Research Paper

Research on Humanistic Technology of Urban Design of Historical Blocks in Harbin

Dian ZHANG¹, Suning XU²

^{1,2} School of Architecture, Harbin Institute of Technology, Key Laboratory of Cold Region Urban and Rural Human Settlement Environment Science and Technology, Ministry of Industry and Information Technology, China

Abstract

Nowadays, with globalization sweeping across cities, more and more cities tend to develop in the same way, while the sense of existence of local identity becomes weaker. It is often the preferred choice of the city government to construct distinctive characteristics with the help of urban design. Historical blocks have their own unique cultural connotations. How to make them retain their own traditional context in the rapid urban renewal and maintain vitality with the development of the city is an urgent problem to be solved in urban design.

In this paper, the research objects are two historical blocks in Harbin which is a representative historical city located on the Northeast China. One of objects is the Central Street of Harbin, which attracts countless foreign visitors every year as a popular tourist area. The other object is the Chinese Baroque Historical Block, which is deserted after renovation and planning. On the basis of urban design, this paper makes a comparative analysis of two historical blocks from the perspective of social humanities, and puts forward the humanistic technology of urban design. Humanistic technology are divided into two technical routes: human and culture. The study of human includes the living needs of local residents, the behavioural feelings of foreign users, the control and management of government development and the distribution of interests of investors. The study of culture includes the combing of the history and culture of the block, the embodiment of space culture and the promotion of value culture. This paper attempts to build a universal theory framework. Humanistic technology will be used as research foundation for urban design in the renovation and conservation planning of cultural heritage.

Keywords

humanistic technology, historical block, urban design, Harbin

1. Introduction

Every city has its own history. In most modern cities, the material carrier of history is more scattered historical buildings or historical blocks. Some cities have better preservation of historical relics and large scale, which can show their unique historical and cultural values and characteristics. In China, such cities are known as historical and cultural cities. Since 1982, China has established the system of "historical and cultural cities", and promulgated



the Law on the Protection of Cultural Relics, the Law on Urban and Rural Planning, and the Regulations on the Protection of Famous Towns and Villages of Historical and Cultural Cities. In the past 30 years, 134 cities have been approved as historical and cultural cities by the State Council. A large number of cities with rich cultural relics and historical value have been conserved, but in the course of conservation, conservators have also experienced many frustrating explorations, and continue to move forward with reflections.

With the social transformation of China, urban planning and construction has shifted from extension to intensive, refined and cultural development. Cities are paying more and more attention to creating high-quality living environment to meet people's needs, which have gradually risen from the past material needs to spiritual needs. The conservation of historical cities has experienced from "constructive destruction" to "conservative destruction", from the past large-scale demolition to the current "renovation as old". However, can such conservation truly preserve the historical heritage and continue the urban context? Everyone can realize that historical heritage is valuable, but what kind of value is it and how should it be conserved and developed? The real purpose of heritage conservation seems to be lost in the heat wave of urban economic and industrial development needs.

The conservation planning of historical blocks is a complicated project, which involves not only the conservation of historical relics, historical buildings and other physical spaces, but also the requirements beyond the scope of conservation planning, such as cultural inheritance, improving livelihood of people, driving urban economic development and increasing urban vitality, which can be achieved through urban design to satisfy. The urban design of historical blocks is different from that of ordinary cities. More importantly, it is necessary to consider all aspects related to urban humanities. This paper puts forward the humanistic technology of urban design, focuses on the humanistic elements of historical blocks, and explores urban design at a higher level from the perspective of sociology and other humanities disciplines, so as to excavate the essential significance of urban design.

2. Investigation

2.1. Introduction of Harbin





Figure 1 The location map of Harbin and historical blocks of Harbin



As one of the representative cities in Northeast China, Harbin became one of the third batch of national historical and cultural cities approved by the State Council in 1994 (Figure 1). Harbin is a young city. At the end of the 19th century, Russia built the Middle East Railway in Northeast China, making Harbin the central city of Northeast China. Due to the influence of western culture in the early stage of city construction, the urban texture of Harbin, architectural style and urban humanities are completely different from traditional Chinese cities. The characteristics of "European Style" have been extended in the urban development of Harbin which enjoys the reputation of "Oriental Moscow" and "Oriental Little Paris". Harbin is located in the northeast plain, with distinct landscapes in the four seasons, combined with the forthright temperament of the Northeast people, which makes Harbin a historical city with an exotic style and a more distinct personality.

However, with the rapid development of urban modernization, the historical imprint of Harbin has slowly disappeared in urban construction. In 2011, government formulated and implemented the Regulations on the Conservation of Historical and Cultural Cities in Harbin to strengthen the conservation of the authenticity and integrity of historical heritage in the city. In these years, with the efforts of the government and conservators, the urban style of Harbin has gradually unified into European style, ranging from the facades of main streets to the sketches of landscape facilities. Moreover, the government plans to renovate large-scale historical blocks in the city, hoping that through the renovation, the features of the historical blocks can be reproduced and used in the development of urban commercial tourism ,and then become the landmark of the city image. However, the situation of different historical blocks after renovation is quite different. What causes such a result?

2.2. The historical block of Central Street

The Historical Block of Central Street was formed in 1989. Its length is 1450 meters. The street starts from Jingwei Street in the South and extends northward to the Songhua River and ends at the Flood Control Monument in Daoli District. As the only remaining stone street in Harbin, the central street is the most characteristic street in Harbin, which still maintains the square granite pavement constructed in 1924. The European-style buildings on both sides of the road make people feel as if they have come to Europe. The exotic style of the whole street is strong, forming a city space and environment with historical characteristics, which has very high historical value and artistic appreciation value (Figure 2).









Figure 2 The location map and photos of Harbin and historical blocks of Harbin



In 1997, Harbin Municipal Government carried out the conservation and renovation of the historical block of Central Street, positioning the whole historical block as a pedestrian street to reduce the interference of external public transport to the block. It also renovated the building facade along the street, enriched the public activity space, increased the landscape facilities, and made the Central Street into a city characteristic public space integrating commerce, culture and tourism. The Central street has become a veritable architectural art gallery, as the miniature of Harbin image, attracting many tourists every year.

2.3. The historical block of Chinese Baroque

As the birthplace of Harbin national industry and commerce, the Chinese Baroque historical block in Daowai District witnessed the rise and fall of the city from the early stage of development to the end of the 20th century. It is an indelible memory in the hearts of the older generation of Harbin people, which concentrated the old Daowai culture of Harbin. The Chinese Baroque architecture with Chinese and Western style is the biggest bright spot in the block, the Baroque style facade along the street and various details of relief decoration with Chinese traditional meaning are very regional and cultural. The architectural features of "front stores and back factories, upper houses and lower business" made the block one of the most prosperous commercial blocks in Harbin. The traditional old brands in the block are deeply rooted in people's hearts, and they are also an indispensable part of the old Daowai culture (Figure 3).

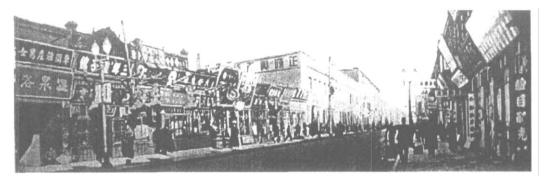


Figure 3 The old photo Chinese Baroque historical block

In order to preserve and continue the historical value of the block and make better use of it, the government began to carry out the conservation and reconstruction project in 2010, and planned the block as a commercial pedestrian street. So far, the first phase has been opened, the second phase has been completed but not put into use, and the third phase of the largest reconstruction area is in progress. However, the effect of the renovation is not satisfactory. Most of the Chinese Baroque buildings in the block have become dangerous houses due to old disrepair, which cannot be repaired. The government took the "rescue of dangerous houses" as the reason, and all the residents in the neighbourhood were forced to move out, so that all the commercial and residential blocks were used for commercial development. The internal structure of the block has been completely changed, only some main streets have been preserved. The building facades along the streets have been rebuilt, leaving only a few historical buildings. At present, some businessmen are stationed in the block of the first phase, and there are many vacant houses in the second phase project. The nine-year-long renovation project is still fragmented (Figure 4).





Figure 4 The location map and three phases photos of Chinese Baroque historical block

3. Comparative analysis

3.1. Existing problems of the historical block of Chinese Baroque

Compared with the Central Street and the Chinese Baroque historical blocks, they are also European-style buildings with distinct features and they have similar fish-bone street texture and spatial scales. The transformation model of Chinese Baroque block followed Central Street to transform the whole block into a pedestrian commercial street. It seems that everything should be done in a natural way, but the effects after the transformation are quite different. What did this happen?

From the point of view of renewal mode, although the Chinese Baroque historical block is developed by stages, not large-scale demolition and construction, but the scale of renewal is still not small, belonging to a short period of time to replace the old with the new, rather than small-scale gradual mode. In the process of block renovation, there is a sharp contrast between the north and south sides of Jingyu Street. The buildings on the south side for commercial purposes have obviously lost their humanity, although the structure, function and facilities of the renovated buildings have been greatly improved. And the north side of the street has not yet been renovated so that it retained the residents and their way of life. Although the buildings have been dilapidated, but the market in the block, old brand snacks still attracted a large number of people every day, maintaining the vitality of the block. Such a contrast, which lasted for several years in the process of renovation, which inevitably caused a huge visual and psychological gap between the outsiders and the internal residents (Figure 5).



Figure 5 Contrast photos of north and south sides of Jingyu Street



The government also had problems with the treatment of the residents in the renovation project. Removing all the inhabitants of the block for commercial development could be said to be a fatal wound in the renovation of the historical block. The government required residents to be placed in new areas far from the block, and used monetary compensation to move the old shop away from the original site. Historical and cultural heritage is not only the conservation of material space, but also the bearing of human beings. The daily life of local residents makes the neighbourhood alive and the recollections of the past of old people can be passed down from generation to generation. The relationship between historical blocks and people is in the same line and inseparable. Moving away from the residents, the historical block is like no soul, empty and indifferent.

3.2. Advantages of the historical block of Central Street

Why is it that the Central Street can maintain its vitality and become the focus of the city when both blocks are used as commercial development? The author believes that there are three reasons.

Firstly, Central Street has been given the function of commercial and residential integration since the 19th century, but with the development of the city, the residential function has gradually degraded, and the value of the commercial centre has been established. With years of development, Central Street has retained many old brands and replaced many new commercial functions, devoted to maintaining the original functions while adding the new functions, and strived to form a historical block with centralized and orderly commercial functions. But the Chinese Baroque historical block has always been dominated by traditional small workshops and retail wholesale business. The ownership of buildings in the block belonged to the residents. The renovation project completely changed the traditional living mode of the block in a short time, which would inevitably lead to the confusion of functions.

Secondly, as the urban culture of Harbin, Central Street has been deeply rooted in the hearts of citizen, becoming the pride of the city, and also the preferred choice for local people to recommend to outsiders for travel. This is the so-called urban culture, which has been passed down from generation to generation for many years without propaganda or slogans. It just exists naturally in the hearts of the people. Although the Chinese Baroque historical block is also well known, its location in the minds of people is just where to taste delicious food. And because of the dirty and messy environment before the renovation, it would inevitably make people disgusted. In addition, the government did not realize the importance of neighbourhood culture before, and there are also deficiencies in the strength of cultural propaganda, leading to a bad impression of the block in the public mind.

Thirdly, due to the different times, the transformation of the Central Avenue into a pedestrian street 20 years ago was a big event in the city and was expected by everyone. At that time, the social environment was different from that of the era when information was developed and flooded. People were relatively lack of understanding of various information resources and had great enthusiasm for new things. Therefore the renovation of Central Street had a great impact on the whole city in that era, and received positive feedback. Perhaps the renovation of the Chinese Baroque historical block would have been successful 20 years ago.

It can be seen that the factors affecting the conservation of historical blocks are extremely complex. How can the reconstruction projects be recognized, attract people, and increase



the vitality of the city, the role of human beings is crucial. Urban design has been committed to creating a high-quality urban space environment. During the transition period of Chinese society, when the ideology and values of people have undergone tremendous changes. Urban design needs to follow the pace of the times and consider how to better meet the needs of people from a human perspective.

4. Humanistic technology of urban design

As a special research branch of the conservation and renovation of historical blocks, the humanistic technology of urban design breaks away from the traditional thinking mode of urban design and pays attention to the relationship between people and historical blocks from the perspective of sociology. On the basis of urban design, humanistic technology need to use sociological research methods, from pre-design survey to post-feedback, through data access, field visits and observation, questionnaire survey and other methods to understand the cultural background of historical blocks and the lifestyle of local residents. Humanistic technology regards people engaged in practical activities in historical blocks as the main body, classifies and studies the people involved, and understands the inherent needs and real feelings of different types of users. The research is divided into two technical routes of "human" and "culture", which discuss the human behaviour needs, psychological perception and the significance of culture to human (Figure 6). Through excavating the humanistic elements in the urban design of historical blocks, the reconstructed historical blocks can not only retain their own historical and cultural values, but also meet the needs of users and become meaningful places.

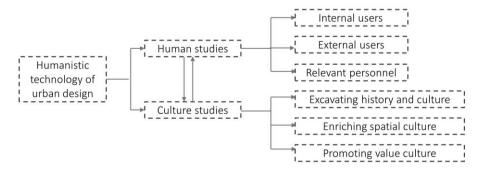


Figure 6 Picture of technical route

4.1. Human studies

(1) Internal users

For historical blocks, people living in them undoubtedly have the most direct and close relationship with them. The daily activities and communication of residents make the neighbourhood more vigorous. They are an indispensable part of the historical block. With the improvement of the living standards of people, the material and environmental conditions of blocks should also be improved. However, due to the long history of buildings, poor quality of buildings and internal environmental conditions, and imperfect hardware facilities, it is difficult for residents to carry out professional renovation of historical blocks themselves, and it may also damage the integrity of historical buildings. It is urgent for the government to provide help to solve the problems of basic livelihood of the people. Therefore, in the renovation project, the people are most concerned about protecting their



own interests after the renovation, hoping to improve the quality of life through the renovation, which is the most important and basic needs. In the reconstruction of the Chinese Baroque historical block, when the government solved the livelihood issue of people, the overall thinking was wrong. The government relocated the residents of the block as a whole and carried out commercial development, which did not meet the needs of the residents. The residents of the historical block were placed in the residential areas far from the city centre, and the self-employed businesses in the block were relocated from their original sites. These practices are contrary to the wishes of the residents, resulting in many difficult contradictions in the process of renovation.

The humanistic technology of urban design emphasizes the concern for people and the relationship between people and environment. The daily life of residents in historical blocks makes the static space alive and makes the culture of historical blocks more vivid. The practice of removing residents in the renovation is to separate the environment from people. Even if the buildings and streets are repaired, the block culture which has lost the mark of traditional social form will not be able to continue. The relationship between blocks and people is mutual. People give vitality and meaning to blocks, and blocks also bring people spiritual perception. The sense of belonging to blocks is a profound cultural rooting for the residents, a historical story and collective life memory handed down from generation to generation. This sense of belonging will unconsciously rise to a sense of responsibility and pride, and this precious humanistic spirit can be used as a positive factor in the renovation of historical blocks. On the basis of improving the living needs of residents in blocks, the government should communicate with them so that they can play a positive role in the renovation of blocks, including the renovation of buildings, the improvement of the environment, and the cultural dissemination of the public, and use their special identity and sense of mission to help the government departments to promote the progress of the renovation work smoothly.

(2) External users

External users include tourists in historical blocks and passers-by on weekdays. The humanistic technology of urban design focuses on the experience of these people in the block. Unlike internal users, they need more from spiritual and psychological perception, including multiple experiences of space, culture, consumption and so on. Spatial perception should be the most direct sensory impression of the block for users, and also the first impression of the historical block after urban design and transformation. The unique architectural style, the rich and varied streets, the traditional landscape, all the elements in the space can be related to the perception of users. Although different people have different feelings about the same place, a good place can provide stable visual symbols, so that people can reach a consensus on their sensory experience to a certain extent, and this consensus is that the experience rises to another height - spiritual experience. The sense of history, culture and deep thinking brought by the renovated historical blocks are the ultimate significance of urban design and the core value of humanistic technology of urban design.

In addition, it has to be mentioned that with the increasing level of consumption, historical blocks have become the gathering place of commercial tourism consumption. The change of the concept of product consumption to experiential consumption has made many people pay little attention to the significance of historical blocks themselves. The concern for their



own value and leisure grade transcends culture and history. Consumption in historical blocks is regarded as the embodiment of elegant aesthetic pursuit. This is because with the development of the times, the values of people are changing. We cannot control this trend, but the humanistic technology of urban design can make corresponding measures according to this phenomenon, strengthen the propaganda of humanistic spirit in historical blocks, and guide people to correct the values of historical culture.

(3) Relevant personnel

The government is the leader of renovation project of historical blocks. It not only has all the powers from urban planning, land expropriation, land use right transfer, financial allocation to project review, but also monopolizes the decision-making power of social policies for the allocation of various public resources. Because of the own economic value of historical blocks, commercial tourism development is the most common mode in the transformation. Developers pay most attention to economic benefits. Whether the government seeks a balance between developers and residents or forms a community of interests with developers determines the future development trend of a historical block. The renovation of Chinese Baroque historical blocks is a typical urban development in which the government and developers work together with land efficiency as the goal. In this process, in order to pursue short-term interests, the renovation of historical blocks was carried out blindly, regardless of the rights and interests of residents, resulting in a series of collateral contradictions and irreparable consequences.

The humanistic technology of urban design need to take restrictive measures to the government, set up supervision groups in the government, and require the government to focus on improving the livelihood of people, listening to public opinions, and doing a good job in public participation. At the same time, in cooperation with developers, the government should take into account the overall situation, achieve the common development of historical and cultural conservation and commercial tourism development, meanwhile, manage and control development projects. Moreover, the government should strengthen the understanding of urban culture for developer, do a good job of publicity and guidance, and make investors realize the importance of conserving historical culture.

4.2. Culture studies

(1) Excavating history and culture

Each historical block has its own historical and cultural background and traditional regional characteristics, which should bring people unique cultural experience. However, in China, many historical blocks have been developed as commercial tourism, which has become increasingly homogeneous. In order to achieve short-term economic benefits, developers neglect the real cultural connotation of historical blocks. Designers know little about the conserved objects and make blind decisions based on subjective assumptions. Policymakers are eager to make quick successes and profits, and they are keen to create theme cultural tourism brands. The reproduction of various spaces and collage of cultural symbols lead to the engulfing of some local characteristics.

The humanistic technology of urban design requires the government and designers to do a good job of historical and cultural investigation in the early stage of reconstruction. Researchers need to study the background culture of historical blocks by consulting a large number of documents and feel the local culture by on-the-spot investigation, through the



external form to discover its intrinsic essence and integrate the form of historical blocks with the spirit of culture and context. In order to provide an important reference for the preliminary study of urban design and renovation, the humanistic research reports of the corresponding historical blocks should be sorted out before the renovation.

(2) Enriching spatial culture

When space is endowed with culture, it becomes meaningful. Spatial culture in historical blocks is manifested in the physical environment on the one hand, and in the daily social life of the residents on the other. The decorative elements in architecture, the texture of traditional lanes and the landscape environment left behind by history are objective material cultures. The humanistic technology of urban design emphasizes that these cultural symbols should be retained to the greatest extent, and their authenticity should be restored as far as possible in the process of renovation, and these cultural symbols can be applied to the surrounding environment to coordinate with historical blocks.

The daily activities of people in the space are the lively embodiment of the culture of historical blocks, including the living life and customs of people in the blocks, activities of traditional festivals and so on. It can be seen that the living cultural inheritance can better reflect the humanistic spirit of the historical blocks. If the residents of the historical blocks are moved away for commercial development, even if the traditional cultural activities are joined, they cannot make people really feel the traditional living form and folk customs of the historical blocks. So, the humanistic technology of urban design adheres to the principle of "coexistence of people and houses" in the transformation, retains living customs of the local people, so as to inherit the cultural context and make the culture alive.

(3) Promoting value culture

The essence of urban design is to enhance the physical environment of the city to have a positive impact on lives of people, and the ultimate goal is to arouse people to think about the meaning of life. Most people know the need to conserve the cultural value of historical blocks, but this is only an idea for people, and cannot affect their behaviour. Humanistic technology of urban design is not only static conservation of historical blocks, but also promoting the shaping of humanistic environment in historical cities through the alive culture of historical heritage, so as to have a lasting and profound impact on the citizens. To a great extent, values of people will affect the conservation and planning of historical and cultural heritage. Enhancing the public sense of identity and pride in urban history and culture, avoiding cultural apathy, and advocating that residents of historical blocks become the insiders and beneficiaries in the conservation word, are also the core issues to be solved in the humanistic technology of urban design.

5. Conclusion

This paper investigates and studies two historical blocks in Harbin. Through comparative analysis, it is found that the existing problems are not only the level of urban design itself, but also related to human, social and other reasons. In view of various contradictions in the renovation of historical blocks, this paper puts forward the humanistic technology of urban design, hoping to examine urban design from a new perspective and make up for the lack of humanities in conventional urban design. This kind of technology needs designers to read a



lot of humanities materials, and be familiar with the use of sociological research methods, which is a challenge for designers. Designers need to have keen observation, be good at communicating with people, and find problems in the city. How to make the humanistic technology of urban design more standardized and specific needs further research, so that it can be used as a necessary special procedure in urban design.

6. References

- Lu Jiwei; Cao Changzhi; Zhang Fan; Hu Yan (2019) "Conservation of historic cultural cities and urban design", China Ancient City, No. 1 (January).
- Yin Haijie; Wang Xueyang (2014) "Culture Dying in Urban Historical Block Modification Works:

 A Case Study of Historical Block of Daowai in Harbin", Modern Urban Research, No.
 6 (June).
- Lynch Kevin (2001) The image of city, Beijing, Huaxia Publishing House.
- Tiesdell Steven (2006) Revitalizing Historic Urban Quarters, Beijing, China Architecture & Building Press.
- Cheng Xinyu; Zhang Yong (2015) "Analysis on Transformation of the Historical Block on the Basis of Consumer Experience Perspective", Huazhong Architecture, No. 6 (June).
- Shan Jixiang (2007) From Functional City to Cultural City, Tianjin, Tianjin University Press.
- Bian Baolian; Cao Changzhi (2009) "Morphological Protection and Context Succession of Historic City", Urban Development Studies, Vol. 16 No. 11 (November).
- Mumford Lewis (2009) The Culture of Cities, Beijing, China Architecture & Building Press.
- Xie Dixiang; Zhu Xuemei (2014) "Social Conflict, Interest Game and Historic Districts Regeneration: A Case Study of Enning Street in Guangzhou", Urban Development Studies, Vol. 21 No. 3 (March).
- Zhang Ruxiang (2019) "The Symbiosis of Cultural Space and Urban Complex in the Era of Experience Economy", Chinese & Overseas Architecture, No. 1(January).

