

Influence of Cultural and Economic Factors on the Design Form of Canglang Pavilion

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Abstract: The design form is often influenced by the cultural and economic factors of its creation period, aligning with the aesthetic ideals of the specific era. The exploration of Chinese classical gardens in terms of site selection, layout, landscaping, lighting, and shadow has resulted in a rich and unique spatial design approach. The humanistic concepts underlying this aesthetics, such as “harmony between man and nature” and “emulating nature,” are fundamental factors in the formation and development of traditional Chinese garden construction.

This paper first analyzes the construction background of Canglang Pavilion from both cultural and economic perspectives. Secondly, it summarizes the role of the cultural environment in shaping the design form of Canglang Pavilion, including creating a “transformation of the real into the virtual” spatial form and fostering a spiritual orientation towards “returning to nature.” Building on this foundation, with references from ancient and contemporary literature, it explores the impact of economic factors on the design form of Canglang Pavilion, focusing on garden architecture, rock stacking techniques, and the cultivation of garden flora. The aim is to explore interpretative and appreciative methods and creative construction approaches that can be applied to enrich and diversify modern Chinese garden construction.

Keywords: culture, economy, design form, Canglang Pavilion

1. Introduction

The term “form” in the dictionary refers to shape, demeanor, or posture and is also used to describe changes in form. Originally a biological term, it represents various features that result from the long-term interaction between organisms and their environment. However, it has been widely applied in the field of art and design, encompassing abstract conceptual forms and objective, real-world forms. In this context, real-world forms include natural forms and humanistic forms. In a broad sense, “design form” not only encompasses the shape of a product but also represents a certain state expressed by the visual system that constitutes the product and the functional representation of the relationship between its visual elements and physical structure [1]. In a narrow sense, “design form” is defined as the shape, form, and graphics of a designed product, tending to describe the visual external image of a product.

Design is the process of artificially constructing or depicting things. Design forms in classical gardens include mountain stacking, water management, plant arrangement, architectural construction,

inscriptions, couplets, carvings, and furniture layout. The formation and development of the forms of various landscape elements in the site are closely related to the cultural and economic contexts of their respective eras. The design forms of garden landscapes are the result of the joint interaction of internal and external elements. They encompass various complexities and result from balancing numerous factors such as the site and functionality. This outcome provides people with artistic aesthetic enjoyment in terms of painting, poetry, and Zen, while also conveying a wealth of information related to Chinese traditional culture.

This paper conducts an analysis and study using the specific case of Suzhou's Canglang Pavilion, combining the meaning of design forms. It elucidates the origins of Canglang Pavilion's design form from both cultural and economic perspectives. Drawing on literary materials, it analyzes the influence of the cultural environment on Canglang Pavilion's spatial form and spiritual orientation. Based on this, it explores the role of economic factors in garden architecture, rock stacking techniques, and garden flora, offering interpretative and appreciative methods as well as creative construction patterns for modern garden design.

2. Background Environment of Canglang Pavilion Construction

2.1. Cultural Environment

The cultural development during the Song Dynasty, especially in the Northern and Southern Song periods, was particularly prominent and played a significant role in the overall history of Chinese culture. Chen Yinke once said, "The cultural evolution of the Chinese nation has spanned thousands of years, reaching its peak in the era of the Northern and Southern Song Dynasties." During this period, Neo-Confucianism emerged, enriching and developing the content of traditional Confucianism. It emphasized ethical morality and obedience to the laws of heaven and earth. Zen Buddhism derived from Buddhism, and Daoist thought also saw significant development, all of which had a crucial impact on garden development. Influenced by "Neo-Confucianism" and "Zen Buddhism," people sought inner experiences, valued contemplation of the meaning, values, and realms of life. The development of "mind studies" and the influence of Zen Buddhism reduced the utilitarian nature of aesthetic functions during the Song Dynasty, emphasizing inner clarity and tranquility, as well as the pursuit of harmony between humans and nature. The theories of "mind-painting" and "simplicity" had a wide-ranging impact. In contrast to the past focus on the direct portrayal of objects, the aesthetic forms of this period tended to focus on the overall essence of things.

Song Dynasty gardens were heavily influenced by poetry and painting, giving rise to "freehand landscape gardens" built based on nature. Landscape painting considered the representation of space a major concern, and painting theories like "inspired imagination" by Gu Kaizhi and "inner source of the mind" by Zhang Mie required the combination of "scenery" and "emotion," "form" and "spirit." For the representation of spatial feelings, it was essential to combine both objective physical objects and the imagination of subjective consciousness, achieving a synthesis of the two. The relationship between landscape painting, landscape poetry, and landscape gardens was just beginning to take shape in the Tang Dynasty, but it was fully established in the Song Dynasty, greatly influencing the overall layout and planning of gardens. For gardens, a unique spatial consciousness was required for spatial expansion, breaking the constraints of space and time, creating a sense of "narrative" for the site, and enhancing the continuous experiential process in fluid spaces.

2.2. Economic Environment

Economic factors played a guiding and supportive role in the formation of Suzhou's classical gardens, which served as comprehensive complexes with residential functions and various artistic elements. They contributed to fulfilling people's desires for both urban material comforts and the natural charm

of “urban gardens.” While the economy in the Guanzhong region of the Song Dynasty had declined, the commercial economy and handicraft industry in the Jiangnan region experienced unprecedented prosperity. Small-scale farming steadily grew, and the enclosed marketplace system gradually broke down, giving rise to prosperous commercial streets in the Jiangnan region. The highly developed commodity economy nurtured a societal culture of indulgence, which drove the development of private gardens.

During the construction period of Canglang Pavilion, the Jiangnan region was affluent, and classical gardens were flourishing. Gu Jiegang’s “Notes on Suzhou Historical Records” recorded, “During these hundred years, the wealth of the city exceeded that of the Tang era. The city was filled with pavilions and towers, and bridges and walkways crisscrossed like rainbows. The streets in the suburbs were narrow and winding, all paved with bricks. The number of carriages and palanquins and the grandeur of the people surpassed those of the southeastern regions” [1], describing the prosperity of the Suzhou region. These classical gardens were operated by local literati, bureaucrats, and landlords. Some pursued luxurious lifestyles, while others used the grandeur of their gardens as a means of gaining fame and prestige, boasting to one another. Literary figures and bureaucrats from other regions often envied the tranquility and comfort of Suzhou and came here for leisure and retirement. To some extent, this indirectly encouraged the design forms in classical gardens to lean towards the use of valuable stones for constructing mountains and symbolic plant arrangements. The contradictory situation of economic prosperity and national weakness gave rise to a lavish and extravagant atmosphere in the court and society. In this atmosphere, from emperors to commoners, there was a surge in construction and expansion of gardens. Furthermore, the flourishing economy also propelled technological advancements, greatly enriching the content and forms of gardens. It laid a solid material foundation for the development of classical gardens in terms of horticultural techniques, house construction techniques, and rock stacking techniques.

3. The Influence of Cultural Environment on the Design Form of Canglang Pavilion

3.1. Creating a “Transformation of the Real into the Virtual” Spatial Form

Influenced by Zen Buddhism, Neo-Confucianism, and Daoist philosophies, literati who built gardens during this era focused more on their inner experiences and the enjoyment of their spiritual worlds, rather than the mere sensory experience. These literati constructed gardens primarily to seek a place for inner solace, where they could express their spiritual world of appreciating picturesque landscapes and renouncing worldly ambitions. They aimed to find a secluded refuge, briefly escaping the worldly entanglements. Consequently, gardens during this period often exhibited the concept of “avoiding the real to embrace the virtual,” emphasizing the creation of a “virtual” spiritual experience through the combination of spatial rules.

The concept of “transforming the real into the virtual” was pivotal to Canglang Pavilion. It achieved this by dividing space through the combination of various objects, extending space infinitely to break the spatial “reality.” As Mr. Peng Yigang mentioned in his book “Analysis of Classical Chinese Gardens,” “In the Jiangnan region, due to operating within extremely limited space, they spared no effort to increase the depth of the scenery for profound experiences” [2]. In Canglang Pavilion, this extension of space was often achieved by using winding corridors and vegetation surrounding the buildings. This not only served a shielding function but also divided and stretched space, transforming the finite into the infinite. This was not just an expansion of physical space but also an “infinite extension” of time. Apart from the subtlety created by the winding spatial design, gardens also employed techniques of concealment and revelation to segment and merge multiple spaces. “Small windows, unintentional paintings” used the technique of transparency to create a sense of endless depth. Walls, flowing water, blind windows, and simulated structures deceived the visual

senses, creating an imaginative atmosphere of “more scenery beyond the scenery, more forms beyond the forms.”

3.2. Fostering a Spiritual Orientation of “Returning to Nature”

During the Southern Song period, private gardens were mostly created by literati, who were deeply influenced by Neo-Confucianism and the profound impact of “mind studies.” In this context, a tendency toward naturalistic and freehand garden design emerged as a consensus among literati garden builders. Therefore, literati aimed to express the “mood” and “spirit” of their gardens and paid great attention to the relationship between architecture, the environment, and people. Many literati were enthusiastic about returning to nature, aspiring to achieve the state of “harmony between man and nature” [3]. They incorporated techniques from poetry and painting into garden construction, with elements such as poetry, painting, and calligraphy permeating throughout the gardens. This was evident in inscriptions, couplets, and decorative elements. Furthermore, the names of various elements within the garden often reflected a longing for and pursuit of nature, such as the “Fish Viewing Spot,” “Emerald Serenity,” and “Mountain-viewing Pavilion” in Canglang Pavilion, all conveying a hidden desire to “return to nature.”

This spiritual orientation of returning to nature and aligning with nature also directly influenced the overall layout of Canglang Pavilion. Su Shunqin initially abandoned extensive artificial construction and alteration, opting instead for a simple and rational approach based on the site’s topography. He preserved the extensive water bodies, mountains, and existing bamboo groves in the garden. Houses were constructed between the mountains and bamboo groves, creating an architectural ensemble nestled amidst the natural environment. This integration of architecture and nature formed the overall layout of “mountains and waters first, followed by buildings,” distinguishing it as one of the characteristics that set it apart from other Suzhou gardens.

4. The Influence of the Economic Environment on the Design Form of Canglang Pavilion

4.1. Promoting the Enrichment of Garden Architectural Forms

The rapid economic development during this era drove advancements in science and technology. Two significant treatises, Li Mingzhong’s “Yingzao Fashi” and Yu Hao’s “Mu Jing,” summarized contemporary construction techniques and practical experience, confirming the highly advanced state of construction technology at the time. Classical Chinese gardens typically featured natural landscapes as their compositional themes, with architecture serving the purpose of scenic observation and ornamentation. Garden architecture, being a human-made element in opposition to the natural landscape, required site-specific construction, making the most of natural topography and landforms to achieve a layout tailored to the site. The highly unified blend of natural beauty and artificial beauty was precisely the ideal pursued continuously in classical Chinese gardens.

In the paintings of the Song Dynasty, one can discern the richness of architectural styles prevalent during that era. Various architectural structures, roof designs, bridge styles, as well as buildings nestled against mountains and spanning across water bodies, serve as testament to the highly advanced architectural techniques of the Song Dynasty. These techniques laid a solid technological foundation for the realization of garden designs. Moreover, this refined architectural expertise propelled the continuous diversification of garden architectural forms. An array of bridges, corridors, architectural structures, and layouts greatly enriched the architectural forms within gardens, fostering the development of garden design. Consequently, in the case of Canglang Garden, architectural diversity abounds. Elements such as gates, pavilions, terraces, kiosks, pavilions, corridors, towers, halls, and ancestral halls are prevalent. These architectural components generally exhibit varying sizes and shapes, each serving distinct functions. Depending on the specific functional requirements,

they can be independently placed or combined within a group using different arrangements of corridors and walls. This congregation of architectural elements results in a richly varied architectural outline that harmoniously complements the surrounding natural scenery.

4.2. Advancement in the Art of Creating Rockery Through Economic Environment

In the context of garden spaces, rocks and stones serve as indispensable elements connecting the landscape. Within the artistic presentation of arranging rocks and creating artificial hills, the technique of placing stones plays a crucial role. In garden design, the presence of hills is essential; indeed, it can be said that a garden is not complete without them. The importance of “hills” as the structural backbone of gardens cannot be underestimated. Creating hills involves the process of using natural rocks and stones to construct artificial hills, a craft known as “rockery.” These constructed hills typically do not exceed eight to nine feet in height, yet they can effectively emulate the grandeur of real mountains, incorporating features like peaks, ridges, valleys, cliffs, and precipices on a smaller scale. Craftsmen extensively employ various types of stones with distinct shapes, textures, and colors. They adopt different stacking styles to create various schools or traditions of rockery, owing to the influence of geographical conditions and diverse climates in different regions, resulting in distinct regional styles of garden rockery.

During the Song Dynasty, the art of garden rockery witnessed significant advancement. Moreover, the appreciation and collection of ornamental stones gained increasing prominence during this period. There even emerged specialized artisans dedicated to the craft of rockery construction. The variety of ornamental stones available for appreciation was exceptionally rich, with more than eighty documented types according to the “Yunlin Shipu” (Catalog of Cloud Forest Stones). Among these, Taihu stones, and especially Taihu Lake stones, held the most representative status. [4] The relationship between Taihu Lake stones and garden design can be considered as a part within the whole, with Taihu stones being remarkable specimens in the culture of stone appreciation. The renowned calligrapher Mi Fu of the Song Dynasty proposed the “Four Characteristics of Stones,” namely, “thin,” “perforated,” “wrinkled,” and “transparent,” in his work “Suyuan Shipu” (Catalog of Stones from the Su Garden). This not only established a standardized criterion for the appreciation of mountain stones but also provided a comprehensive overview of the aesthetics of Taihu stones. [5] Canglang Garden incorporated Taihu Lake stones in its artificial hills and lake scenes, resulting in an arrangement where rockeries were interspersed, offering variations and imbuing the garden’s terrain with a more three-dimensional and intricate appearance.

4.3. Diversification of Plant Varieties in Garden Floriculture

During this period, the cultivation techniques for trees and flowers saw further development, building upon the achievements of the Tang Dynasty. “Luoyang Huamu Ji” records more than two hundred species of ornamental plants. Techniques for cultivating ornamental trees and flowers in gardens improved, and horticultural practices advanced. Grafting and the introduction of domesticated plants became common methods, leading to a proliferation of methods and literature related to flower cultivation [6].

Historically, literati and scholars held a special fondness for bamboo. They personified flowers and regarded bamboo as elegant, graceful, and imbued with character. Bamboo was seen as a symbol of humility, moral integrity, and resilience—a representation of noble character. It was often grouped with plum, orchid, and chrysanthemum as the “Four Gentlemen.” This natural and unadorned style made bamboo one of the most primitive and popular garden plants in classical gardens, characterized by its abundant lush greenery. Canglang Pavilion featured a wide variety of bamboo species, including filial piety bamboo, red rooster bamboo, fei white bamboo, emerald bamboo, arhat bamboo,

and goose feather bamboo. Bamboo was used as an embellishment in the garden, creating vivid scenes of pink walls and green bamboo, resembling a “wall as paper, bamboo as a painting.” The interplay of pink walls and bamboo shadows reflected traditional painting techniques in the portrayal of bamboo. Additionally, Canglang Pavilion also included over forty species of other plants, including tall trees, shrubs, herbaceous plants, and aquatic plants.

5. Conclusion

From the perspective of garden design, the Suzhou classical garden system, to which Canglang Pavilion belongs, has always been an important carrier of the reclusive culture. The literati who managed these gardens were leaders of refined culture in ancient society, often infusing gardens with qualities of “purity” and “elegance.” From the standpoint of design forms, there is a correlation between landscape painting and classical Suzhou gardens in their depiction of nature. Culture and economic factors have a profound influence on the products of an era, and Canglang Pavilion, influenced by the economic and cultural environment of its time, presents an image of transformation from the real to the virtual and simplicity in nature, manifesting the spiritual pursuits of its builders—escape from the world and return to nature—in front of the world.

Represented by Canglang Pavilion, Suzhou classical gardens amalgamate factors such as culture and economy into their design forms, forming precious cultural heritage that is passed down. In the current stage of landscape design, formal languages are often extracted from the design forms of classical gardens. For example, the technique of mimicking nature’s portrayal of outdoor spaces is used in courtyards of public buildings. The use of traditional rock stacking art to create mountain and water garden landscapes is another example. These design techniques explicitly acknowledge the necessity of extracting and transforming the design forms involved in classical gardens for the development of new Chinese garden design. Through the investigation and research of design forms in garden heritage, exploring appreciative methods and creative construction patterns that can be referenced, we can achieve a balance between tradition and innovation, making Chinese garden construction even more rich and diverse.

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