooms; desk lamps with adjustable color temperature (warm light to relieve eye fatigue) are installed in reading areas.
5) Improvement of anti-slip flooring: elastic rubber flooring (shock-absorbing and anti-slip) is used in the sports area, and PVC flooring with wood coating is used in the recreation area (anti-slip and easy to maintain)

III. Barrier-free access:

1) All aisles are at least 1.2 meters wide and doorways are at least 0.9 meters wide, which facilitates the passage of wheelchairs and walking aids; washbasins in toilets are equipped with adjustable height.

2) Innovation in social scenarios "Intergenerational Kitchen": design a U-shaped countertop with different heights (higher section for standing users and lower section for wheelchair users), and organize cooking activities for parents and children.

3) Memory Sharing Area: install old photo scanners and oral history recording booths to encourage seniors to record their life stories and create digital archives for public use.

4) Pet Friendly Area: Dedicated corners for small pets are equipped with pet water fountains and excrement bags to promote interaction and healing between people and animals.

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APPENDIX A.

(Analysis of current problems and search for their solutions)

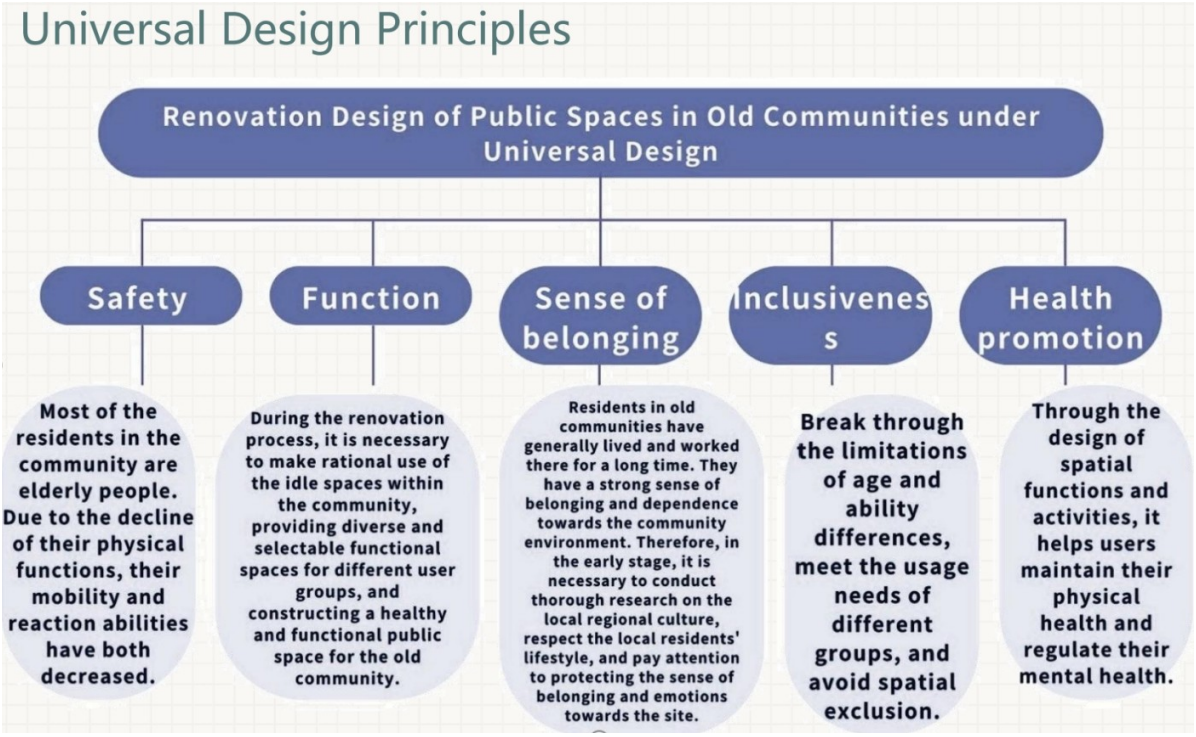


Table 1.



Table 2. Analysis of the problem situation of old communities in this area

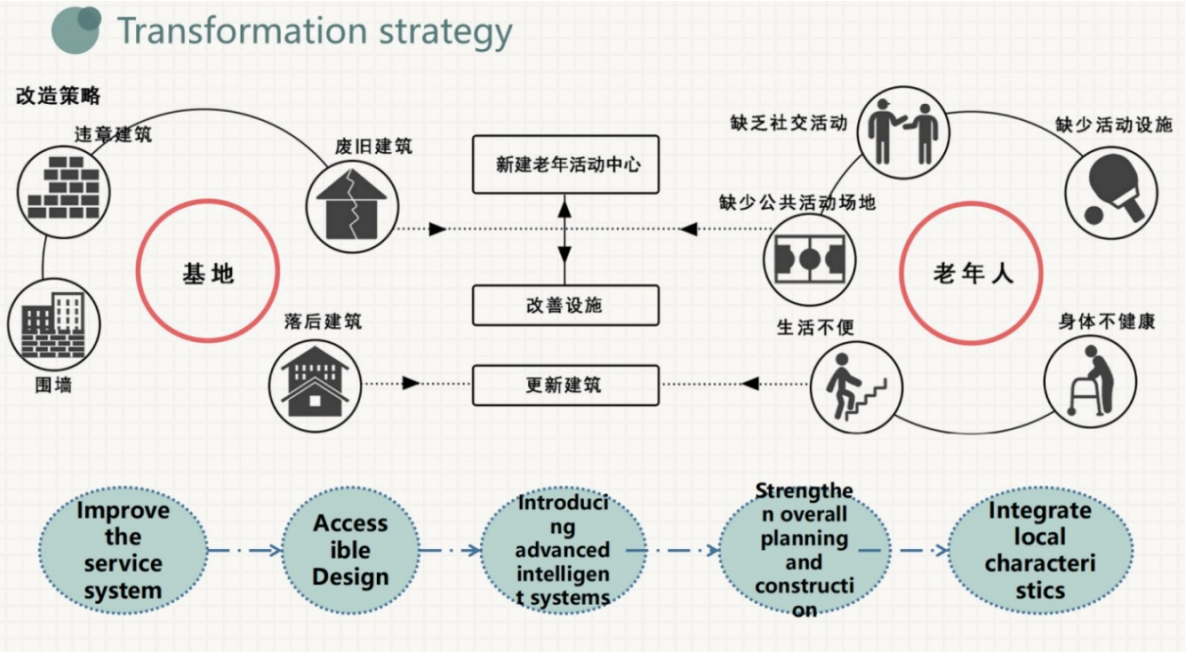


Table 3. Identification of ways to overcome the problematic situation of old communities in a given area

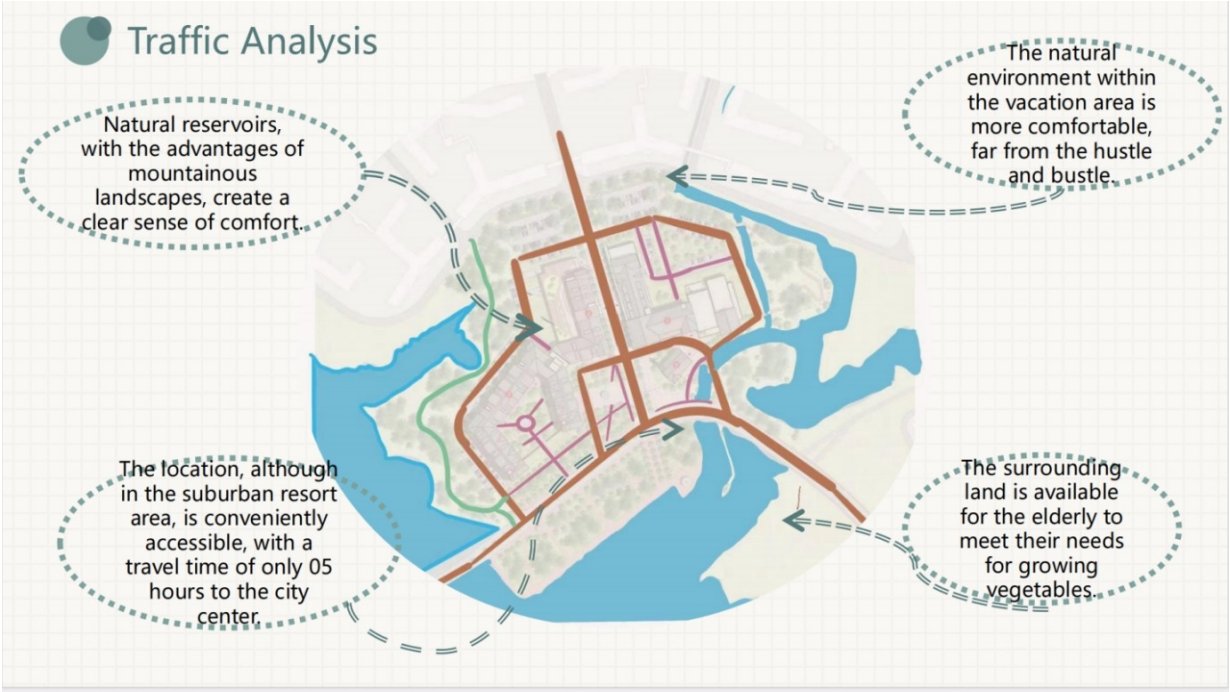


Table 4. Analysis of transport and pedestrian interchanges of old communities in this area



Table 5. Proposals for overcoming problem situations in old communities in this area

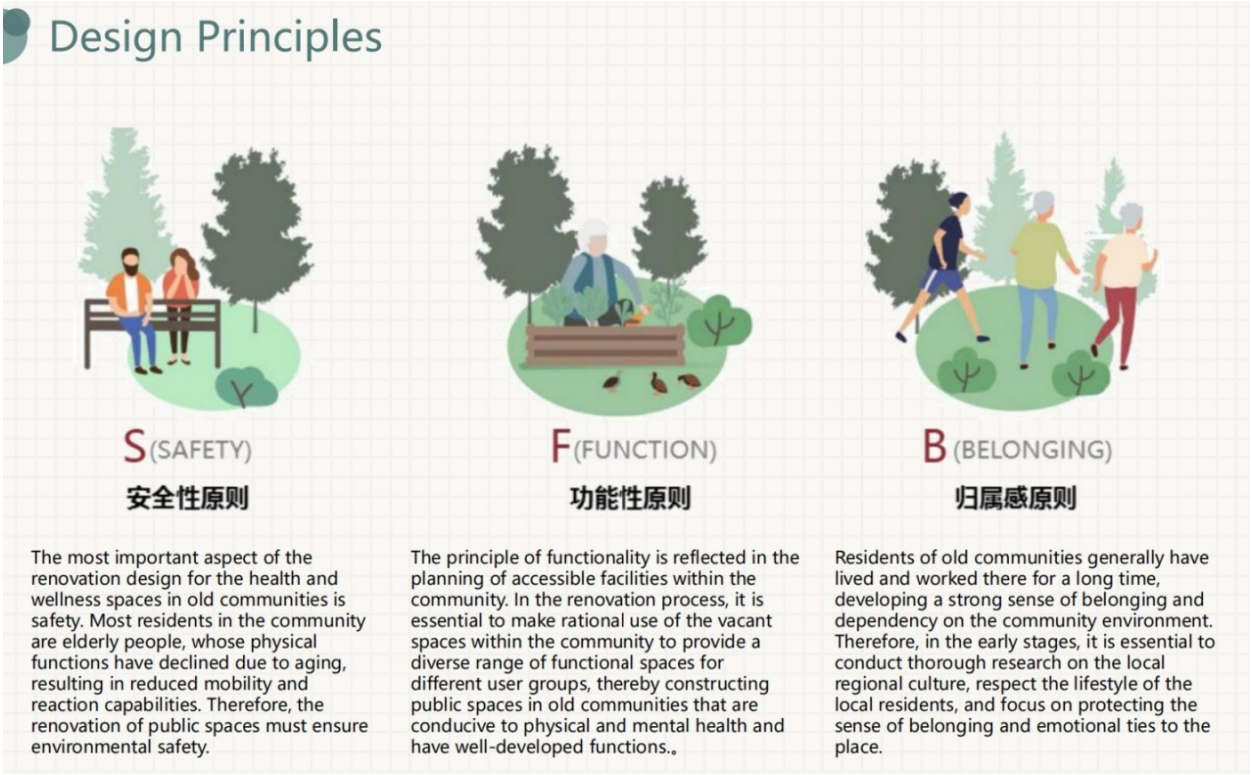


Table 6. Design principles that allow solving problematic issues

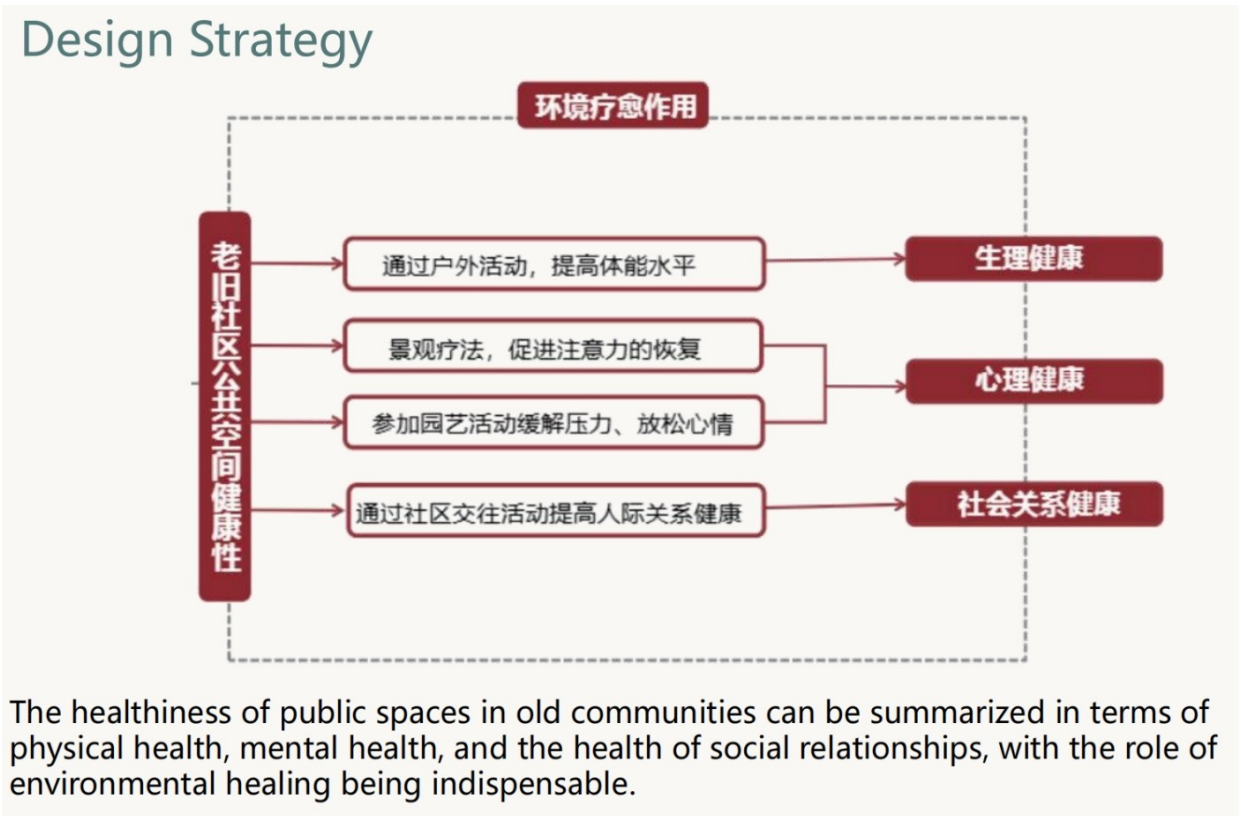


Table 7. Design strategy aimed at solving problematic issues

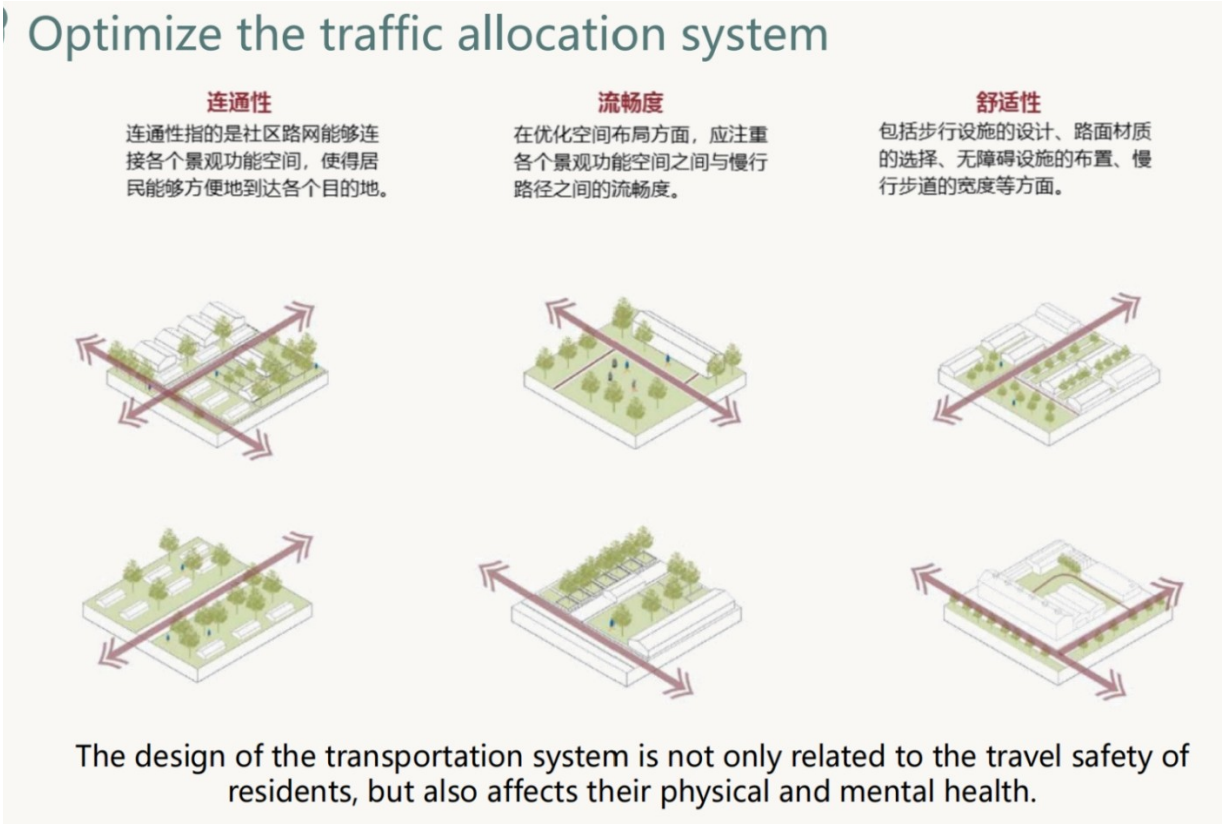


Table 8. Suggestions for improving the travel schedule

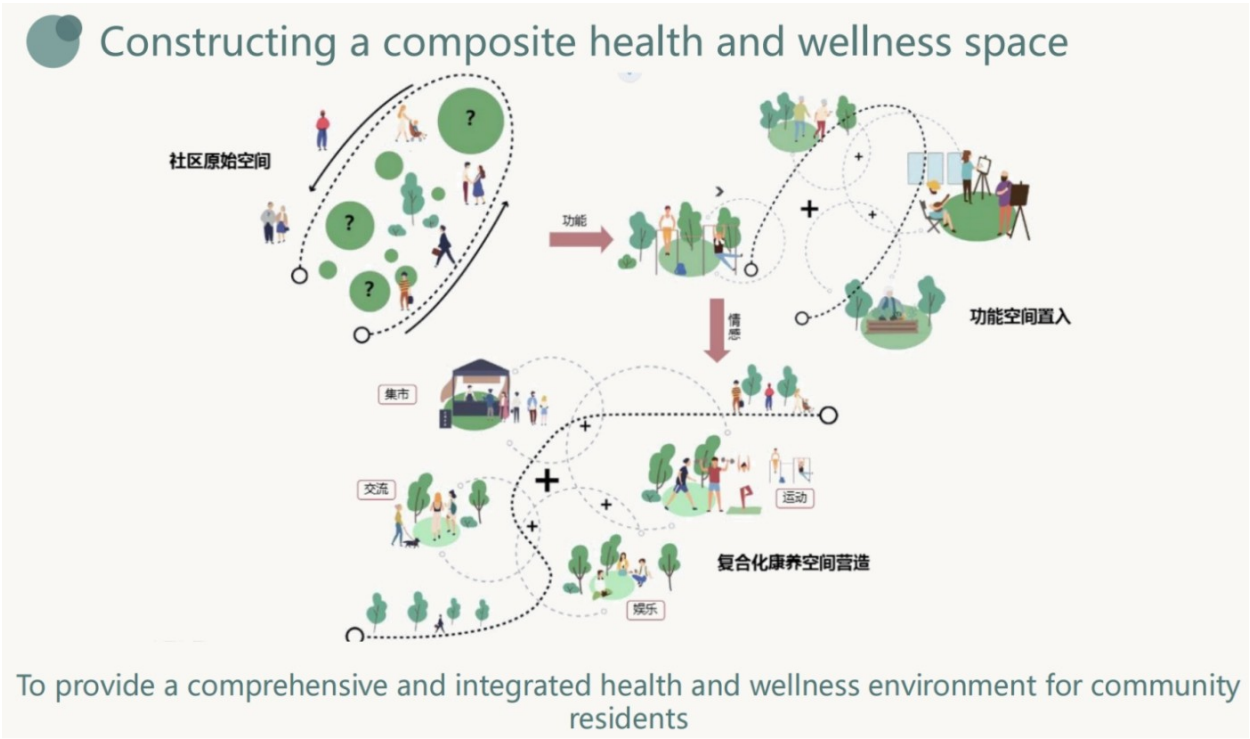
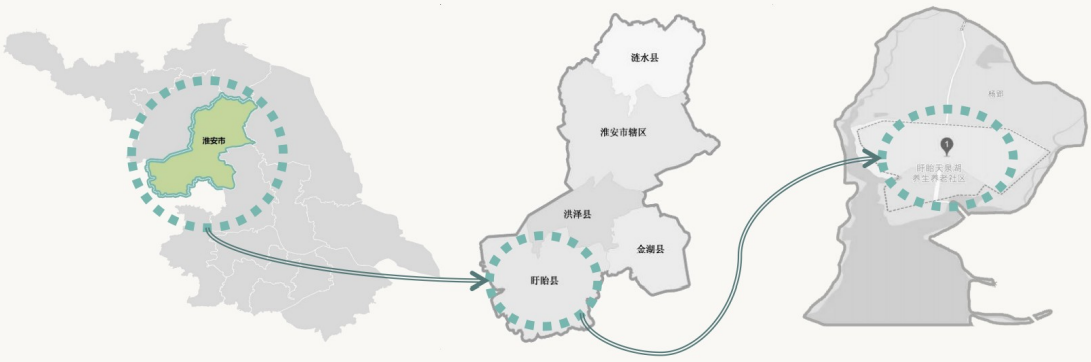


Table 9. Suggestions for improving the recreation area for the elderly

APPENDIX B. (Overview and analysis of the current situation)

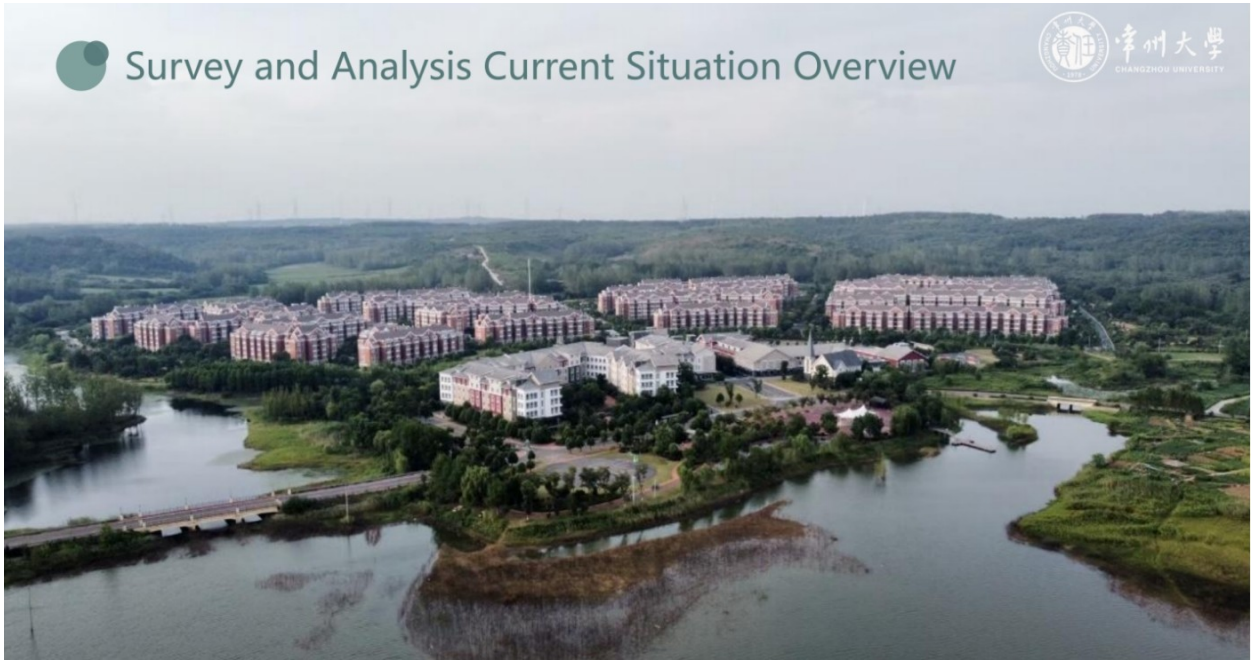
Location analysis



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







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

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。


适合老年人步行的路径


住宅单元内的自然景观


住宅单元内的自然景观


住宅单元


住宅单元内的自然景观


集市广场


易于识别的拱廊

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。







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

Current Situation Analysis













APPENDIX C. Project proposal

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



Herb Garden