

Research on the Humanized Multiple Design of Urban Daily Life Space

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Abstract: This paper takes “daily life space” as the design focus, taking Harbin as an example, and tries to construct a set of urban design strategies that are more suitable for daily life space. Combining the characteristics of daily life space with cultural elements to guide contemporary urban design, this strategy fully embodies the humanization and diversified design concepts, and provides useful supplements to existing urban design. On the basis of comprehensive relevant theories, practical experience and existing problems, we clarify the principles of urban design, and propose humane and diversified design strategies from both the macro and micro levels. So as to make the urban daily space more in line with the needs of humanization and diversification of daily life, and promote the healthy development of the city.

1. Current problems in urban daily life space

At present, our country is at the peak of urbanization, the proliferation of quick success ideology and one-sided dependence on technological rationality have triggered the development and construction of cities overemphasizing high-efficiency production and novel and dazzling visual forms, with ignoring the nature of urban life, and weakening attention to the experience[1]. As a result, the relationship between people and space is becoming increasingly alienated, and the vitality of the city is declining. Over the past four decades, the process of urbanization has progressed by leaps and bounds, and the phenomenon of over-exploitation natural resources has become commonplace, deepening the contradiction between limited resources and unlimited demand. It has aggravated the damage to the original structure of the city, aggravated the separation of functional space, derived a series of problems such as insufficient public space, loss of regional characteristics, and lack of humanization of space. For this reason, it is necessary that taking the daily life of ordinary people as the starting point to re-examining the goals and methods of urban design, and designing more humane and in line with the needs of modern people's daily life space. Therefore, this article taking the design of urban daily life space in Harbin as an example will provide a new research idea for creating a more humane multi-design research and promote the sustainable development of the city.

2. New requirements for organic renewal and transformation of space

A. The essence of urban life is people's living space

As an external manifestation of human settlement behavior, cities have been slowly developing under the leading role of human life. Cities exist not only for economic, political, military and other macro purposes, but also as people's living spaces. Therefore, in the design research of cities, more attention should be paid to the humanized design of people-oriented, so that the city can be needed and loved by people. Aristotle once commented on the nature of the city: “the growth of city-states stems from the development of human life, but their actual existence is for the good life” [2].

B. Human physical and mental needs.

American psychologist Abraham Harold Maslow proposed that human needs are divided into physiological needs, safety needs, emotional (belonging and love) needs, self-esteem needs, and self-realization needs, and there are interrelationships and progressive relationship between them [3]. The needs of people projected into the urban daily life space can be summarized as: physiological needs,

safety needs, convenience needs, comfort needs, recognizable needs, participation needs and communication needs.

①Physiological needs, Physiological needs require space to provide individuals with an environment that can meet the basic needs of normal sleep and rest in life. ②Security requirements, Security requirements require space to provide a safe, stable, orderly and predictable environment. For example, public spaces with surging people are of a security and defensive nature; Local residents have their own inertial scope of activities and sense of territory. Outsiders will also be scrupulous and do not dare to make troubles rashly. This satisfies people's needs for safety to a certain extent. ③Convenience needs, Convenience needs are embodied in saving time, saving distance and so on. The behavior of crossing the guardrails seen on the road reflects people's demand for portability, and also reflects the lack of meeting people's portability needs in the current urban daily life space. Therefore, it is necessary to carry out the humanized design of urban daily life space based on people's needs. ④Comfort needs, the comfort needs is a quantitative indicator about the influence of climate and other environmental factors on human physiology in a certain space environment. This requires the provision of buildings, plants or other facilities to resist wind and rain and special weather in the humanized design of urban daily life spaces. ⑤Identifiable needs, when people need to reach a specific destination and walk through the space, the readability and recognizability of the space become very important. The image of a city in people's minds is mainly related to five urban elements: roads, borders, regions, nodes, and landmarks. People can understand the city through their cognition and realize the city's identifiability. For example, Beijing's urban design can incorporate Beijing opera facial makeup that reflects Beijing's characteristics in the streets and lanes. For Harbin, ice lanterns, ice scenes and other elements can be incorporated to deepen the impression of "ice city" and enhance the city's recognizability. ⑥Participatory needs, once people enter the space, there is a demand for environmental space. Participate in it, such as being attracted or restrained, whether this participation is active, spontaneous, passive or passive. Due to the differences in the interests, tastes, preferences, needs and perceptions of space users, the diversification of space usage methods has been produced. Therefore, a variety of spatial forms have emerged. For example, in the park, there are people dancing square dancing, and children are roller skating. ⑦Communication needs: To meet people's communication needs, the urban daily life space can provide a place for normal communication and communication between individuals, between individuals and groups, or between groups and groups.

Therefore, in the design process of urban daily life space, people's communication needs should be considered, and humanized design should be taken as an important element of design. In the design process of urban daily life space, it is extremely necessary and feasible to carry out humanized multiple design based on the people-oriented concept and people's demand for living space.

3. Investigation on the status quo of daily life space in Harbin

In the field of urban planning and architecture, some scholars have realized that it is necessary to break away from the purely rational and purely formal design ideas to create urban spaces with a human scale and a sense of life. Daily life space can be divided into four main categories: unit space, living space, consumption space, and leisure space. Because unit space is affected by the special system and environment, it is inconvenient to discuss in depth, this article mainly studies the latter three spaces.

A. Living space

Its spatial scope includes the internal space of residence, the block where it is located, the surrounding neighborhood, and even a residential area of the city. It is both private and public, and it plays an important role in neighborhood communication [3]. The research on living space aims to explore useful block patterns and provide a way to model contemporary living space suitable for life.

In old towns in Harbin, people place their own idle furniture and other facilities in public spaces for recreation and entertainment. Someone uses vertical interfaces such as walls to make basketball hoops and other leisure facilities, or to build tall and low awnings and umbrellas. These phenomena can be seen everywhere. On the one hand, it reflects the life of the residents, On the other hand, it

also reflects the lack of leisure space in the urban daily life space, indicating that the ability of residential space design meeting the needs of residents' portability and comfort has to be improved.

B. Consumption space

Consumption space refers to the space occupied by people during the acquisition and consumption activities for the purpose of maintaining individual survival and reproduction activities. With the expansion of modern urban consumerism, consumer behavior has spread to all corners of daily life, and consumer space has also shown a trend of continuous expansion. Under the downward pressure of the economy, in order to better develop the economy, Chinese enterprises are facing the pressure of transformation. For this reason, China proposes to “accelerate the establishment of a ‘dual circulation’ development pattern in which domestic economic cycle plays a leading role while international economic cycle remains its extension and supplement” give full play to Chinese super-large-scale market advantages and domestic demand potential, and switch from an export-oriented economy to a domestic demand-growth economy[4]. The creation of consumer space can play a role in stimulating consumption to a certain extent. In such an external environment, a number of unique consumer spaces such as commercial blocks, commercial complexes, and night markets have been born [5].

The main consumption space in Harbin is the shops and shopping malls on the bottom of the street, and gradually formed a relatively concentrated street market. The consumption space of the store on the ground floor facing the street not only facilitates people to consume on the way to and from get off work, but also reduces the fatigue of climbing ladders, as well as provides business opportunities for shops. However, in the large-scale urban renewal and transformation, the disorderly development and construction continue to squeeze the living space while ruthlessly breaking the original order of life. Especially the new construction of large-scale and closed projects is profoundly affecting all aspects of urban life. Most of these large-scale projects win with novel concepts and fail to take detailed considerations on a human scale. The development and construction process are even more self-centered, completely disregarding the overall structural layout of the city and the continuity in form and style with the surrounding environment, resulting in the fragmentation of the overall spatial layout of the city and the random collage of the city's image. The fragmented urban pattern has suddenly split the original slow-formed life texture of the city. Especially the large-scale closed commercial complexes such as the Metropolitan Plaza have absolutely weakened the diversity of original street life. At the same time, the ever-increasing traffic flow in the central area has gradually changed the nature of life on the streets, causing a sharp decline in the vitality of urban space. This extensive development model easily ignores the use logic of citizens' daily life, and has a more or less negative impact on the daily lives of residents in the old city.



Figure 1 mass - demolishing mass - construction

C. Leisure space

The analysis of leisure space is helpful to study the diversity, connectivity and place significance of the city's external space, and can guide the construction of contemporary urban public space system.

At present, the leisure space in Harbin mainly includes the front of the house, squares and parks. Many residents will play cards and chat with their neighbors in the open space in front of the house. Such a leisure space is convenient and familiar, and is very popular among the citizens. At the same time, squares and parks are also very popular, where people can participate in large-scale collective

leisure. However, due to the influence of many factors, this kind of leisure space is not universal. Many citizens are far away from squares and parks.

On the one hand, the construction and renewal of Harbin is still centered on economic development. Due to the over-emphasis on the centralized effect of commerce, office, production and other functional spaces, the fragmentation of urban space in functional areas is becoming more and more serious. Especially in the construction of the new district in Harbin, a large number of business districts, office districts, and industrial parks have gradually formed. The singular functional zoning runs counter to the basic requirements of diverse and convenient daily life, and the city gradually loses its original vitality. On the other hand, the various groups in the main urban area of Harbin are showing a continuous and expanding development trend. With the gradual formation of the expressway network, a development model of high-end residential areas based on fast motorized traffic and mainly low- and medium-density has been formed in urban fringe areas, showing certain characteristics of urban sprawl. At this stage, various functional spaces in Harbin are showing a trend of accelerated dispersion. In addition, the existing public space in the main urban area lacks consideration for different users. Especially with the intensification of aging and the increase of leisure time, the demand for urban public space by the elderly is increasing. However, the construction of public space for the elderly is not yet in place, no matter the quantity or quality are obviously lagging behind. Elderly people gathering and talking can be seen everywhere in the city streets, alleyways, and squares, but the corresponding space and facilities are severely lacking, and there is even nowhere to sit, which brings a lot of inconvenience to the daily leisure of the elderly.



Figure2 Lacking of small public space

4. Humanized multiple design strategies for urban daily life spaces

A. Macro strategy: constructing a city pattern suitable for daily life

Efficient, green, and user-friendly transportation not only brings convenience to the daily life of citizens and leaves a good impression on tourists, but is also the basic condition for the rapid operation of various economic and social activities, reflecting the potential value and radiation ability of the city [6]. The layout of urban roads is directly related to whether the portability needs of urban daily life can be met. Therefore, in the design of urban daily life space, the transportation system must be improved, and the various functional spaces of the city must be closely connected to construct an urban pattern suitable for daily life.

First, promote the construction of public transportation. Public transportation has the characteristics of large capacity, fast speed, safety, punctuality, and energy saving, and it is the most effective way to personnel transport. Improve the layout of urban public transportation by adjusting public transportation routes and adding public transportation stations, so that the distribution of the public transportation network will be more balanced and reasonable. In addition, from the perspective of the actual traffic situation in Harbin, it is not enough to add bus stations and lines alone. It is necessary to speed up subway construction and increase subway construction planning to alleviate road traffic congestion. By rationally arranging the exclusive sections and exclusive time of public transportation, the traffic time between the two places can be shortened and the accessibility of the route can be increased. Thus, the structure of the entire city will be more compact.

Second, improve the supply capacity of green space services. Progress of economic society and changes in ideological concepts have increased the proportion of leisure in people's lives[7]. At the

same time, the pressure of work and life has made citizens demand for leisure space increasing. The urban green space is able to meet people's requirements for leisure space to the greatest extent. In addition, the urban pattern of the integration of mountains, water and city creates the uniqueness and urban recognizability, and outlines the background picture with humanistic and geographical significance in the daily life of citizens. Therefore, the protective use of urban natural elements is not only a prerequisite for ensuring urban ecological health, but also an important measure to continue the urban context. It is necessary to improve the supply capacity of green space services. The first is to propose protective strategies for the ecological characteristics and site conditions of various natural resources. Secondly, we emphasize the role of natural elements in the landscape framework of the urban form to realize the network of ecological space. Finally, we need to increase the urban green coverage rate and build a garden city.

Third, improve the layout of leisure space. Facts have proved that the continuous demolition and construction of the urban renewal model in Harbin area cannot fundamentally solve the quality of citizen life. On the contrary, it has caused irreparable losses to the city's ecological environment, traditional texture, and historical context. as well as, due to the consideration of individual economic interests by various developers, the control of urban construction scale and plot ratio has become a difficult problem to solve[8]. In order to better find a balance between urban daily life, economic development, and environmental protection, it is necessary to implement the urban renewal concept of "organic renewal", abandon all the thoughts of overthrowing and rebuilding the city, and through the existing buildings and urban space carrying out repairs and upgrades to drive the optimization of urban functions and the improvement of its image. On the one hand, the layout of the leisure space reflects the humanized design, not only to provide convenient consumption space around dense residential areas, but also to increase the construction of leisure spaces such as squares and parks. On the other hand, we can prioritize the use of existing sites, tap the potential space, and use the open space that is now used for stacking debris and temporary parking to carry out renewal design, clean debris and restore space, install leisure facilities, and transform it into a small leisure space. At the same time, the space relics that once carried a certain form of life but have now lost their vitality should be protected and transformed. "Darning old and new" is based on the experience of urban life and develops a new life style that is integrated with space and life, making it a place close to people's daily life and making it a public activity space for contemporary citizens.

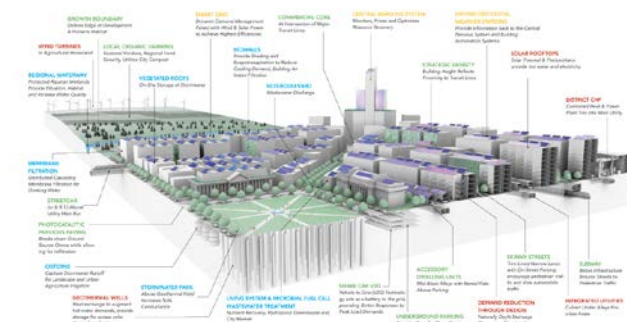


Figure 3 exhibition of "Darning old and new" city

B. Micro-strategy: Create a humanized space

In the investigation and analysis of urban space in Harbin, we found that the urban single space that spontaneously formed under the action of daily life embodying the outstanding characteristics of following the life logic, ingeniously responding to the terrain, and respecting the scale of living scale. At the micro level of contemporary urban design, daily spatial characteristics should be used as the criterion to explore spatial strategies that conform to the trend of the times.

First, increase the utilization rate of public space. Existing urban public spaces have more or less utilization defects, and different types of public spaces need to be improved specifically, from the perspectives of the scale, form, accessibility, furniture, vegetation, and activities of the space. On the one hand, increase the inclusive and diverse forms of urban squares, making it a representative urban space that meets both social needs and personal daily needs. On the other hand, the precious riverside landscape resources can be shared, starting from the two aspects of accessibility and diversity, improving the use of waterfront space, and making it a "natural living room" of the city. At the same time, it is indispensable to effectively improve the permeability of the urban public space

system, increase the utilization rate of service facilities, and configure various public facilities for different groups of people.

Second, increase the cultural connotation of leisure space. By combining public places with local regional culture and historical context, or mobilizing aesthetic factors such as their shapes, colors, materials, decorations, patterns, to carry out novel designs that will help to build a fusion of characteristics, culture, beauty. The creative urban environment allows people to perceive the city and space through public facilities, and stimulate imagination and creativity. For example: holding regular festival activities to highlight the lively atmosphere and cultural connotation of the space, and promote the formation of a square space with historical and cultural significance.

Third, consider the needs of various groups of people. In the design of urban public facilities, in order to meet the actual needs of all citizens in daily life, government and related planners should fully understand people's behavior patterns, relevant scales, habits, hobbies and psychological needs, then make a scientific, appropriate and comprehensive arrangement.

References

- [1] Huang Duo, Huang Xiaomin, Xi Ziyin, et al. Measurement of the spatial development about urban new districts based on the four-boundary model--Taking Nansha New District of Guangzhou as an example [J]. Urban Issues, 2019, 000(006): 37-44.
- [2] Lobo B . The essence of cities. 2020.
- [3] Allen J , Munoz J C , Juan D . Understanding public transport satisfaction: Using Maslow's hierarchy of (transit) needs[J]. Transport Policy, 2019, 81(SEP.):75-94.
- [4] Ma Li, Huang Linglu, Shen Yiwen. Sharing the trend to reshape the daily life of young people[J]. Chinese Art, 2019 (05): 92-99.
- [5] Qiu Yue. Reshape our country's economic advantages with a new dual- circulation development pattern [N]. Guangming Daily, 2020 (003).
- [6] Jiang Kaikai, Gao Zhuchen, Zhao Taihe. Research on the Mechanism and Characteristics of Urban Consumption Space Production from the Perspective of Rent Difference Theory: Taking Chengdu Taikoo Li as an Example [J/OL]. International Urban Planning, 2021:1-15.
- [7] Jin Yunfeng, Wu Yubin. Research on the spatial characteristics of urban green space quality and health benefits based on daily life[J]. Chinese Art, 2020(06): 36-43.
- [8] Sun Shuai, Duan Guangde. Analysis of urban park landscape space based on the perspective of elderly use behavior[J]. Modern Horticulture, 2021, 44(07): 40-42.