

Research on the Design Strategy of Office Building External Public Space

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ABSTRACT: Under the background of the city's rapid economic development in our country, more and more people gathered in the city. At the same time, High quality of urban public spaces for people's outdoor life are eroded by the all kinds of buildings and expanding road .The number of urban public space are relatively less than before, the location distribution of urban public space are unequal and the quality of urban public space are poor .Thus only relying on individual urban planning public space has been difficult to meet the people's demand for increasingly rich outdoor public activities. Proportion of office buildings in the modern city is big. And office building is the most one of the buildings closely relating to people's daily lives. If the external space could be properly designed, it can be one of the effective solutions solving the current problems in the urban public space. But at present, the design of office building public external space is insufficient. The attention and research in this respect is deficient. So, in this article, through the analyzing of office building external public space, we summarize the methods which high quality public space should follow. The study of these problems can provide guidance and reference for the design of office building external public space.

SUMMARY OF OFFICE BUILDING EXTERNAL PUBLIC SPACE

Under the background of rapid city development in our country, the number of urban public space are relatively less, the location distribution of urban public space are unequal and the quality of urban public space are poor. Urban planning public space has been difficult to meet the people's demand for increasingly rich outdoor public activities. The integrated development trend of city and architecture has become increasingly obvious, but the relationship between them in China still apathy. Office buildings are widely exist and closely related to people's lives. So if the external public space of office building can be transformed into urban public space, then the above problem could be solved. But at present, the external public space of office building in China cannot be used very well by the public, and have a series of problems on space design.

1.1 *Concept definition relevant to office building external public space*

The specific noun phrase of “public space” first appeared in sociological and philosophical works in the 1950 s. In the early 1960 s, the concept of public space gradually appears in the field of urban planning and design disciplines. In the fields of city discipline, the concept of accessibility was emphasized by many scholars as the most important attribute of “public space”. In addition to physical space features of attractive, the accessibility of social sense is more important. It includes both "different people" – allowing access of different social class, race, and groups, and "different activities" - allowing access of various social activity and characteristics.

Synthesizing above related concept, the office building external public space refers to architecture exterior space that was separated from urban space by the lands boundary of national administrative office building or private office building. The office building external public space is orderly, functional, and undertaking the functions of urban public space. Moreover, it has well accessibility of

material space, allows the public freely come in and go out, and allows a variety of social activities take place.

1.2 *Characteristic of Office building external public space*

1.2.1 *Easy access to the city*

Ideal office building external public space is interrelated with urban space, and easy to reach. In special plots of land, external public space can take the city's traffic system access to the site, making the city adjacent plots for connection, convenient for the public to go through. The boundary of Office building external public space should be open, should have no fence, and should be convenient for the public to enter and stay.

1.2.2 *Compound function*

Ideal external public space of office building has a variety of functions and can meet the needs of a variety of activities, such as recreation, communication and meeting. Function facilities in public space can be fully effective use in different season and different time bucket. Besides excellent external public space of office building have reasonable arrangement of office staff flow streamline and the public recreation flow streamline, and avoid mutual interference.

1.2.3 *Comfortable landscape environment*

The ideal external public space of office building has a comfortable and pleasant environment. According to local climate and site condition, the space can meet the needs of the people to communicate, walk and watch, and also can provide a convenient infrastructure, such as seating, lighting, landscaping and pools.

THE DESIGN METHODS OF OFFICE BUILDING EXTERNAL PUBLIC SPACE

1.3 *The combination of external public space and city*

The external public space of office building is not closed and independent. It should have closely connection with city environment. The combination can be implemented by the connection with urban space system, the design of space function, the design of space form and the space landscape.

1.3.1 *The connection with urban space system*

we can implement connection between the external public space of office building with city environment through the following three aspects: the degree of visibility and accessibility.

① *The external public space should have a certain degree of visibility*

The degree of visibility refers to that people can easily see the external public space from the urban space. Because the elevation difference, trees and signs will cause a certain degree of shade of space, and they could make the external public space of office building not easy to see. The best vision of external public space is without shade. If the external public space was surrounded with interface, we should ensure that the external public space can be easy found. It is very important to improve the sense of security of the external public space.

② *The external public space should have a certain degree of accessibility*

The form of external public space should have directly contact with urban space, and the public can quickly arrived at the public space from urban space. If a roof space or yard space only have entrances within the building and no entrances outside the building, generally speaking, it's hard to for the public to reach. Roof space and the subsidence space should have elevators, stairs or ramps from outdoor; For the courtyard inside the building, the degree of accessibility should increase by bottom overhead or reduce borders.

1.3.2 *The connection with urban traffic system*

Public space needs to be combined with urban traffic system, needs to be effectively organized well in the traffic of pedestrian and cars, and needs to be ensured the efficient use of space. Due to the complexity of city transport system, sometimes we need to adopt multi-layered and three-dimensional traffic network structure. That will make the combination between external public space and urban traffic system became more coherent consistent. That will also make the external public space of office building have high accessibility and public participation. Such as the external public space of HSBC, it makes the northern road and the southern road connected, convenient for people to cross.

1.4 *The function design of external public space*

1.4.1 *The function design of external public space*

The external public space of office building should not only satisfy the basic functional requirements, also should be combined with the function structure of the area, and should conducted a comprehensive and systematic analysis to the urban environment. By studying the social demand of the public around, we should conduct accurate evaluate about the office building external public space. The public space can undertake the function of urban public space and maximize the value of space. For example, in the registry office building in Jiaoxi, Yilan, Taiwan, the architect considered the surrounding urban environment, and designed a small green square between the public space and the adjacent Jiaoxi kindergarten, that has become a place for children to play.

1.4.2 *Increase the accessibility of function*

Accessibility determined that if it is convenient for the public to get to the external public space. In some private office buildings containing commercial function, some commercial function of space has a property of openness. If we make the functional space within the building out, that will not only greatly increase the profits, but the energy and the participation of the public space will increase. According to the conditions of the functional space out, the methods can be divided into two cases. The first one is the externalization of some auxiliary function space. For example, we can move shops and exhibition halls to outside space, and achieve better profits and publicity. The second one is the externalization of some special function space: we can put some independent functions such as dining, fitness, and drama performance theater to the independent areas of public space.

1.5 *Increase the utilization of space*

The design of space function should be of elasticity, plasticity and adaptability in use, and the design should not be too rigid. We Should fully understand the characteristics of the public's behavior, make the function configuration effectively support the public behavior, and improve the efficiency of the use of public space. Because people's behavior pattern has a great deal of uncertainty, if the function of space is relatively single, fixed and inflexible , that will make the public feel bound. Therefore, we shall be in accordance with the tendency of social public to redefine the using way of public space. In addition, we can improve space utilization by increasing the residence time. In the space of people going by, people will have a short stay .

1.6 *The form design of external public space*

1.6.1 *Different combination way of the public space from horizontal and vertical direction*

For some office buildings, the site area is relatively limited, and it is impossible to set separate and independent public. At this situation, the combination of buildings and public space at different heights is a good way to get more public space. According to the different forms at different height

of the public space, we can use the following design methods: the subsidence of the ground ,the building bottom aerial and the roof space. According to the relative position of plane layout, external public space of office buildings can be divided into four types, each type has different enclosure. The first type of external public space is opening, and it has strong openness and visibility.The second type of external public space is half-opening, and it's openness between the completely openness and completely enclosure. The third type of external public space is closed, and it has little openness and visibility. The fourth type of external public space is the combination of the above types.

1.6.2 *The construction conditions of public space form*

① *The proportion and size scale of external public space*

The proportion and size scale of external public space will affect people's behavior. The large squares attract the accumulation of the public, and the enclosed courtyard spaces attract people to sit-ins, observation and nap. Therefore, we should design different space scales according to the function orientation of different public space. The setting of space scale should be given a comprehensive consideration of space feeling, social distance, space horizon and so on. And the size of the space should comply with the purposes itself. For the external public space of office building that has open frontage, the ratio of length and depth influence the visibility of the public space.

② *The spatial difference and slope*

If the level ground of external public space of and city streets are not in the same height, it often appears that the public space is not easy to see or has poor accessibility problem interfering with the use of space. So, we can adopt appropriate space design method of slope or platform, and guide the stream of people and the view of sight in the city. This design method can not only increase the richness, consistency and integrity of Space levels, and can also attract the public to improve the utilization of space much better.

1.6.3 *Elements of space environments*

We should make the space environment, the natural scenery of peripheral environment and the regional cultural characteristics skillfully blends as far as possible. We also should reserve the original landscape trees and structures in external public space of office building as much as possible. And we should use landscape facilities of appropriate proportion to create comfortable space environment for the public. The landscape design of office building external public space should possess characteristics reflected peripheral environment, produce a kind of relatively strong identification and uniqueness, and enhance its attraction as urban public space. Landscaping and planting is a key element for external public space of office building, and it should achieve the objectives of the environmental beautification. Plants have the effects of visual block, and also can shape with public and private space.

CONCLUSION

Currently, our country still stays in the period of accelerated development of urbanization. The development and construction of the external public space of office building also stay in the rising stage.

Compared with western countries , in our country, the design methods of the external public space is not yet mature, and the construction of the external public space is still an arduous and urgent task.

In China, the design of external public space of office building in addition to should not only be followed the design strategy that this article summarized ,we should also consider the truth of our

country, and adjusting measures to local conditions to facilitate the construction the external public space of office building.

Except architects, the urban planners, related policy makers, property manager and the public also play important roles on the formation and maintenance of high quality external public space of office building.

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