Research Paper

Japanese Commercial Street and Its Effect on Community Development

The Case of Ningyocho

Zixin ZHAN, Peking University, China Yu HOU, Peking University, China Tianxing WEI, Peking University, China Libin OUYANG, Peking University, China

Abstract

Faced with the demand for functional transformation of traditional commercial streets in the context of rapid commercial development, Japan has had some relatively successful cases. After land consolidation, building renovation and business upgrading, some traditional commercial streets in the centre of Tokyo, Japan, are thriving again. They not only attract many tourists and invigorate the community economy, but also retain the local folk traditions and cultural atmosphere. These cases provide us with the ideas of the transformation of traditional Chinese commercial streets. Among them, the traditional commercial streets in Nihonbashi still maintain a high degree of commercial prosperity and community vitality. This paper takes one traditional commercial street in Nihonbashi, Ningyocho, as the study case. The spatial structure, commercial supply of the street are investigated, so as to obtain an inspiration for improving the material form and carrying function of Chinese and other countries' commercial service in urban communities. It is found that the vertical spatial organization of the buildings in the commercial street of Ningyocho is often combined with other structural characteristics of the architecture in various forms. It is aimed at solving the problem of construction and reducing functional separation between high-rise buildings under the background of high density land use. As a commercial street that serves wide areas, Ningyocho's most attractive part for the outside crowd is actually its various restaurants, which makes up more than 30% of the business. Meanwhile, other entertainment and life service facilities are more limited and only meets the needs of residents within the block. Its community commerce not only satisfies the consumption of basic living goods and cultural entertainment, but also provides community public space and communication place for local residents. Elderly care, childcare assistance, environmental protection and other functions closely related to the society determine the significant contribution of Japanese community commerce to equalization of public services.

Keywords

Ningyocho, Commercial street, Spatial structure, Community service

1. Introduction

Commercial street is composed of many shops, restaurants and service stores, arranged in a certain proportion of the structure, which is the epitome and essence of the city's commerce. With the economic growth and rapid urbanization of modern society, commercial complex and other modern commercial forms have become the main forms of urban prosperity, and new lifestyles and consumption concepts have gradually come into being. The market environment of traditional commercial streets has



undergone great changes. In this context, traditional commercial streets gradually undergo functional transformation and upgrading, mainly manifested as: specialization and refinement of shopping function, weakening of transportation function, strengthening of leisure and entertainment function, and increasingly significant and diversified cultural function. On the one hand, traditional commercial streets need to compete with other modern commercial facilities, and are faced with problems such as old buildings and facilities, mixed plots and deteriorating environmental quality. On the other hand, traditional commercial streets to some extent carry the history and culture of a region in terms of urban style and cultural atmosphere, endowing consumers with a sense of local place.

In the context of the rapid development and change of commercial forms, there have been some successful cases in Japan to meet the functional transformation needs of traditional commercial streets. Nihonbashi (日本橋) bridge is a bridge across Nihonbashi Stream in Central Tokyo, Japan. It not only represents the beginning of Japan's road network, but also marks the commercial prosperity of Tokyo since the Edo Period (江戸時代). Located in the centre of Nihonbashi district, Ningyocho (人形町) is a residential area of Edo commercial craftsmen with a long history. Ningyocho, the main thoroughfare of the district, has a tradition of making and selling traditional food and handicrafts such as dolls since the Edo period, and is also famous for its kabuki and doll performances. During the Meiji era, bustling commercial streets were formed, with banks and companies settled there. Today, The town still retains the traditional atmosphere of "Edo commercial handicraft residential area". There are also a large number of traditional craft shops and old-brand authentic food shops lasting from the Edo era, which are very popular among men and women.

This paper takes the Ningyocho as the research object, investigates its overall characteristics, spatial structure, format structure and space use, so as to explore the form, function and significance of the traditional commercial street, and draws the reference significance for Chinese cities.

2. Literature review

In China, commercial economy, urban planning and urban design, and urban tourism are the most intensively discussed in urban commercial streets. Because the Chinese domestic research started later than Europe and the United States and Japan, therefore has not yet formed a complete system, now concentrated more on the description and the practical experience of urban planning and design.

There are many practical cases of urban commercial street transformation and traditional commercial block renewal in China, such as the design of Zhenrulanxi Road in Shanghai, the planning of Waterfront commercial Street in Taizhou, the planning of Nonglin Xialu Road in Guangzhou, and the transformation of traditional commercial street in Jiefang Road and Jianghan Road in Wuhan. In terms of the introduction of foreign commercial street, the United States, Canada, Europe, Russia, Japan and South Korea, South Africa and parts of islamic country cases are involved in relevant literature. New York's fifth avenue, the champs-elysees in Paris, Tokyo's ginza, and dozens of the world's most famous commercial street are included. However, most of the existing studies are qualitative description and few in-depth quantitative analysis..

In terms of theoretical research, Zhou Yin (2005) systematically described the structure of commercial street for the first time, dividing the community commercial street system into three components, namely, morphological space system, commercial system and social system. Hu Youpei (2005) studied the morphological rules of spontaneous growth of small street businesses, analyzed the interaction mechanism between the graphic code order of business interface and architectural order, and comprehensively discussed and constructed the practical logic of small business system from bottom to top. Shi Beixiang (2014) found in the case study of Guangzhou Jianglan Road Commercial Street that commercial functions gradually infiltrate into the surrounding area from the commercial street as the



center, changing the functional composition and spatial form of the surrounding area, presenting multilevel hierarchical structure features.

3. Research area and method

Ningyocho is located in the central location of Central Tokyo. It covers an area of about 16.5 hectares and had a total population of 4640 in 2013. There are important traffic stations in and near Ningyocho, which is convenient for traffic and attracts a large amount of people. Ningyocho Station is located at the intersection of Ningyocho Road (人形町通り) and Kinza Road (金座通り). It is a railway station for the Hibiya Line (日比谷線) and Asakusa Line (浅草線), which plays an important role in the traffic of this region. In 2017, the average number of people getting on and off the subway per day is 134755 (Figure 1a).

The whole commercial street of Ningyocho is 465 meters in length, which reaches New Bridge Road in the South and the third plot north of Ningyocho Station in the north. Along the northeast side of the road, there are 10 plots with 47 buildings, one of which is a temple. On the southwest side, there are 10 lots with 42 buildings. The existing buildings are in normal use without vacancy. The main road of The town is about 40 meters wide (Figure 1-b).



Figure 1. Location of Ningyocho and the commercial street

The qualitative research methods in this investigation are field observations, interviews and policy content review. The main way of field investigation was to take photos to show the real situation of Ningyocho's community and commercial development.

4. Results

4.1. Spatial structure of Ningyocho commercial street

Like other streets, the commercial street is a kind of aggregation formed by the combination of many different volumes and distinctive buildings and streets and lanes. But from the perspective of space composition, Japanese commercial street has its own unique space form and combination form. On the one hand, under the premise of private ownership of land, the morphology of Japanese commercial streets are directly influenced by community owners and are more free in the development process. There are many typical Japanese architectural spaces on both sides of the Ningyocho Road. On the other



hand, the unique location and historical background of the commercial street also lead to its unique spatial structure.

4.2. Distribution of business types

There are 149 stores in Ningyocho, covering various types of commercial services. According to their commodity supply, service function, facilities, target customers, the stores of Ningyocho can be divided into 7 basic types, including restaurants, daily necessities, boutiques, life services, entertainment, clothing and medical facilities. Restaurants can be divided into general restaurants, fast food restaurants, food stores, beverage stores and izakaya (居酒屋, Japanese bar) (Table 1). In addition to commercial shops, the form and state of residences and offices are also discussed in this study. Residences include independent houses and apartments, and offices include into multi-enterprise sharing and single enterprise.

Table 1. Business types of Ningyocho

function	species	Number	Proportion
Commercial	General restaurant	43	29.25%
business	Fast food restaurant	4	2.72%
	Food store	17	11.56%
	Beverage shop	6	4.08%
	Izakaya (Japanese bar)	6	4.08%
	Daily Necessity	2	1.36%
	Boutique	8	5.44%
	Life service	19	12.93%
	Entertainment	5	3.40%
	Clothing	9	6.12%
	Medical facilities	30	20.41%
	Sum	149	100.00%
Live	Residence	19	
Office	office	35	

Figure 1. Distribution of business types on the ground floor of buildings

In terms of vertical distribution of the shops, restaurants are basically located on the ground floor of the building, and a few restaurants are located on the second floor (figure 2). Daily necessity stores, boutiques and clothing stores are basically located on the ground floor of the building. Massage shops are generally located in high floors, while other life service shops are basically located on the ground floor of the building. The entertainment places are located on the second floor and above, except that one game hall is a 2-storey single building. The common form of medical places is 5-10 storey buildings, and each floor is a medical shop operated by different enterprises or individuals. In terms of horizontal distribution, specialty food stores are mostly distributed on street corners, especially near subway stations (figure 3).



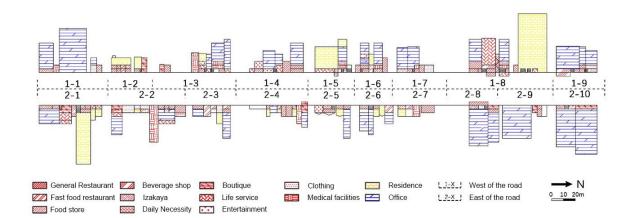


Figure 2. Vertical distribution of business types



Figure 3. Horizontal distribution of business types on the ground floor of buildings

If a shop occupies the whole building, the building is generally 2-4 floors high, of which 2 floors are the most common (figure 4). The width of stores along the street is between 3-6 meters, and a few are more than 6 meters. The buildings are generally old, and a few have traditional architectural forms. The most common type of store is catering, especially famous and large-scale traditional restaurants or fast food. For example, A1 is the most famous barbecue shop in Ningyocho. The first floor is used for selling and displaying food materials, and the second floor is used for dining in.





Figure 4. Examples of buildings belonging to a single shop

If multiple and different stores are located on different floors of a building to form a combination, one stores generally account for one floor, and a few large-scale stores account for two floors (figure 5). The number of floors is 3-10, and the width of the storefront along the street is 4-10 meters. There are three types of store business combinations. First, the same business type of shops are combined. For example B2, from the bottom, there are different medical stores such as pharmacy, dermatology, dentistry, surgery, internal medicine. The same kind of stores gather to facilitate customers' selection and use. Second, shops with similar or complementary functions are combined. The first and second floors of B3 are medical, and the third-fifth floors are massage shops, all of which can improve health, and their customers may be potential customers to others. The first floor of B4 is a cold drink shop, and the second to fifth floors are KTV. People who visit the latter are very likely to come to the former, so the number of customers is increased. Third, Shops that do not affect each other are combined, that is, they operate independently and have no obvious connection and influence. For example, B5, the first and second floors are drugstores, the third floor is Thai massage shop, and the fourth and fifth floors are learning classrooms.



Figure 5. Examples of combination of different shops

4.3. Space use of stores of Ningyocho street

In general, Ningyocho commercial street is regarded as a community commercial street, mainly serving residents and staff in Ningyocho and nearby areas, as well as a small number of foreign tourists (figure 6). It mainly provides catering, specialty food, handicrafts and other commodity services, and follows the tradition of "Edo commercial handicrafts residential area".

The users' behaviours of Ningyocho commercial street have certain regularity. (1) Local residents' use behaviour mainly occurs in the morning and afternoon, avoiding commuting and dining time. Most of them are the elderly and housewives. At weekends, there are more couples, and the use space is mostly food stores, commodity stores and bookstores. Most of them are purchasing and consuming and consumers will not stay too long. Couples' dining or food purchasing mainly occurs at dinner time or weekend, and they probably stay for a long time. (2) The consumption behaviour of employees mainly occurs at lunch and dinner time. Most of them are middle-aged and young men. The use space is mostly restaurants, cafes and izakaya along the streets. Most of employees eat alone, and only a few have dinner or entertainment with friends. (3) The behaviour of tourists has no time preference. In terms of space selection, they prefer handicraft stores, traditional food stores, restaurants along main roads and temples. Most of them are experiential consumption and tourists often stay for a long time.





Figure 6. Space use of stores of Ningyocho street

4.4. Relationship between commercial street and community

According to the size and number of stores, the Department of small and medium-sized enterprises in Japan divides the commercial street into four categories: neighbourhood commercial street, regional commercial street, wide area commercial street and ultra wide area commercial street. Neighbourhood and regional commercial streets refer to small-scale commercial complex that concentrated on serving the consumption of community residents. Wide area community commercial street and super wide area community commercial street refer to large-scale commercial complex that not only serve the residents of surrounding communities, but also have the ability to collect customers for foreign residents. These four types of commercial streets constitute a hierarchical multi-level retail network in Japan. This hierarchical distribution is not only conducive to the exertion of urban functions, but also conducive to the rational distribution of urban population. Except that the wide area commercial streets are mainly formed naturally, most of the other types are reconstructed or newly built by the Japanese government in a planned way. The construction and development of commercial street directly affects the daily life service level that residents can obtain, and is closely related to urban governance and economic growth.

Up to now, the polarization process of Tokyo is still continuing, and the urban population density has reached 13300 people / km2. In addition to several super large business districts such as Ginza, Shinjuku and Shibuya, the distribution of three-level commercial streets can promote the city to build a reasonable and orderly commercial system and ease the daily shopping needs of low and middle levels. Scattered community commercial streets can form multiple small urban vitality growth points, so that people's daily life can be more evenly distributed in all spatial areas of the city, which is undoubtedly beneficial to the normal play of urban functions. On the other hand, the centralized construction of commercial streets at transportation hubs and nodes not only facilitates residents, but also reduces the commuter flow from other urban areas to the central area, greatly reduces the overall traffic volume of the city and improves the efficiency of urban economic operation.



In the construction process of the commercial street, small and medium-sized enterprises can reduce the operating cost of small stores and increase the passenger flow by unified promotion, unified procurement, unified delivery and unified construction of the commercial street publicity website and brand image. In addition, the improvement of the environment of the commercial street also contributes to the improvement of the urban environment. The material space management of the commercial street jointly funded by the shop operators, such as the development of parking lots, road beautification, the establishment of public rest facilities and public toilets, are all the help to the urban public utilities. Store buildings often have eye-catching decoration, glass windows, advertising signs and neon lights, which have diverse forms, rich colours and unique shapes. They also enrich and beautify the urban environment.

Under the background of many social problems faced by the Japanese government, such as aging, fewer children, industrial recession and so on, community commerce plays a more important role in helping the Japanese people's grass-roots life and service security. It can not provide free social services and help like non-profit activity groups, nor can it operate for the purpose of grabbing commercial profits like ordinary enterprise clusters. In fact, many Japanese scholars prefer to emphasize the sociality rather than commerciality of community commerce. They point out that community commerce is composed of people-centered and community-based enterprises and can revitalize regional development. It should take solving regional problems as the primary goal. Pension, child care support and environmental protection, which are closely related to society, determine the sociality and contribution of Japanese community commerce. In some traditional communities, the commercial street management organization (Community Business Management Committee) even shoulders the responsibility of protecting small and medium-sized enterprises and inheriting the traditional culture of the community (figure 7). Because the local community business management committee believes that these shops are indispensable to local residents, and once closed, it will bring inconvenience to residents' lives. Such a community commercial street and its management organization can adjust the commercial supply and provide the services needed by the community from the perspective of the overall interests of the region, rather than simply from the perspective of commercial profits, and play a positive role in building the community.

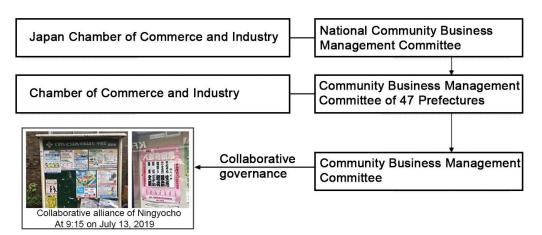


Figure 7. Organizational structure of Japanese community business management

5. Conclusion and discussion

There are many types of business in Japanese commercial streets, which have both life service function and external service function. Ningyocho is not only a commercial space, but also a living space for local residents. In contrast, China's commercial streets are relatively independent. They often don't belong to a community, but interact with residential areas as independent urban spatial units. The commerce is



arranged among the residential areas in the form of commercial complex, but as a result there is not enough commercial supply inside urban communities. Although this difference is a reflection of the differences between Chinese and Japanese lifestyle, we can get some ideas to improve land use efficiency. China's land development is large-scale. In a piece of land, it often happens that each building has a single function. For example, office buildings often have only offices, and there is no bottom business. It is even rare to have stores on the second floor. It is a good choice for China's commercial streets to combine various functions including office, commerce and residence in the vertical direction by learning from the business distribution of Ningyocho.

The construction of commercial street in China has always been based on large-scale and planned top-down development. Government regulation plays an extremely important role in its development process, and the commercial street as a community business is no exception. In fact, in some areas, we can try to liberalize excessive government intervention and regulation, establish a grass-roots autonomy system for commercial streets, carry out bottom-up commercial street construction like Japanese commercial streets, and fully mobilize the vitality of grass-roots units and the enthusiasm of market subjects. For example, the activities of various shops in China are generally limited to their own shops or between chain stores. There are few ideas and practices of jointly holding activities or jointly managing the business environment by different stores in the same regional space, which makes it difficult for China's commercial aggregates to improve their overall competitiveness. Only institutional changes can fundamentally solve this problem and lead to a new situation of mutually beneficial community commerce.

4. References

- Chen, X. 'Commercial streets in Japan and its role in urban construction', Japan Studies, 1986(03), p23-25.
- Fan, L. 'Research on the current situation and Development Countermeasures of community commerce in Shanghai', *Shanghai Journal of Economics*, 2007(04), p77-82.
- Han, J. 'Study on meso economy of China's commercial street system', *Times of Economy & Trade*, 18(06), p13-15.
- Huang, Y. 'Analysis on the new development trend of commercial street in Japan', *Jiangsu Commercial Forum*, 2016(07), p3-7.
- Jin, J. 'Comparison and experience of Chinese and foreign community business development models', Journal of Commercial Economics, 2018(17), p9-12.
- Jin, J. and Zhou, H. '"Inheritance and revival", planning practice of waterfront historical commercial block
 -- Taking Taizhou Luqiao as an example', *Modern Urban Research*, 2005(08), p50-57.
- Li, X. 'Operation and management of commercial streets in Japan', *Market Modernization*, 2003(07), p37-38.
- Li, X., Zhang, P., Chen, J. and Zhou, L. 'Study on the distribution and matching of business types in commercial pedestrian blocks', *Architecture & Culture*, 2018(08), p159-161.
- Lu, Y. 'An empirical study on community business based on the construction of community spirit -- A case study of four communities in Chengdu', *Sichuan Architecture*, 33(05), p34-36.
- Reng, C. 'Analysis on the evolution, value, form and applicability of high-density grid road network and streets -- Also on the phenomenon of "Big Road and Big Block", *Urban Planning Forum*, 2008(02), p53-61.



- Shi, B., Yang, J. and Pan, Y. 'Spatial hierarchical structure characteristics and succession mechanism of commercial street', *Planners*, 30(10), p110-116.
- Wang, R. 'Research on the effective supply of urban community commerce in China', *Economy and Management*, 29(05), p42-48.
- Wang, X. and Cui, G. 'Research on specialized blocks in Metropolis', *Planners*, 2003(06), p76-79.
- Yin, S., Hu, J. and Chen, G. 'Japan's experience in promoting the development of Commercial Street', *Manager' Journal*, 2000(07), p36-37.
- Zha, J. 'Research on planning and design of community commercial street', *Planners*, 2006(06), p28-30.
- Zhang, C. 'Research on community business orientation in Japan', China Market, 2018(25), p60-61.
- Zhang, X. 'Summary of research and development of urban commercial street', *Commercial Research*, 2007(11), p115-120.
- Zhao, H. 'Functional planning of urban commercial street based on consumer demand characteristics -- taking Hunan Road commercial street as an example', *City Planning Review*, 2005(11), p56-61.
- Zheng, S. 'Development model and operation of community commerce', *Commercial Economics Review*, 2004(03), p1-3.
- Zhou, T. and Lai, J. 'Quantitative study on building facade of commercial street -- Taking the front area of subway station in Fukuoka, Japan as an example', *Architectural Journal*, 2013(08), p78-82.

