

Tourism ,public spaces and urban cultures

Urban Public Space Design from the Perspective of Environmental Behavior——A Case Study of the round-city-park in Xi'an

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Abstract: Urban public space provides the place and environment for leisure, entertainment and social intercourse for residents, and it is an essential part of urban composition. In the process of building public space, we should pay full attention to the use value of public space to people and people's perception of public space. Through the use of various dynamic elements in public space, the space environment can play a guiding role in human behavior, and create a city public space that corresponds to the behavior of communication activities. Based on the theory of environmental behavior, this paper deeply interprets the interaction between space environment and human behavior, and analyses the characteristics of human behavior in urban public space. It also elaborates the influence of environmental behavior on public space in combination with Xi'an Circle Park, and explores the ways of constructing urban public space with local historical and cultural characteristics, so as to improve the quality of urban public space.

Keywords: Public space The round-city-park in Xi'an Environmental Behavior

Introduction :

With the development of the city and the improvement of people's living standards, the existing urban public space is more and more difficult to meet the citizens' cognitive and use needs of public space. With the development of environmental behavior, people gradually attach importance to the study of the relationship between human and environment. On the one hand, urban public space conforms to the characteristics of human perception and cognition, on the other hand, it also closely corresponds to the characteristics of human behavior, which can meet the needs of different levels of human beings. Therefore, relying on the theory of environmental behavior, the study of urban public space planning and design is in line with the new requirements of urban development. Through the study of urban public space planning and design, this paper summarizes the influencing factors and design principles of urban public space quality, and adds theoretical basis based on environmental behavior perspective to the field of urban public space planning and design. It is conducive to the future design, use, protection, management and development of public space, while positively affecting the new style of the city.



1.Origin and Research Progress of Environmental Behavior

The concept of "environmental behaviour" was first proposed by American scholars Prochansky and Iterson. Environmental Behavior focuses on the artificial environment, which pays attention to the relationship between environment and behavior, and studies the relationship between environment and behavior as a whole, emphasizing the interaction between them. Environmental Behavior is called Environmental Psychology, but the scope of Environmental Behavior seems to be narrower than that of Environmental Psychology. Environmental Behavior combines the relationship and interaction between human behavior and its corresponding environment. It pays attention to the relationship and interaction between environment and human's explicit behavior, so it is more applicable.

In 1968, the Association for Environmental Design Research was established in Europe. In 1969, the Journal of Environment and Behavior was published. Many research centers were formed and gradually became the largest number of academic groups engaged in environmental-behavioral research and application. By the end of 1950s and the beginning of 1960s, the study of environmental behaviour began to rise in Europe. In 1979, psychologist David Canter founded the Journal of Environmental Behavior, which and the Journal of Environment and Behavior are the two most influential periodicals in this field so far. Environmental Behavior began to be introduced into Asia in the 1960s. It was first studied in Japan and developed rapidly in the 1970s.

China started late in the field of environmental behaviour research. In the early 1980s, relevant theories and research methods were introduced from Europe, America and Japan, and began to be applied in the field of architecture. In the field of environmental behavior, Professor Li Daozheng's Introduction to Environmental Behavior, which systematically introduces the relevant theories of environmental behaviour, is the main theoretical book in the field of environmental behaviour. Professor Xu Leiqing's "Human Engineering and Environmental Behavior" combs environmental behaviour, and makes a detailed study of the theory and application of human engineering. Similar studies include Environmental Behavior and Human Engineering, compiled by Zhang Yuming, Zhou Changliang, Wang Hongshu, Liu Yuchu and Wang Xueyi, which has made in-depth studies on the theory of environmental perception and the theory of the relationship between environment and behavior. In addition, Professors Xu Leiqing and Yang Gongxia's Environmental Psychology and Professors Hu Zhengfan and Lin Yulian's Environmental Psychology play an important role in guiding the theoretical research of environmental behavior. With the development of environmental behavior in China, the number of books and academic papers on environmental behavior is also increasing.

In summary, the research practice of environmental behaviour in China is relatively late, and most of the research methods and contents focus on theoretical research content. The research of empirical cases still needs to be deepened.

2.Necessity of Organic Combination of Environmental Behavior and Public Space Planning and Design

From the perspective of human visualization, urban public space is not only designed and constructed by human beings, but also realizes its use function value by human beings. The relationship between them is an interaction and interaction.

Through the related theories of environmental behaviour, we can find that the main reasons for the limitations of urban public space environmental design are: in the early stage of urban public space planning and design, most decision makers and designers do not do enough in some basic research work, and they do not have a good understanding of the regional cultural background, user age and social

stratification, physiological and psychological demands and even social and economic development. The comprehensive consideration of the influencing factors such as the objective law of exhibition is not meticulous enough, which leads to that the public space environment presented in front of the users can not fully meet the various practical functional needs of various groups of people; at the same time, in the design process, the users are not placed in the main position of public space construction for relevant discussion and research, and the real meaning of "people-oriented" can not be penetrated. In the whole planning and design process.

Therefore, from the user's point of view, it is necessary to take environmental behavior as the basic theoretical support, and combine the research methods of literature review, case analysis, on-site investigation and comprehensive evaluation. Firstly, the specific design elements that may have a direct impact on the urban public space environment should be identified. On this basis, the behavior and needs of the users in the empirical cases should be analyzed and summarized. The results are summarized and refined, and more reasonable design strategies and objectives are formulated to meet the needs of different types of users for various activities, so as to maximize the use value of urban public space.

3. Study on the Development of Public Space of Xi'an Ring City Park

Xi'an Circum-city Park is located in the periphery of Xi'an Ming City Wall. It is a three-dimensional park which includes Xi'an City Wall, Moat and Circum-city Forest Belt in Ming and Qing Dynasties. Xi'an Circum-City Park relies on two elements of Moat and Ancient City Wall to construct. Because of the obstruction of the city wall, the development space is relatively small. In the South Gate of Xi'an Circum-City Park-Suzakumen Section, around the city wall, the Plaza central attractions are connected with a series of small attractions in the form of riverside walking belts. In some large squares, thematic sculptures are arranged to form large public recreational space through the combination of static environment such as landscape, sculpture, sketches and waterfront buildings. (Figure 1)

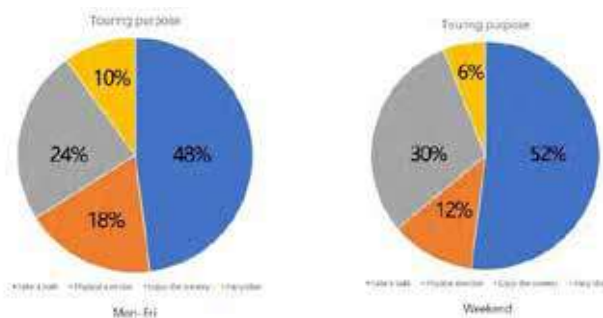


(Figure 1 Xi'an Ring City Park)

The biggest characteristic of Xi'an Circum-city Park is to design with the city wall, which not only retains the original style of the ancient capital, but also enlarges the urban public space. With the development of the times, the design methods of Xi'an Circum-City Park are constantly innovating and changing, forming the landscape of the city wall. With the gradual improvement of Park facilities, the number of tourists is also increasing. From the current effect, the city wall has become the symbolic structure of the park, the defensive function of the old city wall has changed, and it is well integrated into the urban public space.

4. Environmental Behavior and Space Analysis of Ring City Park

According to the questionnaire on the behavior of tourists in the park around the city, the age composition, sex ratio and purpose of tourists are studied and analyzed. It was found that from Monday to Friday, 48% of the respondents wanted to walk, 18% of the visitors wanted to exercise, and concentrated in the morning and evening. 24% of the visitors enjoyed the scenery, while the remaining 10% were friends gathering and chatting. On weekends, 52% of visitors are for walking, 12% for exercise, 30% for enjoying the scenery, and 6% for party, chatting and so on. (Figure 2)



(Figure 2 Questionnaire charts)

According to the theory of environmental behaviour, people have different requirements for the environment in every activity. Spontaneous activities and social activities are particularly dependent on the quality of the space environment. Most of the activities in public space are mainly spontaneous and social activities. In order to build urban public space, it is necessary to make rational use of the elevation difference of the site, plant diversified, and provide space for users to communicate with each other, so that people will not feel lonely, alienated, or uncomfortable, and then build a suitable dynamic space environment.

Spatial communication includes some space for communication, such as entrance space, square space, garden space, etc. In the design of the entrance area of the park around the city, considering the influence of people flow, traffic flow and other factors, a number of square lawns are laid out, which effectively realizes the transition from public space to semi-public space. Through the layout of the archway, visitors are attracted to the park by its unique appearance and historical logo. Array of trees at the entrance of Xi'an Circum-city Park. Under the big trees, people can stop and rest. Residents can talk and cool down. It is a more ingenious and applicable arrangement to make trees and not grasses, because this arrangement enlarges the use of space. In the objective form of material existence, the combination of vegetation and water surface elements can provide people with a more comfortable space environment in a long, wide and high range, and improve people's satisfaction.

At the same time, the tree array isolates the noisy urban main roads from the urban parks, and also serves as a transition from public space to semi-public space. Considering the difference of terrain elevation, different vertical elevation differences are often used in public space. Steps and retaining walls are used to layout the site and separate the space. The management facility building in the park around the city is a city landscape building which integrates urban green space and functions. At the spatial level, it is highlighted that the city wall, as the background of the park around the city, is the product of history and culture. Under the environmental conditions of the city wall and the famous historical and cultural city, attention should be paid to the distinction of primary and secondary, and the ups and downs and scattered space environment should be constructed.

The moat has a sinking hydrophilic entrance, new docks and landscapes on the South bank. These facilities are bricked and built by ancient methods. Near the bridge deck, there are new decorations and changes. On the basis of the original trees, many new trees have been planted. (Figure 3)



(Figure 3 City Moat)

Many theme sculptures have been added to the central part of the park. The setting of these landscape sketches has become the focus of the central square. There are some shaving burdens in the living customs of the old Xi'an people, as well as living scenes and appliances such as selling water, oil tea, storytelling, walking birds, Qin opera culture and so on. Concentrate on reflecting the commercial culture, catering culture, opera culture and folk culture of old Xi'an. When visitors come to the moat, they have a concept of Xi'an's life and culture. They can really feel the taste of the ancient city of Xi'an, recall the history and experience the contemporary era. (Figure 4)



(Figure 4 Sculptures in the Park)

In addition, the space environment should play a guiding and enlightening role in human activities. By combining the important natural environment elements such as water body and green space with people's activities, we can create more excellent activity space, enhance people's communication, and enhance the vitality of public space. The five-in-one "Wall, Lin, River, Road and Lane" has become an important landmark symbol with historical and cultural characteristics of Xi'an. Witness historical memory, store cultural spirit, enrich human experience, influence modern life, improve the overall environmental image of the city, and provide people with more leisure facilities and public goods of high social value.

Around the moat of the ring park, through the blending of wharf landscape and hydrophilic space, the paving way and decorative style of the ground and bridge deck conforming to the characteristics of cultural accumulation, retaining and supplementing the decorative echoes of trees and grasslands, and

actively giving play to the guidance of space environment to people's willingness and way of activities. In the design of the park around the city, the city wall, as the core of historical elements, often appears as a composition element. Through the intersection of different trees, high or low, the city wall presents in different forms in front of visitors. Looking from a distance, it seems that it is shaded by the big trees in front of it. Looking from a close angle, it is tall and lofty.

5. Discussion on Promotion and Development of Public Space around City Park

5.1 Complete and reasonable transportation system

Systematic integration of the traffic system around the city park, full consideration of the outdoor public space scale, create pleasant, comfortable pedestrian and space, create functional organic series, visually unique charm of the pedestrian system space, for people through walking to carry out exchanges, leisure, entertainment, shopping and other activities to create space conditions, foil the vitality of creative space atmosphere.

5.2 Overall Planning of Ground Form

The division of hard and soft media, the choice of material texture and the design of pattern and color will make people feel the space intuitively. Therefore, in the design stage, it is necessary to divide the functional space according to the basic elements of the node theme and the use function of the park around the city, through the application of different materials and the transformation of the laying style, to create the vitality of the ground space, and to guide people to carry out different types of behavioral activities from the side.

5.3 Overall Planning of Activity Sites

On the premise of guaranteeing its diversity, the public activity space in the park around the city should provide sufficient quantity, comfortable and safe activity facilities according to the users demand for behavior activities; at the same time, reasonable control and selection should be made on the site scale and layout according to different use functions, so as to carry out for users of different types, age groups and cultural backgrounds. Various types of activities create positive conditions.

5.4 Landscape greening is exquisite and diverse

Environmental landscape design should meet the needs of people's visual sensory enjoyment, and integrate the needs of people's behavioral activities into it. Through the rational collocation of plant vertical level and the rich change of seasonal color, and combined with spatial nodes and functional themes, the landscape facilities such as sketches and structures are designed to create a good ecological environment and achieve the overall upgrading of the environmental landscape.

Epilogue

Today, with the rapid development of urbanization in China, the quality assurance of urban public space is becoming more and more important. It is the material basis for promoting a healthier and harmonious social life. The overall quality of public space construction directly affects the city's comprehensive competitiveness and public satisfaction. Therefore, urban decision makers, builders and users all pay special attention to it. It is an important guarantee for building an environment-friendly city and realizing the scientific development of human settlements environment to excavate the characteristics of urban public space and improve the quality and taste of public space in combination with environmental behavioral research.

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