

# Design of Urban Building Complex with Space Function Traffic Organization as the Core

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**ABSTRACT** City building complex urban society with the continuous development of economy, culture and gradually developed, and gradually become an important part of the city, its only function effectively reorganized the space, and the completion of the complex and the combination of urban functions, played beyond the integration of excitation functions. In this paper, Understanding urban complex design features function and points to note from the three aspects of space, function and traffic organization.

## KEYWORDS

City building  
Complex space  
Function  
Traffic organization

## 1. The city building complex concepts and features

City building is complex multiple architectural spaces with different combination of the use of functional building complex. Correspondingly, traditional architecture having a single function, namely to meet the self-service closed system people use a function in a period of time, with suitable urban space is constituted by a single function of these road traffic building together. In contrast with the city building complex is the rapid development of the city, the lack of land resources, transportation pressure, deterioration of the quality of urban environment and other urban development problems developed, through the construction of a variety of functions and composite connections the building complex, the construction of the organic unity of a variety of functions in an organic whole inside, mutually harmonious and balanced development between and inspire each other, more active functions of the building, it has changed people's social life and the environment, positive changes in the social life mode.

The main characteristics of urban building complex are as follows:

(1) The function of the complex and interoperability. Use complex will feature a variety of architectural space together,

not only to play a greater various functional spaces with different functions at the same time be able to inspire each other, the greater the efficiency of functions with a single function space, one can in the building comprehensive in vivo functions implemented more functional complex and synergistic complex the better, the better people live, work, entertainment, consumer, health, etc., reduce the time and cost of back and forth between different buildings city shuttle, improve working and living efficiency.

(2) The urban complex has the clustering capabilities, making urban complex traffic and pedestrian design more complex, more three-dimensional spatial organization. In order to meet a variety of function, depending on the nature and purpose of the use of the traffic, people, goods, information flow, etc. for effective segmentation and combinations, to avoid the formation of mutual influence, and therefore the design space. It requires more complex and demanding. Require functional organization, traffic organization, spatial organization combined with each other, use the ground, ground, air three levels form three-dimensional space, function and traffic organization design, and with the three-dimensional transportation around the city cooperating to form a unified overall space system [1].

## 2. The spatial organization of the city building complex

City building complex is not the type of building space and building more functions simple grouped together, but through a systematic, hierarchical and there is a sequence of science, precision space design composite made, compared to the traditional single building, a composite and complex special point.

Complex spatial organization, there are three levels of content. The first is a comprehensive urban architecture combination of body and urban space structure. Build-

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ing complex is not isolated in the city, which should be the first space and the overall integration of the city constitute the building, which including content transportation, recreation, landscape and other aspects. Secondly, the interior of each building complex spatial organization between the functions of the system, complex internal organization should hand through some space sections and elements, these spaces functional subsystems will combine together to form a scientific and orderly, clearly structured space systems. Again, that is the space inside the complex system between different spatial organization and structure design. Typically the overall need for external space design and layout, Then the system's internal space planning, design and finally the unit space, but each level is the mutual influence, and therefore during the general layout should also be taken into account not functional space with nature, quantity and transportation, land use and other factors, in order to achieve system function optimize.

### **3. The functional organization of the city building complex**

Usually feature city building complexes usually have a hotel or apartment, residential, office, conferences, exhibitions, shopping, dining, fitness, recreation, transportation and parking, when a certain function. To a certain extent, the number of share has become a complex function of the system under functional subsystems. As an integrated body of a small shop, small, serving only service in the hotel's customer, then belong to the hotel functional subsystems constitute a functional unit, when the store a larger scale, and open for business when the complex became a separate subsystem. Overall, the functional integration can be divided into four categories namely body to live, work, business, transportation stop. During the design process, it should be used according to the nature of partition centralized arrangement, in order to facilitate the management and use. It should also be the logistics and management as a separate stand-alone system for managing complex, such as administration, cargo transportation [2].

While paying attention to certain functions (such as commercial building complex, office building complex, exhibition building complex, etc.) space design should focus on spatial design and layout capabilities in accordance with its emphasis. Forming a complex function of the system that is independent and overlapping system of systems to facilitate in which to work, live, play and ease of information exchange. To prevent this were two extremes, one function strictly in accordance with the division, not mutually stimulate the formation and effective use of non-flexible function space divided form, the second is too much emphasis on the excitation function of the neglect of the relative function between the functional independence and the emergence of chaos, chaotic phenomenon.

Also worth noting is that the function is also linked to the needs and spatial organization in order to effectively

unifies the spatial organization and functional organization, better play architecture and function. Such as commercial facilities, as far as possible close to the crowd, easy to transport and crowd evacuation, roads and high-rise podium position of the lower portion or the transport of goods. For the office, room, apartment, residential space it has strong privacy requirements for quieter environment, vision, good landscape, so from the layout for the arrangement should avoid the crowd of more streets, select quiet, beautiful secondary roads. Functional layout can be superimposed on each other, side by side, inclusive, or separation, in particular the design should be comprehensive and balanced consideration of all aspects of design and land by Intuit, landscape, transportation, technology cost and other functions based on specific projects.

### **4. Urban building complex traffic organization**

Traffic organization urban building complex is the life-blood of complex operation, if left the traffic organization, complex as the vehicle cannot front row, lost its value and role. According to statistics, a building area of 100,000 square meters of office-type complex, the flow of people was 50,000, the equivalent of a small city population flow, while access to people flow, traffic, logistics, information flow more, so, good for complex traffic organization running complex has a crucial role.

Traffic organization in general, to focus attention to the traffic interface mode complex and the city, ways and means of external traffic organization, streamline internal organization, but also need to focus on transportation provided is building types, principles and methods of building functional subsystems entrance settings and traffic section points.

The interface, complex and urban transport, a flat-screen interface, and three-dimensional interface, the in three-dimensional interface has pedestrian bridge, air corridors and subways, in traffic areas need note weight of the vehicle velocity, direction, and control of traffic considered.

During external transportation organizations, need to adhere to several principles, one integrated body traffic Organization in conjunction with the overall plane functional layout, space layout. According to the different actual situation of the city, a plurality of interfaces combined construction and urban connections. Different nature, purpose (including people, vehicles) shunt the best settings, prevails and in accordance with the nature of the traffic. Characteristics, mode of transportation and the time to peak traffic flow line, the organization and division of traffic into the complex in general are generally walk, take the bus, private cars, taxis, unit car, commuter cars, freight vehicles. According to these parties types carry out the purpose of the diversion to avoid mutual interference [3]. You can set different entry into line shunt arrangements, such workers into the entrance, the garage entrance,

cargo entrance, bike Entrance wait. Generally arranged in a building at the entrance to a number of shopping, dining, office buildings, hotels and other temporary outdoor parking spaces in front of the crowded entrance, preferably with some plaza or open space, transportation convenient parking lot entrance to avoid the crowd and other cross interference.

## 5. Conclusion

City building complex urban development is increasingly important place in indispensable for effective design and building of urban complexes, will help improve the urban functions, saving the city run capital and energy, and bet-

ter promote the further development of the city convenient city people's daily work and life, production.

## References

1. Xu, X. D. (2010). Urban rail transit on urban building complex influence. *Urban Construction*, 25.
2. Yu, W. B. (2001). City building complex design-space, function, traffic organization. *Xi'an University of Architecture and Technology*.
3. Hu, J. (2007). City building complex symbiosis of design theory under study. *Xiamen University*.
4. Huang, Q. (2011). Urban complexes and commercial integration design. *Materials Development Guide*, 02.