

Landscape Design under the Influence of Digitalization

Li FeiYan

Shandong Institute of Commerce and Technology,
Jinan, Shandong,
China, 250103

Xing XuDong

Shandong Institute of Commerce and Technology,
Jinan, Shandong,
China, 250103

Abstract: Landscape design under the influence of digitalization is studied in the paper. The ultimate purpose of environmental design is to apply social, economic, artistic, technological, political and other comprehensive means to meet the needs of people's existence and development in the urban environment. The artistic image generation of forest landscape is in its various constituent elements and space with its own laws of formal beauty. The interplay of different elements as the interweaving and fusion of different elements constitute the garden environment, form and other different artistic. The artistic image of the garden landscape space is more harmonious and unified, and in the human aesthetic interest in the world of human emotions. This paper gives the novel ideas for the digital analysis and provide the novel suggestions.

Keywords: Landscape Design; Influence of Digitalization; Image Sensing; Data Analysis; Design Pattern

1. INTRODUCTION

In urban planning, architectural landscape design is mentioned more and more by people, it plays a very important role in the city, such as parks, communities, streets, residences, interior and exterior design of buildings, etc. The modern sense of landscape planning and also the design, because of industrialization, environmental pollution, general human unreasonable felling of trees, etc. on the modern landscape planning and also design has emerged as a result of the industrialization, environmental pollution and also human's unreasonable cutting down of trees, which have both damaged nature and human's body and mind [1-4].

The most fundamental difference between modern landscape planning and design and previous gardening is that The main object of modern landscape planning and design is the human home, i.e., the entire ecosystem; its service objects are the humans and other species; the emphasis on human.

The most fundamental difference is that the main object of modern landscape planning and design is the human home, that is, the entire ecosystem; its service targets are human beings and some other species; and it emphasizes the human development and sustainability of resources and environment. Based on the existing work, the principles can be summarized as the follows.

(1) Most of the urban construction is the renewal and also transformation on the original basis. Today's construction has become a bridge connecting the past and the future. For the scenery with the historical value, commemorative value and artistic value, it is necessary to consciously excavate, utilize and maintain, so that the urban space and landscape operated by the past dynasties can be continuous.

(2) Landscape design should also fully consider people's taste and interest in life, the design of the composition of the elements of beauty and rational analysis of the constitutive elements and laws of design beauty, and fully consider design, art, economic, general aesthetic function and comprehensive function, so that the garden design can on the basis of comprehensive design, it reflects the beauty of design.

(3) Although the landscape architecture in Chinese history has made remarkable achievements, it is only a civilized record of the farming era. With the development and evolution of the society, it has been unable to adapt to the group feeling of the urban population in the post-industrial society.

In the figure 1, the design pattern is presented and in the next sections, the proposed model will be discussed.



Figure. 1 The Landscape Design Pattern
(<http://www.build.cn/Item/6990.aspx>)

2. THE PROPOSED METHODOLOGY

2.1 The Influence of Digitalization

The virtual world based on the digitization has become an indispensable part of real life, and digitization has become a way to reshape the world. All kinds of things, whether human or material, can be well displayed in this virtual world [5-10].

For landscapes dominated by culture, digitization is favored because of the large amount of culturally relevant information. In the digital design and construction of landscape, based on the teaching idea of "comprehensive application, effective practice", the interdisciplinary knowledge of general bionics, interactive digital design, adaptive environmental science, mechanical design and manufacturing, and materials science is creatively applied. Integrating into the process of digital design and construction, it has initially formed a technology based on self-generation of form, human-computer interaction technology, and further environmental performance analysis technology. Spatial modeling is expressed by the two-dimensional hand-painting, which tests people's spatial thinking ability. The transformation of spatial modeling into two-dimensional graphics will be limited in terms of the observation and

understanding, while the three-dimensional models can express design content more comprehensively than two-dimensional graphics.

Then, we consider listed aspects.

(1) Even partially digitized landscapes have brought further extraordinary experiences to people due to the changing relationship between virtual and real news. Entering its digital world is not only immersive, but also brings a strong visual beauty and a general grasp of landscape culture.

(2) The advent of computer-aided design has brought a new creative experience to designers. Computers are faster and more accurate in data processing is faster and more accurate than the human brain, and through computer language can perform very complex logical operations, and the software software is a collection of many kinds of complex computing instructions, and in traditional architecture design, landscape design in a large number of the repetitive, complex in the traditional architectural design, landscape design, a large number of the repetitive, complex work, through the software corresponding instructions can be can be completed quickly and accurately through the corresponding instructions of the software.



Figure. 2 The Digitalization Demonstration
(<https://www.mana.art/article/detail/1652679518283175025#!en>)

2.2 The Landscape Design under the Influence of Digitalization

The outline of the urban garden landscape, the shape and the color of the scenery, etc. reflect the artistic feeling of beauty. We use different design ideas for different types of landscapes, and adapt measures to local conditions and times, which is conducive to the formation of differences in landscape spatial forms and cultural content, and creates a variety of landscape types and diversified forms of beauty; this is in line with people's understanding of the complexity of the environment as the characteristics of the demand and the trend of the diversification of aesthetic standards are also the material reflection of the people's diverse life content, reflecting the inclusiveness and dynamic development of culture.

The cultural nature of the landscape should meet the cultural needs of the public, raise the awareness of public participation, refer to the public public opinion, to create a civic landscape; and should not be only the aesthetic preferences of individuals and the expression of their will. The cultural expression of the landscape should be subjective and the subjectivization and rightsizing of cultural expressions in the landscape are not conducive to the healthy development of the landscape and the modernization of culture.

Landscape design is the embodiment of the artistic beauty, scientific beauty and social beauty. In the design of modern garden landscape, the first priority is to ensure that the design

conforms to the modern landscape style, so that the garden landscape has a good aesthetic function.

3. CONCLUSION

Landscape design under the influence of the digitalization is studied in the paper. The cultural expression of landscape design is conducive to the protection of the uniqueness and diversity of the landscape, but the way and true meaning of the cultural expression does not lie in the reproduction and continuation of traditional forms, but in the current self-cultural cognition and innovation. This paper gives the novel ideas to the digitalization. In the future, the further discussions will be considered.

4. REFERENCES

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