Wrapping up the Historical Form: Transformation and Symbiosis of Melbourne Central's Ammunition Depot

DOI: 10.23977/ftte.2025.050101

ISSN 2616-2334 Vol. 5 Num. 1

Xiong Chengxia^{1,a,*}, Sun Junxia^{2,b}

¹College of Publishing, University of Shanghai for Science and Technology, Shanghai, 200093, Nanchang, China

²College of Publishing, Shanghai University of Science and Technology, Shanghai, 200093, Wuhan, China

^aBobjucy@usst.edu.cn, ^b1835404866@qq.com *Corresponding author: Xiong Chengxia

Keywords: Downtown Melbourne, Old bullet factory, Metabolism, Symbiosis theory, Place spirit

Abstract: Taking the reconstruction of Melbourne central bullet depot as the reading object, this paper reveals how the old and new buildings are connected and symbiotic in the intersection of history and modernity, and analyzes the relationship between their design strategies and symbiosis theory. Using the symbiosis thought put forward by Kurokawa as a theoretical framework, this paper discusses the historical background of Melbourne central bullet factory and its transformation method, and realizes the continuation of cultural memory and field integration through spatial reconstruction; Multi-sensory synesthesia evokes the memory of urban historical context; The integration of the individual and the whole promotes the dynamic balance within the city. Melbourne central's planning shows the characteristics of metabolic urban complex, the harmonious creation of old and new buildings, the revival of culture, and the connection and symbiosis of modern society. As a visual interpretation of symbiosis theory, it truly reflects the sustainable development idea of urban planning. The concept of symbiosis provides a new path for future urban development, so as to promote the inheritance of history and culture and the liveliness of space.

1. Introduction

In the 20th century, the wave of urban renewal swept the world's major cities. As the capital of Melbourne, Victoria urgently needs modernization to meet the growing demand of urban population. Because of its special geographical location, the ammunition depot has become an important area for reconstruction to cater to the urban ring road, and as a key node for connecting large shopping centers around and building an efficient transportation network, there are different opinions on the future of the old ammunition depot. In order to meet the requirements of many parties, Kisho Kurokawa added a layer of "glass cover" to the historical building by repairing the old as before, and "protected" the bullet factory and tower with modern forms. The building contains cultural spaces such as transportation hub, shopping center and museum, which completely preserves the

historical building and integrates it into the urban function for the first time to meet the living space needs of modern society. This urban center complex model is the practical application of Kurokawa's metabolic thought (Figure 1). In the dynamic development of "metabolism", we seek the organic combination of historical context and modern civilization. "Coexistence" is the third space that is both opposite and integrated, and it is a vivid space composed of contradictory sense of suitability [1].

The primary purpose of metabolic movement is to introduce the regeneration process into architecture and urban planning, and think that architecture should be regarded as the concept of sustainable development from the past to the present and even the future. The old bullet factory witnessed the changes of Melbourne's history. With the urban renewal and development, the building experienced the transformation from a single functional space to a multicultural place, realizing functional metabolism. Due to the transformation of building materials in different historical periods, Melbourne central adopted modernist reinforced glass and other materials, which is in sharp contrast with the original red brick tower. The transformation of building shape not only gives new vitality to the old building, but also adds historical depth to the modern building and realizes the metabolism of style. Due to the increase of population, the functionality of land parcels is strengthened, and thus the metabolic development of commercial, entertainment, transportation and other multi-land parcels is realized. By exploring the reconstruction case of Melbourne's bullet depot, the implementable strategy of symbiosis concept in urban sustainable development is triggered.

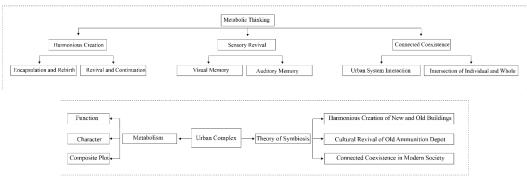


Figure 1 Creation, Resurrection and Symbiosis of Urban Complex ①

2. The Dual Performance of Time and Space: The Harmonious Creation of Old and New Buildings

The renovation of Melbourne central retains the original architectural style of the old bullet factory, and the harmonious creation of the historic red brick tower and the modern glass spire makes the old and new buildings interweave with each other and become the new center of urban life (Figure 2). Different from the "old and new" symbiotic concept of "leaving skin and bones" in the previous transformation, Kurokawa's protection and reuse of the bullet factory realized the creation of a new functional space, reflecting the dual role of historical buildings: on the one hand, it is a collection of historical context memory and collective memory of the city, on the other hand, it constructs its own cultural value in the current new context, reconstruct the urban cultural memory to continue the historical civilization and make it express the spirit of the place like a memorial. Architects should Make use of the characteristics of the building to form a certain place spirit, and make these characteristics interact with people^[2]. Place is the spiritual core hidden behind space, which contains profound national, historical and cultural significance and forms a unique place spirit in the region. People gain a sense of local identity in a familiar environment. Historical

imprint and modern innovation collide with each other in time and space, and experience the new space while indulging in the echo of history, resulting in a two-way linkage between people and places.

Therefore, modernization should never be based on the destruction of historical and cultural heritage, and "establishing a new one" does not mean that it must be "dilapidated"^[3]. Urban renewal is definitely not at the expense of denying all history, and it is not necessarily possible to achieve modernization by breaking the old and establishing the new. Exhibition, respect for historical traditions does not mean standing still, and it is absolutely impossible to present a divided history to future generations during development. Laozi said "Tao gives birth to everything", and architecture is also created by the root Tao. The creation of the bullet factory is reflected in the innovative preservation and functional transformation of the original form, which is not only the coordination of appearance, but also the functional complementarity and cultural continuation. Redefining the cultural value of old buildings makes historical memories continue to be reborn and revived, forming a sustainable urban system. The process of creation shows that architecture, as an important medium of cultural carrier, realizes the all-round harmonious and symbiotic development conveyed by "Tao".



Figure 2 Harmonious creation of new and old buildings ①

2.1 Package and Rebirth: Time Dialogue in Architecture

The old bullet factory building has a red brick tower with a height of 50 meters, which provided a place for British people to make shotguns from its construction to the mid-1940s. Because of its altitude, it has always been a landmark building in Melbourne (Figure 3). However, because the urban construction and development tower is located in an important development area, in the era when the historical heritage protection law has not been promulgated, different concepts have emerged in the face of the future of architecture. Finally, Kurokawa's design strategy not only revived historical buildings but also adapted to the process of modernization. Using the simplest geometric cone to protect the original tower (as shown in Figure 4), the old historical form is "reborn" into a new functional space, and the space becomes a field intertwined by different times. This transformation is not only the transformation of the external physical space, but also the reshaping of the social, cultural and emotional values it carries. The simple geometry of the glass cone and the use of light make it look like the focus without robbing the historical position of the magazine. The symbiosis advocated by Kisho Kurokawa includes other dimensions such as time, space, matter and consciousness, and explores the balance of coexistence by dissolving the opposing state between things^[4]. The design concept he pursues is never eternal, but considers the whole development context from the past to the present and the future, and realizes a dynamic and sustainable balance relationship with the change of time and place. The package of the historical features of the old bullet depot keeps the visual continuity of the city image, and it is also a package of symbolic memory and spiritual culture. It shows the historical context of the city and regenerates new functions and social interactions, and feels the sense of belonging given by historical buildings, which is not only the safety of the space itself, but also the continuation spiritual bond between visual memory and cultural memory. Architecture is wrapped and reborn at different levels, which makes it have a longer-term vitality and becomes an important carrier of urban historical memory.



Figure 3 Old Bullet Factory Site Figure ①



Figure 4 Melbourne central Reconstruction Status Figure 2

2.2 Revival and extension: the intersection of old bullet tower and new life

The intersection of the preservation of the old buildings and the new life reflects the two-way development of the city. The cultural memory of historical buildings is "revived" and the new space field is "extended". With the continuation of time, the magazine has a new spatial relationship and evolved into a monumental and sculptural harmonious urban space. As Yang Yingfa and others put forward, cities with material and intangible cultural heritage have been integrated into the modern trend again because of historical symbols[5]. Therefore, as a non-verbal media, historical buildings form symbols, which play a key role in strengthening cultural identity and laying the foundation for collective cultural identity. The conical architecture is similar to the pyramids, which can be regarded as a curved evolution of the spatial semantics of the pyramids in ancient Egypt. The conical design is more inclusive, which reduces the sense of authority of traditional buildings in the past and dispels symbolic ritual symbols for people's psychology. The old magazine is not as solemn as the memorial space in the past, but more caring. This design form makes the intersection of history and new life produce a more comfortable experience.

At the same time, the conical building is also reminiscent of the panoramic open-view building proposed by the 18th century philosopher Bentham. Through the special design of the ring structure, a unidirectional visual observation method is created in the space. The central watchtower can monitor everywhere, but people in the ring building cannot understand the situation inside the watchtower^[6]. From this, a relationship between space and rights is formed, which has a certain influence on people's behavior and psychology, and then it is applied to the field of sociology through Foucault, forming a brand-new theoretical perspective, space through its unique design, people in it can have a strong sense of identity with space, which is called "space discipline". Geometric form often reflects a strong sense of space discipline, and the tower is located in the center of the conical space (as shown in Figure 5 and Figure 6). It seems that people are also shrouded in this annular space, and they feel monitored and surrounded in Melbourne central, thus creating a sense of psychological restraint and regulating their own behavior, deterring potential criminals through implicit design techniques, and reducing the crime rate in urban public spaces. The combination of modern geometric architecture and old bullet magazine historical architecture solves the problem of symbiosis between modern architecture and historical heritage, interweaves the old and new buildings in physical space and maintains the social order in psychological space, and realizes the harmonious symbiosis of the positive development of the city.



Figure 5 "Kisho Kurokawa philosophy of urban design and its planning method" ③



Figure 6 Inside Melbourne City Center ③

3. Audio-visual Symphony: Memory Revival of Melbourne's Old Bullet Factory

Reviving cultural memory is not a simple representation of the past, but a reinterpretation according to the current needs, giving it a new meaning and reshaping the past process. When stepping into this circular building space, the vision will not be solidified by the towering conical spire. On the contrary, the red brick tower with historical charm stands in the core area, which is even more shocking. The new and old visual memories merge in the same space to form the coexistence and continuation of the historical pulse. The circular edge of the cone undertakes the function of a large shopping center, and a modern device-a big bell is hung outside the mall corridor, playing traditional Australian music on the hour. Continuous sensory stimulation has built a three-dimensional historical trace. This is an attempt to make the bullet factory a visual symbol bearing the collective memory through the communication and interaction of individuals in the latitude of time and space. The musical performance of the big bell constructs the auditory logo of the cultural space, and reproduces the source and motivation of the specific architectural form and the well-known musical rhythm in the mind in a sensory linkage way, thus playing an important role in awakening cultural memory. Cultural memory itself has the potential of continuous change, innovation and reconstruction^[7] (as shown in Figure 7). Through this space, people can feel the continuity of traditional culture and deepen the multiple narrative experience interwoven with history and modernity. Melbourne central awakens tourists' cognition of the complex of the whole space, and repeated memories increasingly urge tourists to strengthen their identity. Focusing on the magazine itself, the coexistence and balance on the psychological scale are formed through the two senses of visual memory and auditory memory, and a multi-dimensional space experience is constructed to realize the memory resurrection of Melbourne bullet factory.

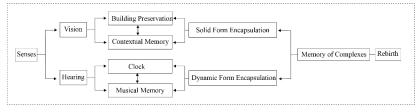


Figure 7 Cultural revival of Melbourne's old bullet factory 4

3.1 The Pulse of History: Time Coexistence of Visual Memory

In modern development, protection and development are often mechanically opposed, ignoring that the destruction of historical buildings cannot be regenerated. The reconstruction of Melbourne central should not only ensure that the reconstruction of old bullet depots meets the requirements of urban planning, but also preserve and protect historical relics. Symbiosis is not reconciliation and compromise, but finding the sacred realm between contradictory things in different cultures and different elements. Kurokawa explores the harmonious space in opposition, and uses the "glass cover" to enclose the bullet depot and wrap the historical heritage in a solid state, making the new building itself a landmark, and also realizing the blending of different time latitudes in the space through the protection of physical form, achieving the coexistence of visual memory and realizing the symbiosis of historical and future time memory. For example, the planning proposed by Liang Henian and others should have both top-down consideration based on coexistence and bottom-up balance of self-existence and coexistence based on different scales^[8]. Therefore, Kisho Kurokawa keeps the old and new buildings in the same space from the comprehensive planning of visual scale, forming a coexistence balance between visual memory and psychological level. Preserving memorial buildings is not only the preservation of material heritage, but also the preservation of lost historical memory, which enhances the strong sense of regional belonging of local people and the cultural identity of the city. Historical buildings are not only the material heritage of a city, but also an important part of its cultural incarnation. Architecture itself is a relatively stable place, but the memory and spirit it carries are "fresh" things with the times. Therefore, through the retention of visual memory, historical buildings can coexist with modern society, and the pulse of history can re-penetrate into the renewal of modern buildings to realize cultural revival.

3.2 Narrative Experience: Sensory Resonance of Auditory Memory

When creating a space, resonance is transmitted by sound, and time memory is constructed by placing a clock device in the field. In addition to retaining historical buildings, another major feature of Melbourne central is that it has a large bell weighing 2,000 kilograms (as shown in Figure 8), which plays traditional folk music to attract people to gather or disperse and create an active social field. Designers can stimulate multi-dimensional emotions and memories with the short-lived instantaneous experience of music itself, and resonate in the "lively" experience. When music is played on the hour, the marionette falls from the bottom of the clock, on which the Australian native bird-cockatoo hangs, with six parrots on both sides, and two flute players in the middle. The carefully arranged marionette falls at the same time as the performance of traditional folk music, and the visual dynamic changes and music melody form a multi-sensory "synchronous" juxtaposition narrative experience; The combination of marionettes made by traditional techniques and modern mechanical devices in the big hanging bell, the interweaving of traditional music and modern architectural environment, realize the juxtaposition of ancient melodies and new and old cultures in modern space; When the bell rings, the tourists scattered in the shopping mall gather in front of the old bullet depot. With the bell ending, the gathered people also return to the modern shopping mall. Tourists follow the flow of time through music, forming a linear narrative structure with spatial changes due to time. This paper expounds the auditory narrative of Melbourne bullet depot from two dimensions of linearity and juxtaposition by using Long Diyong's narrative theory. In the course of time, through repeated music perception, the historical memories of this place are repeatedly constructed, and the continuous surround music is also a form of package for historical dynamics. Spatial plot comes from people's perception. "In a broad sense, multi-sensory activity is the arousal of memory" [9]. With the help of the narrative language of music, the design constitutes a sensory translation of the architectural environment, blends traditional music with old and new

buildings, and redefines urban space to make it a brand-new spiritual interaction place.

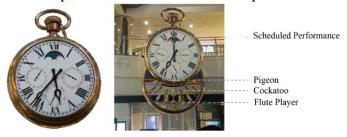


Figure 8 Big Bell in Melbourne City Center 3

4. Field Symphonic Poem: The Connection and Symbiosis of Modern Society

Field was put forward by Pierre Bourdieu, a French sociologist. Society is composed of a variety of complex "fields", such as art field, business field and power field. Each "field" is independent, forming its own specific power structure and benefit system^[10]. He believes that field can better understand the structural relationship between individual behavior and social activities, which is composed of individual behavior, capital and practical activities, and the relationship space for individuals to carry out practical activities according to their habits and capital. Based on Bourdieu's field theory, the circular interaction of Melbourne central's commerce, transportation and entertainment is constructed (as shown in Figure 9), forming the link symbiosis of Victoria. People usually understand symbiosis as symbiosis between man and nature in a narrow sense, ignoring the symbiosis between man and the whole natural society. The relationship between man and nature is multidimensional and dynamic. The symbiosis between man and all things is not based on the chaotic state of all things, but on the orderly and harmonious state of each thing^[11]. Symbiosis is not a one-way linear development, but a two-way balance and development achieved by all parties through cooperation and interaction, which promotes the sustainable development of society, ecology and culture. The transformation of Melbourne central achieves functional complementation and integration through the bounded linkage of urban system. Although these functions are independent, they form an orderly whole due to efficient collaborative links, and realize the connection and symbiosis of the whole Melbourne central. The concept of symbiosis was first applied in biology, then put forward by Kurokawa in architecture, and extended to the field of urban design, which means that different individual forms are interdependent in urban places^[12]. Therefore, symbiosis regards the whole space as a collection of countless individual forms, from individual objects to a comprehensive small area and then to a borderless range, indicating that individual freedom needs to be realized within the symbiotic system. Kurokawa successfully applied the metabolic thought to the transformation of modern urban space, creating a harmonious symbiosis between human and society, architecture and city, history and culture, and individual and whole. In the complicated process of urbanization, the application of field theory can better analyze the interaction between different actors, and the transformation of Melbourne central correctly practices the operational logic among urban society, political culture and spatial governance.

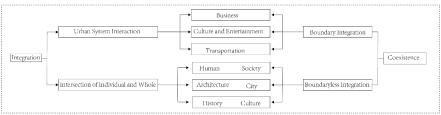


Figure 9 Connection symbiosis in downtown Melbourne ①

4.1 Comprehensive Linkage: Bounded Integration of Urban System

Pure and single protection of old buildings can't really revitalize them, and buildings without functions will eventually die out^[13]. The utility of the old bullet factory has disappeared, and the development and reuse of historical buildings need to be based on the replacement and reconstruction of functional space. A trinity of "commerce, entertainment and transportation" has emerged in the new Melbourne. Although the three subjects have clear boundaries in physical space, through effective integration and series connection into an organic whole, the different functional elements of the city can achieve integration, complementarity and linkage, effectively connect historical buildings with modern life needs, and form a flowing urban artery. The boundaries of different fields become blurred, but they can achieve efficient cooperation within their respective scopes to achieve a composite urban system. The trinity symbiotic narrative space map is thus developed (as shown in Figure 10), and the narrative is displayed in two dimensions. In the profile of Melbourne central, the ancient bullet Kuta building and the avant-garde geometric building form a double play of time and space, and the modern building meets the needs of business and leisure, forming a juxtaposition narrative between history and culture. People in space is not only a physical flow, but also a time series flow. From Melbourne central to the tram stop, every stop is a new chapter, which constitutes a linear narrative of time flow. Urban planners can Fully tap the relevance of various functions, thus playing the role of rational allocation of resources, and mixed use has closely linked the functions^[14]. Form a state of coexistence of multiple complex functions, and the functional elements of the city are organically integrated and complement each other, forming a vibrant city and an old bullet factory. It is no longer an isolated historical relic, but a cultural place closely integrated with modern life. This borderless urban system forms borderless integration through organic organization, which optimizes and improves the overall function and efficiency of the city. Melbourne downtown can divide the space into two sub-fields: core and non-core. The core and non-core fields of the newly developed Melbourne central business district experience the local history and culture in a circular way. The core and non-core present a discrete and harmonious situation, and coexist and nurture each other to maintain the circular development pattern of social space.



Figure 10 Melbourne central Trinity Symbiosis Narrative Space Figure ⑤

4.2 Intersection of Space: Boundless between Individual and Whole

Christopher Alexander mentioned an enlightening point in his famous book "A Patten language" "The edge of the building must be regarded as a kind of entity, a space, a region with mass, not a line without thickness" [15]. In fact, this shows that there is no boundary between architecture and environment, and the boundary space belongs to a kind of space type that the exterior of the building and the surrounding environment expand outward. By blurring the original single boundary, a multi-functional complex space type can be produced. Melbourne central's "borderless" design

concept is reflected in the flexibility and openness of the whole downtown space. The three-dimensional layout inside the building breaks the traditional fixed space and makes the historical context and the overall environment dynamically connected in series. The ground loop tram and underground train station are like the urban context. Trams shuttle through the heart of Melbourne to form the downtown loop, which carries the historical buildings, art museums and university campuses of the urban context in series. The train connects the center of city of Victoria with the surrounding areas, from the bustling city to the quiet town, so that business and entertainment can be shared across borders. The ground transportation network covers the surrounding important areas, forming a loop line with no boundary from the inner ring of the city center, and the underground transportation covers the surrounding towns, realizing the all-round network system that the city center radiates outwards. Citizens experience rich historical and cultural exchanges and promote the positive development of regional commercial activities. The "symbiosis" mentioned by Kurokawa is not only related to the building itself, but also covers the interaction between people and the environment, history and modernity, and architecture and cities. In the design of Melbourne city center, the relationship between the old bullet factory and the new shopping center makes the relationship between individual buildings and the whole city closer. The intersection of history and future, the harmonious interweaving of human beings and society and the symbiotic relationship between cultures provide a new perspective for urban renewal design and sustainable development. Through transportation, a huge commercial and entertainment network circle is realized, which gathers from the surrounding areas to the hinterland of the city and then expands outward, forming a central radiation effect, and the city becomes a whole without specific boundaries, realizing the borderless intersection of historical, cultural and spiritual exchanges from individuals to the whole.

5. Conclusion

The transformation of Melbourne central realizes the symbiosis of old historical memory and new commercial space. On the other hand, in the way of historical protection of buildings in modern urban renewal, there is often a phenomenon of forgetting the sense of social and historical responsibility. As far as sensory experience is concerned, the space renewal is in sharp contrast with many modern shopping centers in China, which tend to excessively pursue the short-lived "online celebrity" effect to attract traffic. Lack of continuity and deep excavation of historical context to form long-term cultural communication; The former plays local traditional music all the time by putting a big bell in the venue. On the other hand, in domestic large-scale shopping malls, although circulating pop music brings people into new situational experience, it also inadvertently weakens the quality of the overall environment and reduces the pleasant experience when walking. Through the linkage of functional requirements, Melbourne central has built a large supermarket chain inside the building, which is convenient for citizens to finish shopping tasks conveniently during commuting, optimize time management and improve life efficiency. This design idea embodies a profound insight into the daily behavior habits of urban residents. In contrast, domestic large-scale supermarkets are usually not located in urban main roads, thus reducing the convenience of shopping process and increasing travel costs, ignoring the needs of fast-paced urban life and failing to fully tap the advantages of urban integrated systems.

From this perspective, the commercial center reconstruction projects in many cities in China are often relocated or rebuilt, paying more attention to short-sighted needs and immediate interests, while ignoring the integration and interaction between the surrounding environment and even the cultural and functional bodies of the whole city. If Kisho Kurokawa maintains the old magazine, its glory will gradually disappear with time, and the historical building will only become a rigid body,

and this protection method will naturally decline. Urban renewal does not necessarily exclude the existence of old buildings, just as the river of life is continued by the same blood, the evolution of the city also needs the nourishment of unique cultural context to make it develop forever. In the modern environment, new vitality is injected into historical buildings, memories can be continued and spread, and the integration and symbiosis of old and new buildings can be realized. The application of symbiosis theory is not limited to the transformation of the periphery of the bullet depot, but a new life extending to the whole urban space, radiating from historical buildings to the whole Victoria, and the symbiotic relationship between inward aggregation and outward diffusion is sustainable, which promotes the interconnection and symbiotic integration within the city. The reconstruction case of the old bullet factory in Melbourne central provides a successful model, which not only enhances the economic value of the plot, but also innovates on the basis of respecting history, and realizes the sustainable symbiotic development of the city.

Notes:

- ① Figure 1, Figure 2, Figure 7 and Figure 9 Source: Self-painted by the author.
- ② Figure 3 Source: http://www.archcollege.com/archcollege/2017/08/36302.html
- ③ Figures 4, 6 and 8 Source: Photographed by the author.
- ④ Figure 5 Source: Excerpted from "Thoughts and Techniques of Urban Design in Kurokawa", page 171.
- ⑤ Figure 10 Source: Excerpted from the 180-page "Thoughts and Techniques of Urban Design in Kurokawa"

Acknowledgement

Funds: This paper is the interim result of the 2024 Shanghai Art Science Planning Project "The Thought of Transportation: A Study on the Morphological and Ideological Logic of Ancient Chinese Boats and Vehicles and the Cultural Connotation They Carry" (2024-A-003).

References

[1] (Japan) Kurokawa, K.; Translated by Qin L et al. Kisho Kurokawa philosophy of urban design and its planning method[M]. Beijing: China Architecture Publishing, 2004.150.

[2] (Noah) Norberg-Schulz, C. Towards a phenomenology of architectural [M]. Wuhan: Huazhong University of Science and Technology Press, 2010.23.

[3] Wu J. Old Existing within New—Preservation of Chen's House in Pudong New Area [J]. Times Architecture, 2000,43(3):36-37.

[4] Guo Y. M. In Memory of Kisho Kurokawa from Urban Symbiosis to the Harmony of Society [J]. Times Architecture, 2007,50(6):4-5.

[5] Yang Y. F, Zhang J. Construction of a rolling mechanism for the protection and management of historical and cultural symbols in urban modernization [J]. Social scientist, 2017,32(12):71-75.

[6] (France) Foucault, M; Translated by Liu B. C, Yang Y. Y. Discipline [M]. Beijing: Life, SDX Joint Publishing Company, 1999.224.

[7] Assmann A, Translated by Wang M. Re-framing Memory: Between Individual and Collective Forms of Constructing the Past [J]. Journal of Guangzhou University (Natural Science Edition), 2021,20(2):6-14.

[8] Liang H. N, Shen C, Yang B. J, Zhang X. L, Zhou S. H, Zhou J, Tian L, Hou C. Z, & Zhao H. Shared city: self-existence? Co-existence? [J]. City Planning Review, 2019,43(1):25-30.

[9] (British) Lawson B; Translated by Yang Q. J et al. The Language of Space [M]. Beijing: China Architecture Publishing, 2003.47.

[10] Feng B. Chinese Cases in Applying Bourdieu's Theory of Practice [M]. Hangzhou: Zhejiang University Press, 2020.2.

[11] Chen Y. Symbiosis and Chinese Modernization [J]. New Horizons from Tianfu, 2023(3):13-22.

- [12] Liu J. Integration of Urban Form [M]. Nanjing: Southeast University Press, 2004.41.
- [13] Zheng X. Reconstruction, Expansion and Go-Existence—On the Renewal and Development of Historic Buildings and the Symbiosis of Old and New Buildings [J]. Planners, 2002,18(2):25-33.
- [14] Ren Y, J. B. Kisho Kurokawa: Architectural master based on the ideal of symbiosis [J]. China Engineering Consulting, 2018,0(9):82-89.
- [15] (America) Alexander et al; Translated by Wang T. D, Zhou X. H. A Patten language: towns, buildings and structures [M]. Beijing: Intellectual Property Publishing House, 2002.1537.