

## On the Innovation of City Waterscape Design

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**Abstract.** The waterscape has become one of the important determinants of City waterscape design is successful, and the city or city waterscape environment is closely related to the charm. Each city river or waterfront region has its own unique function requirement and humanistic characteristics, which determines the planning and landscape design of waterfront should be a kind of can meet the different characteristics of the City waterscape landscape design, the current society exists identical without innovation characteristics, through the analysis of the current existence problems, combined with the particularity and necessity of the waterscape design, try to summarize the future waterscape design direction and innovation strategy, method of mining city waterscape design elements in the humanities and regional characteristics landscape.

### Introduction

Water gave birth to a city of civilization, to promote the city's economic development, it has become an important part of city landscape, beautiful and lively city waterscape not only provide a relaxing place for local residents, has become the introduction of local natural humanities style, highlight the connotation of the city name card. Each of the different city river or waterfront region has its own unique cultural characteristics and functions required, thus shaping the city waterscape, has become a priority among priorities of city waterfront space, ecological climate can improve the Waterfront Space Coast City, increase the rate of greening, improve the quality of life of residents, the more prominent a city regional landscape unique, reflect a continuation of the historical and cultural city.

### The Existence of the Waterscape Design in the Present Problem

The landscape design of waterfront space in China started late but is developing very fast, with the human water loving nature, whether residential, square or park, the construction of waterscape everywhere. But in the construction of waterscape, most of the lack of ecological consciousness and river, Lake habitat consciousness, without considering the ecological environmental protection of water resources, artificial modification of natural rivers, lakes and the water resources and the excessive exploitation, and uncontrolled discharge of sewage, resulting in the ecological environment of waterfront severely damaged, causing water eutrophication, destroy the self purification capacity of water body, water ecological imbalance, once clear trickling waters become dirty and smelly. A series of transformation of water taken to re design, regional culture characteristics of less consideration, almost did not take into account the importance of public participation, therefore, follow the same pattern of waterfront space landscape, ecological function, microclimate regulation function, participation function, ornamental function, public functions are weakening.

**The lack of ecological consciousness lead to ecological imbalance of waterscape.** City waterfront area is an important part of city public open space, waterfront space landscape design combines to create a natural and artificial landscape, if its clever fusion together, can enhance the accessibility and intimate of human and nature. But at present them. But at present the transformation of the city of natural river in the process, often only consider the utilitarian value: the safety of flood control, river, transport channel, in the engineering measures of city water system uses stone revetment, building high embankment and other measures, the mutual influence between the space of waterfront buildings, plants, activity lack of consideration, the natural characteristics of cemented artificial revetment closed to prevent the natural formation of the riverbank and

important ecological functions, destroyed the original ecosystem, breaking the original ecological balance, causing water pollution, many of the city waterfront environmental capacity and ecological carrying capacity overwhelmed, destroyed ecosystem, water self purification and degradation, the self recovery ability or even disappear, and then make the ecological structure of waterfront imbalance, eventually caused the whole city ecosystem imbalance.

**The formalism leads to the waterscape context deletion.** With the invasion of western social development and design ideas, the current design of urban waterscape full of formalism, the gradual emergence of "convergence" phenomenon, serious neglect of historical and cultural characteristics of the city, ignored the urban regional feature, cut off a continuation of the urban context, the design scheme of the waterscape appears nearly in recent years, blindly copying western landscape works and landscape style, so we can see the familiar Binjiang Binhu landscape, thousands of river side, ten thousand scene unification, characteristic landscape of the waterfront lost, regional characteristics disappeared, the whole design is not life, lost soul. A city's historical context, embodies a city's development and emotional memories, hopes of a city residents of faith and identity, once overlooked cause disappear, will not be renewable, so, the waterscape more and more the lack of innovation, presents homogeneous tendency.

**Positioning result in waterscape of social differentiation.** At present, the analysis of location development most of domestic urban waterfront region lack of overall function, in urban land use planning, there is no clear positioning, resulting from the phenomenon of the overall planning and landscape planning; in the overall urban planning, not the nature and direction of waterscape, waterscape design leads to blindness, no clear direction; in the field of urban design, there is no clear waterscape proportion, leading to commercial land too much, lack of resident activity space, lack of basic services and facilities, resulting in urban waterfront space waste and empty phenomenon.

In addition, with the rise of urban real estate market, all kinds of waterfront land and the surrounding resources are not planning for the urban public space to provide services for the residents, but as a scarce resource is some high-grade residential, villas, green to hold, leading to the malignant development of social differentiation. Only the urban function and the waterfront environment complex woven together, to take into account the interests of public, in order to form a rich in content and function of waterscape, promote the development of the city.

**The government leading cause the lack of public participation in the waterscape.** Many survey found, whether in the city or in the city planning and design, landscape construction of ordinary citizens in the city's participation is very low, many of which are government in determining the design scheme, for a week of shows, and residents are in a passive state, the opinions and suggestions in the no communication, cause landscape space cannot be better construction of services for residents, which led to the development of malignant cavity.

If can use efficient mode of western public participation, leisure and entertainment features of ginseng and waterfront do system analysis of investigation, emphasis on the touch based, emphasizing the participation of the people, emphasizing pluralism on water experience. Can better play the role of public participation, the waterscape design can fit the need of real people.

## **Exploration on the Necessity of the Waterscape Design Innovation**

City not only originated in the waters, the future development is directly affected by the waters of the constraints, it can be said that the waterfront is has a positive effect on the urban ecology, landscape, culture and entertainment, it than any kind of nature, are more profoundly revealed the connotation and extension of human history and culture.

**The ecological importance of waterscape space.** City waterfront is the most vigorous part of a city, is the confluence of waters and terrestrial ecosystems, while both the abundance of terrestrial and aquatic animal and plant resources, the formation of any other single ecosystem can match the unique ecological environment,

influenced by two kinds of ecological system, the diversity of ecological. Because the material and energy flow of high, waterfront area is rich in biodiversity and high productivity.

The waterfront and continue the urban life, carrying the water cycle, water storage and flood regulation, water conservation, and other operational function, but also can regulate temperature and humidity, purifying the air, dust collection noise and improve the urban microclimate, the effective regulation of the urban ecological environment, increase the density of urban natural environment, to make a sustained and healthy development.

**The importance of waterscape.** In the city the waters to its activity and penetrating into the landscape organization in the vibrant component, as an important part of city public open space, waterfront bear the green heart of the city, the city combined with the brilliant history and culture the essence, the formation of landscape space moving, and can provide close to nature function for the public, showing unique landscape image of city.

Therefore, the waterfront area can be used as a carrier of culture the existence of the soul in the city, it embodies the cultural accumulation city deep and rich material civilization. Therefore the waterscape is the human ideal of life and the ability to create in the natural water environment in the condensation and shape, is person and water combination of points, is the crystallization of human beings in the natural scenery of dumped into the emotional.

**The functional importance of waterfront space.** Waterfront area is a city life source, also is the city development and survival conditions. It provides irrigation, transport for the benefit of the city, and can be used as swimming, fishing, water skiing, skating, rowing and other water sports venues. In addition, channel for people and physical activities can slow down the road congestion, as an important aspect of city transportation system. More important is, water quality, water directly affects the city's production, life and development in the future. So the waterfront development and utilization, water flowing through the line and the quality and quantity of water for the city design is critical to decision making, also restricts the city renewal and development.

### City Waterscape Design Innovation Strategy

**Human nature design of waterscape.** The landscape design of waterfront city, should meet the people's needs of social contact. Who is the first essential factor of environment, social activities, is the main performing various activities, beneficiary. The environment must be with the people daily life close to the scale and facilities, make people feel warm, can attract and evoked participants play their creative potential in activity, thus a wider range of social contacts, exchange of ideas and culture sharing. City waterfront space design should provide diverse forms of activities, meet the demand of different levels, the life habits of the public forms of influence on the design of waterfront space and create a good social atmosphere.

Humanization of waterfront space design mainly includes the diverse hydrophilic form and activity form, transportation system, convenient facilities perfect function three aspects, do a good job of coordinating the development of these three aspects, realizing the common development of waterfront space landscape value, social value, ecological value.

**Humanistic design of regional waterscape.** Historical context includes the harmony between man and nature of the experience, it can provide a reference for the future development of human system is to promote cultural and ecological heritage means continuously, evolution.

Effects of different regions, different nationalities, different geological and topographical factors, different climatic conditions restrict the various environment, people's social activities, but also in different regions of the people in the environment improvement activities in the form of unique, adapt to the local environment, habits, customs code of conduct. This kind of phenomenon is particularly evident in the human architecture, landscape design activities, effective accumulated experience, analysis, summary of which is an important way to achieve sustainable development.

How to inherit and develop the local culture, tradition, the elements of traditional symbol design, knead central melt in the modern waterscape, endowed with new connotation, the landscape design of the new form, new meaning, new soul, is a key problem to be solved of landscape designers.

**Sustainable design of waterscape.** The concept of essential city waterscape design is a natural system based on self renewing regeneration design, including as much as possible to reduce interference and destruction of the natural system of self regeneration capacity, ability as far as possible to restore the natural regeneration of the destruction of the landscape, the maximum use natural regeneration ability of minimal design. In dealing with the effects of non biological natural process, the intervention of human activities on natural drop to a minimum, efficient use of natural resources, make full use of the natural system of self adjustment ability, self regeneration capacity. In effect to treat biological processes, including the maintenance of diversity of native habitat, maintaining diversity of animal, plant and microorganism. On the impact of the human process, sustainable landscape reflecting on the cultural heritage treasure, protect human cultural inheritance and continuity.

### Summary

Urban waterfront is the concentrated expression of the characteristics of meta Point City, people can get it from the landscape expression feel comprehensive impression of city natural environment, human environment, culture. Waterscape design in the new era should respect site based on the current situation, respect for local history and culture, natural environment protection design recovery waterfront, waterscape design should be combined with the ecological environment, has become a unique and comfortable city in the kind of space, to create a living environment, the city features, upgrade the city's landscape quality.

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