Penetration and Prominence of Regional Culture in Urban Landscape Design

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Abstract. Urban development should get rid of the stereotypical design and planning mistakes, so as to pursue the prominence of local characteristic culture, bring the expression of regional culture with landscape design, and make the city more characteristic and impressive. In urban landscape design, it is necessary to excavate regional cultural elements, attend to the regional culture, and truly integrate regional cultural characteristics into urban landscape design. This work mainly discussed the penetration and prominence of regional culture in urban landscape design, and reflected on the embedded ideas and strategies in urban landscape design of urban regional culture through taking Luoyang as an example, so as to create a vivid city card with urban landscape design.

Keywords: Urban landscape, Regional culture, Design, Penetration.

1. Introduction
The regional culture is a card of the city characteristic display, and the urban landscape is the display window of urban image and civilization. Through integrating regional culture into landscape design, the characteristic display card of a city can be more vivid and memorable. In the current urban landscape design, the penetration and prominence of regional culture is the general trend.

2. Concept of Regional Culture
Regional culture refers to the cultural form with a long history and unique connotation and value in a specific region. Different regions have different customs, and people from different regions also carry their distinctive characters. Regional culture not only refers to natural landscape and resources such as landform, climate and vegetation, but also refers to social and cultural aspects such as basic life necessities, religious belief, history and culture, local conditions and customs. Region has certain boundaries, characteristics and functions, and culture is also marked with regional brand based on specific environment. Regional culture is rich in content and can be divided into explicit culture and implicit culture according to its existing form [1]. The explicit culture refers to the material culture that people can see and touch, while the implicit culture refers to the system culture and spiritual culture in terms of thought and behavior. The specific classification is shown in Fig. 1.
Fig. 1. Classification of regional culture

3. Correlation Between Regional Culture and Urban Landscape
In the process of urban development, the character of the city, especially the landscape and the regional culture of the city, is the relationship of interaction and mutual construction. Urban regional culture is the comprehensive crystallization of all spiritual civilization and material civilization accumulated in the historical process. The modern urban landscape design should have its own uniqueness, so as to construct the unique visual memory and cultural interpretation of the city, and present and analyze the unique regional culture of the city. Under the guidance of the urban landscape with characteristic culture, the city can have a sense of cultural identity, highlight its uniqueness, and no longer "converge" with other city images, so that the city can generate cohesion and memory points. Regional culture is the root of urban charm and attraction and the spirit of the city. As a carrier of urban regional culture, urban landscape can construct urban public psychology. The regional culture that belongs to the city is the source of belonging and the stimulation of cohesion. With the participation of regional culture, urban landscape becomes the language of the city, and constantly tells the charm of the city in each corner of the city, which has become the medium for people to interpret and understand the city [2].

4. The Permeation Principle of Regional Culture in Urban Landscape Design

4.1. Respect urban natural conditions

4.1.1. Respect climate conditions. The application of regional culture in urban landscape design should respect the local climatic conditions, this is because the climatic conditions in different regions are different, and the urban landscape design under different climatic conditions is also very different. In southern China, the temperature is high in summer and the climate is humid, so the landscape design of many cities can be carried out according to the climatic conditions. For example, in order to adapt to the humid climate, the house design of Kulangsu pays great attention to permeability. In the process of landscape design, the subtropical scenery is the main theme. By combining featured landscape, landscape nodes and green belts, the charming coastal landscape belt is designed while respecting the climatic elements and topography of Kulangsu.

4.1.2. Respect topography. The application of regional culture in urban landscape design should respect the topography of the city, and the requirements of different landforms such as plateau, flat...
land, basin and hilly land are also different. Therefore, designers should combine regional culture with topography when using regional culture. For example, the landscape design of Dalian is mainly designed according to the hilly terrain, which makes the landscape design not only full of cultural charm, but also in line with the local topography.

4.1.3. Respect indigenous plants. The application of regional culture in urban landscape design should respect the indigenous plants of the city. Affected by geographical conditions, indigenous plants are also different in different regions. As an important resource for urban landscape design, indigenous plants have strong adaptability to the local environment at a relatively stable survival rate. They can survive well in the case of transplanting, so they are the first choice for greening plants in the process of urban landscape design [3]. Therefore, in the process of applying regional culture, urban landscape design should combine regional culture with indigenous plants and choose indigenous plants as greening plants.

4.2. Respect the cultural attributes of the city

4.2.1. Respect the history of urban culture. Urban culture is formed under a certain historical background and in the process of long-term historical development, which is the precipitation of history, carries the city's past and exudes its unique charm, so it is worth passing on. Therefore, in the process of urban landscape design, it is necessary to respect the history of culture and actively inherit regional culture.

4.2.2. Respect the national character of urban culture. In the process of development, different regions will gradually form their unique cultures and languages, which will form a nation through kinship and blood relations in the process of communication, integration, and division. China is a multinational country with numerous ethnic groups. Different ethnic groups have different living habits and cultural customs. Therefore, in the process of urban cultural landscape construction, it is necessary to fully respect the national character of urban culture and fully reflect the national characteristics of urban culture.

4.2.3. Respect people's needs. People play a dominant role in the process of urban landscape design, and the main purpose of urban landscape design is to serve urban residents. Therefore, the process of using regional culture to design urban landscape should respect people's needs and embody humanistic concern for urban residents. Urban landscape design should pay attention to the physiological and psychological needs of urban residents, strengthen the construction of public activity space, and actively provide urban residents with places for activities, communication, leisure and sports. Moreover, urban landscape design should pay attention to personal safety and avoid threats and injuries to the health of urban residents. Finally, urban landscape design should adhere to people-oriented concept, and actively adopt the opinions of urban residents for landscape design, so that landscape design can be affirmed and recognized by urban residents [4].

5. Research on the Permeation of Regional Culture in Urban Landscape Design - Taking Luoyang as an Example
This work first extracted 8 typical regional culture types in Luoyang: capital culture, celebrity culture, poetry culture, peony culture, folk activities, folk handcraft, religious culture and industrial culture. Questionnaire survey is used to investigate the cognition degree of regional culture in Luoyang, and the survey results are summarized and analyzed to obtain the current perception degree of regional culture in Luoyang, the current satisfaction degree of urban park in Luoyang and the respondents' ideal urban park. It is necessary to analyze how local urban landscape designs and expresses regional culture by means of direct expression, retention and reproduction, metaphor and symbol.
According to the survey, characteristic is the primary consideration when people go to the park, and the strong cultural atmosphere is an important reason to attract people. Specific data is shown in Fig. 2.

![Figure 2](image)

**Fig. 2.** Factors that people choose to go to the park (left) and the most attractive aspects of the park (right)

The top 3 most frequented parks are: Wangcheng Park, Sui and Tang Dynasties City Ruins Botanical Garden and National Flower Park of China. Combined with the above analysis, it can be concluded that the local cultural atmosphere in these three parks is relatively strong, and people prefer the city park with rich local cultural characteristics [5]. Therefore, in the future construction of Luoyang urban park, it is necessary to consider more cultural aspects, and try to integrate Luoyang's regional culture into the planning and design of urban green space, so as to create a satisfactory urban cultural landscape.

![Figure 3](image)

**Fig. 3.** Top 3 most frequented parks

The survey shows that in addition to the most familiar ancient capital culture and peony culture, the most popular Luoyang regional culture in people's mind is the culture of celebrities, poetry, religion and industry, which indicates that the expression of these cultures should be emphasized in the construction and reconstruction of the park in the future. It can be observed from the overall trend that with the continuous improvement of living standards, more and more people begin to pay attention to the pursuit of spiritual life, and their love for culture is no longer limited to the single traditional culture type, but to further pursue the comprehensiveness and diversity of cultural cognition [6].
Permeation Method of Regional Culture in Urban Landscape Design - Taking Luoyang as an Example

6.1. Direct expression
In urban landscape design, the most intuitive, concise, and conducive to people's direct feeling of the local cultural connotation can be called direct expression. This expression technique is an expression technique that can directly and clearly reflect the connotation of regional culture without artistic processing. It is the simple addition of cultural elements and landscape design techniques. Without too much analysis and induction, it can design a landscape environment that can touch people's hearts and obtain people's recognition. For example, all kinds of ancient gates in Luoyang Park can directly reflect the strong Sui and Tang styles from the appearance, reflecting the long capital culture of Luoyang; the large-scale peony garden in Luoyang Park can express Luoyang's long peony culture intuitively by displaying different varieties of peony patterns and colors, bringing sensory visual impact and spiritual cultural enjoyment. Some realistic sculptures in Luoyang Park, such as peony fairy sculpture, peony bronze sculpture, celebrity sculpture, and historical figure landscape are intuitive expressions of regional culture.

6.2. Retention and reproduction
In urban landscape design, the use of scene retention and reproduction to express regional culture is a trace of historical scenes, which can bring people a wonderful feeling of immersive experience. Scene retention refers to the proper retention of valuable traces of the current situation of the site in the process of landscape design. Regional culture is the concentration of the history of a city, and it is integrated into the sights and objects of a city, which all witness the history of a certain period. For example, the buildings, streets and streetlights formed in the process of urban development are the cultural representation of a development stage. Therefore, the retention of some historical traces left over from the site is often used in landscape design, which helps people cling to them to retain memories or understand history. Scene reproduction refers to the reproduction of some scenes existing in the site by the designer to reflect the regional culture of the site. Scene reproduction is the reproduction of real events in history or the reproduction of classical scenes described in ancient literary works [7]. For example, in Luoyang Park, the artistic conception of poetry is extracted to restore a specific landscape; in the Silk Road Art Park, several representative historical events occurring along the Silk Road are selected and reproduced through the combination of themed sculpture pieces and squares, thus expressing the time-honored Luoyang Silk Road culture; in the Sui
and Tang Dynasties City Ruins Botanical Garden, the relief wall of "purple spot peony" and the relief wall of "Hua Erqiao" are two representative ones selected from many peony mythological stories, and the situation of the whole story is reproduced with exaggerated depiction, which shows the peony culture of Luoyang with various forms and profound culture.

6.3. Metaphor and symbolism
Metaphor and symbolism are the design methods to express a certain culture or emotion through symbolic language. Metaphor is a design technique directly derived from postmodernism, which integrates theme into visual expression through narrative technique or local characteristic elements and comprehensively applies them to landscape design. Metaphor is to transfer a certain emotional color or different spiritual and cultural contents to another thing, so that the thing implies such emotional color or spiritual and cultural content. In the specific landscape design, this kind of emotional color or spiritual and cultural content is generally extracted from nature or local cultural life, transformed into design elements, then refined the design elements, and finally metaphorized into a visual symbol with certain significance and cultural connotation. For the more implicit metaphor, the viewer may not be able to understand the implied cultural connotation, so it is necessary for the viewer to have relevant knowledge in order to appreciate the cultural connotation. Symbolism is a kind of artistic expression technique in which objects are used as metaphors for things, and the artist expresses some profound thought or some special meaning by means of the external characteristics of a specific thing. In China, the use of symbolism is very common, such as using Canglong, Baihu, Zhuque, and Xuanwu to symbolize the east, west, south, north four directions, using twelve animals to symbolize Chinese zodiac, and using plum, orchid, bamboo, and chrysanthemum to symbolize the proud, quiet, firm, and indifferent characters. For example, in Wangcheng Park, the opposite stone statue symbolizes "entering the city", nine stone materials and different shapes of Ji Shengzhu symbolize the nine gates of the ancient city, and nine warp and nine weft ground pavement symbolize the layout pattern of the palace during the Zhou period. This abstract form of expression can stimulate people's curiosity and imagination, so as to enhance the interest of viewers in regional culture, and naturally accept the influence of regional culture in the process of exploration and knowledge seeking.

6.4. Reference and citation
The development process of urban landscape is a process of drawing lessons from and quoting Chinese classical gardens and recreating them on this basis, therefore, landscape design can learn from the elements and design language of classical gardens, and can also learn from the design form and language of regional culture, so that people can feel the extensive and profound regional culture. The reference and citation of regional culture in landscape is usually from some ancient buildings, structures, traditional art and handicrafts. At the same time, the urban landscape can also absorb and extract other artistic or creative rhetoric. The emergence and development of modern landscape is not isolated, but influenced by many fields of thought, which can not be separated from the study and utilization of knowledge in related fields such as architecture, but also from the absorption and extraction of nutrition in the field of art [8]. The extensive absorption and citation of China's extensive culture and art can enrich the design elements of the landscape, but at the same time, it should note that reference and citation can not be completely copied and imitated, but should understand the essence of traditional gardens as much as possible, sum up their forms of expression, and enhance the ability to learn and use tradition. Additionally, it should meet the needs of the development of the times, respect the aesthetic standards of modern people, combine the above art forms with the design techniques with the significance of the times, and improve the expression level of landscape art on the basis of the expression form of traditional garden elements in China. The Longmen Grottoes approaches Longmen Avenue on the north, Yihe on the east, Longmen ancient town on the west, and Longmen Grottoes on the south. The total occupation area is 192,855 square meters.

The front area is the only way to Longmen Grottoes, and the main axis distributes shaded trees on both sides, lush, quiet and distant, intended to let visitors to Longmen Scenic area, first through a
natural dense forest, so that people can leave the noise of the city and enjoy Longmen Grottoes art. The green plant configuration technique is to create a landscape effect with history for visitors with traditional gardening techniques by using a large number of pine and Buddhist tree species.

7. Summary
Urban landscape is the material basis of regional cultural expression, and regional culture is the inner soul of urban landscape. Therefore, in urban landscape design, only by clarifying the relationship and positioning of regional culture, and fully paying attention to the opposition and integration between tradition and modern civilization, regional culture and other culture, can regional culture be expressed incisively and vividly in urban landscape design.

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