

# Visual Expression of Space Art in Landscape Architecture

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**Keywords:** Visual Elements, Landscape Design, Space Art

**Abstract:** in the Process of Urban Construction, We Should Not Only Pay Attention to Economic Development and Construction, But Also Pay More Attention to the Improvement of Human Environment. as an Important Part of Urban Development Planning, the Design and Application of Landscape Meet People's Spiritual Needs. to Design a Landscape with Artistic and Practical Value, We Should Pay Attention to the Application of Visual Elements, Because People's First Impression of the Landscape Greatly Affects the Evaluation of the Landscape.

## 1. Introduction

“The Ear is the Sound, the Eye is the Colour”. the Body is in the Nature, and the Existence of Light is Inseparable from What We See and Feel. Light and Shadow Are Like Two Poles, Which Complement Each Other. They Can Not Only Be the Carrier of the Space Image, But Also the Main Body of the Space Atmosphere[1]. the Existence of Light and Shadow in the Garden Space between Sunrise and Sunset, the Change of Four Seasons and the Change of Day and Night Will Affect People's Emotional Ideology and Then Produce Different Visual Feelings. to Find the Unchanging Essence in Different Real Feelings and Changeable Image Feelings is Where the Significance of Visual Feeling Evaluation in the Garden Light and Shadow Space Lies.

## 2. Definition of Garden Space

“Space originates from Latin spatium, and the initial research on space theory comes from the field of physics and philosophy. The earliest cognition of space in China dates back to 2500 years ago. The description of space in Laozi's Tao Te Jing:” Cuan is an instrument, when it is not, it has its use. “. Chisel a house into a room, and when it is empty, it can be used as a room[2]. “ In Cihai, space is defined as two basic forms of moving material existence, which are formed philosophically with “time”. Space refers to the extensive ductility of material existence; time refers to the continuity and sequence of material movement process. Space and time are objective Hegel, a foreign philosopher, thinks that “space is a state of indifference and indifference which lies outside its own existence. That is to say, the existence of space depends on matter, which is an abstract form of direct externality. Lu yuanyixin (Japan) pointed out in the design of external space that the external space is defined by the framework from the nature, and is a purposeful external space created by people. From ancient times to now, there are endless explanations for the definition and research of space in various fields. It can be seen that space is not only the concept of philosophy, but also the category of aesthetics. It is not only a highly abstract, but also a concrete existence. There are thousands of worlds, no matter from the vast star sea to the sand dust, all exist in space[3]. In the study of landscape architecture, landscape space refers to the external space relative to architecture, and refers to the landscape area composed of plant, landscape, terrain, structure and other landscape elements within the scope of people's sight. It includes the layout of plane and the composition of facade, which is a multi-dimensional concept of comprehensive plane and facade treatment. With the development of landscape architecture and the integration of various fields, more and more people realize that garden space is not an isolated object for art appreciation. The purpose of garden landscape construction is to provide a place for people to communicate and integrate with nature. The concept of “harmony between man and nature” endows the construction

of garden space with the ideographic requirements of integrating feelings with scenery and integrating feelings with scenery. In other words, garden space is not only an art space, but also a living space. It is not only a concrete material space, but also an abstract spiritual space. Therefore, creating pleasant space is the fundamental purpose of landscape architecture design, and garden art is a space art.

### **3. The Relationship between Light and Shadow and Garden Space**

Bergson once said: “people always use space words to describe time, so that space and time can be interchanged”. The occurrence and change of light and shadow in the garden space makes the space become “the trace of time loss”. The pursuit of light and shadow in the garden space is similar to the essence of traditional Chinese culture, which emphasizes the virtual breaking through the real, transforming the real into the virtual, and blending the virtual and the real. Just as the blank in the traditional Chinese painting, “planning white as black” is a brief description of the object image of white contrast with black. The change of light and shadow is like the transformation of the virtual and the real to add a mysterious and illusory color to the garden space. In the garden space, light surrounds every corner in various forms, but the most intuitive feeling is that the sky is shadow, light is invisible, shadow is boundless, shadow and shadow overlap, interweave another gray experience space on the ground, so plastic imaging can highlight the change of space more than light, using light imaging, modeling with shadow, time flow, and artistic conception is leisurely[3]. The existence of shadow needs the light source, the projected object and the receiving surface. The changes of these three factors affect the changes of shadow. Therefore, the reasonable use of light source, the design of the projected object and the material and shape of the receiving surface can change the characteristics of shadow to enrich the garden space and endow the space with flexibility. Light is the source of all things. Light is a special artistic means for garden space. Although it is intangible and hard to capture, it is also an important element in design, and an important means to narrate emotion and set off atmosphere. On the one hand, the art of garden space originates from the designer's ingenuity, on the other hand, it lies in people's emotional experience, and the change of light and shadow is like the happiness to the soul when people's sensibility meets, and there is no trace of seeking time. The essence of light and shadow and the implication of garden space we pursue are the expression of natural feelings and the foresight of experience.



Fig.1 Silhouette

### **4. The Function of Light and Shadow in Garden Space**

#### **4.1 Landscape Space Sequence Guided by Light and Shadow**

When it comes to Chinese classical gardens, it can't help but remind people of the magnificence and solemnity of the royal gardens in the north and the freshness and elegance of the gardens in the south of the Yangtze River[4]. The classical gardens in Suzhou are more able to embody the gardening techniques of taking advantage of the small in the space and borrowing the scenery from the inside and outside. Their spatial layout is exquisite. If the Buddha doesn't design it, the changes

of light and shadow in the space are implicit and transparent, which condenses the endless sense of poetry and painting In a limited space. Using the light and elegant grey bricks, green tiles, white powder walls and “thin, leaky, wrinkled and ugly” stone to create the space atmosphere of Suzhou garden, which is “subtle in small, exquisite in scenery, valuable in change, and long in emotion”. Therefore, it is indispensable to understand and explore the light and shadow construction of Suzhou classical garden space for the analysis of the role of natural light and shadow in the garden space. Among Suzhou gardens, Liuyuan is more well-known[5]. After the garden is close to the residence, it is mainly divided into three scenic spots: West, middle and East, with mountain view as the long west area; middle area with both mountains and rivers, and east area with architecture as the winner, while middle and east area are the essence of the whole garden. The entrance space of the garden gradually promotes the spatial sequence, connects and penetrates each section of space through the change of light and shade, so as to organize the dynamic change of space.



Fig.2 Reflection

#### 4.2 Light and Shadow Define Space Domain

Located in the downtown area of guhuating, Mr. Feng Jizhong carried out the overall planning and design again in 1978. In order to protect the historical and cultural heritage of the city, the design concept takes the square tower building as the main part of the park with respect to history as the first. The large-scale brick carvings of Ming Dynasty, which are preserved in front of the square tower, cleverly handled the stone bridges and all kinds of ancient and famous trees of Song Dynasty, and the overall planning is adapted to local conditions[5]. To decorate pavilions and pavilions is to create a natural, quiet and ornamental historical and cultural garden. In the square tower Park, the cutting road in the park is the most spatial sense for people. The overall cutting road is 100 meters long, and the two walls are made of granite with height of 3 meters and width of 5 meters. Ancient trees are preserved on the rolling earth mountain on the side of the wall, and tall trees with dense shade are planted. In the cutting road space of the square tower Park, green plants are the top, granite on both sides is the spatial facade, and the pavement and At the bottom of the projection, when you see the entrance of the cutting road for the first time, the mottled trees on the ground define the garden space as two parts, one is bright and open, the other is like stepping into a deep valley, where the light and shadow have the meaning of predicting the conversion of space in advance. When you walk in the cutting road, a little light spot or light occasionally falls between the trees, giving people a sense of returning to nature, leaving the whole entity empty Add a touch of unreal color between. It can be seen that the definition of solid space needs to be completed by the bottom, the facade and the top. In the actual garden space, in addition to the solid elements, the outline boundary of the scene projection can also change people's visual perception of the solid space, so as to define the space field. In other words, light and shadow can define the space field by using the differences and commonalities of light and shadow to give people space Domain sense[6]. In the garden space, light and shadow, through the connection and organization with the garden entity elements, produce the physical space with significant difference between light and shade, so as to define the space field. The contrast between light and shadow can form a penetrating virtual

space interface, which is also one of the virtual landscapes in gardens. When the virtual of light and shadow is combined with the real of garden elements, there will be a variety of space fields.



Fig.3 Humble Administrator's Garden

### 4.3 Light and Shadow Adjust Spatial Scale

Light and shadow not only define the space domain, but also affect people's perception of space scale. The borrowed scene of water surface and mirror image, and the difference between light and shade will give people different sense of space scale. In a view of “who sits in the porch with whom” in the Humble Administrator's garden, the water surface is used to pass the originally small and slightly cramped space through the reflection of the water surface, enrich the spatial level, increase the spatial depth to expand the visual scale feeling of the space[7]; in one corner of the wall corner of the Humble Administrator's garden, one side of the two intersecting walls is covered by shadow, the other side is still bright, and the bright wall surface will obviously give people larger Volume sense, while the dark side gives people a sense of shrinking and retreating. German scholars call the relationship between the degree of light and darkness in space and the physical elements “space density”. The space density is determined by the relationship between the distance between the interface and the light intensity. When the distance increases or the light becomes brighter, the space density tends to decrease, which is different from the virtual reality in space Qu tonggong[8]. In the second picture, when we are in the dim indoor self view frame to watch the outdoor, there is a strong contrast between the black of the backlight surface around the indoor window frame and the bright and colorful outdoor. The backlight and silhouette are used to frame the external environment of the door and window frame. The two different density spaces inside and outside squeeze and penetrate each other, and the bright outdoor with small space density It makes people feel open, while the dark space with large space density makes people feel depressed, so as to connect the indoor vision with the external courtyard. It can be seen that the change of light intensity has no effect on the space itself formed by the objects. What is affected is the visual perception of the people who watch the scenery to the space, coordinate the position and volume of various elements in the garden space, and skillfully use various kinds of devices The appropriate spatial scale can be adjusted by light and shadow.

### 5. Visual Expression of Light and Shadow in Garden Space

“Color”, “shape” and “texture” are the three basic elements of object display and human feelings. The recognition of human vision and color depends on light; shadow deepens the three-dimensional sense and contour of the object; objects with different light and different viewing positions and the same material will also present different texture feelings, so the light and shadow in the space strongly affect “color The visual expression of shape and quality.

### 6. Conclusion

Light and shadow are the “invisible landscape” in nature, and light is the premise for people to watch all things. The organization of light and shadow space comes from the influence of light and shadow on people's vision[9]. When light acts on objects and produces a series of physical changes in projection, it can affect people's perception of the volume, texture, shape and color of each

element in the garden space, as well as the contrast of light and shadow. The relationship between light and shadow, acting on human vision, will guide people's visual effect and psychological feelings in the garden space, and people's aesthetic activity is also an emotional thinking activity. Therefore, understanding the changes of light and shadow in the garden space, perceiving the light and shadow, guiding and controlling the light and shadow are more conducive to expressing the atmosphere and artistic conception of the garden space to people.

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