Study on Urban Artificial Landscape Feature Grading Based on Aesthetic Structure Theory

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Key words: City, Landscape Feature, Aesthetic, Grading

Abstract. Under the background of rapid urbanization, artificial urban landscape represents the features of the times. Based on the aesthetic structure theory of landscape features, the bases of artificial landscape grading are proposed in this paper, and the aesthetic features of different types of artificial landscape are analyzed. It is pointed out that the grading of artificial urban landscape is to set up standards for building urban landscape features, and serve as an important indicator for measuring the distinctiveness of urban landscape features as well.

Introduction

Urban landscape feature is an interconnected entirety of urban feature, urban landscape and landscape feature. As an intangible asset of urban areas, urban landscape feature can bring about not only aesthetic satisfaction to the city, but also economic and social benefits. Urban landscape can be divided into urban natural landscape and artificial landscape according to their cause of formation, the latter reflecting more features of the times and highlighting the contradictions between historical cultures and the course of modernization. Based on the Theory of landscape feature Aesthetic Structure (LCAS Theory) proposed by Professor Yu Bochun of Huazhong University of Science and Technology and with a combination of related theories including noetic science, aesthetic psychology, system engineering, and urban and landscape architecture, this paper investigates the construction mechanism, modes, attributes and application of landscape feature aesthetic structure. With the method of feature grading, this research can provide a reference for future evaluation of urban artificial landscape features and serve as guidance for the construction and protection of artificial landscape in urban construction.

Aesthetic Structure Theory of Landscape Features

Landscape characteristic aesthetic structure refers to the constitution relations and methods of landscape characteristic types built by the aesthetic subject in related specific aesthetic systems and specific space-time range in the aesthetic psychology structure under the action of aesthetic intermediary. Aesthetic structure theory of landscape features contain two parts of theoretical research and application research.

Theoretical Research

1) Research on the Mechanism of Landscape Feature Aesthetic Structure. The practice to experience, protects, and innovate landscape feature is a process of psychological activity of aesthetic appreciation and creation of beauty. Landscape feature is a kind of aesthetic experience of landscapes, the achievements of which are people’s perception, judgment, and creation of the aesthetic feature of a landscape differentiated from other landscapes. And it is related to the aesthetic intermediary of landscape feature—the landscape feature aesthetic psychology structure. With the city of Wuhan as an example, this paper investigated the factors influencing the public’s aesthetic judgment by use of the quantitative analysis method of SBE (Scenic Beauty Estimation) to calculate how the public judges the degree of landscape feature, presenting a new attempt in the
domain of urban planning with qualitative study as its main approach [1].

2) Research on the Modes of Landscape Feature Aesthetic Structure Landscape feature aesthetic structure refers to the constitution relations and methods of landscape feature types built by the aesthetic subject in related specific aesthetic systems in the aesthetic psychology structure under the action of aesthetic intermediary. Landscape feature exists in the aesthetic system of landscape feature. Landscape feature aesthetic system is a kind of time-space construction system, i.e., the system combining time-domain construction and space-domain construction.

3) Research on the Attributes of Landscape Feature Aesthetic Structure Landscape feature is an unstable form of aesthetic structure exiting in people’s aesthetic psychology structure as well as a result of individualized operation in the landscape feature aesthetic system. Specific landscape aesthetic individuality or landscape feature only exists in corresponding landscape feature aesthetic system, which is determined by the instability of landscape feature aesthetic structure. By conducting a dynamic analysis on the changes in landscape feature aesthetic structure system, it is concluded in this research the inherent causes and dynamic mechanisms that affect landscape feature aesthetic structure system and result in all sorts of attributes [2].

Empirical Research

Starting from the western region in China, an analysis on aesthetic object groups was conducted in this paper from the regional angle. Combining with a comprehensive consideration of regional features of different cities, urban landscape feature types with prominent aesthetic features and their aesthetic structures were summarized. From the provincial angle, the urban landscape feature aesthetic structure was studied centering on Jiangsu Province, and the conclusion was made that the provincial system of urban landscape feature aesthetic structure is comprised of two levels of urban landscape feature, the urban landscape feature core area and the landscape features in other cities in the same province. As for a range of fast-developing cities such as Shenzhen, the composing elements of the aesthetic structure of various natural landscapes and cultural landscapes were investigated in search of the formation rules of their features from the angle of popular aesthetics and great importance was attached to feature and innovation in landscape planning so as to bring urban cities closer to the advance of the time [3].

Bases of Urban Artificial Landscape Feature Grading

As all types of feature landscapes are taken as the carrier of urban artificial landscape feature, the investigation of its landscape feature grading should also start from feature landscapes by summarizing the reasons of their features so as to classify landscape features.

Aesthetic Feature of Scarcity of Urban Artificial Landscape

The aesthetic feature of scarcity refers to artistic elements and their combinations that are rare in the “background” structural system. There are two types of aesthetic feature of scarcity: 1) certain formal features that are unusual among the same kind of landscape; 2) certain formal features that are unusual in their environments. As for artificial landscapes with aesthetic feature of scarcity as compared to other artificial landscapes of the same kind, their aesthetic feature of scarcity out of the same type of landscape is mainly manifested in their hue of unorthodox “individuality”.

Aesthetic Feature of Interlacing of Urban Artificial Landscape

The aesthetic feature of interlacing refers to artistic elements and their combinations which are able to form an interlacing “both opposite and unified” relationship. According to the way of unity, this kind of aesthetic feature can also be divided into two types: aesthetic feature of contrast interlacing and that of corresponding interlacing. The aesthetic feature of contrast interlacing is directly derived from people’s sensory organs and local cultural customs a priori, and is therefore regarded as a bright contrast. On the other hand, the aesthetic feature of corresponding interlacing is indirectly deduced by the human eye judging its corresponding relationships with other forms, and
is therefore considered a dark contrast.

Unlike the aesthetic feature of contrast interlacing, the formal elements or combinations to form corresponding relationships are not direct or a priori, but deduced in an indirect way by human visual thinking [4]. The aesthetic feature of corresponding interlacing can only come into existence when a form not only conflicts with the hint proposed by the background image structure, but also associates with adjacent forms to form a new unified structural system. On the contrary, if there are only conflicts without any kind of unity, the aesthetic feature of corresponding interlacing cannot be formed as such cases will result in visual confusion without any aesthetics.

**Aesthetic Feature of Imitation of Urban Artificial Landscape**

The aesthetic feature of imitation refers to artistic elements and their combinations that imitate things with specific aesthetic value. Similar to the aesthetic features of “scarcity advantage” and “interlacing advantage”, the aesthetic feature of “imitation advantage” also results from human instinct of survival [5]. Human sensitivity to common things has become the source of inspiration for a lot of artistic creation. It was even believed in ancient Greece that imitation is the source of all arts, the idea of which is still popular up to now as this is out of the very nature of humanity. Ever since the ancient times, imitation of nature has been widely applied in landscape design by humans; whether in Chinese mountain and water gardens or western geometric gardens, natural elements and flora and fauna images are indispensable formal features. Even during the era of modernist architecture boasting the crystallization of the advanced industrial civilization, the design method of imitation was still in use expect that the object of imitation was shifted from natural images to images of machines. Many feature landscapes also directly take the aesthetic feature of imitation advantage as their own aesthetic feature.

**Aesthetic Feature of Trace of Urban Artificial Landscape**

The aesthetic feature of trace refers to artistic elements and their combinations that express the motion trend of things. It is the most complex type of visual advantage as well as the most widely used one throughout human plastic arts. Human’s imagination and deduction to the energy and direction of motion trend of things are the basis for the formation of artistic effects of trace advantage. Such energy and direction of virtual motion are also called “momentum” and “intention” respectively. The interaction of “momentum” and “intention” embedded within different forms can give rise to two kinds of completely different psychological effect: the sense of equilibrium and the sense of quasi motion. Accordingly, the aesthetic feature of trace can be divided into aesthetic feature of equilibrium trace and that of quasi motion trace, neither with a random form as the former has to conform to the basic rule of human gestalt psychology, while the latter has to satisfy human’s special preference for regular motions. Of course, if things can be actually in motion, such as windmills, flags, and fountains, it is deemed to be a more direct way of expressing the energy of motion, and is thereby classified as a kind of aesthetic feature of quasi motion trace.

**Effect of Urban Artificial Landscape Feature Grading**

In modern days, urban landscape feature has become more and more important. Many cities have started to pay more attention to urban landscape features, which boast an endless variety in type and increasingly diversified functions. These landscapes also tend to rapidly increase in scale, developing toward super large types. Many countries, especially cities with relatively developed tourism, have tried to manage landscapes by implementing grading. A number of places within China have also started to establish a grading system on related landscapes.

Actually, in urban landscape construction, there has always existed grading management and approval in practice in China, but an overall grading is not yet implemented on urban landscape feature. The grading of urban artificial landscape feature will become a major technical base for evaluating the distinction degree of urban landscape feature. However, the key to the survival and development of standardization still lies in the enhancement of standard quality and authority. The effective operation of standard systems relies on the scientificty of the standards and the
coordination among the standards in the system. The quality level of standards is determined by the working experience, cognitive levels, judgment on popular aesthetic features of the personnel responsible for formulating grading standards, etc. Therefore, in applying the criteria, much consideration should be given to potential problems arising from the necessity and applicability of specific provisions in the grading standards as well as in practice. On account of this, the grading standards shall not substitute theoretical and practical knowledge and shall be open to continuous improvement.

**Conclusion**

Should the urban landscape feature industry fail to establish its own high-quality and authoritative industry standards, it would be bound to be controlled by the standards of other industries with its own operation subject to related standards of other industries, for example, the regulations of construction industry or water conservancy industry, many of which themselves exist conflicts in terms of content. Therefore, to establish a set of urban landscape feature standards suitable for China's national situation is of important realistic significance. Meanwhile, as urban landscape construction is also a field of great diversity, it is important to manage well the contradiction between standardization and diversity, and continuously develop grading standards, thus benefiting the individualized development of urban landscape feature.

**Acknowledgement**

This research was financially supported by the 2016 young science and technology backbone training program of Wuhan University of science and Technology (2016xz033).

**References**


