

Research on Environmental Design of Modern Residential Area

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Abstract. As an important part of the commercial development of residential areas, the living environment has the characteristics of commodities, and has many social, cultural and behavioral attributes and has evolved with the times. Therefore, it is necessary to combine with the development of foreign settlements and planning and design theory, combined with China's specific national conditions, to our reform and opening up more than 20 years of residential development and characteristics of the stages and characteristics of the environment to give a clear and summarized, the use of systems theory, landscape Ecology and related theory of urban planning theory of landscape planning, the objectives and principles of environmental design of residential areas and the characteristics of environmental space are analyzed. Based on this, the patterns and languages of landscape design in modern residential areas in China are constructed.

Introduction

In recent years, the tide of urbanization has intensified and the city's territory has been changing rapidly. The new residential area has become an important part of urban construction. With the large-scale renovation of cities, people have realized the importance of improving the environment and improving the quality of life. The environment in residential areas is closely related to people's life. The concern and emphasis on the quality of human living environment is listed as a major principle in the construction of living environment minus. At the same time, living environment as an important part of commercial development of residential areas, with the nature of the goods, but also with social, cultural, behavioral and other attributes, and is evolving with the times. At present, in the construction of residential areas in various cities in China, it seems that the reason is that the houses are covered too fast, and there are also misunderstandings and deviations in practice. Some residential areas of environmental construction deviated from the principle of economic fit, the blind pursuit of the luxurious style of the surface; repeat Western countries, "high consumption, high materialization, high consumption, high pollution," the old road, while ignoring the "cheap" type Of the research on the design and development mode in line with the development level of a well-to-do society. Some of them unilaterally emphasize the principle of "people-oriented" while neglecting the principle of "coordinating people with nature", and desalinating the original mountain forests ; Some for the sake of sales attraction, the pursuit of exotic theme style, ignoring the original local experience and identity, living in the landscape of others; some residential area and the city's relationship did not fully consider and coordination, leading to the city part of The imbalance with the whole.

Residential Environment Design Goals and Principles

Nowadays, people are beginning to advocate community spirit and emphasize people's return from big society to small society. Home is the basic unit of people's social life. Good residential environment is of great significance to the reconstruction of community spirit. Therefore, the modern residential area environment more emphasis on the harmonious coexistence of many factors, the formation of a virtuous circle of the overall system. Harmony is multifaceted, including the harmony between man and nature, the harmony of the internal and external environment of the residential area, the harmony among the residents of different ages and levels, etc. The residential

area with good environment and complete facilities is like a sound development. Like a small society, it has various social implications such as maintaining social stability, improving the quality of residents and cultivating people's sentiments.

Ecology refers to the balance between biological and environmental coordination of the interrelationship. To provide urban residents with a harmonious living environment, improve sanitation, reduce air and dust, maintain the proper temperature and humidity of the city atmosphere, and jointly assume the task of regulating urban ecology is the responsibility of residential designers. At the same time, the environment of nature and culture, the environment of design, the environment of life, the form of beauty and the ecological functions should be truly and comprehensively integrated; the residential area should no longer be a specific land in the city, but be dissolved into the city and nature; the natural participation designed to allow natural processes to accompany each person's daily lives; to allow people to re-sense, experience and care for the sustainable development of natural processes and settlements; and to coordinate with ecological processes to minimize the impact of environmental damage.

The construction of residential area environment emphasizes the principle of economic efficiency and strive to make efficient use of space resources, reduce construction costs and management and maintenance costs, and achieve the economic efficiency target of reducing, reusing, and reusing resources, Build a conservation-oriented settlement. At the same time, through the improvement of residential area morphology and environmental space, the overall environmental quality of cities has been raised and the surrounding land prices have also risen step by step. This can bring more economic benefits to the entire region, create wealth for the cities and provide more employment opportunities.

Residential space is an integral part of the city's overall space, in the spatial layout of the city should take into account the green transition and green transition and transition; traffic organization, consider connecting with the urban transport system layout; in the spatial relationship and historical context. In order to maintain the continuation of the original urban fabric and encourage the opening up and continuity of residential space to urban public space, a wide range of activities and exchanges should be encouraged while giving a sense of harmony in the overall style.

The city has both natural landscape and artificial landscape, both the static hardware facilities and dynamic human activities, the urban environment is manifested as the interweaving and performance of the various elements. Living Environment Art is a time-space art that presents a continuous picture as occupants move in space. Living landscape as a whole by all the local landscape superimposed.

Cities are the accumulation of history. Each city has its own process of generation and development. It has experienced the construction and transformation of generations after generation, and different times have different styles. Living environment is just a process, there is no final result. Living environment changes with the development of the city. Each residential area has its own specific geographical environment, with its own historical and cultural background, as well as the unique architectural forms formed in the long-term practice, and the local residents' qualities and the activities undertaken. A city-specific landscape.

All inhabitants in a residential area, including people of different social strata, different genders and ages, both normal and disabled, whose common or different environmental requirements should be respected. Take the aging population as an example. As the urban population ages, the proportion of the aging population will gradually increase. Their age-specific environmental requirements should be emphasized. Should also give full consideration to the psychological needs of the elderly and aesthetic taste. The fairness of the living environment is conducive to building a sense of community belonging and promoting social stability. The sharing of living environment in residential areas is reflected in the following: The environmental facilities in residential areas should meet the needs of various types of residents in residential areas. For example, in a comprehensive residential area, there should be neighborhood parks and children's parks as well as outdoor fitness facilities, The elderly interaction area.

Modern Residential Environment Design Patterns and Language

An important contribution to the study of modern society is the systematic observation of things and phenomena. City, society and biology are all systems, thanks to the establishment of System Theory. The well-established American Austrian, founded by L. Von Bertalanffy, a theoretical biologist. He published "Antibody System Theory" in 1952 and put forward the idea of system theory. In 1973 put forward the general theory of system theory, laid the theoretical foundation of this science. Usually the system is defined as: the organic whole which is composed of a number of elements in a certain structural form and has only some kind of function. In this definition includes the system, elements, structure, function four concepts. It shows the relationship between elements and elements, elements and systems, systems and environment. System theory holds that overallness, hierarchical structure, dynamic balance and timeliness are all common basic characteristics of all systems.

The green space system is an important part of the residential environment and plays an important role in the ecological environment of the residential area. ① For the green space system of residential area, our common formulation is point, line and surface combination. From an ecological point of view, it is more important to study how to make the green space layout of point, line and surface as a whole, continuous Because a holistic, coherent and effective open natural green system will be more conducive to bringing into full play the ecological benefits of green space and improving the ecological environment in settlements. From an ecological point of view, an effective system should refer to the organic links between the various components. Therefore, for the green space ecosystem of residential areas, the shorter the distance between the various components, the more continuity Strong, the integrity of the better. The layout of green space system with different residential environment not only affects residents' impression of the environment, but also has a direct impact on the ecological performance of the entire residential area.

The base of such settlements generally has good natural and ecological conditions. The land for residential buildings is relatively loose and the building layout is free. There are green spaces between residential quarters (clusters) in residential quarters (neighborhoods) and natural residential quarters Green space infiltrates into the interior of the residential area by external space to form a close organic whole. The layout of this residential area is more the pursuit of organic coordination with nature, the green space model also has the greatest integrity and connectivity, from the landscape and ecological point of view, the most favorable. However, since this model requires a large area of green space, it is generally applicable to suburban residential areas that are far from the city center and are located in favorable conditions and with ample land.

This residential area is characterized by ribbon-shaped public green spaces throughout the residential area, and within the residential area, ribbon public green spaces and residential quarters of the courtyard green space mutual infiltration, connectivity, which together constitute the entire residential green network system. Residential buildings can maintain a high density of buildings, the width of green space can be flexible changes in the layout of the organization is also rich and varied, the current use of this green space model is more extensive. Such as Wanda Jilin "Riverside people" district, is located in the Songhua River in Jilin City, the planned land area of 30.6 hectares, with local customs and ecological culture as the dominant ideology of design, the local unique snow landscape, meteorite culture, birch , Celebrity allusions and Riverside culture into the residential environment. Design local customs axis, meteorite culture axis, landscape timeline, landscape waterfront shaft several axes as the guide. With economic and reasonable cost, with the characteristics of the northern region to create a living environment.

The central green space generally occupies an important position in the residential land, and its development and construction will also have a greater impact on the ecological conditions of the base. Therefore, if the planning and design are carried out at the beginning, the green space of the central green space Location, and should be as far as possible on the base of the original topography, vegetation and water retention, and organized into green space, so that not only to minimize the damage to the original natural environment, but also can create a unique geographical landscape .

Shenzhen Zhong Hai Yi Cui Villa is a large-scale leisure residential development developed by Shenzhen Zhong Hai Investment Management Co., Ltd., which is located in Shui Jing Village, Buji Town, Longgang District, Shenzhen, covering an area of 280,000 m². It Yi Cui Valley as the core, the formation of four living groups. Yee Tsui Valley is the impact of the original deep river 7m, loess exposed. According to the original terrain, in the design, according to the different elevation and shape changes of the central water system, combined with the enclosed space of plants and small objects, three areas of quiet, curved and open are formed along the east-west direction. Through the art , Cultural practices into environmental design, art to reproduce the natural process, the natural division of law, but higher than the natural. Taking full account of the types and actual needs of residents at different levels, taking into account the ecological type and ecological diversity of residents, taking into account the residents' participation, leisure and entertainment, the formation of a vibrant ecological oasis.

Conclusion

The planning and design of the residential area environment landscape should be based on the site conditions and planning requirements of the project, guided by the advanced landscape planning theories and methods, pay attention to the holistic grasp, consideration of the ecological environment and detailed design of the residential area, Fully reflect the people-oriented, with people and environment-based coordination, with the geographical characteristics of responsible design, so that the construction of residential environment to science, ecology, sustainability.

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