Wuhan City Park Landscape Design Based on River Culture

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Abstract. Urban parks, as one of the starting points of urban green development, are a composite product of the interaction between people and nature. They play an important role in displaying and continuing the city’s culture. Therefore, it is critical to attach importance to the design and renewal of urban parks. This article takes Wuhan City Park as the specific research object, and extracts the “water”, “fish” and “bubble” in the “river culture” as landscape design elements. To show, let people feel the baptism of urban culture while visiting the park, and re-entrust the park with the mission of inheriting cultural heritage.

1. Introduction
General Secretary Xi has delivered a series of important speeches on the theme of "Chinese Excellent Traditional Culture" since the 18th National Congress of the Communist Party of China. The report of the 19th National Congress of the Party also emphasized "We must strengthen cultural self-confidence and promote the prosperity of socialist culture. Obviously, the inheritance and development of culture plays a critical role in national politics and economy.

Wuhan is called "River City", and some people also call it "Lake City". Water nourishes the history and culture of Wuhan, nurtures countless people with lofty ideals and celebrities, and has also achieved the status of a thoroughfare in the nine provinces. "River culture" is the accumulation of Wuhan's natural landscape and human history, and it occupies an irreplaceable position. The continuation of the river culture is the development demand of Wuhan and the actual trend of Wuhan's urban landscape design. In view of this background, it is particularly important to discuss the concept.

2. Research overview
2.1. Venue overview
The design plot is located on the western edge of the urban area of Wuhan, Hubei Province, at the intersection of the Dongxihu District Third Ring Road and the Changqing Overpass. It is an open space between Zhanggongdi and Huasheng Hankou City Plaza (Figure 1).
The total area of the designed plot is about 9 hectares, the length is about 1 km, and the original greening rate is about 86%. However, it lacks the matching of middle-level shrubs and lower ground cover, and the plants need to be transformed in the later design.

A lot of ups and downs are seen in the plot so walking there is often difficult. The slope trend rises from east to west. There is a strip of dry creek running through from east to west in the middle. The height difference between the water surface and the surrounding terrain is obvious, with a maximum height difference of 5m. The east is the intersection under construction, the south is the 30-kilometer Zhanggong Dike, the west is the urban secondary road adjacent to the residential area, and the north is the Hankou Huasheng City Plaza community (Figure 2).

3. Design themes and ideas

3.1. Venue overview

The design theme is "Daier Jing Chuan Lin". The ancients said, "Water goes with the feather located on ship (a sign of promoting education and culture in ancient China), waiting someone to quiet (comfort) chuanlin (local people)." "Daier": means waiting, hoping that people will stop and watch; "quiet" means to create a peaceful space in the city; "chuan" means the endless stream of Wuhan Jianghe culture combines its wave pattern with the site to express people's yearning for freedom; "Lin" means fish scales, fish cakes, fish delicacies, etc., a specialty of East and West Lakes, symbolizing the unique fish culture. In the design, the "water", "fish" and "bubbles" of the river culture were extracted as elements of design evolution, which were blended with the park space planning, node planning, and public facility design (Figure 3).
3.2. Design ideas
The overall layout design of the scheme uses Jianghe culture as the basis. According to previous investigations, it is concluded that the flow of people is mostly concentrated in the north. Therefore, the north is positioned as a "smart and vigorous space", and the south landscape based on the lake view is an "inspiring and quiet space" to achieve a "combination of dynamic and static" to achieve a two-way positioning of the landscape level.

In consideration of the surrounding environment, the height difference of the base, cultural factors, and the flow of people, plan the location and quantity of the entrances and exits of the connecting nodes between urban roads and the land. Consider the planning and distribution of primary traffic and secondary traffic based on national road regulations, combined with road size, function, and site requirements. Finally, combined with the form of Pisces playing in the river culture, the specific styles of each district were designed to form the final plan (Figure 4).

4. Landscape structure and zoning planning

4.1. Venue overview and Landscape zoning
According to the topography and function of the park site in this plan, the plan is to form "one axis, two belts, three scenic spots, and eight districts" as a whole (see Figure 5). "One axis" refers to the landscape with regional culture built with water culture as the landscape axis; "two belts" refers to the two-dimensional landscape belt formed by the red ribbon runways on both sides of the park; "three scenic spots" refers to the garden The children's activity area, the park management area, and the central activity area are the three main landscape nodes; the "eight districts" are the eight functional areas planned in this plan.

In this design, the districts in the park are based on the river culture as the starting point, combined with the size of the space, the function and the flow of people. They are: entrance square area, children's activity area, park management area, central activity area, sparse forest vitality area, ecological entertainment area, water tourism area, and cultural leisure area (Figure 6).
4.2. Entrance Plaza Area

The entrance plaza area is the first impression of the park. It is the beginning stage of the project and it defines the style of the overall design. The paving form of the entrance, the style of the tree pond and the design of the rest pavilion are combined with the "fish element" of the Jianghe culture (Figure 7). The design of the rest pavilion uses the expression technique of obstructing scenery to induce the subsequent abundant landscape.

4.3. Children's activity area

The children's activity area is adjacent to the entrance plaza, which is the climax of this case. Children are curious about colorful things, and bright scenes help children grow up. In the design, fish elements and water elements are integrated into the paving. The paving materials use yellow, blue, green, and red environmentally friendly plastics. Yellow represents the mermaid pattern, blue represents the river water where the fish play, and red and green are dancing. Of seaweed (Figure 8). This paving material is flexible, reducing the risk of injury to children.

4.4. Park management area

The park management area is located in the central area, where important people are scattered. Out of the "people-centered" design concept, with a complete park management area, it is convenient for visitors to seek help, and it is also convenient for staff to provide fixed-point services. The design of the reception area is inspired by a special fish species in Wuhan-Wuchang fish. Its frame extracts the
appearance of the fish, and the surrounding paving form also adopts the pattern of fish on the plane, which is linked to the cultural theme and can give people culture. Experience (Figure 9).

Figure 9. Management center area (created by the author)

4.5. Central activity area
The central activity area is located at the intersection of the park and has functions of rest, viewing, gathering and walking. In the design, parametric expression techniques are used and organic symbols are repeatedly used to keep the structure, pavement, and rest chair consistent in form. The design combined with cultural elements is expressed in the plane effect of the structure, and the design of the structure is derived from fish tails and bubbles. After the evolution, frosted glass is used to construct the top of the structure, and the transparent effect can shading during the hot summer without blocking the sight of people looking up (Figure 10).

Figure 10. Central square area (self-made by the author)

4.6. Cultural leisure area
The cultural and leisure area is the ending stage of this project. The space is organized by dense forest combined with structures. The rhythmic life under the green forest and the green shadows looks for dynamic fashion in tranquility. The red ribbon corridor and rest seats are placed in combination with the trend of the lake surface, which can become objects for viewing and stopping. At the same time can also play a role in dividing space. The design combined with cultural elements is expressed in the plane effect, and the refined water pattern is transformed into a concise symbol, which is integrated into the plane design of the landscape bench and structure, just like a water wave overwhelming the river, which serves as a decoration The function of beautifying the space can also provide people with rest and shelter, which is practical (Figure 11).

Figure 11. Cultural leisure area (created by the author)
5. Plant design
Different regions breed different ecological plants. According to the geographical location of Wuhan City Park, a reasonable green plant arrangement should be selected (Figure 12).

![Plant configuration diagram](image1)

Figure 12. Plant configuration diagram (self-made by the author)

6. Public facilities design
Water culture theme bench design. The water culture theme bench is located in the children's activity area. The design is inspired by the "water pattern" element, and the form is like a long river. The appearance is blue and yellow, the two basic colors can produce a strong sense of vision. The design is a undulating style, which can meet the needs of people of all ages and heights, and achieve a humanized and personalized design. The height changes are 550mm, 450mm, 400mm, and 350mm respectively (Figure 13).

![Theme bench design](image2)

Figure 13. Theme bench design (author's self-made)

7. Conclusion
In the landscape design of Wuhan city park, this article uses plants, paving, public facilities, etc. as the design direction, and makes full use of its own environmental resources around the theme of river culture. Organically integrated with the landscape of people's leisure places.

The following enlightenments can be obtained in the landscape design of Wuhan city parks:
(1) Starting from its own regional culture, respecting natural conditions while retaining unique culture and continuing cultural elements.
(2) Starting from the overall and characteristics of the crowd, emphasizing the functional diversity of landscape design, and strengthening the functional layout and spatial experience, design a park design suitable for groups at all stages of the city.
(3) Respect the human-oriented design concept, design appropriate theme cultural sketches according to human psychological activities, strengthen the sense of experience and participation of tourists, and achieve the design points of serving people with complete park facilities.

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