

Application of Traditional Chinese Elements in Modern Landscape and Architectural Design

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Abstract: The accelerating process of urbanization has driven landscape architecture toward functionalization and standardization; however, Westernized design has led to a severe loss of cultural identity. Centered on traditional Chinese elements, this paper explores the connotative features of natural imagery, spatial creation, and cultural symbols. It proposes three application principles — cultural translation, functional adaptation, and ecological integration — and clarifies four-dimensional application paths involving landscape space, architectural form, decorative details, and plant configuration. Through case studies such as the new Suzhou Garden Museum and Beijing Olympic Forest Park, the paper analyzes modern practices and value transformation approaches of traditional elements.

Keywords: Traditional Chinese Elements; Modern Landscape Architecture; Architectural Design; Cultural Translation; Spatial Creation; Ecological Integration

1. Introduction

Traditional Chinese gardens embody the philosophy of harmony between humans and nature, encapsulating unique aesthetics of natural landscapes and spatial beauty, and serving as vital carriers of national culture. However, modern landscape design's excessive pursuit of standardization and functionality, coupled with the blind imitation of Western models, has led to severe cultural homogenization and weakened the spiritual value of gardens [1]. It is therefore urgent to explore organic integration paths between traditional elements and modern design, so as to inherit cultural connotations and aesthetic qualities while meeting functional and ecological demands.

2. Core Types of Traditional Chinese Elements in Modern Landscape and Architectural Design

2.1 Elements of Natural Imagery

In landscape design, elements of natural imagery embody the intuitive expression of learning from nature. Centered on mountains and water, they reproduce natural scenes through the techniques of rockery building and water management—for example, Taihu stones symbolize the essential characteristics of mountains and rivers. Plant imagery conveys emotions through metaphor, such as the “Three Friends of Winter” representing the noble character of scholars. Plant arrangements emphasize achieving a four-season landscape effect, reflecting the rhythmic changes of nature. Astronomical imagery employs features like moon gates to guide viewers in observing the moon, thereby reinforcing the close connection between the garden and nature.

2.2 Elements of Spatial Creation

Spatial creation elements in gardens are key to achieving the aesthetic concept of “greatness within smallness.” Through division, composition, and visual guidance, physical limitations are transcended to form multi-layered narrative experiences. Core techniques include borrowed scenery (jie jing), framed scenery (kuang jing), leaking scenery (lou jing), and opposing scenery (dui jing). Each method possesses distinct spatial logic and implementation pathways. Borrowed scenery can be categorized as distant, near, upward, or downward borrowing, expanding the visual depth. Framed scenery uses window frames to compose picturesque views, enhancing artistic appreciation. Leaking scenery creates a sense of hazy charm, increasing the pleasure of exploration. Opposing scenery forms visual

correspondence between scenes, thereby enhancing the spatial order of the overall environment.

2.3 Elements of Cultural Symbols

Cultural symbol elements in gardens carry national memory and value, mainly including three categories: plaques and couplets, auspicious patterns, and traditional colors. Plaques and couplets convey the cultural theme of a garden through written expression — for instance, the “Yifeng Zhibai Pavilion” in Suzhou’s Lion Grove Garden highlights the garden’s scenic features. Auspicious patterns such as dragon and phoenix motifs symbolize good fortune, while peony motifs represent wealth and prosperity. Traditional colors — blue, red, yellow, white, and black — are used to create garden atmospheres: blue is often applied to eave decorations, red to lacquered parts, yellow is reserved for imperial use, white evokes a sense of simplicity, and black enhances the depth and layering of the garden space.

3. Principles for Applying Traditional Chinese Elements in Modern Landscape and Architectural Design

3.1 Principle of Cultural Translation

The principle of cultural translation emphasizes extracting the spiritual essence from traditional elements and reconstructing it using modern design approaches, specifically through three steps: deconstruction, connotation extraction, and modern reconstruction [2]. For example, when translating the design of a traditional pavilion, its open and transparent functions and connotations should be retained while adopting modern materials such as steel structures and glass curtain walls. The key to cultural translation lies in achieving both form and spirit — for instance, when reinterpreting mountain and water elements, designers can simulate natural textures and use modern technology to create light and shadow effects, balancing traditional connotations with contemporary needs.

3.2 Principle of Functional Adaptation

The principle of functional adaptation highlights that traditional elements should serve the core functions of modern landscape design, including leisure, ecology, cultural display, and circulation organization. In leisure space design, the corridor element can be transformed into a modern covered walkway equipped with seating, shading devices, and accessible passages. From an ecological perspective, traditional water management techniques can be integrated with sponge city technologies to form vegetated swales and infiltration ponds that provide both drainage and purification functions. In terms of cultural display, plaques and couplets can be adapted into signage systems that combine traditional poetry with modern guidance. This principle requires differentiated applications of traditional elements according to the type of landscape: urban parks should emphasize practicality and public accessibility, while cultural theme parks may focus on deepening traditional connotations and enhancing immersive experiences.

3.3 Principle of Ecological Integration

The principle of ecological integration advocates combining traditional elements with modern ecological concepts and technologies to promote sustainable development in landscape design while inheriting the wisdom of harmony between humans and nature. Traditional ecological ideas in classical gardens — such as plant composition and water self-circulation — can be integrated with modern technology to improve ecological efficiency. In plant configuration, applying the concept of four-season scenery and using native species can reduce costs while protecting the environment. In water system design, combining traditional water management techniques with purification technologies enables self-circulating water systems. Regarding building materials, adopting eco-friendly materials such as recycled stone and bamboo-wood composites preserves traditional characteristics while meeting environmental protection requirements.

4. Practical Application Paths of Traditional Chinese Elements in Modern Landscape and Architectural Design

4.1 Landscape Space Construction: Reshaping Modern Spatial Hierarchy through Traditional Techniques

In large-scale urban park design, the technique of distant borrowing (yuan jie) can be employed to incorporate surrounding natural landscapes or landmark buildings into the park's visual field. For example, during the design of Beijing Olympic Forest Park, the open western lawn and viewing platform were used to visually borrow the distant Olympic Tower, creating a unique spatial effect that connects park scenery with urban vistas. Within the park, multiple visual corridors are arranged, using variations in plant density to guide the viewer's gaze toward the borrowed scenery, thereby enhancing the sense of spatial depth [3].

In medium-scale community garden design, the framed scenery (kuang jing) technique can be used to create localized landscape focal points. For instance, at the community entrance, fan-shaped or hexagonal windows in a modern style can be installed, with traditional plants such as bamboo or plum trees planted inside the frame for viewing. From outside the garden, viewers can appreciate a "scene within a frame" visual effect. The window frame can be made of modern materials such as aluminum alloy or stainless steel, coated with grayish-blue paint to retain the traditional aesthetic characteristics of framed scenery while meeting the durability requirements of modern communities.

In small-scale courtyard landscape design, the leaking scenery (lou jing) technique can be used to create a subtle and implicit spatial atmosphere. For example, modern-style perforated walls can be installed in courtyards using precast concrete components carved with traditional cloud or geometric patterns. On one side of the wall, plants such as banana or rose bushes can be planted, while on the other side seating areas can be arranged. Viewers seated on the benches can appreciate the plant scenery on the opposite side through the hollowed patterns of the wall, forming a hazy, semi-concealed visual effect of "seeing the scene through separation." In addition, the perforated wall can serve to divide the courtyard into resting and planting areas, enhancing the spatial hierarchy of the environment.

4.2 Architectural Form Innovation: Reconstructing Modern Architectural Images through Traditional Prototypes

In the modern design of pavilions, the traditional pointed roof (cuanjian ding) serves as the core formal prototype. Modern pavilion design can employ a steel structure to form the skeleton of the pointed roof, replacing the traditional wooden framework. The surface of the structure can be covered with titanium-zinc panels or glass; when oxidized, the titanium-zinc panels display a grayish-blue tone similar to traditional roof tiles. The pavilion's columns can be made of concrete wrapped in bamboo to preserve the texture of traditional wooden pillars. Meanwhile, the spatial dimensions of the pavilion are expanded to meet modern leisure needs, with circular seating and charging ports installed inside to accommodate multiple users and electronic devices. For instance, the Rockery Pavilion in the new Suzhou Garden Museum adopts the traditional pointed-roof pavilion as its prototype, constructed with steel and glass. Beneath the pavilion, an artificial rockery is arranged, reflecting the traditional aesthetic of harmony between pavilion and mountain while fulfilling modern functional requirements in landscape design.

In the modern design of corridors, the traditional prototypes of curved and straight galleries can be integrated with contemporary circulation functions. Modern corridors adopt linear layouts, with routes adjusted according to the site's topography to form a combination of curved and straight segments. The roof is built with steel and glass instead of traditional timber and tiles, and traditional geometric patterns such as huiwen can be printed on the glass surface, serving both shading and cultural expression purposes. Transparent railings made of stainless steel are installed on both sides, with their forms inspired by the traditional Wuwangkao railing style. Inside the corridor, LED light strips are embedded, creating a meandering light-and-shadow effect when illuminated at night. For example, the landscape corridor in Shanghai Chenshan Botanical Garden draws inspiration from the traditional curved corridor prototype, integrating modern materials and lighting technology to function as both a transportation hub connecting different exhibition areas and a leisure space.

In the modern design of waterside pavilions (xie), the traditional prototype of building along the water's edge can be integrated with contemporary ecological concepts. Modern waterside pavilions employ cantilevered structures that extend the building body over the water surface, supported by

concrete columns underneath to avoid damaging the aquatic ecosystem. The building façade uses glass curtain walls instead of traditional wooden lattice panels, creating a seamless integration between the indoor space and the surrounding water scenery. The roof adopts a flat design planted with greenery, forming a distinctive rooftop garden. Inside the pavilion, tea lounges and viewing platforms are arranged to meet visitors' needs for tea drinking and waterscape appreciation.

4.3 Decorative Detail Expression: Embellishing Modern Landscape Nodes with Traditional Symbols

In pavement design, traditional auspicious patterns can be transformed into modern paving motifs. For example, in the paving of an entrance plaza, granite slabs can be arranged to form traditional patterns such as auspicious clouds or peony motifs. These patterns are distinguished by the use of stones in different colors—for instance, grayish-blue stone can be used as the background color, while sesame-white stone serves as the main motif. In courtyard pathways, permeable bricks can be assembled to form traditional huiwen (meander) patterns. The use of permeable bricks not only meets modern ecological requirements for sponge city construction but also conveys traditional cultural significance. The scale of the paving patterns should be adjusted according to the spatial size: patterns in larger spaces can be appropriately enlarged, while those in smaller spaces should be reduced in scale.

In railing design, the form of traditional railings can be integrated with modern safety standards. For instance, in designing lakeside railings, the main body can be made of stainless steel, with vertical bars shaped to resemble traditional bamboo joints and horizontal bars imitating traditional wooden mortise-and-tenon structures. The surface of the railing can be coated with grayish-blue paint to harmonize with the surrounding landscape. Small lantern-shaped lamps in traditional style can be suspended from the railing, enhancing the overall decorative effect when illuminated at night.

In lighting design, the forms of traditional lamps can be combined with modern lighting technology. For example, courtyard lamps in gardens can adopt the shape of traditional palace lanterns, with glass lampshades printed with traditional landscape patterns. The lamp posts can be made of stainless steel, modeled after traditional wooden pillars, and fitted with LED bulbs inside. The height of the lamps can be adjusted based on spatial requirements — for example, plaza lamps can be 4–6 meters tall, while courtyard lamps can be 2–3 meters in height.

In signage design, traditional plaque and couplet elements can be integrated with modern wayfinding functions. For instance, guideboards within a park can be designed in the shape of traditional plaques. The signboard surface can be made of solid wood engraved with wayfinding information, using kaishu (regular script) or xingshu (running script) calligraphy styles. The top of the signboard can feature a traditional flying eave form to enhance its decorative quality, and a QR code can be added for visitors to scan and access detailed audio guides.

4.4 Optimization of Plant Configuration: Creating Modern Plant Landscapes through Traditional Artistic Conception

In symbolic plant configurations, traditional plants with cultural meanings can be integrated with modern landscape needs. For instance, in the cultural exhibition areas of gardens, the Three Friends of Winter — pine, bamboo, and plum — can be planted together, arranged with pine as the background, bamboo as the middle layer, and plum as the foreground. Tall black pines or oil pines can be chosen for the pine layer, clumping species such as *Phyllostachys pubescens* or purple bamboo for the bamboo layer, and ornamental red or white plum varieties for the foreground. Stone benches and ornamental rocks can be placed nearby to form the traditional composition of pine, bamboo, plum, and stone, symbolizing perseverance and resilience. Modern pruning techniques should be used to maintain aesthetic plant forms while avoiding excessive trimming that might hinder growth.

In four-season plant configurations, traditional seasonal plants can be combined with modern ecological species. For spring, plants such as crabapple, cherry blossom, and winter jasmine can be used to create a vibrant flowering landscape. For summer, lotus, crepe myrtle, and pomegranate can be selected to form a lush and shaded scene. For autumn, osmanthus, ginkgo, and sweetgum can be planted to create fragrant and colorful fall scenery. For winter, wintersweet, nandina, and ivy can be used to compose a distinctive evergreen and plum-viewing landscape.

The traditional “tree–shrub–groundcover” layered planting method can be integrated with modern ecological principles to build three-tiered plant communities — tree, shrub, and groundcover layers — within ecological protection zones of gardens. The tree layer can consist of native species such as

camphor (*Cinnamomum camphora*), Chinese hackberry (*Celtis sinensis*), and goldenrain tree (*Koelreuteria paniculata*). The shrub layer can include native species such as gardenia, azalea, and hibiscus, while the groundcover layer can feature *Ophiopogon japonicus*, iris, and oxalis. Drawing from traditional experience with shade-tolerant understory plants, hosta and *Ajuga reptans* can be planted beneath trees to increase green coverage. The design of plant communities should consider ecological compatibility among species to prevent interspecies competition and ensure sustainable ecological balance.

5. Conclusion

This paper systematically explores the application of traditional elements in modern landscape architecture, revealing the importance of cultural translation and ecological integration. It emphasizes the need to integrate regional culture and modern technology, overcome homogenization, and achieve harmonious coexistence between tradition and modernity. Future design practices should balance the spiritual core of tradition with the demands of modernization, creating landscape architecture that embodies both national character and a sense of the times, thereby promoting the innovative development of Chinese traditional garden culture.

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