

## Analysis of People's Behavior in City Public Space

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**Abstract:** Urban public space is an important part of a city, embodying the essence of urban design. It is the foundation of civic life, a space and place for social activities and behavioral exchanges, and carries the soul and culture of the city. Therefore, the scientificity, planning, rationality and comfort of urban public space design have a close impact on people's behavior. This article analyzes the behavior of people in urban public space, observes the rationality of urban design, and analyzes the social behavior of urban people from behavior analysis, which provides a reference for scientific design and rational use of urban public space.

### 1. City Public Space

There is a certain space between buildings distributed in cities or urban groups. This space belongs to open public space, and it is also a space for people to carry out social activities and public exchanges. City public space is the carrier of social activities. The purpose of designing city public space is to serve the people. In the design, it will also take into consideration the comfort, rationality and scientificity of public space. It embodies the essence of city space design, and is also one of the places for cultural heritage and development. It has a direct impact on citizens' life satisfaction, happiness, and urban competitiveness. Generally, the environment of public space includes mountains and forests, water flow, and roads, while the more obvious city public space includes parks, squares, parking lots, streets, and sports fields.

### 2. Analysis of People's Behavior

In the "Life Between Buildings", the famous Danish architect Mr. Jan Gail divided the scope of outdoor activities in the public environment into three types: necessary activities, spontaneous activities and social activities, as shown below.

#### (1) Necessary activities

Necessary activities are all activities that people have to participate to varying degrees, including those that are somewhat involuntary. Generally speaking, work and life affairs fall into this category. Necessary activities are mainly concentrated on streets and squares, which are characterized by scattered and intermittent walking and staying in the process, and convenient and safe traffic conditions are important factors.

#### (2) Spontaneous activities

Such activities will only occur if people are willing to participate, and where time and place are possible. This type of activity includes walking, breathing fresh air, stopping to watch interesting things, sitting down and sunbathing. Such activities are greatly affected by the quality of the space environment.

#### (3) Social activities

Social activities are activities that depend on participation in others in public space. Including children's play, greeting each other, talking, various public and the most extensive social activities-passive contact, that is to see others only by audiovisual. Most cases are caused by

necessity and spontaneous activities. This kind of chain reaction means that as long as the conditions for necessary and spontaneous activities in public spaces are improved, social activities will be greatly increased, which will attract more people.

### **3. Behavior in Public Spaces in Different Cities**

The people who use city public space are roughly divided into two categories, namely the resident of the city and the tourist coming to the city. City public space is roughly divided into city parks, city squares, residential areas, cultural and creative industrial parks, places with historical culture, and places with specific functions. Behavior analysis is performed from the above several public spaces.

#### **3.1 Behavior Analysis of Public Spaces in City Parks**

City parks are one of the main constructions of city public space, and they are also the backbone of city ecosystems and landscapes. They are also one of the main places where people need leisure. They can provide space for people to rest, exercise, socialize, play, and watch place. City parks have large green areas, and have cultural heritage and urban regional characteristics. Through special park designs, people can enjoy good visual enjoyment, rest enjoyment, and entertainment enjoyment. The behaviors in the city park mainly include rest, walks, excursions, fitness exercises, watching, science and cultural popularization. Activities carried out in public spaces in city parks are closely related to the design of park space, and behavioral biases in different city parks are different. For example, animal parks raise and protect wild animals under artificial conditions. They are more focused on animal viewing behaviors, animal cultural popularization behaviors, and recreational behaviors. The botanical park is a place for carrying out plant science research, and the behaviors under this type of park include plant ornamental behavior, recreational behavior, and plant science popularization behavior. The behaviors in the historical gardens are mainly the behaviors of understanding, studying and inheriting cultural relics and historical sites, and visiting places of interest. The behaviors in the amusement park are mainly play behaviors, entertainment behaviors, and performance activities. Therefore, the behavior is different in different park spaces, but recreational behavior is more common.

#### **3.2 Behavior Analysis of Public Space in City Square**

The design of city square is to meet the needs of social life. It is mainly composed of buildings and roads. Its public space is large, which is more suitable for activities, performances and other behaviors. The main types of city squares are civic squares, life squares, cultural squares, monumental squares, commercial squares, and transportation squares. However, with the development and the needs of social life, the design and function of various types of squares are overlapped. Most of the people's squares and life squares are located close to the living area, and most of the users are urban residents. The behavior in the public space is more life oriented and leisure oriented, and the behavior in the square is mainly walking, rest and exercise. The common exercise is square dance. The high incidence period of square behavior is in the morning and in the evening according to people's living habits. The behavior of memorial square is similar to that of life square and citizen square. It will also carry out commemorative activities and cultural propaganda. Some large-scale memorial squares will also undertake some cultural performances, including performance and viewing activities. The commercial square is usually located in the downtown area of the city, and close to the commercial shopping place. The behavior in this type of square tends to consumption behavior, eating behavior, rest behavior, and entertainment behavior. Traffic square is the intersection square formed by the combination of several main roads. The main behavior of this type is passing behavior. The design of square public space and the definition of square have a direct impact on people's behavior, and the behavior bias in different squares is also different. But in order to meet people's needs to life and activity to a greater extent, we should design the square according to different square behavior bias, for instance, to design the traffic roads and parking lot according to the flow of people and vehicles in the square.

### **3.3 Behavior Analysis of Public Space in City Residential Areas**

City residential area is the focus area of people's life. According to statistics, more than half of people's life is spent in residential area, which is a dense area of behavior development. With the improvement of people's living standards in China, the construction of city residential areas and the design of public space require higher quality, but the design of public space in residential areas is also constantly improving. Residential area is a living area, whose demand is more complex, and the behavior in public space is more inclined to life. The behaviors in the public space of city residential areas include physical exercise, interaction, rest, walking, and drying clothes. In the public space of city residents, physical exercise is a common behavior, which includes playing badminton, morning exercise for the middle-aged and the elderly. At the same time, city residential area is a living place and a high incidence place of communication and interaction among neighbors, and also a main place for children's entertainment and game behavior. In addition, the public space in the city residential area is the place with high incidence of necessary activities, spontaneous activities and social activities, and the three kinds of activities occur frequently in this type of public space. For example, necessary activities include going to work, going off work, carrying out housework, buying vegetables; spontaneous activities include walking after meals, and children's play; social activities include neighborhood greeting, communication, interaction, and mutual aid.

### **4. Analysis of Several Activities of Different Groups in the Square**

The city square is designed to meet the needs of social life. It consists mainly of buildings and roads. It has a large public space and is more suitable for events, shows and other acts. The main types of city squares are Civic Square, Life Square, Cultural Square, Memorial Square, Commercial Square and Transportation Square. However, with the development and needs of social life, the design and functions of various types of squares overlap. Most people's squares and living squares are close to living areas, and most users are urban residents. The behavior of public space is more focused on life and leisure. The behavior on the square is mainly walking and leisure.

Necessary activities, spontaneous activities and social activities also constitute the main body of most people's behaviors in the square, and they have focused on different types of front grounds. Through observation and analysis, the activities of the users in the front ground are mainly researched into shopping, walking, rest, eating, watching, friends exchange, bringing children, etc. The above types of activities are the basic activities in the front ground space. Set up reasonable and necessary environmental facilities in the front space to provide a good and vibrant space environment. People's requirements for public space are not only the continuity of shopping and walking activities, but also the possibility of social activities.

In a questionnaire survey of several squares in Macau, a total of 223 people were interviewed. Among them are 70 tourists, 67 Macau citizens, and 85 working and studying in Macau.

Looking at the questionnaire, in addition to the sports and bringing children projects in the table below, Macau's squares have become a place for informal and occasional interactions as a public space. It provides an opportunity to interact with people. It is greatly affected by the environment. Setting up more activity spaces and corresponding environmental facilities for people to communicate can increase interpersonal communication behavior.

### **Conclusion**

As an important public space in the city, there are many factors that influence the appearance and development of people's behavior. They will be influenced by the design, use function, environment and climate of urban public space. In the long "growth" process of public space, it will form its inherent historical and cultural characteristics and directly or indirectly affect the citizens' emotional consciousness. Everyone will have a deep self-identity in the places they are familiar with, and they will have an interdependent feeling. Therefore, people and the space environment are complementary and inseparable. Only on the basis of fully understanding the physical and

psychological needs of people, can the humane design of public spaces be done in a courteous manner. Therefore, in different types, different functions, different time periods, different groups have different behavioral deviations and behaviors. Therefore, urban public space can be reasonably planned and designed according to the needs of user behaviors, in order to meet people's living, work and social needs to a greater extent, and improve the use value of urban public space.

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