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MEANS OF FORMING THE DESIGN OF A CULTURAL AND EXHIBITION SPACE BASED ON THE CONCEPT OF INTERACTION

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. _____ Tang Jiahao (Kyle)

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CONTENTS

INTRODUCTION.....8

CHAPTER I. STATUS OF RESEARCH ON THE TOPIC 9

1.1. Overview of the state of domestic and foreign research. Theory of urban acupuncture.....9

1.1.1 Research on the theory of acupuncture in Chinese cities.....9

1.1.2 Research on acupuncture theory in foreign cities.....10

1.1.3 Research on the application of urban acupuncture theory.....12

1.2. Research on the Reconstruction and Design of Historical and Cultural Districts in China.....15

1.3. Theoretical research on the reconstruction and design of foreign historical and cultural districts.....16

1.4. Research on the design of reconstruction of historical and cultural districts.....18

1.5. Research on the design of reconstruction of historical and cultural districts according to the theory of urban acupuncture.....20

1.6. A Case Study on the Design of Reconstruction of Historical and Cultural Districts through Urban Acupuncture.....23

Conclusions to the first section…….....25

SECTION II. PROJECT PROPOSAL FOR THE FORMATION OF THE DESIGN OF A TRADITIONAL CULTURAL EXHIBITION SPACE IN BENNIU PARK.....28

Concept.....28

Conclusions to the second chapter…….....28

REFERENCES.....28

ANNEX A. (Tables and diagrams)…….....…….35

ANNEX B. Prototypes for improving community design based on the theory of "urban acupuncture".....39

ANNEX C (Project Proposal) Location of the facility.....50

ANNEX C. Project proposal.....53

ABSTRACT

This study comprehensively explores the development status and practical cases of rural cultural exhibition spaces based on interactive concepts both domestically and internationally, with a focus on the transformation process from traditional cultural preservation to modern exhibition innovation. In China, research on rural cultural exhibition spaces has evolved from early cultural resource protection to modern designs that integrate multifunctionality, immersive experiences, and digital technology. Scholars have gradually combined rural cultural exhibitions with agriculture, tourism, ecological protection, and other fields, emphasizing community co-construction models to achieve a balance between cultural heritage and rural economic development. Xijiang Qianhu Miao Village demonstrates a model of achieving a win-win situation for culture and economy through interactive experiences and community co-construction. In contrast, international research is more advanced in interactive experiences and the application of digital technologies, using emerging technologies such as 3D, VR/AR, and haptic feedback to promote immersive and participatory development of cultural exhibition spaces, offering new possibilities for rural cultural exhibitions. The Vitra Design Museum's rural exhibition in Switzerland combines digital technology with interactive experiences, showcasing the integration of traditional cultural displays and community co-construction. Future research should further explore the integration of digital technologies with cultural exhibitions and find sustainable ways to balance cultural preservation and economic development, promoting the revival and prosperity of rural communities.

Keywords: Interactive concepts; community co-construction; digital technology; rural cultural exhibition space; immersive experience.

The object of the study is the design of urban and interior spaces. It emphasizes the study of how interactive design concepts adapt to the functional needs and characteristics of the rural cultural exhibition scene, taking into account the analysis of interactive transformation directions, application effects and

practical developments in the formation of exhibition hall design from the perspective of spatial planning, exhibition scenario and methods, and service experience. The proposed exhibition space design will clarify the specific role of the proposed interactive concepts in invigorating rural cultural communication, enhancing the sense of experience of exhibition spaces, and enhancing the effectiveness of national cultural heritage, so as to provide a practical reference for optimizing the design of similar rural cultural exhibition spaces.

The subject of the study is approaches to the formation of urban and interior spaces. is means and concepts of interactive design and rural cultural exhibition space design, with the Benniu Park cultural exhibition hall as the specific practical medium.

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, 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 from the perspective of compliance with the urban theory of acupuncture of the city. Based on the synthesis of the results of the analysis of these sources, the main groups of approaches to the formation of the design of urban and interior spaces are formed.

The second section describes the characteristics of various methods related to the design of the cultural exhibition space in Benniu Park, Benniu Ancient Town.

The conclusions indicate that the development of rural cultural exhibition spaces is moving towards a direction that integrates cultural heritage, interactive experiences, and community collaboration. Future research could delve deeper into

the integration of digital technology and cultural exhibition, while also focusing on how to sustainably promote the revitalization and prosperity of rural communities within the balance of cultural preservation and economic development.

АНОТАЦІЯ

Це дослідження всебічно досліджує стан розвитку та практичні приклади сільських культурних виставкових просторів на основі інтерактивних концепцій як всередині країни, так і за кордоном, з акцентом на процесі трансформації від традиційного збереження культурної спадщини до сучасних виставкових інновацій. У Китаї дослідження сільських культурних виставкових просторів еволюціонували від раннього захисту культурних ресурсів до сучасних дизайнів, що поєднують багатофункціональність, захопливий досвід та цифрові технології. Вчені поступово поєднували сільські культурні виставки із сільським господарством, туризмом, екологічним захистом та іншими галузями, наголошуючи на моделях спільного будівництва громад для досягнення балансу між культурною спадщиною та економічним розвитком сільських районів. Село Сіцзян Цяньху Мяо демонструє модель досягнення безпрограшної ситуації для культури та економіки через інтерактивний досвід та спільне будівництво громад. Натомість міжнародні дослідження є більш просунутими в інтерактивному досвіді та застосуванні цифрових технологій, використовуючи новітні технології, такі як 3D, VR/AR та тактильний зворотний зв'язок, для сприяння захопливому та партисипативному розвитку культурних виставкових просторів, пропонуючи нові можливості для сільських культурних виставок. Сільська виставка Музею дизайну Vitra у Швейцарії поєднує цифрові технології з інтерактивним досвідом, демонструючи інтеграцію традиційних культурних експозицій та спільне будівництво громад. Майбутні дослідження повинні глибше дослідити інтеграцію цифрових технологій з культурними виставками та знайти стійкі шляхи балансування між збереженням

культурної спадщини та економічним розвитком, сприяючи відродженню та процвітанню сільських громад.

Ключові слова: інтерактивні концепції; спільне будівництво громад; цифрові технології; сільський культурний виставковий простір; захопливий досвід.

INTRODUCTION

1. **Research Background.** China is currently experiencing rapid economic growth and accelerated urbanization, which are driving profound transformations in urban spatial structures and traditional lifestyles. As vital carriers of urban cultural heritage, historical and cultural districts not only preserve rich historical legacies but also face significant challenges in modern urbanization. While the traditional "large-scale demolition and reconstruction" approach yields quick results, it severely undermines the uniqueness and sustainable development potential of these districts. Against this backdrop, the "urban acupuncture" theory has gained attention. Drawing inspiration from traditional Chinese acupuncture, this concept advocates precise and subtle interventions at key spatial nodes to gradually revitalize cities. Emphasizing respect for historical textures, this renovation method achieves organic renewal through gentle, incremental changes, avoiding the structural damage caused by conventional large-scale renovations.

This study explores the application of urban acupuncture theory in historical district revitalization design. Through targeted small-scale interventions, it aims to activate cultural and economic vitality within districts, promote organic renewal and sustainable development of historic areas, and provide new perspectives for other historical district renovation projects.

CHAPTER I. STATUS OF RESEARCH ON THE TOPIC

1.1. Overview of the state of domestic and foreign research. Theory of urban acupuncture

1.1.1 Research on the theory of acupuncture in Chinese cities

Regarding the current state of research on urban acupuncture theory in China, although this theory is gradually attracting attention, its overall depth and breadth of study are still in the research stage. In the 1980s, Mr. Wu Lianyung's organic renewal theory had similar conceptual directions to urban acupuncture[1].

Organic renewal is essentially a continuous and gradual process of environmental transformation and regeneration. Although there are certain methodological differences from acupuncture therapy, its use based on localized node renewal methods can effectively activate the vitality of the entire area, thus sharing similarities in effectiveness with acupuncture.

Yu Ying's research analyzed the theories and methodologies of urban structure, exploring structuralist thinking models. Based on this foundation, "urban acupuncture" as a specific operational paradigm of urban renewal shows significant practical value[2].

Zhang Xiao argues that “urban acupuncture” is a model of small-scale urban renewal that triggers changes in the environment through localized renovations, ultimately aiming at urban revitalization[3].

Wu Zhongping points out that urban acupuncture emphasizes careful and subtle interventions, ensuring that new buildings are closely integrated with original textures while having significant impacts beyond their immediate areas[4]. Jia Yonda and Guo Qian systematically outlined the premise and principles of the theory of “urban acupuncture” by analyzing its widely used forms and

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characteristics[5]. The article highlights the shortcomings in public engagement and research on intangible culture in China.

Yuan Xin proposed means for improving ecological space based on the article “Urban acupuncture”: Small environmentally friendly actions can lead to significant improvements in the quality of urban life, thereby improving the living environment of residents[6].

Shu Tingting suggests that green acupuncture, as a design approach within urban acupuncture, shapes green public spaces with plant elements, enhancing their communal value and vitality[7]. The goal is to stimulate the overall improvement of cities and generalize effective strategies suitable for improving urban public spaces in China.

1.1.2 Research on acupuncture theory in foreign cities.

Research on the theory of “urban acupuncture” has been conducted earlier abroad, mainly focusing on urban renewal practices in Europe and Latin America. In particular, the Spanish architect Manuel de Sola Morales proposed this concept in the 1990s, emphasizing the stimulation of overall urban vitality through small-scale localized interventions.

In Europe, scholars have applied “urban acupuncture” to address the problem of spatial fragmentation in cities, prioritizing micro-level improvements to improve the overall quality of public spaces.

Urban planners in Switzerland, the Netherlands and other countries often use this theory in the revitalization of historic districts and the reconstruction of old

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communities, promoting social interaction and community revitalization through precise design interventions.

In Latin American countries, particularly Brazil, the theory of “urban acupuncture” has been widely applied to rehabilitate slums and reduce urban poverty. By modernizing public institutions and services in key nodes, it contributes to the gradual improvement of surrounding areas. In addition, international scholars are increasingly focusing on integrating “urban acupuncture” with sustainable development and the construction of eco-cities, combining urban micro-renewal with ecological and cultural heritage conservation to further expand the practical application and significance of the theory.

In his article, Lerner defines acupuncture strategies as methods that activate specific disease-affected areas by stimulating key meridian nodes[8]. These therapeutic approaches require simple implementation protocols and produce immediate results, while maintaining cost-effectiveness for improving the condition of the urban environment. He goes on to explain that urban acupuncture works by triggering chain reactions by stimulating specific urban acupuncture points, triggering systemic adaptive changes to improve the urban ecosystem and stimulate neighborhood regeneration.

Salman Qabas Abdul Hamid; Hussain Shaimaa Hamid proposed the concept of “urban acupuncture” in their paper, which aims to achieve design goals through small interventions within limited time frames and budgets[9]. This approach mirrors the diagnosis of medical conditions by identifying focal points that require treatment. The basic principle of urban acupuncture is to analyze cities and identify areas that need the most rapid renewal.

Salvatore Iaconesi and Oriana Persico suggested that the use of social media allows different groups to participate in urban renewal planning through big data

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applications, effectively improving public engagement within urban acupuncture[10].

1.1.3. Research on the application of urban acupuncture theory

Based on theoretical research, a large number of practical studies on the concept of urban acupuncture have emerged, and the urban acupuncture theory has achieved significant results in the design of public space, streets and parks.

1) *Application of urban public space reconstruction design.* The urban acupuncture theory offers a new and effective approach to the transformation and design of urban public spaces. It not only focuses on maintaining the overall texture of the city, but also promotes organic renewal and development through precise spatial interventions. Niu Ruirui, based on this theory, emphasizes that careful design methods similar to acupuncture can effectively solve various problems in urban public spaces, thereby Improving the overall quality of the urban environment[11].

In her study, Zhang Dan explores the practicality and feasibility of renewing public spaces in aging communities through the theory of urban acupuncture, aiming to revive community vitality and improve the living standards of residents[12].

Liu Yanwen analyzes the behavior patterns of the elderly to identify their specific physiological and psychological needs for public spaces in residential communities[13]. Based on the theory of urban acupuncture, she explores key solutions to these problems. Investigating the existing problems in old areas, the study shows that the main difficulties are the lack of public spaces and poor

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environmental quality. By addressing the issues of spatial regeneration, road organization and cultural development, this approach achieves the separation of pedestrians and vehicles, preserves local cultural features, promotes the creation of a historical atmosphere, and comprehensively promotes the renovation of public spaces adapted to the needs of the elderly in aging communities.

2) *Application of urban street reconstruction design.* The theory of urban acupuncture applied to street reconstruction design effectively solves the problems of urban streets through precise, gradual and participatory design approaches, enhancing their viability and functionality. At the same time, it emphasizes the preservation of cultural heritage and ecological restoration, transforming the renovated streets into multifunctional spaces with distinct local characteristics that contribute to sustainable urban development.

Liang Yichao and Wang Xiuhui explore acupuncture point selection and reconstruction strategies in their paper based on the theory of urban acupuncture, proposing innovative solutions for the revitalization of traditional alleys while preserving their heritage[14]. Liang Tiantian, in her master's thesis, using Huanghuagang Road in Dongxing City as a case study based on the theory of urban acupuncture, explored a low-cost, small-scale, phased model of micro-street renovation with community participation[15]. The study aimed to optimize urban resources, improve the quality of the district, balance cultural heritage preservation and urban renewal, while providing design guidelines and implementation frameworks.

Zhang Yaofang, in her master’s thesis, applied the theory of “urban acupuncture” to introduce four strategic approaches to the reconstruction of the historic district of Dongting South Road[16]. This initiative effectively solved the

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problems of historic streets, offering replicable models for similar urban renewal projects.

In her article, Wang Jinzhui explores the “Acupuncture-style Micro-Renovation of Street Space” approach, which involves targeted spatial interventions to revitalize surrounding public spaces through localized improvements[17]. Applying the theory of acupuncture-style renovation, she analyzes the spatial dimensions, commercial typology of public areas, and the external environment to explore their impact on public space activities, ultimately proposing customized micro-renovation strategies.

3) *Application of urban park renovation design.* The theory of urban acupuncture offers an innovative approach to the renovation and design of urban parks. Through precise and gradual interventions, it can effectively improve the ecological environment, functional diversity and cultural value of parks, transforming them not only as places for citizens’ daily recreation, but also as vital areas that promote community interaction.

Luo Man notes in his article that the introduction of pocket parks in urban spaces is similar to the effects of “urban acupuncture”, where interventions at certain heterogeneous nodes gradually trigger changes in the surrounding environment[18]. As microenvironments in cities, pocket parks increase open spaces and are closely related to citizens’ daily lives. They are characterized by openness, accessibility, compactness and diversity, providing urban residents with places for social interaction and outdoor recreation.

Wu Qiaoyun emphasizes the use of digital tools to explore the precise positioning of “acupuncture points”, offering important recommendations for future urban micro-renovations[19]. Li Ming explores the design strategies of

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Copenhagen's pocket parks, identifying problems in urban spatial configurations using point-line approaches and proposing methods for reviving urban vitality[20]. This provides a guideline for future pocket park design.

1.2. Research on the Reconstruction and Design of Historical and Cultural Districts in China

Numerous Chinese scholars have conducted large-scale research and studies on historical and cultural districts. In his article, Jiang Zhengliang proposed a comprehensive preservation and renovation strategy from the perspectives of protecting historical and cultural heritage, improving the urban spatial environment, and enhancing regional vitality. He emphasized the principle of "restoring the old as it was", advocating moderate functional adjustments and spatial optimization to revive the original appearance of historical districts while meeting the needs of modern urban development, thereby achieving the dual purpose of cultural heritage preservation and urban revitalization[21].

Chen Chen and Tan Xuwai proposed to establish a flexible but rigid preservation mechanism within the framework of dynamic renewal, focusing on key nodal areas for targeted control to promote overall regional revitalization[22]. They also proposed to strengthen operational management through strategies such as spatial formation, functional optimization, and capital mobilization, to ultimately achieve the revitalization and sustainable development of historic districts.

Zhuang Yisan and Gu Xiaowei discussed practical examples of historic districts in China, summarizing the strategies of preservation and renewal[23]. They

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concluded that future efforts should adhere to the principle of gradual, small-scale "organic renewal", because large-scale demolition and reconstruction inevitably disrupt the original urban structure. Instead, they advocated the gradual restoration of historic districts to gradually revive their traditional appearance. This reconstruction process aims to protect and inherit the unique characteristics of historic districts, ensuring the preservation of authentic history for future generations. Through their in-depth research on different research methods, different focuses, and different cultural perspectives of historical and cultural districts, these scholars have studied the modern history The renovation and transformation of cultural districts provide new ideas and experiences.

1.3.Theoretical research on the reconstruction and design of foreign historical and cultural districts

International research on the reconstruction and design of historical and cultural districts shows a trend of comprehensive and diversified development. Through interdisciplinary integration, the transformation of historical districts is increasingly combined with fields such as sociology, economics and ecology, emphasizing that reconstruction is not only spatial and architectural renewal, but also the coexistence and interaction between history, culture, ecology and modern urban life. At the same time, foreign research attaches great importance to the balance between heritage preservation and modern functions - preserving the historical memory and cultural characteristics of the district, while providing new functional opportunities to meet the needs of modern society. Innovative design strategies have become the focus of international research, especially in small micro-renovations. Precise interventions by specialists achieve localized effects that contribute to overall improvement, offering new avenues for the sustainable development of historic and cultural districts. These trends and experiences offer significant inspiration and guidance for global projects for the reconstruction of historic and cultural districts. Western countries began to prioritize the protection

of historic and cultural heritage as early as the 18th century, establishing a series of relevant laws and management regulations.

In 1933, the first international framework document for urban planning, the Athens Charter, proposed methods and principles for “the protection of architectural complexes and areas of historical, cultural and artistic value”, including the concept of “the protection of the surrounding areas of buildings of significant historical, cultural and artistic value”. This laid the foundation for Western research on cultural heritage areas.

In 1987, the International Council on Monuments and Sites (ICOM) in Washington, D.C., adopted the *Charter for the Protection of Historic Towns and Urban Areas* (also known as the *Washington Charter*), which first explicitly introduced the concept of historic districts. The charter further refined the definitions of "traditional towns" and "historic districts," emphasizing that these concepts should encompass not only buildings but also urban spatial characteristics, street patterns, and landscape elements.

Lewis Mumford, in his analysis of contemporary urban development, questioned the large-scale demolition and reconstruction of old urban areas, advocating instead people-centered approaches to renewal[24]. Jane Jacobs identified the shortcomings of traditional models of urban renewal, highlighting their negative impact on cities. She proposed prioritizing small-scale streets and open spaces to preserve urban diversity through localized renovations.

1.4. Research on the design of reconstruction of historical and cultural districts

1) *Micro-renewal concept.* The concept of micro-renewal provides a low-impact, highly adaptive renovation approach in the design of reconstruction of historical districts, avoiding the destruction caused by large-scale reconstruction, while

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gradually optimizing and improving the functions, environment and cultural value of the district. This philosophy not only preserves the authenticity of historical districts, but also revitalizes them through meticulous design strategies that meet the sustainable development requirements of modern urban development. Fu Xiaoyu and Ding Yalan, in their article based on the theory and practice of micro-renewal, proposed a small-scale, phased and low-intervention strategy[25]. Taking Daren Alley as an example, they promoted the healthy development of historical and cultural districts through three aspects: fine-tuning of circulation, minor spatial changes and cultural improvement.

Ma Xiangtian took the historical and cultural district of Yantai Qishan Fortress as an example in his master's thesis[26]. Based on the principles of micro-renewal, he proposed recommendations for the design of micro-renewal of historical and cultural districts — sustainable development, diversity, heritage preservation, and regional characteristics — by synthesizing research results, analyzing case studies, and conducting field research. He also proposed design strategies that include extracting regional elements, creating premium nodes, and upgrading service facilities to complete renovation projects, which provides recommendations for the sustainable development of historical and cultural districts.

2) *Organic Renewal Theory.* The theory of the renewal of historical and cultural districts emphasizes respecting heritage and achieving functional optimization through gradual, small-scale renovations that maintain historical continuity. This approach promotes sustainable urban development through multi-stakeholder engagement, environmental improvement, and functional innovation, breathing new life into modern urban landscapes.

Hu Binghan developed a spatial organization framework based on ARCGIS, using the mathematical model of "Tyson Polygon", to analyze the neighborhood

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relations in historical districts, and establish reasonable spatial integration strategies[27].

Xu Youzhi's master's thesis systematically reviews renovation methodologies within the framework of the theory of organic renewal, synthesizing the best practices of successful cases and demonstrating its implementation through the Zhongjie Pedestrian Street Project[28].

2) *Catalyst Theory.* Designing the reconstruction of historical and cultural districts within the framework of the catalyst theory enhances the overall vitality and functional optimization through precise interventions in key nodes and small-scale reconstructions. This approach not only focuses on the preservation and transmission of historical culture, but also on the introduction of modern functions and the improvement of the ecological environment, which ultimately leads to multi-dimensional catalysis of economic, cultural and social benefits for these districts. Through gradual renewal and public participation, historical and cultural districts can maintain their uniqueness and vitality in modern urban development. Li Runyu and Wang Li explored the methods of revitalizing the vitality of public space and residents' social life within the framework of urban master planning, using the revitalization of Taicheng Residential District — a planned wartime development of the Manchukuo period in Anshan — as an example in their paper integrating the theory of urban catalyst[29].

Zhang Yanyu, in his master's thesis, delved into the cultural connotation of the site, the renovation and transformation of site elements to revitalize the surrounding area, improve the environmental quality of the quarter, and give the quarter vitality[30]. In this way, it can continue the historical culture of the quarter and promote the healthy development of the historical and cultural quarter.

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1.5.Research on the design of reconstruction of historical and cultural districts according to the theory of urban acupuncture

Urban acupuncture theory, as a micro-intervention strategy for cities, has been widely applied in the reconstruction and design of historical and cultural districts in recent years. By implementing small-scale, precise interventions at the "key nodes" of urban areas, this approach stimulates the vitality of both inside and outside the districts, thereby achieving comprehensive functional improvement and optimization.

In the revitalization of these historical districts, the theory emphasizes the preservation of their cultural heritage while integrating modern urban functions, ultimately achieving the dual goals of preservation and development. In the existing literature, many scholars have integrated acupuncture theory with the preservation of historical districts, proposing acupuncture-style interventions as an operational paradigm for urban renewal, exploring its practical value in small-scale reconstructions.

The research focuses on precise spatial design, functional restoration and small-scale interventions aimed at revitalizing areas and preserving cultural heritage. However, comprehensive theoretical frameworks or methodologies for selecting acupuncture points, functional optimization and balancing cultural heritage preservation with renewal remain underdeveloped.

Pan Ying's article applies the concept of "urban acupuncture" to partial landscape renewal in historic districts, improving the visual environment and promoting cultural revival[31]. Analyzing domestic and international research trends in the field of preservation and renewal of historic districts, the study explores the theory of "urban acupuncture" and applies it to the landscape improvement of the Shanxia Han Historic District in Fuzhou City. It proposes strategies including basic

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research, selecting “acupuncture points” and reconstruction, and finally confirms the feasibility of these strategies through case studies to promote the sustainable development of landscapes and cultures of historic districts.

Wu Jingxuan explores design strategies that harmonize physical renewal with cultural heritage preservation based on the theory of “urban acupuncture”.[32] The article identifies key issues in the renewal processes of China’s historic districts and examines in detail the applicability and feasibility of the theory of “urban acupuncture” for the revitalization of historic districts. By examining the application principles, objectives, and typologies, this study explores the multifaceted social, economic, and cultural benefits of “urban acupuncture” in urban development. It proposes design strategies that balance social impact, economic value, and cultural significance in the revitalization of districts.

Zhang Aiqin’s master’s thesis explores the interdisciplinary integration of historical heritage preservation with traditional Chinese medicine (TCM) culture. Conceptualizing cities as living organisms through the theory of urban acupuncture, she applies TCM diagnostic methods to analyze and rejuvenate historic districts, revitalizing communities through precise spatial design and functional restoration[33].

Yao Chengrui’s thesis addresses the innovation challenges of alleyways in ancient cities by implementing the principles of urban acupuncture. Using the Ming-Qing theory of the Ancient City of Yiyang as a case study, he demonstrates the dynamic adaptability of the theory and its practical improvement for district revitalization[34].

Jia Yongda’s study establishes a framework for street revitalization guided by the principles of urban acupuncture, prioritizing the improvement of the

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material environment, cultural continuity, and enhancement of vitality[35]. Using the Analytic Hierarchy Process (AHP), he develops a district vitality assessment system by applying five acupuncture strategies (including architectural style optimization and functional upgrades) to Zhongshan Road in Shilong Town, Dongguan City.

In his article, Xiao Wei introduces the concept of "urban acupuncture" based on traditional Chinese medical theories such as meridian theory and acupuncture point theory. He proposes a progressive reconstruction strategy for the preservation and renovation of historical and cultural districts by analogizing the "functional zones", "corridors" and "vitality points" of these districts with human organs, meridians and acupuncture points. The study analyzes their respective relationships in cognitive frameworks, operational principles and mechanisms[36]. The author identifies three main problems faced by historical districts: organ dysfunction, meridian blockage, and insufficient vitality in acupuncture points, and proposes corresponding corrective strategies to promote their healthy development. In summary, domestic research on the design of urban historical and cultural district reconstruction based on acupuncture has made gradual progress, but remains mostly exploratory with limitations in both theoretical and practical application.

1.6.A Case Study on the Design of Reconstruction of Historical and Cultural Districts through Urban Acupuncture

1) *Nanmen Historical and Cultural District, Yongxin County Yongxin County,* located along the western border of Jiangxi Province, boasts a unique ancient city landscape characterized by waterways surrounding mountains. The South Gate District, as the core of this historical district, retains its original layout with well-preserved street patterns and concentrated historical and cultural resources

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alongside revolutionary heritage sites, making it a prime candidate for preservation and revitalization. In contrast to the traditional approaches of “large-scale demolition and reconstruction”, the regeneration of Yongxin Ancient Town adopts an “acupuncture” strategy. This targeted reconstruction method focuses on specific areas through small-scale interventions, triggering environmental changes that ultimately revitalize urban vitality, transform urban landscapes, and renew urban identity. During the Southern Gate, the district’s renewal, comprehensive planning, landscape restoration, and cultural atmosphere enhancement have significantly improved the quality of space and the well-being of the population.

At the micro level, numerous functional spaces closely related to the daily lives of residents are revitalized through acupuncture-inspired reconstructions that enhance functionality, enhance visual identity, and revitalize community life. Strategically selecting key points for reconstruction using this “urban acupuncture” approach, the design stimulates regional development while creating a holistic landscape system that enhances the spatial quality and environment of the district. At the same time, unlike demolition and reconstruction, local renovation is conducive to preserving the cultural context and continuing the cultural genes of Yongxin. Through functional exploration and artistic reproduction, it can compensate for the uniqueness of the space's functionality, increase the opportunities for public activities in the ancient city, stimulate the vitality of the ancient city, and enhance the sense of cultural benefit and life happiness of residents.

3) *Suzhou Pingjiang Historical and Cultural District.* Located in the northeast of the ancient city of Suzhou, Pingjiang Historical and Cultural District covers an area of approximately 116.5 hectares. Its eastern border reaches the Outer Ring River, with Linding Road as the western border, Ganjiang Road as the southern starting point, and Baita East Road as the northern. As the most representative historical and cultural district of Suzhou, it boasts rich traditional architecture and cultural heritage. This area crosses the eastern part of the ancient city along the

Pingjiang River, showing the typical features of a water city and profound historical and cultural significance. The reconstruction of Pingjiang Road integrated the “point intervention” method from the theory of urban acupuncture, implementing a series of micro-renovations that balance the preservation of historical culture with modern development, achieving the revitalization and reactivation of the district.

The reconstruction is an example of the application of the theory of urban acupuncture in the renovation of a historic district, achieving precise interventions that maintain the historical appearance while enhancing the overall vitality. The traditional residential buildings and historic buildings along the street have been restored and maintained, preserving their original Suzhou architectural style, characterized by gray tiles, white walls, small bridges and flowing water. By creating pedestrian streets and optimizing lanes for non-motorized transport, the problem of congestion was solved, allowing visitors to experience the city better historical and cultural atmosphere of the quarter.

In addition, pedestrian paths were designed along the river to further improve accessibility and scenic experiences. Through these micro-renovations and reconstruction methods based on the theory of urban acupuncture, Pingjiang Road has not only attracted a large number of tourists, but also provided a livable environment for local residents. The historical and cultural value of the quarter has been inherited, and the commercial viability has been increased, making it a successful model of ancient city preservation and modern renewal in Suzhou.

Conclusions of the first chapter

1. It is determined that through the analysis and synthesis of domestic and international research, it is obvious that the theory of urban acupuncture has great potential for research in the revitalization of historical and cultural districts.

2. It is found that this study aims to build on existing theoretical foundations, inheriting their essence, complementing and deepening specific aspects. The concept of “urban acupuncture” will be expanded accordingly to further explore its connotations through integration with the context of Gaoyou City.

3. It is found that the practice of reconstruction and design of the historical and cultural quarter in Chengnan aims to stimulate the inner life of the quarter through small and targeted design intervention.

4. Based on the above-mentioned state of research on the design of rural cultural exhibition spaces at both the national and international levels, the study and practice of rural cultural exhibition spaces around the world is gradually moving towards diversification, interactivity and community co-construction.

5. It is proved that in China, research has gone through a process from cultural heritage preservation to cultural innovation. However, early research mainly focused on the protection and display of traditional cultural resources, emphasizing the use of rural natural landscapes and traditional architecture to display and develop cultural heritage. With the development of rural revitalization and new rural construction, researchers are increasingly paying attention to the design of multi-functional spaces, integrating rural cultural exhibitions with agriculture, tourism, community activities and other elements, and gradually introducing the concepts of interactivity and participatory experience.

6. It has been found that through innovative methods such as digitalization and scripted storytelling, the quality of the material display has greatly improved the sense of experience and participation of visitors. At the same time, more and more scholars emphasize the role of rural residents in cultural exhibition spaces, proposing a model of community co-construction to achieve a balance between cultural heritage preservation and rural economic development.

7. In contrast to the above, foreign studies are more advanced in interactive experiences and the application of digital technologies in rural cultural exhibition spaces. Foreign scholars such as Kocaturk and Gareth Beale have explored the use of new technologies such as 3D technology, VR/AR and haptic feedback in cultural exhibition spaces, contributing to the development of immersive and participatory experiences in museums and cultural exhibition spaces. These technologies not only provide new opportunities for showcasing rural culture, but also expand the boundaries of traditional exhibitions through digital means, making culture easier to understand and access. In addition, overseas projects such as the Vitra Village Exhibition Hall in Switzerland have also showcased local culture and lifestyle through community co-creation models, involving community residents in the exhibition and its work, thereby achieving a win-win situation for cultural heritage, economic benefits and community cohesion.

8. It is found that both within China and internationally, the development of rural cultural exhibition spaces is advancing with three main directions in mind: integrating cultural heritage, creating interactive experiences and actively cooperating with communities.

9. It is proved that future research can more actively delve into the combination of digital technology in the display of cultural exhibitions, and focus on how to continuously promote the revitalization and prosperity of rural communities in the balance between cultural preservation and the country's modern economic development.

10. In conclusion, through synthesizing domestic and international research findings, it is evident that urban acupuncture theory holds vast potential for exploration in the revitalization of historical and cultural districts. This study aims to build upon existing theoretical frameworks by inheriting their essence while supplementing and deepening specific aspects. The concept of "urban acupuncture" will be appropriately expanded to further explore its connotations, through integration with Gaoyou City's context.The renovation and design practice

of the historical and cultural block in Chengnan tries to stimulate the inner life of the block through small-scale and targeted design intervention

SECTION II. PROJECT PROPOSAL FOR THE FORMATION OF THE DESIGN OF A TRADITIONAL CULTURAL EXHIBITION SPACE IN BENNIU PARK

The project proposal is based on the formation of the design of a traditional cultural exhibition space in Benniu Park, taking into account the concept of interactivity.

CONCEPT

With the development of society and the advancement of technology, people's demand for cultural exhibition spaces is increasing, with expectations of increased interactivity and involvement during visits. The study aims to explore the design methods of cultural exhibition spaces based on interactive concepts and conduct empirical research using the case of the Benniu Park Cultural Pavilion. By studying the design of cultural exhibition spaces based on interactive concepts, this project aims to protect and revive the rich cultural heritage of the ancient city of Benniu.

The conceptual design of this project considers various dimensions such as human-computer interaction, narrative context and emotional interaction, and explores the means of improving interactivity and experimental aspects of cultural exhibition spaces through technologies such as multimedia, virtual reality and augmented reality. During the project development work, a set of innovative design strategies were proposed to improve interactivity and experiences, which include elements and zones of cultural demonstration spaces to increase visitor participation and psychological satisfaction among local residents, taking into account the immersive method. The above allows us to propose six aspects that are considered in detail in the project. •

The first stage of the work: the research background and the significance of the design of the cultural demonstration space of Beniu Park within the framework of the interactive concept are considered and analyzed. •

The second stage: aims to define the interactive concept, collect relevant literature, design examples and research methods related to the interactive concept and cultural demonstration space. It is determined how the concept of interactive analysis is integrated into the design of the demonstration space, as well as what changes it brings to the experience of the interactive audience when applying various interactive technologies in related design fields. •

The third stage: analyzes the local culture of Beniu ancient city and the current state of the demonstration spaces, presents the historical and cultural context of Beniu ancient city to provide a cultural basis for the design of the demonstration spaces, including the advantages and disadvantages, to provide a qualitative basis for future improvements of the design proposal. •

The fourth stage: incorporates the interactive concept into the design methods of the demonstration spaces, explaining the main content of the interactive concept and its importance in design, and applying it to the design of the demonstration spaces. •

The fifth stage: describes in detail the interactive design practice of the cultural demonstration space, specifying the guiding principles and objectives of the interactive design of the demonstration space of Beniu ancient city. Specific interactive design strategies are proposed based on the detailed design plans, including interactive elements and the application of modern technology. •

Part six is mostly a summary of the entire article, which addresses the shortcomings of the design plan.

Conclusions to the second chapter

This proposal focuses on the design of the traditional culture exhibition space in Benniu Park, with a core integration of interactive concepts to respond to the growing demand for interactivity and participation in cultural exhibition spaces in the context of social development and technological progress. The project aims to explore design methods for cultural exhibition spaces based on interactive concepts and uses the Benniu Park Cultural Center as an empirical research case. Through this design, it seeks to protect and revitalize the rich cultural heritage of the ancient city of Benniu. During the design process, the project approaches from multiple dimensions, including human-computer interaction, narrative context, and emotional interaction, utilizing technologies such as multimedia, virtual reality,

and augmented reality to explore ways to enhance interactivity and user experience in cultural exhibition spaces. Combined with immersive methods, it proposes an innovative design strategy that includes exhibition space elements and regional planning to increase visitor engagement and local residents' psychological satisfaction. The entire project is carried out in six stages: The first stage analyzes the design background and significance of the Benniu Park cultural exhibition space under the framework of interactive concepts; the second stage defines the interactive concept, collects relevant literature, design cases, and research methods, and clarifies how it integrates into exhibition space design and the impact of various interactive technologies on audience experience; the third stage sorts out the local culture of the ancient city of Benniu and the current state of exhibition spaces, explains the historical and cultural context, and analyzes the strengths and weaknesses of existing spaces to provide cultural basis and optimization directions for the design; the fourth stage incorporates interactive concepts into the exhibition space design method, explains its core content and design significance, and applies it; the fifth stage refines the practice of interactive design in the cultural exhibition space, clarifies design principles and objectives, and proposes strategies for the application of interactive elements and modern technologies in specific plans; the sixth stage summarizes the entire work and points out the shortcomings of the design plan.

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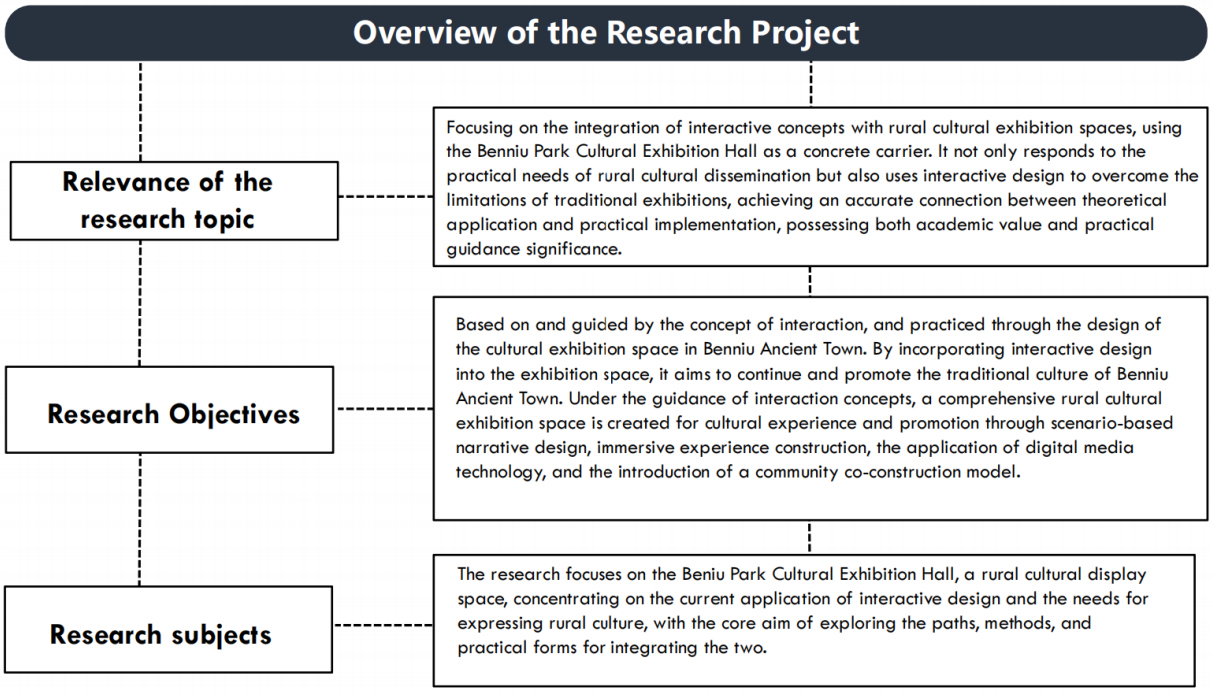
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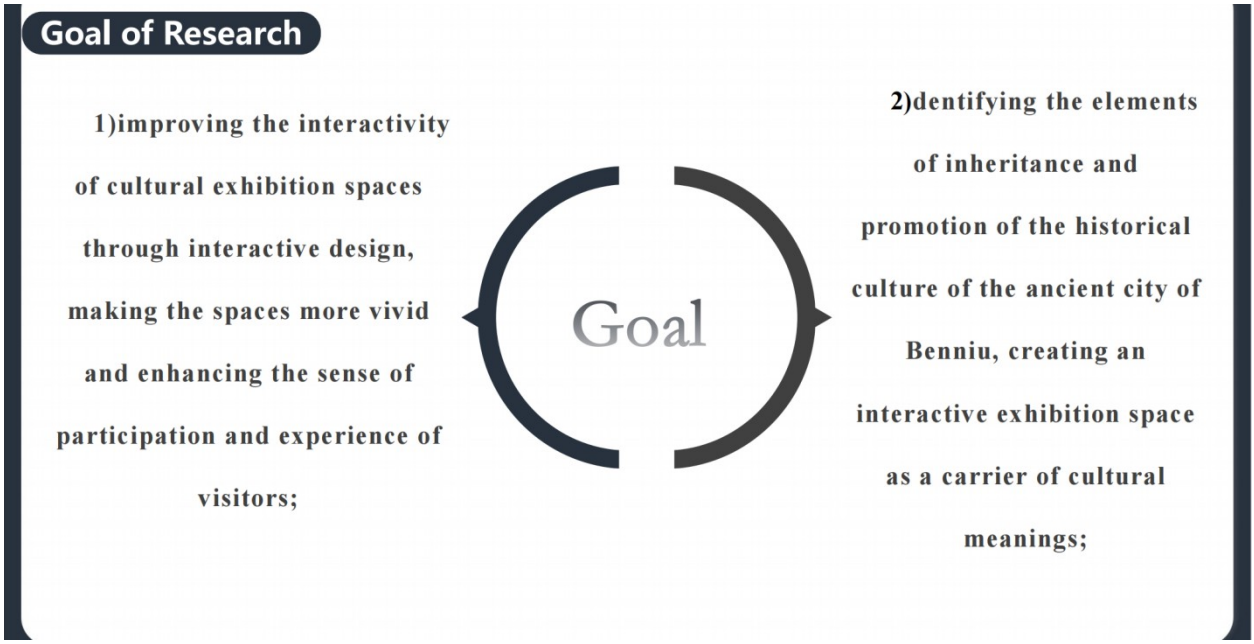
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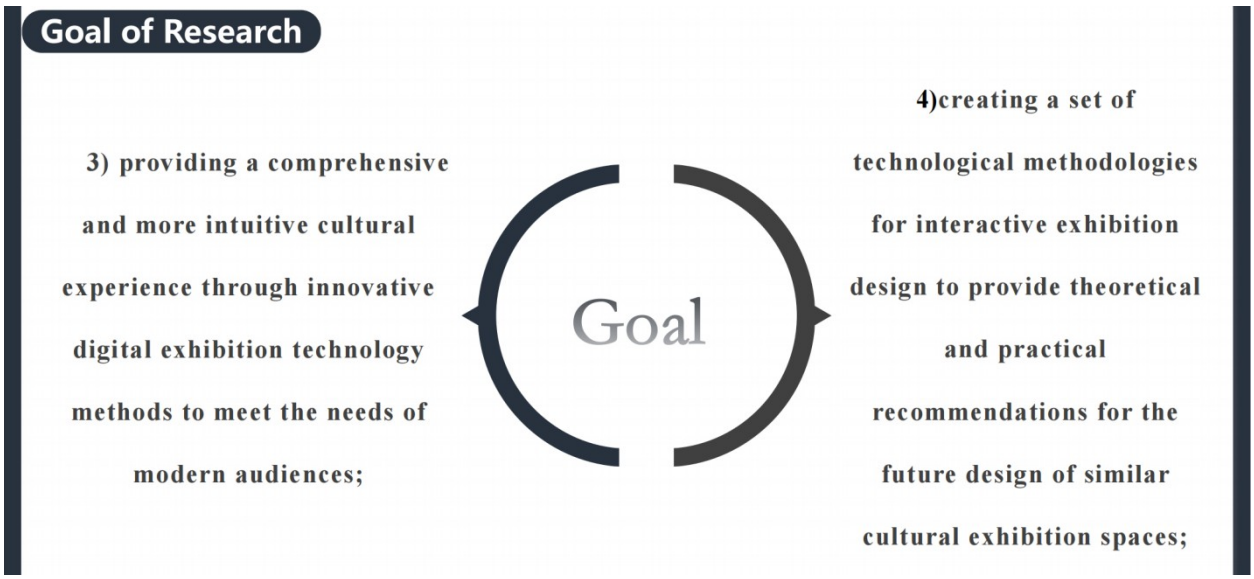
ANNEX A. (Tables and diagrams)


Overview of the Research Project
Relevance of the research topic
Focusing on the integration of interactive concepts with rural cultural exhibition spaces, using the Benniu Park Cultural Exhibition Hall as a concrete carrier. It not only responds to the practical needs of rural cultural dissemination but also uses interactive design to overcome the limitations of traditional exhibitions, achieving an accurate connection between theoretical application and practical implementation, possessing both academic value and practical guidance significance.
Research Objectives
Based on and guided by the concept of interaction, and practiced through the design of the cultural exhibition space in Benniu Ancient Town. By incorporating interactive design into the exhibition space, it aims to continue and promote the traditional culture of Benniu Ancient Town. Under the guidance of interaction concepts, a comprehensive rural cultural exhibition space is created for cultural experience and promotion through scenario-based narrative design, immersive experience construction, the application of digital media technology, and the introduction of a community co-construction model.
Research subjects
The research focuses on the Beniu Park Cultural Exhibition Hall, a rural cultural display space, concentrating on the current application of interactive design and the needs for expressing rural culture, with the core aim of exploring the paths, methods, and practical forms for integrating the two.

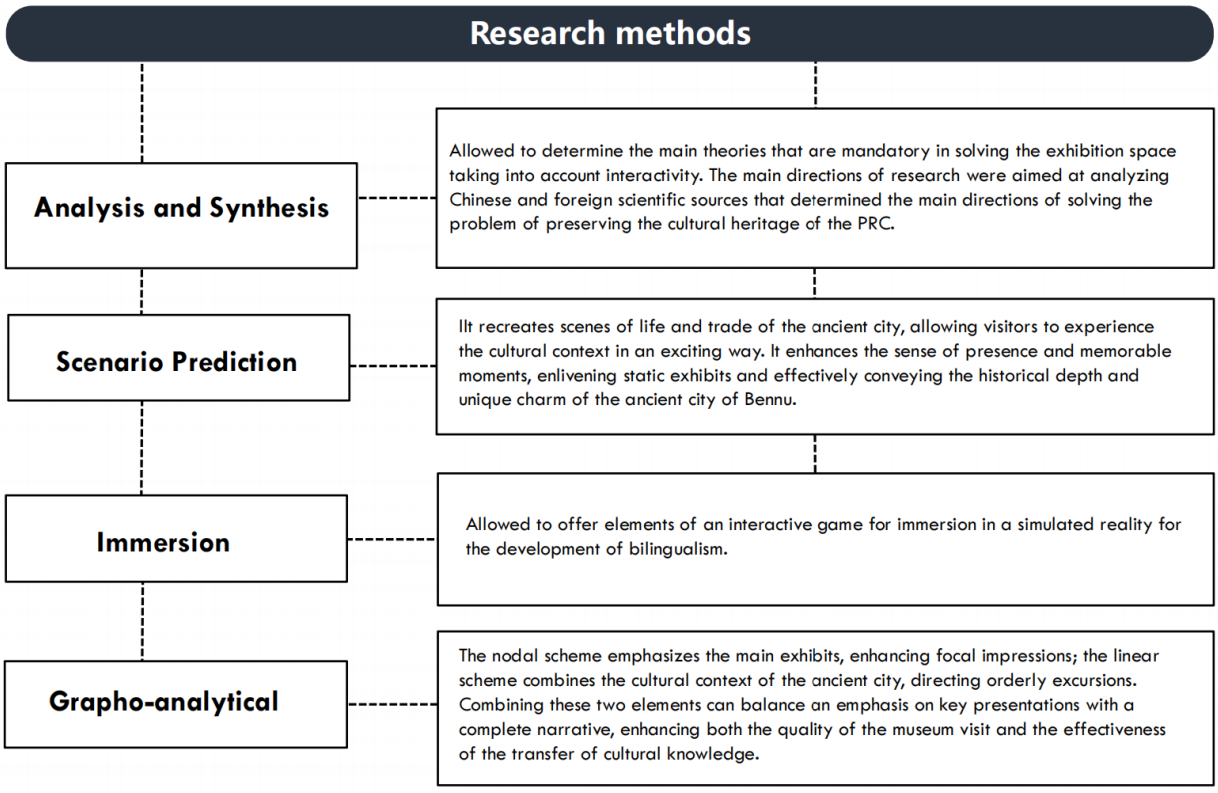
Tabl.1.


Goal of Research
1)improving the interactivity of cultural exhibition spaces through interactive design, making the spaces more vivid and enhancing the sense of participation and experience of visitors;
Goal
2)dentifying the elements of inheritance and promotion of the historical culture of the ancient city of Benniu, creating an interactive exhibition space as a carrier of cultural meanings;

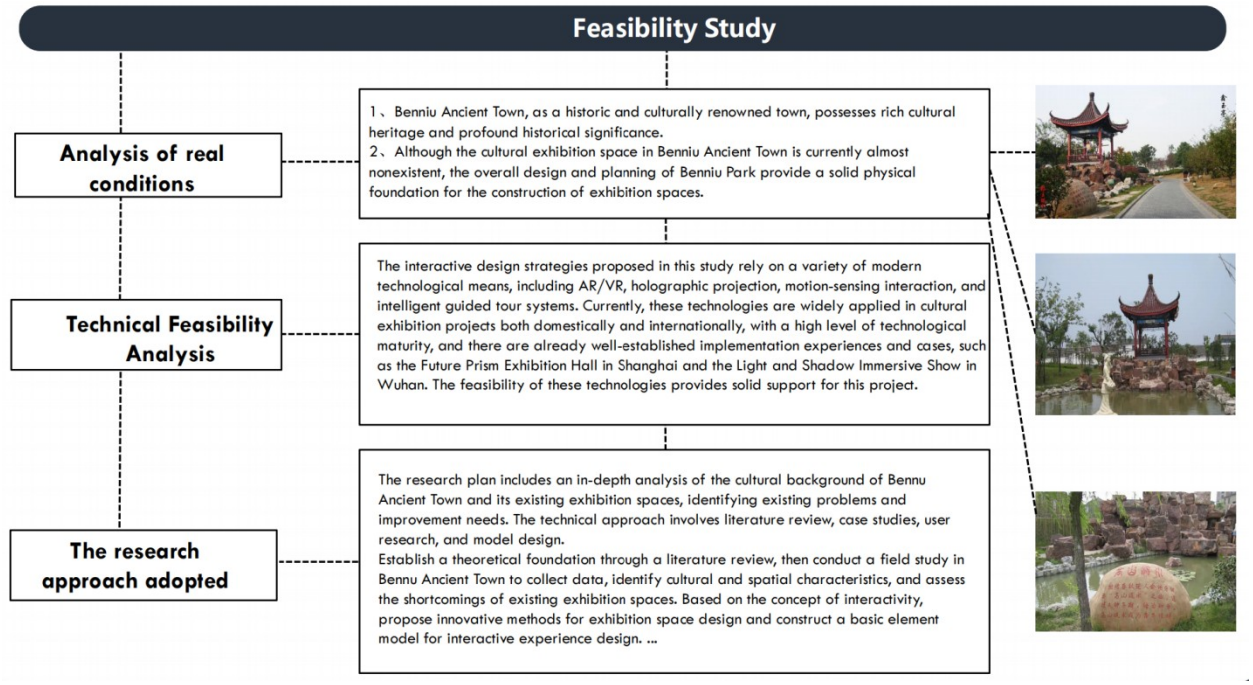
Tabl.2.


Goal of Research
3) providing a comprehensive and more intuitive cultural experience through innovative digital exhibition technology methods to meet the needs of modern audiences;
Goal
4)creating a set of technological methodologies for interactive exhibition design to provide theoretical and practical recommendations for the future design of similar cultural exhibition spaces;

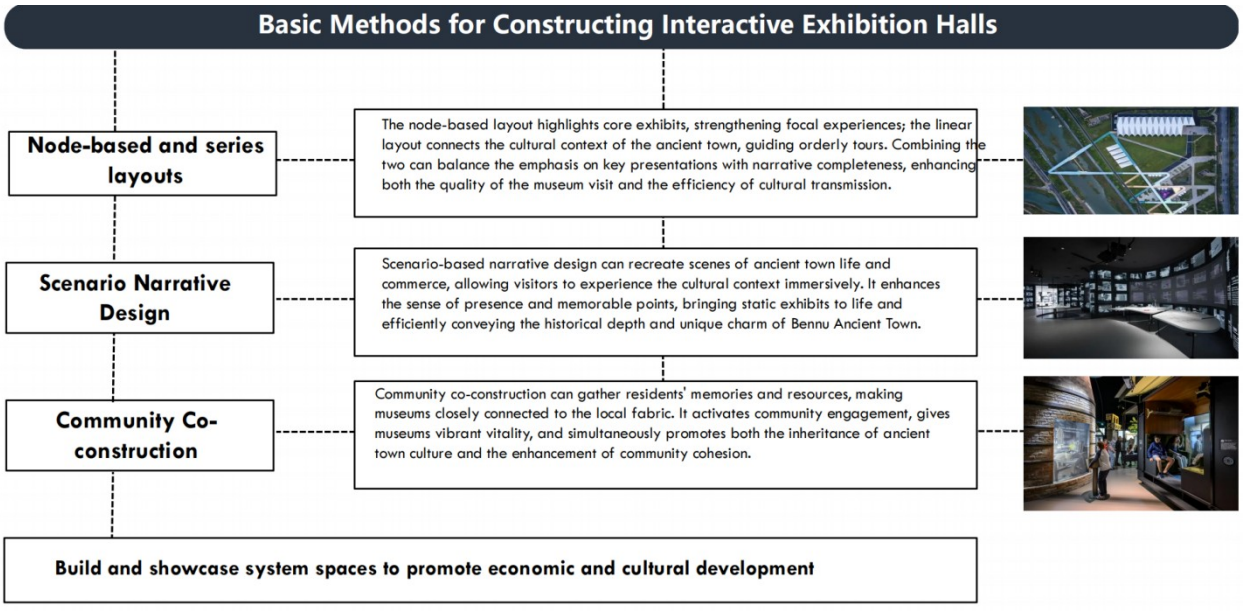
Tabl.3.


Research methods
Analysis and Synthesis
Allowed to determine the main theories that are mandatory in solving the exhibition space taking into account interactivity. The main directions of research were aimed at analyzing Chinese and foreign scientific sources that determined the main directions of solving the problem of preserving the cultural heritage of the PRC.
Scenario Prediction
Ilt recreates scenes of life and trade of the ancient city, allowing visitors to experience the cultural context in an exciting way. It enhances the sense of presence and memorable moments, enlivening static exhibits and effectively conveying the historical depth and unique charm of the ancient city of Bennu.
Immersion
Allowed to offer elements of an interactive game for immersion in a simulated reality for the development of bilingualism.
Grapho-analytical
The nodal scheme emphasizes the main exhibits, enhancing focal impressions; the linear scheme combines the cultural context of the ancient city, directing orderly excursions. Combining these two elements can balance an emphasis on key presentations with a complete narrative, enhancing both the quality of the museum visit and the effectiveness of the transfer of cultural knowledge.

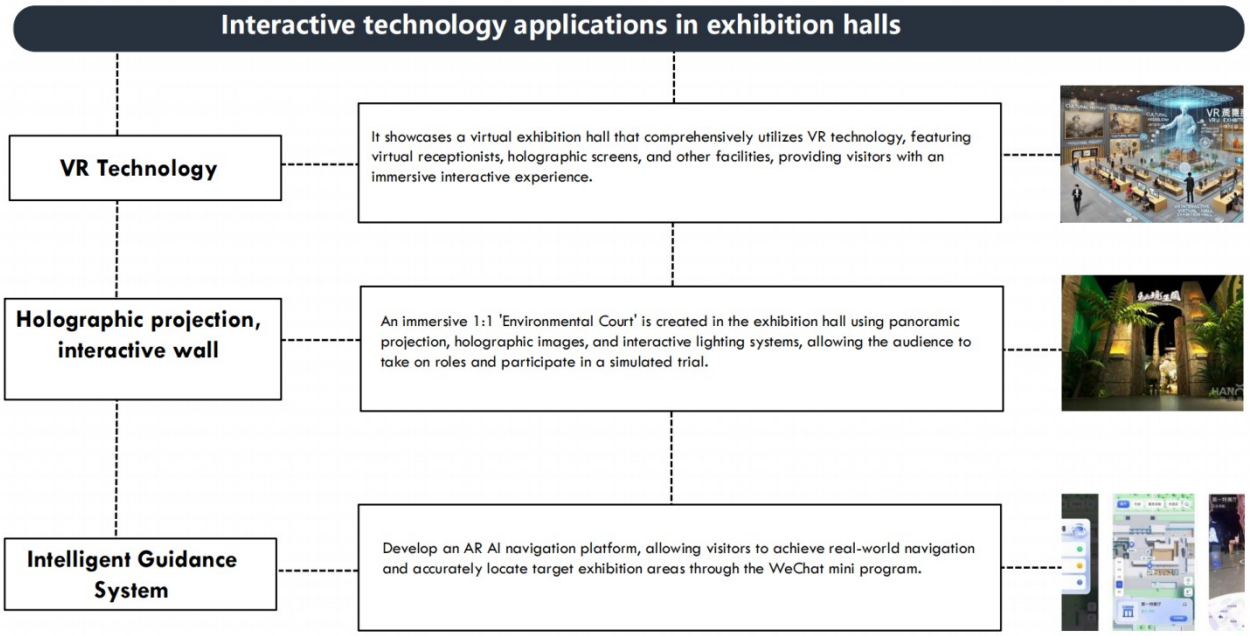
Tabl.4.


Feasibility Study
Analysis of real conditions
1、Benniu Ancient Town, as a historic and culturally renowned town, possesses rich cultural heritage and profound historical significance.
2、Although the cultural exhibition space in Benniu Ancient Town is currently almost nonexistent, the overall design and planning of Benniu Park provide a solid physical foundation for the construction of exhibition spaces.
Technical Feasibility Analysis
The interactive design strategies proposed in this study rely on a variety of modern technological means, including AR/VR, holographic projection, motion-sensing interaction, and intelligent guided tour systems. Currently, these technologies are widely applied in cultural exhibition projects both domestically and internationally, with a high level of technological maturity, and there are already well-established implementation experiences and cases, such as the Future Prism Exhibition Hall in Shanghai and the Light and Shadow Immersive Show in Wuhan. The feasibility of these technologies provides solid support for this project.
The research approach adopted
The research plan includes an in-depth analysis of the cultural background of Bennu Ancient Town and its existing exhibition spaces, identifying existing problems and improvement needs. The technical approach involves literature review, case studies, user research, and model design.
Establish a theoretical foundation through a literature review, then conduct a field study in Bennu Ancient Town to collect data, identify cultural and spatial characteristics, and assess the shortcomings of existing exhibition spaces. Based on the concept of interactivity, propose innovative methods for exhibition space design and construct a basic element model for interactive experience design. ...

Tabl.5.


Basic Methods for Constructing Interactive Exhibition Halls
Node-based and series layouts
The node-based layout highlights core exhibits, strengthening focal experiences; the linear layout connects the cultural context of the ancient town, guiding orderly tours. Combining the two can balance the emphasis on key presentations with narrative completeness, enhancing both the quality of the museum visit and the efficiency of cultural transmission.
Scenario Narrative Design
Scenario-based narrative design can recreate scenes of ancient town life and commerce, allowing visitors to experience the cultural context immersively. It enhances the sense of presence and memorable points, bringing static exhibits to life and efficiently conveying the historical depth and unique charm of Bennu Ancient Town.
Community Co-construction
Community co-construction can gather residents' memories and resources, making museums closely connected to the local fabric. It activates community engagement, gives museums vibrant vitality, and simultaneously promotes both the inheritance of ancient town culture and the enhancement of community cohesion.
Build and showcase system spaces to promote economic and cultural development

Tabl.6.


Interactive technology applications in exhibition halls
VR Technology
It showcases a virtual exhibition hall that comprehensively utilizes VR technology, featuring virtual receptionists, holographic screens, and other facilities, providing visitors with an immersive interactive experience.
Holographic projection, interactive wall
An immersive 1:1 'Environmental Court' is created in the exhibition hall using panoramic projection, holographic images, and interactive lighting systems, allowing the audience to take on roles and participate in a simulated trial.
Intelligent Guidance System
Develop an AR AI navigation platform, allowing visitors to achieve real-world navigation and accurately locate target exhibition areas through the WeChat mini program.

Tabl.7.

ANNEX B. Prototypes for improving community design based on the theory of “urban acupuncture”

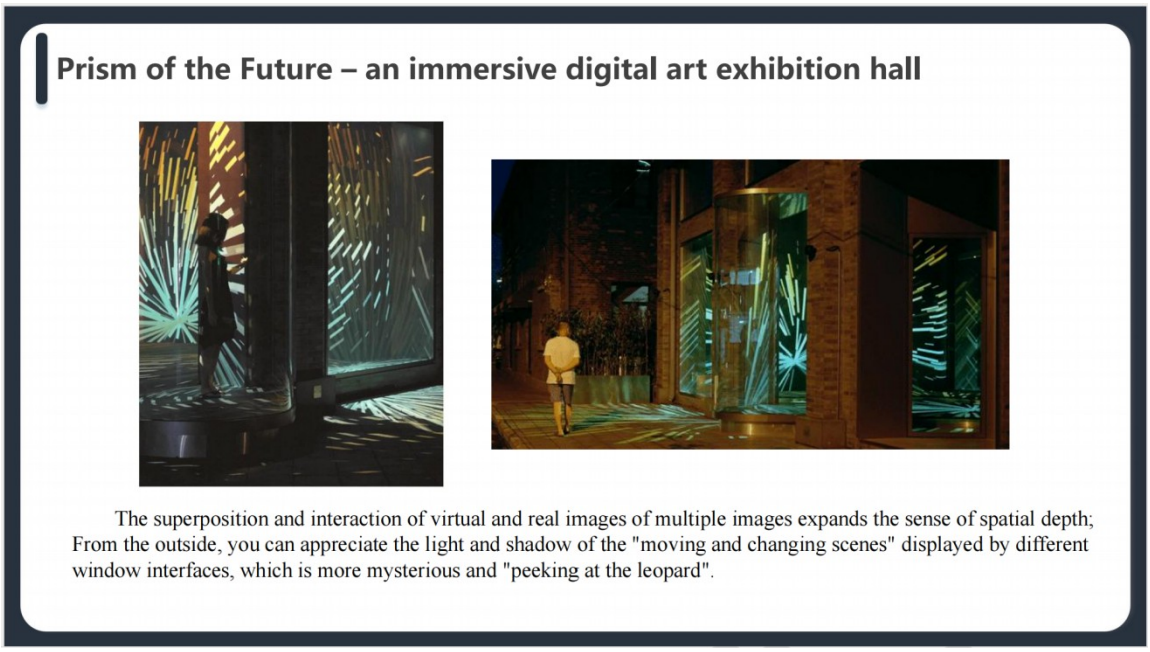


Fig. 1. The interaction of virtual and real images, which expands the sense of spatial depth; From the outside, one can appreciate the light and shadow of the "moving and changing scenes" displayed by different interfaces

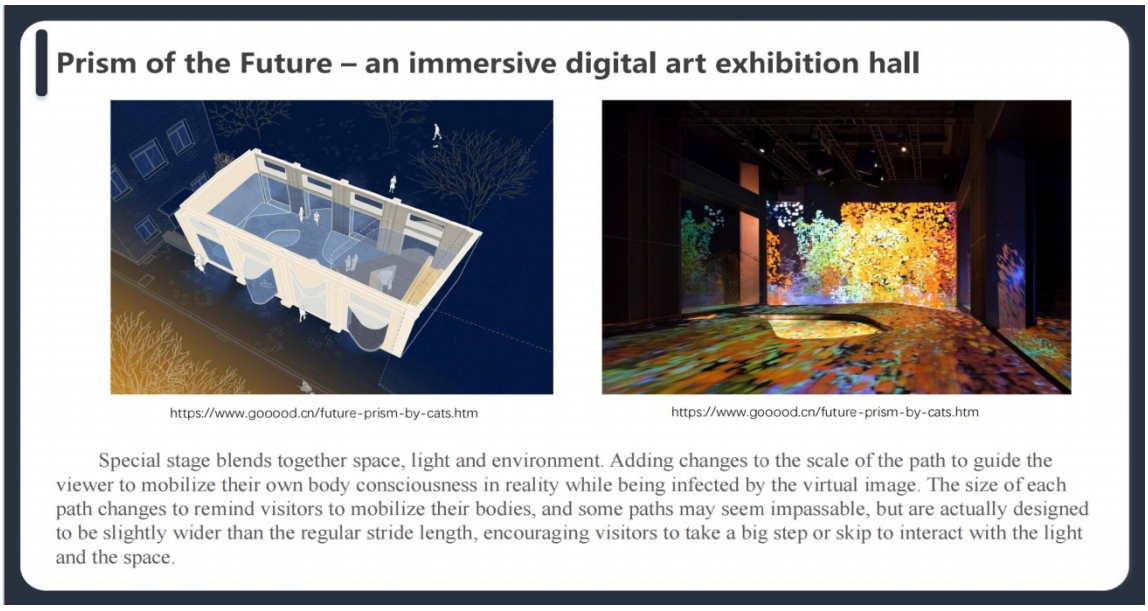


Fig. 2.

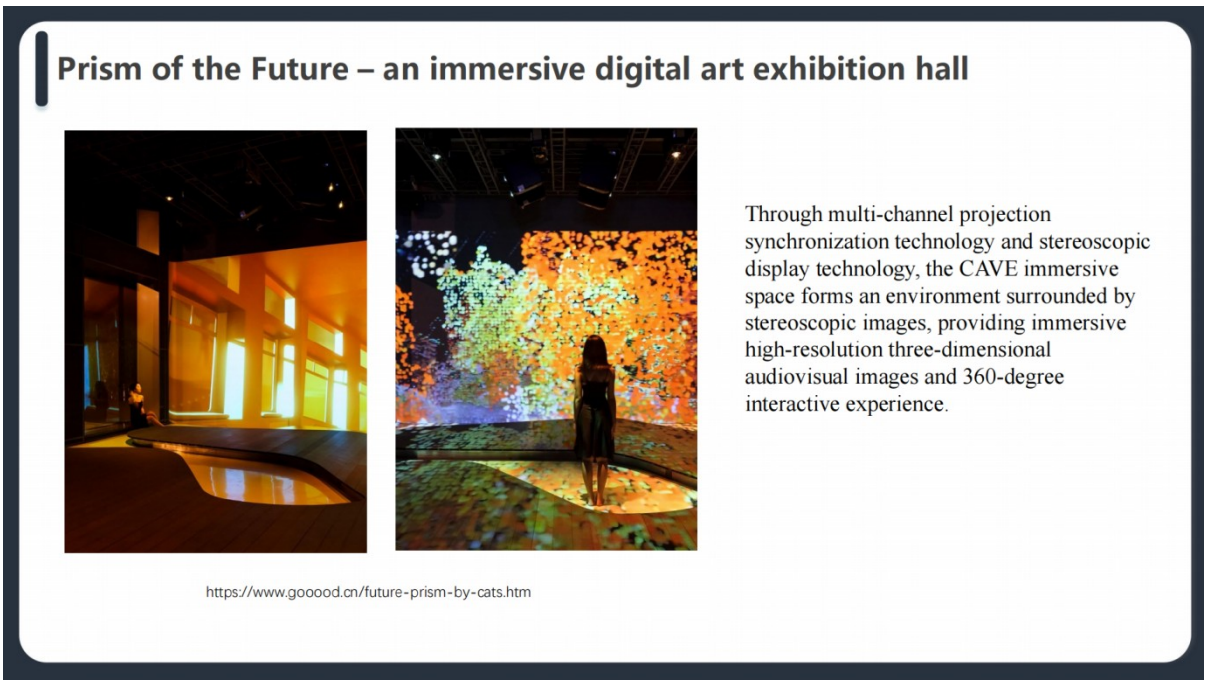


Fig. 3. With multi-channel projection synchronization technology and stereoscopic display technology, the CAVE immersive space shapes the environment, providing a demonstration of immersive high-resolution three-dimensional audiovisual images and a 360-degree interactive experience.

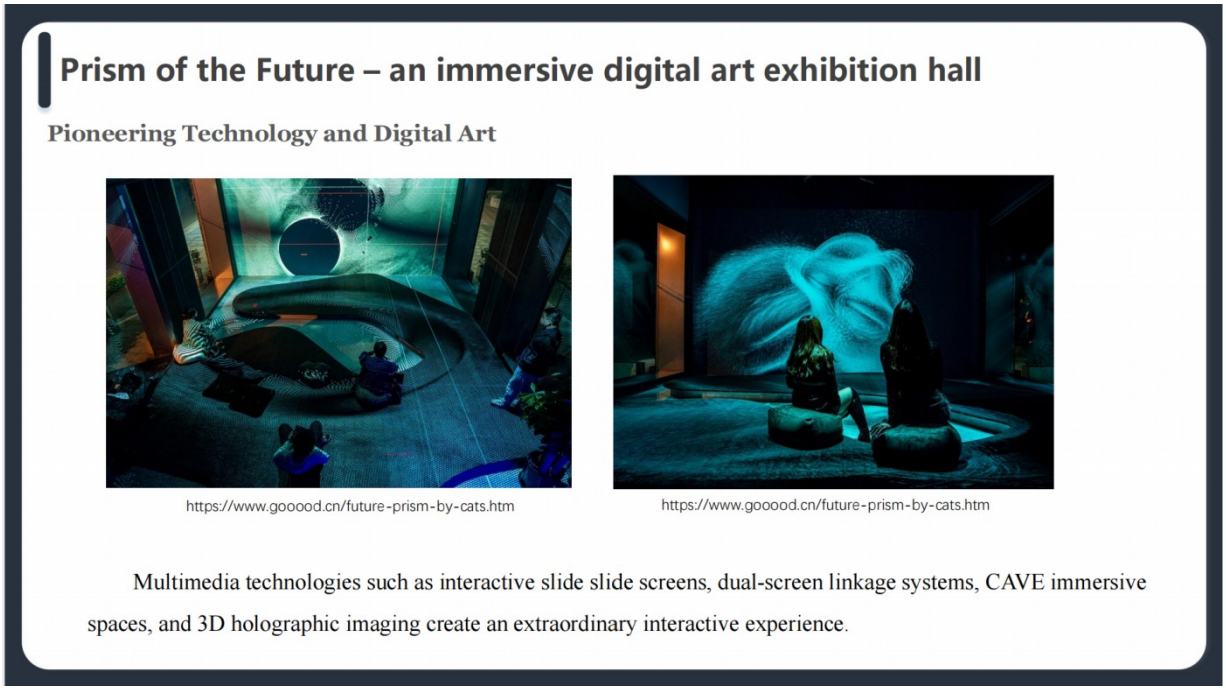


Fig. 4. Multimedia technologies such as interactive slide screens, two-screen connection systems, immersive CAVE spaces, and 3D holographic imaging create extraordinary interactive experiences.



Fig. 5. With Su Shi and his poems as the basis, the exhibition helps visitors understand the profound wisdom and contemporary value of China's wonderful traditional culture through the discovery of the system of "culture + technology" and "art + technology".



Fig. 6. Through radio frequency identification technology, Su Shi's invented and recorded delicacies are presented on a plate through light and shadow, allowing viewers to experience the fireworks of the Song Dynasty thousands of years ago, as well as experience the pleasure of food and understand the philosophy of life contained in Su Shi's poems.



Fig. 7. The exhibition combines modern scientific and technological innovations such as metaverse and artificial intelligence, allowing “Su Shi” to personally visit the exhibition site to interact with the audience and ask questions: “Can you tell me a poem? How is Dongpo meat made?” The audience enthusiastically interacted with “Su Shi” and had a dialogue across time and space.



Fig. 8. The design of the Suzhou Bay Digital Art Museum - combining technology and art. Three exhibitions: "Spiritual Land - The World of Future Inspiration", "Painting a Thousand Miles of Rivers and Mountains - The Exciting Art Exhibition of the Forbidden City" and "Spiritual Eyes - The Fun Vision of the Pupil" were opened at the same time, fully integrating advanced technology with culture and art to provide viewers with a full digital experience.

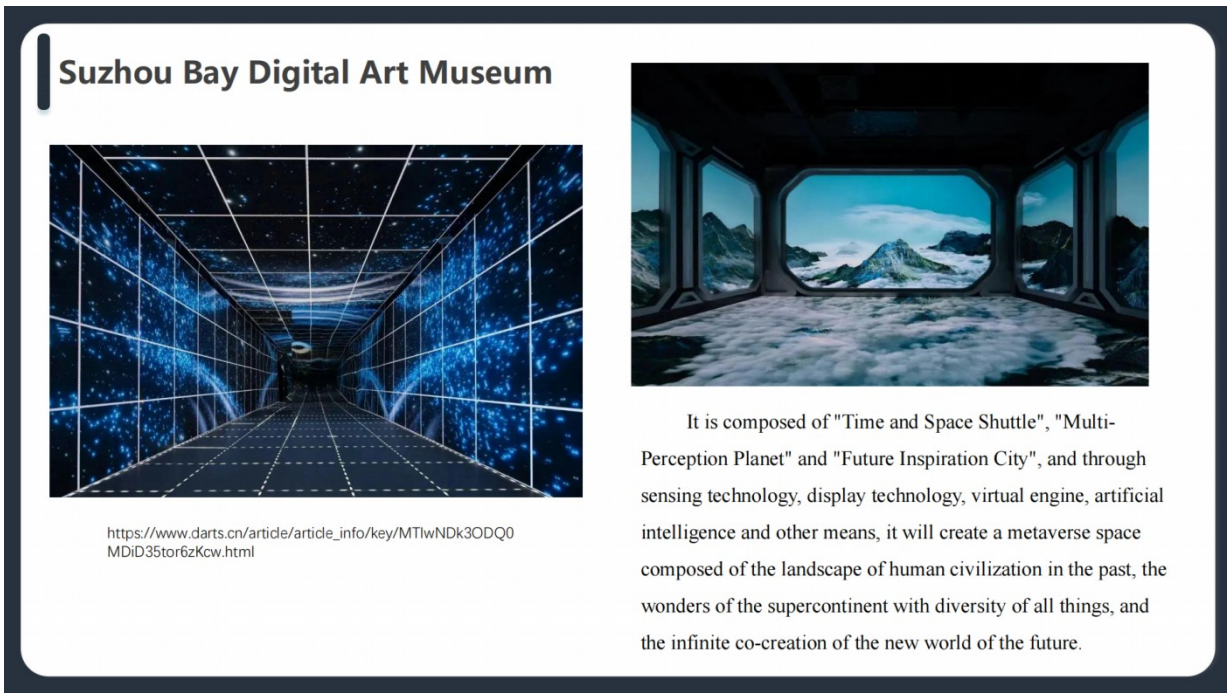


Fig. 9. The design consists of the “Time and Space Shuttle”, “Multiperception Planet” and “Future Inspiration City”, and through sensor technology, display technology, virtual engine, artificial intelligence and other means creates a metaverse that demonstrates the past of human civilization, the wonders of the supercontinent with the diversity of all that exists and the infinite through the co-creation of the world of the future.



Fig. 10. A dynamic digital screen of the theme of cultural relics, using the core technology of multi-layer rendering and interactive time conversion system, shows visitors the story of the "first long bridge in the south of the Yangtze River" - the Wujiang Chuihong Bridge.



Fig. 11. Bryce Wolkowitz Gallery exhibits various forms of new media art, including digital artworks. These works are usually related to digital technology, network technology, and communication technology, serving as a means to provide information services to users.

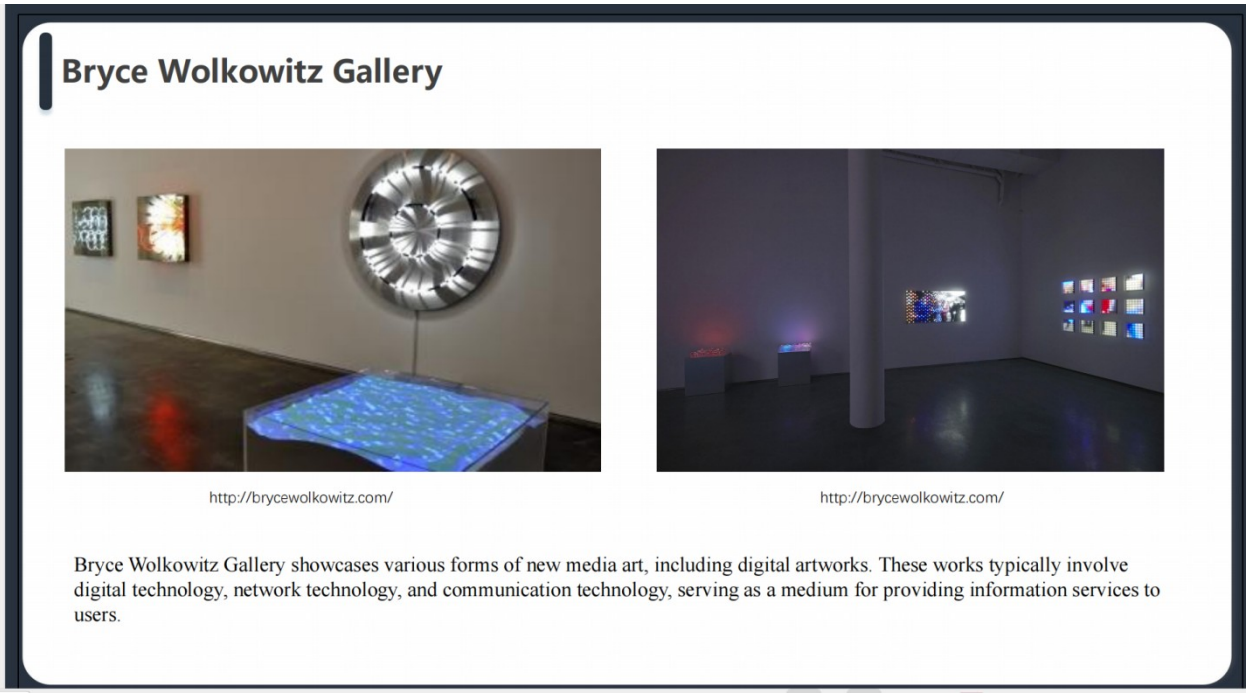


Fig. 12. Bryce Wolkowitz Gallery exhibits various forms of new media art, including digital artworks. These works are usually related to digital technology, network technology, and communication technology, serving as a means to provide information services to users.

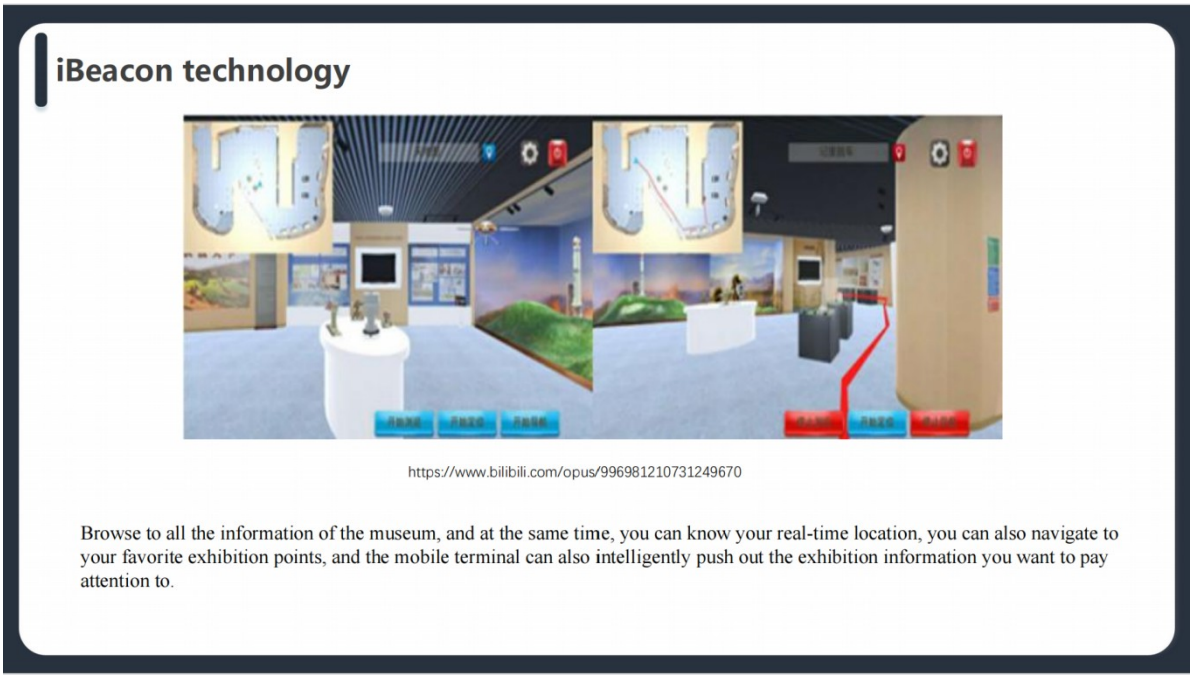


Fig. 13. Thanks to this technology, you can view all the information about the museum, and at the same time know your location in real time, and you can also go to your favorite exhibition points, and the mobile terminal helps to intelligently display information about the exhibition that the visitor is paying attention to.

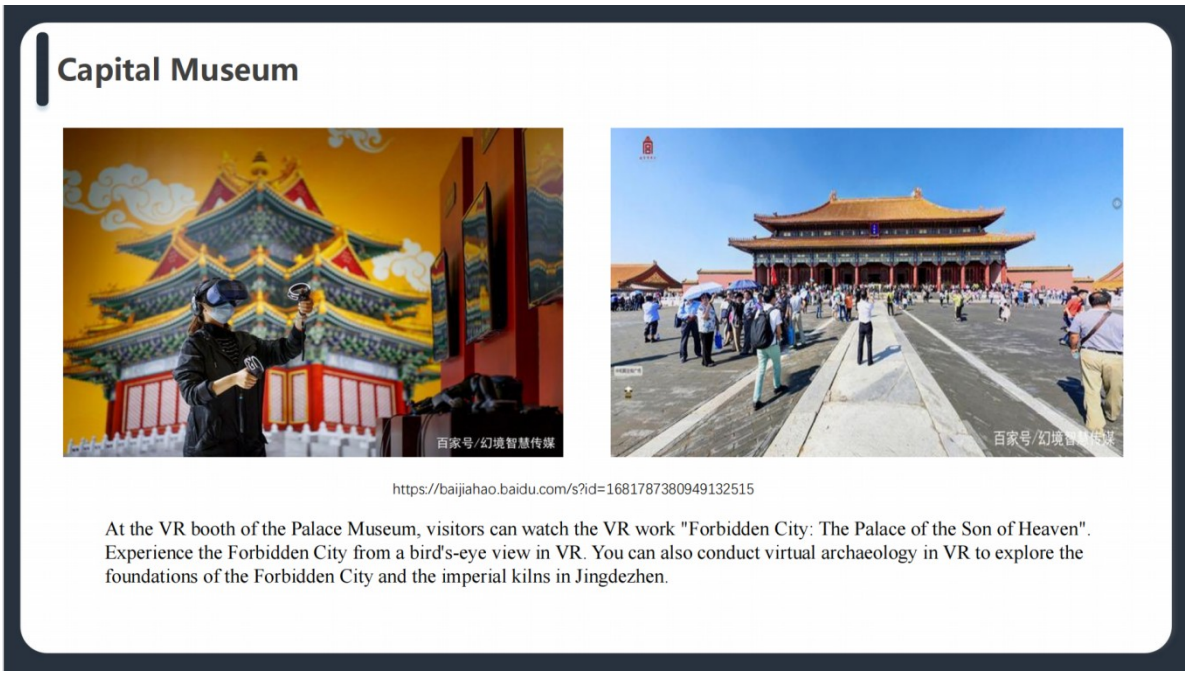


Fig. 14. At the Palace Museum's virtual reality booth, visitors can view a bird's-eye view of the virtual reality story "Forbidden City: Palace of the Son of Heaven." You can also conduct virtual archaeology in virtual reality to explore the foundations of the Forbidden City and the imperial kilns in Jingdezhen.



Fig.15. Relying on a new generation of multi-modal human-computer interaction technologies, as well as 3D modeling, speech synthesis, action and expression capture, the Tencent Cloud team has proposed high-quality forms of a Han Dynasty woman in her gestures, creating an image similar to a real person with realistic facial expressions. All these tools help to study the behavioral characteristics and speech patterns of Han Dynasty women

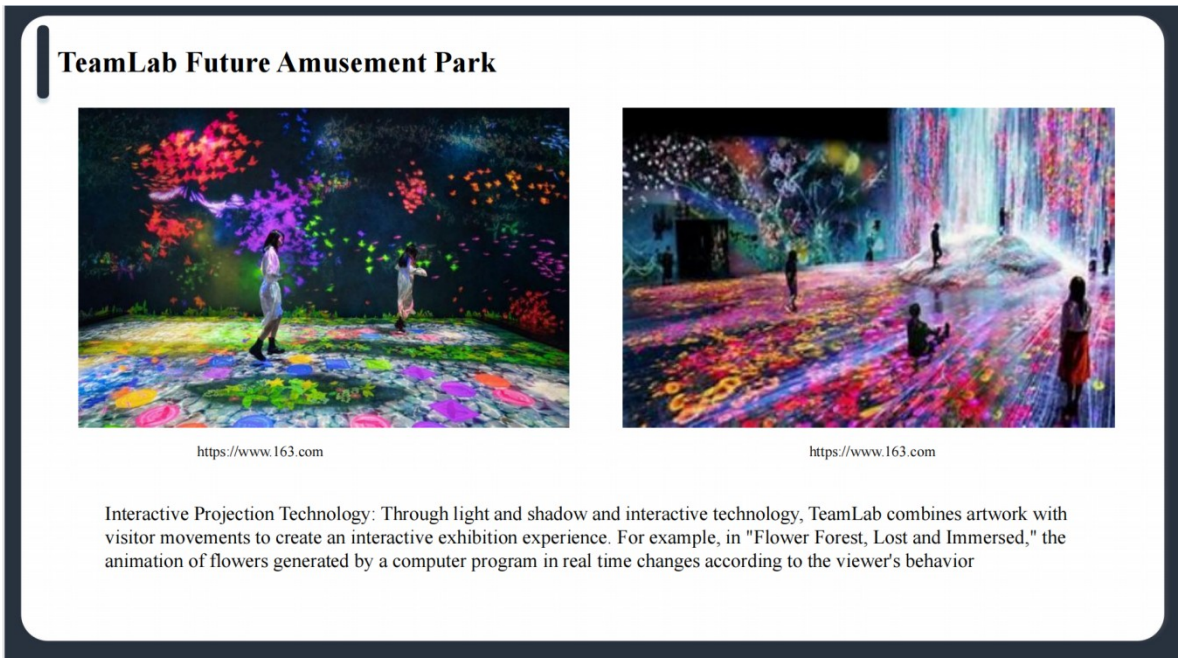


Fig. 16. Interactive projection technology: Through light, shadow, and interactive technologies, TeamLab combines artwork with visitor movements to create a real-time interactive exhibition experience.



Fig. 17. "Smart Guide" is an intelligent tour guide system with a tablet computer as the carrier, which uses Bluetooth wireless induction to determine the location of visitors, and the system displays images of nearby cultural relics on the tablet computer according to the position of the viewers, and the viewers can independently select the cultural relics they want to explore.

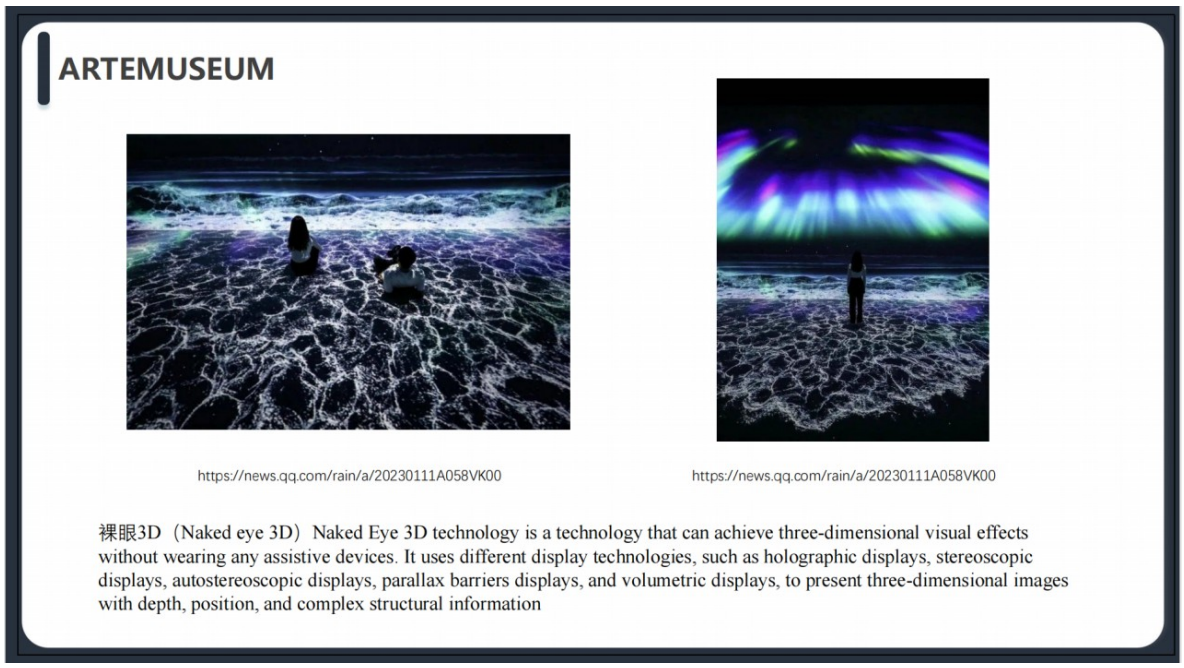


Fig. 18. Naked eye 3D technology is a technology that can achieve three-dimensional visual effects without the use of any auxiliary devices. It uses various display technologies, such as holographic displays, stereoscopic displays, autostereoscopic displays, parallax barrier displays, and volumetric displays, to present three-dimensional images with depth, position, and complex structural information.

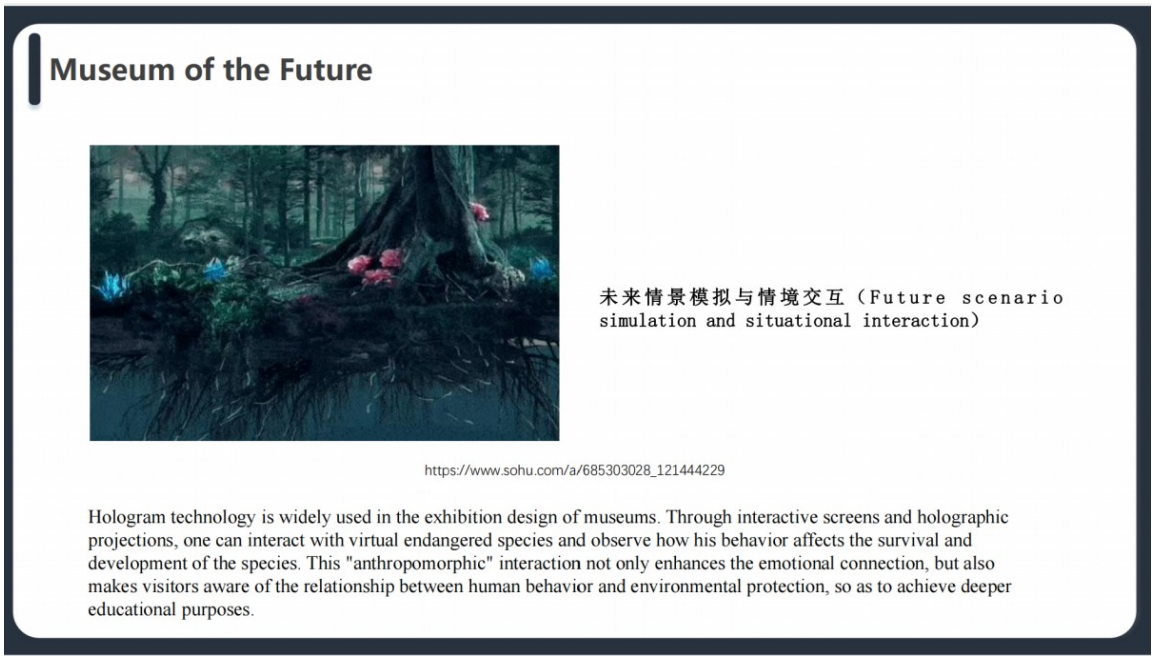


Fig. 19. Holographic technology is widely used in museum exhibition design. Using interactive screens and holographic projections, one can interact with virtual endangered species and observe how their behavior affects the survival and development of the species. Such “anthropomorphic” interaction not only enhances the emotional connection, but also realizes the connection between human behavior and environmental protection to achieve deeper educational goals.

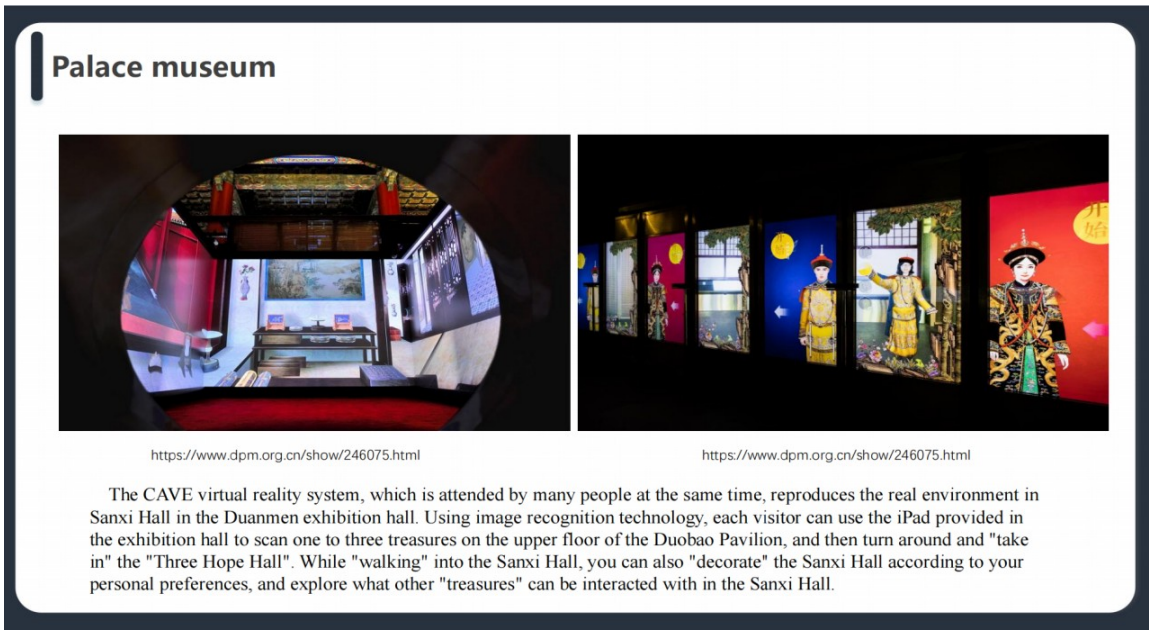


Fig. 20. The CAVE virtual reality system recreates the real-life environment in the Sanxi Hall in the Duanmen Exhibition Hall. Using image recognition technology, each visitor can use the iPad provided in the exhibition hall to scan one to three treasures on the upper floor of the Duobao Pavilion, and then turn around and “explore” the “Hall of Three Hopes”. During the “walk” to the Sanxi Hall, you can also “decorate” the Sanxi Hall according to your personal preferences and explore what other “treasures” can be interacted with in the Sanxi Hall.

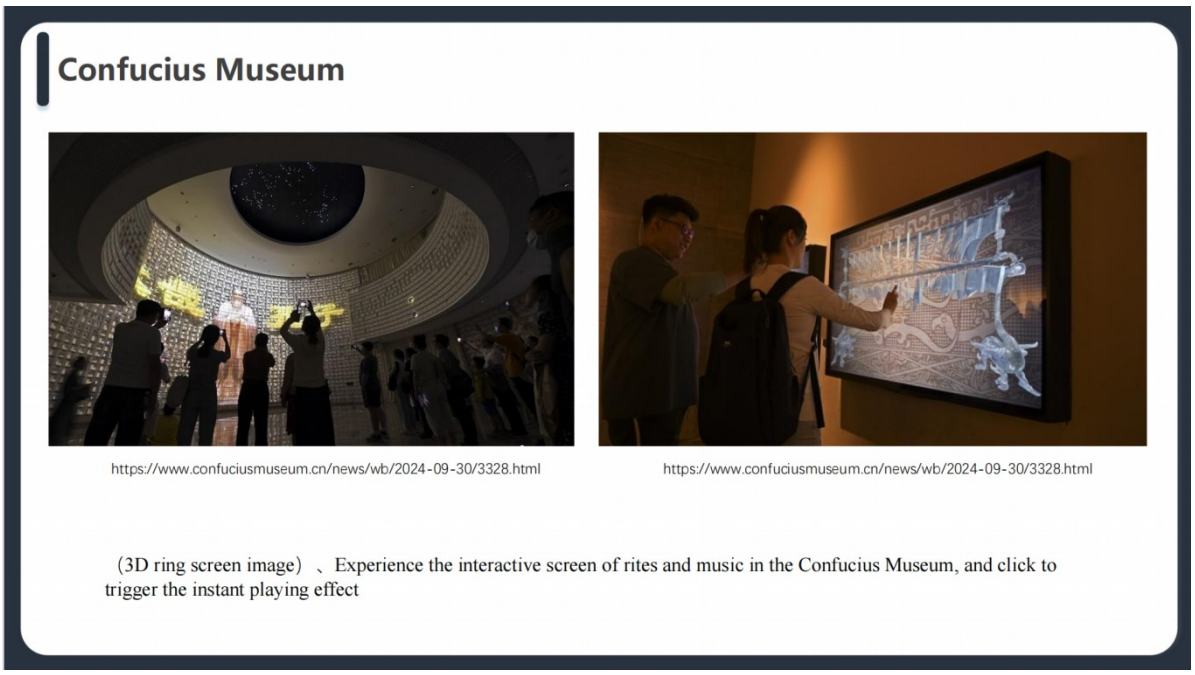


Fig.21. The 3D display technology of the ring screen allows you to experience the interactive screen of rituals and music in the Confucius Museum when pressed to activate the effect of instant replay of the event.

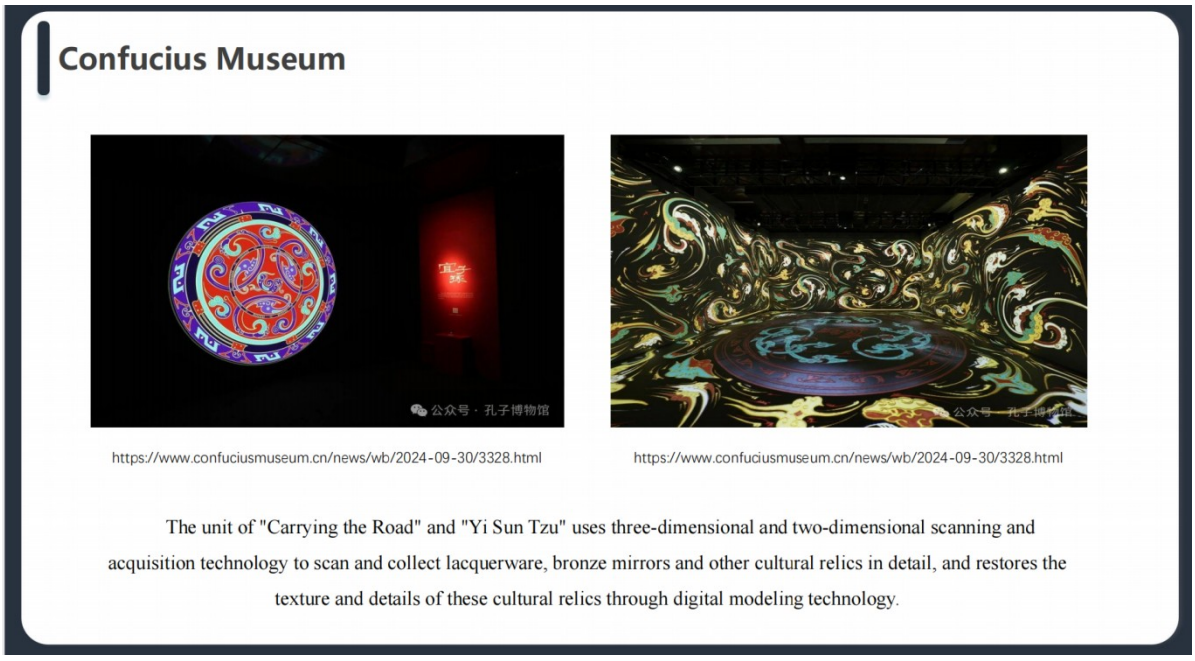
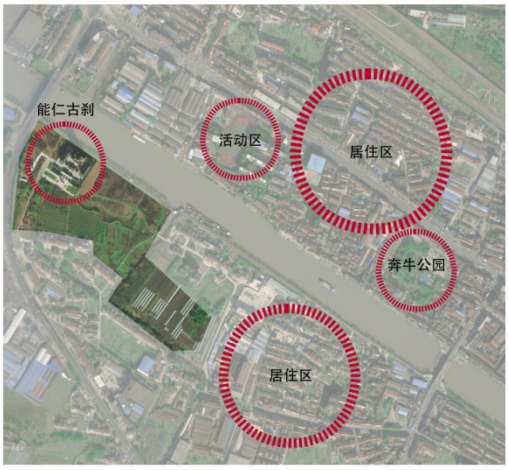


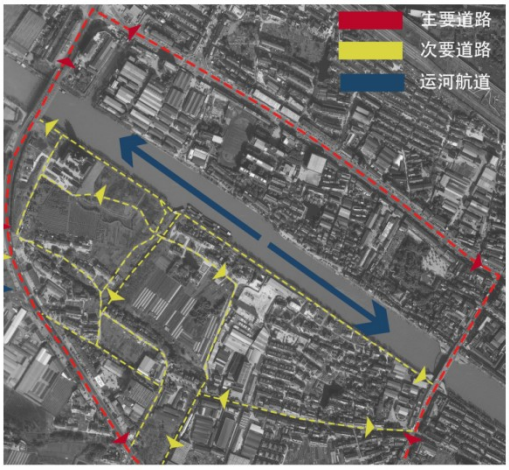
Fig. 22. The design departments of "Carrying the Road" and "I Song Zi" use three-dimensional and two-dimensional scanning and data acquisition technology to scan and collect lacquerware, bronze mirrors and other cultural relics in detail, and restore the texture and details of these cultural relics through digital modeling technology.

ANNEX C (Project Proposal) Location of the facility

location of the project



Analysis of the surrounding area



Traffic analysis

location of the project







My design project site is located in Benniu Park, which is a multi-functional comprehensive park integrating cultural activities, fitness and leisure, and visits in the old street of Benniu Town, Changzhou City, Jiangsu Province. There are many scenic spots, such as Boya Bridge, Bosom Friend Pavilion, etc.; At the same time, there are two outdoor functional places and indoor functional places for the masses to relax and entertain. However, there is still a lack of systematic indoor cultural display space, and Benniu Old Street still has the problem of lack of cultural space.

location of the project

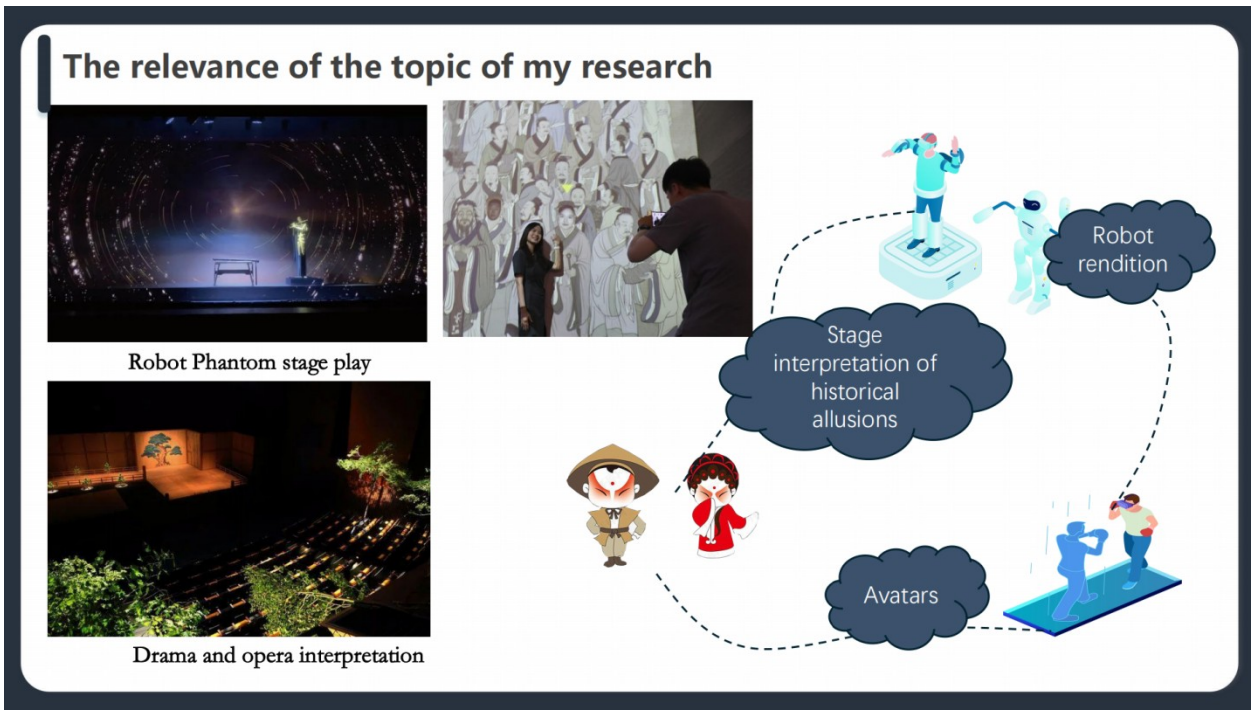




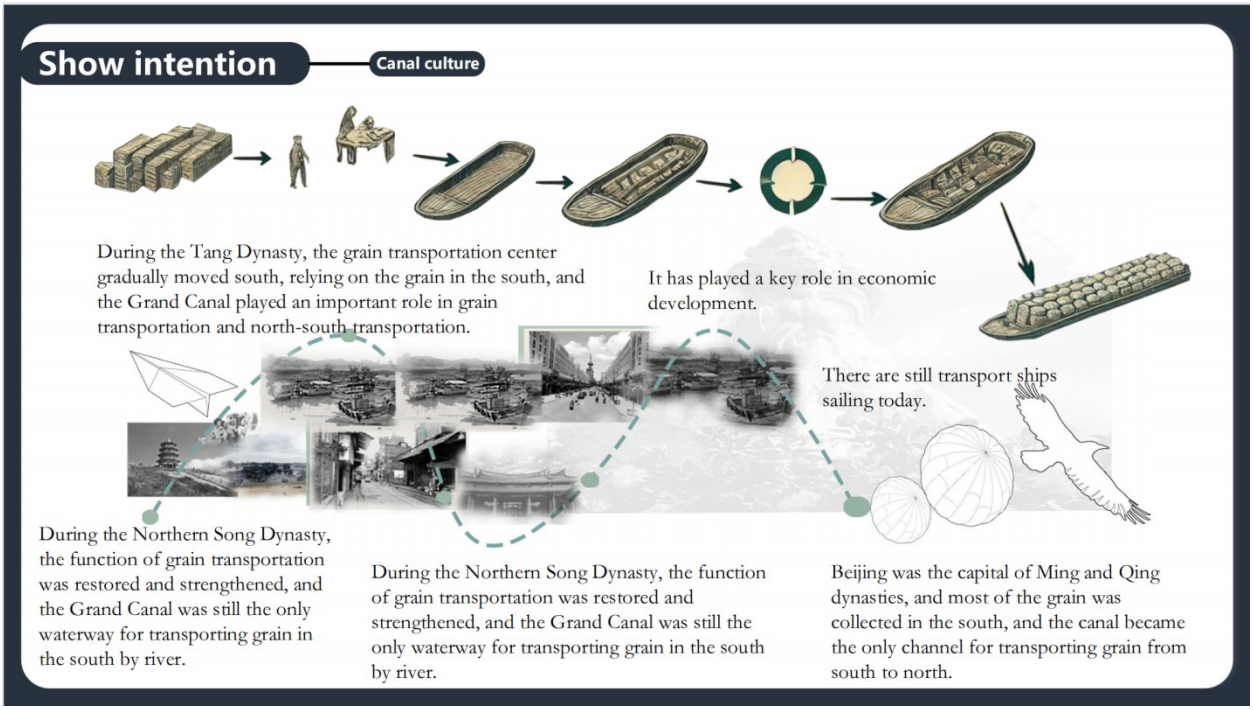
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Suggestions for using interactive technologies





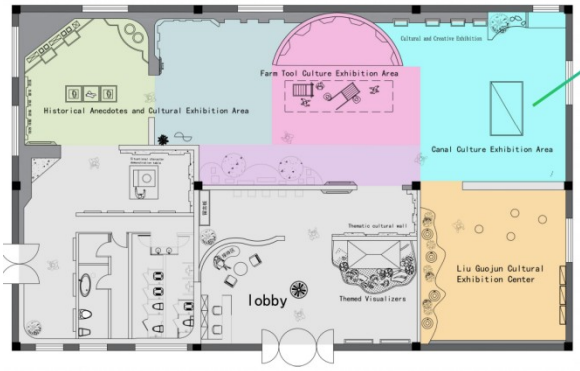
Exhibition space design incorporating interactive technologies



ANNEX D. Project proposal

Planning solution for exhibition space

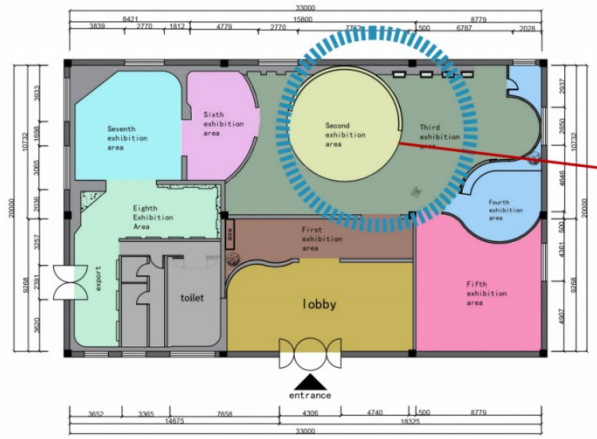
Show intention — Canal culture



Canal culture exhibition area

This paper introduces the history of water transport culture in Benniu ancient town, the central 4 m×1.2 m digital sand table "water rhyme long table", the audience scans the code to upload old photos and new stories, and the data flows into the "canal cloud" in real time, forming new ripples on the desktop;

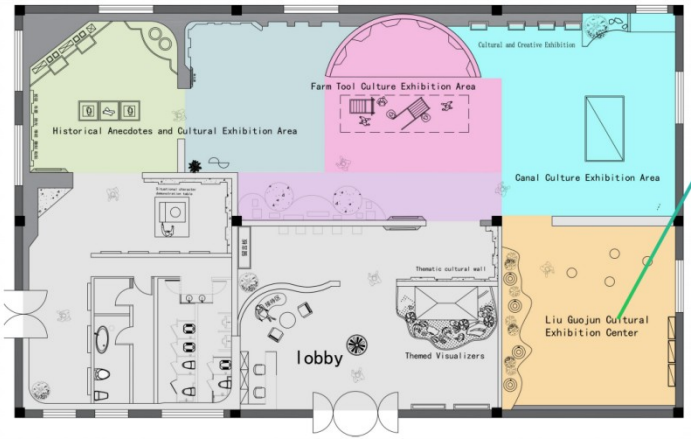
Functional zoning



This is an area where I use new media technology for the interior design of the exhibition hall.

Exhibition Hall Layout Plan 1:100

Show intention — Liu Guojun culture

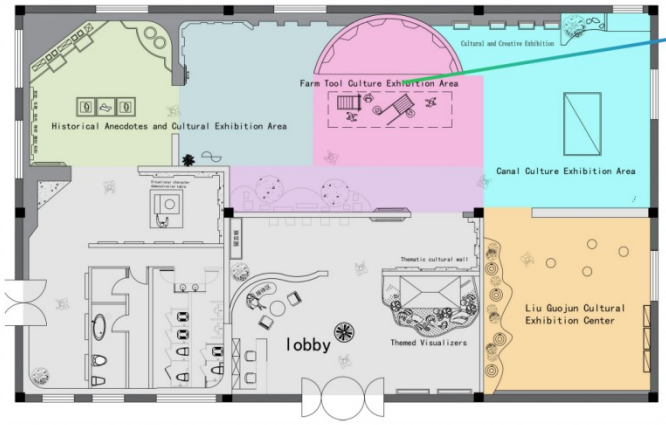


Liu Guojun cultural exhibition area

Liu Guojun's six life nodes (running an ox apprentice → Hefeng starting a business → achieving a great miracle → moving westward during the Anti-Japanese War → a new Republic → donating and collecting) are described and displayed.

Show intention

Agriculture tools culture

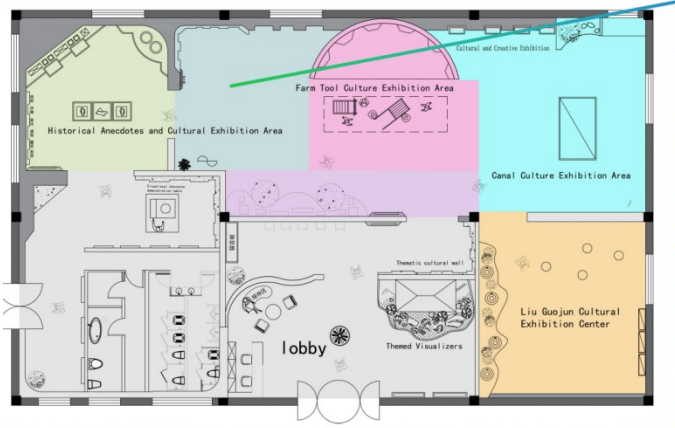


Agricultural tools culture exhibition area

1、Cultural relics display of farming tools.
2、The audience can "plow-drive cattle-thresh" in the virtual 1930s bull-running rice polder, and the vibration of the handle matches the real plow weight to realize "ploughing one square meter on behalf of others"

Show intention

Agriculture tools culture

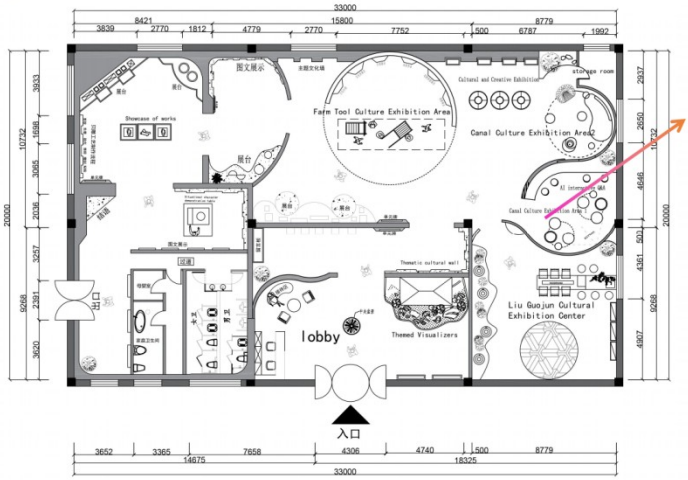


Historical Allusions Area

Story of True Friendship: Benniu is the place where the story of 'High Mountains and Flowing Water meeting a kindred spirit' originated. During the Spring and Autumn period, the qin master Yu Boya traveled by water through Benniu. On the Mid-Autumn Festival of the fifteenth day of the eighth month, as his boat passed near Zhong Village in Benniu, with the bright moon overhead, he could not help but play the qin. To his surprise, the woodcutter on the shore, Zhong Ziqi, could understand the meaning behind his music and praised, 'Magnificent, for it expresses the grandeur of the mountains,' and 'Expansive, for it represents the flowing water.' The two then became steadfast friends for life.

Show intention

Canal culture



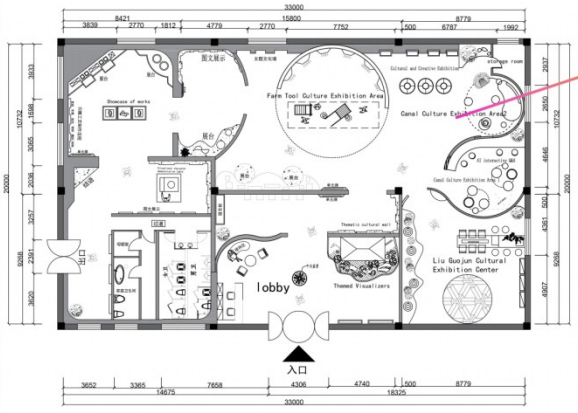
Floor plan of the folk culture exhibition hall 1:100

Canal culture exhibition area 1

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Show intention

Canal culture



Floor plan of the folk culture exhibition hall 1:100

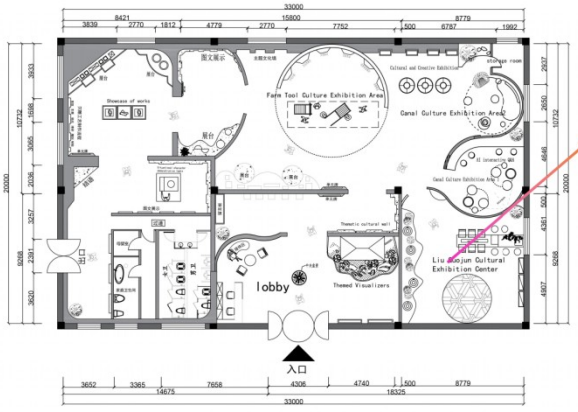
Canal culture exhibition area 2

Water Vein Corridor-"Living Map"
The "granary walls" on both sides can be drawn, containing 27 pieces of cultural relics of Cao Gang, and the instant wall projection of the drawer tells the story of "Cao Yun culture" simultaneously.

Movable "micro-tea stalls" are set up at both ends to supply "three tea for running cattle", so as to realize "visiting the ancient town after watching the exhibition and recalling the canal with tea fragrance".

Show intention

Liu Guojun culture



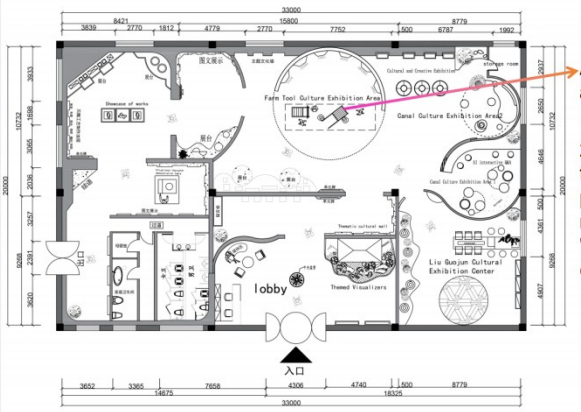
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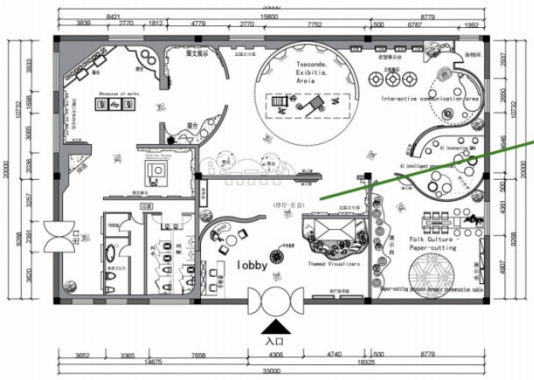


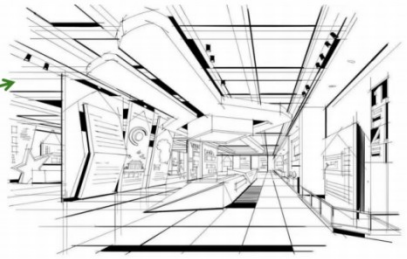
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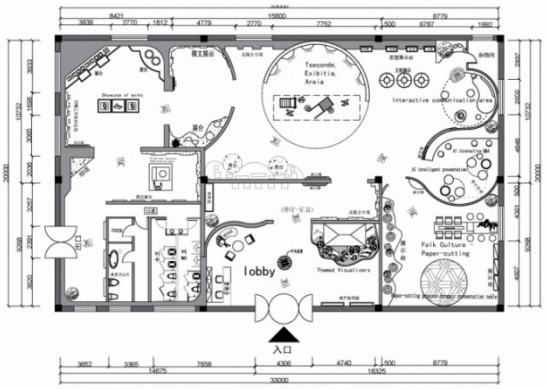
Design areas and corresponding sketche 1

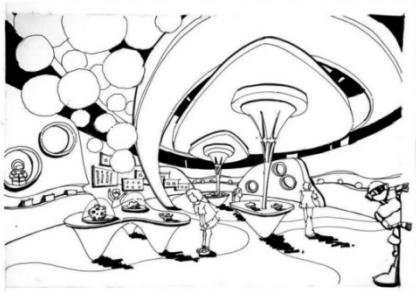




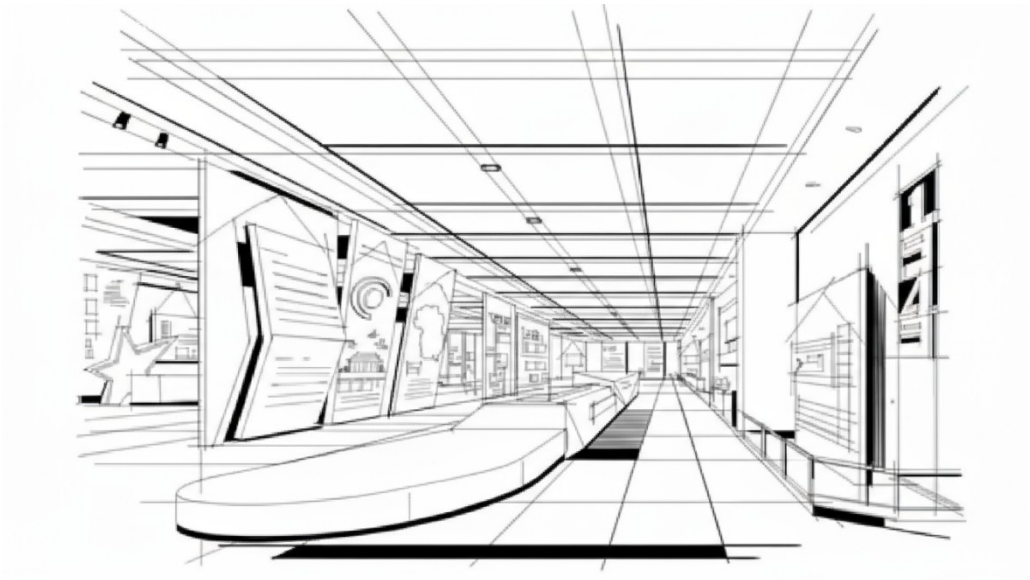
民俗文化展厅平面布置图1:100

Design areas and corresponding sketche 1





民俗文化展厅平面布置图1:100












发展历程
战后复兴（1946-1949）：
重建产业版图，推动行业革新






高山流水
遇知音
笔墨书香


稻麦与人类文明
粮稳天下安
稻麦的前世今生