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APPLICATION OF INTERACTIVE LANDSCAPE VIGNETTES IN ENVIRONMENTAL DESIGN

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The work includes an overview of the existing varieties of interactive decoration in environment design. Attention is focused on the landscape vignette as a kind of ecological space that ensures human communication with nature. Recommendations for the use of interactive landscape vignettes in environment design have been developed.

***Key words:** environmental design, interaction design, landscape vignettes, innovative ideas, murals.*

INTRODUCTION

An interactive landscape vignette is a kind of ecological space that provides communication between people and nature. It allows users to participate in the design of the environment. By using this product, consumers can not only experience the aesthetics and functionality of the design, but also get a sense of "involvement" and "satisfaction". The interactive landscape product is an ecological design product with strong integration, high technical content and important experience. By analyzing elements of traditional and modern culture, combining them with new media technologies, interactive landscape sketches can have greater practicality and expressiveness.

PURPOSE

The main goal of the work is to research the varieties of interactive landscape decoration, in particular landscape vignettes with the aim of their further application in art and design practices.
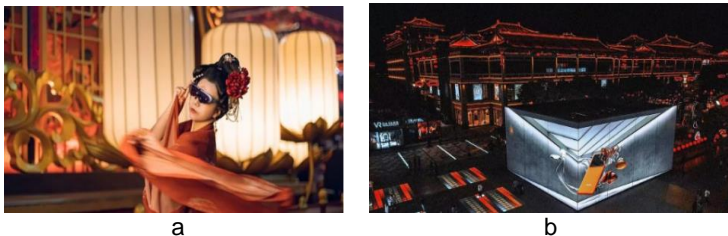
RESULTS AND DISCUSSION

Interactive landscape vignettes can be used in environmental design to make a more meaningful contribution to the environment, landscape and overall design, such as the ability to create different levels and variety of design, making the environment more interesting and rich. At the same time, it can help environment designers and viewers better understand the characteristics of the environment so that consumers can customize the environment according to their own needs. It can help people better understand buildings, gardens, parks and homes. Common interactive landscape vignettes include water features, stone decorations, rocks, stone bridges, and wooden features that beautify the

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environment and provide educational and recreational opportunities for area residents [1, 2].

The development trend of interactive landscape vignettes is influenced by environment design and landscape direction. With the continuous development of technology, interactive landscape vignettes bring a variety of new ideas and applications in design, one of the trends is the combination of landscape vignettes with intelligent technology, which makes the landscape more dynamic and interesting [3]. In addition, the emphasis on the ecological environment and greening of the natural landscape, as well as on the design of urban public space, also stimulate the development of interactive landscape vignettes. Interactive landscapes can be applied to many scenarios, such as urban garden programs, public space programs, interactive landscape exhibitions, and event programs. Taking the example of an urban garden, an interactive landscape can well contribute to the community atmosphere and improve the image of the city, and enrich the life experience of residents so that they can visit, participate, enjoy and appreciate the ecological landscape more effectively [4].

For example, the overall style of the Datang Bujianchen Cultural and Commercial Pedestrian Street is designed with the culture of the heyday of the Tang Dynasty in mind. The commercial facade and public facilities belong to an architectural style that contains cultural elements of the Tang Dynasty everywhere, from the large buildings on both sides of the street to the shops, as well as numerous landscape elements such as seats and benches, electric boxes, flower ponds and tree pools [5]. In addition, these decorations are constantly being improved, and more interactive devices appear with high-tech means such as sound and photoelectricity, walking paths with piano keys, sound fountains everywhere, which further conveys the overall atmosphere. Almost every few tens of meters there are interactive landscape vignettes that can quickly gather people. In addition, the scenic spot was modernized and created digital application scenes and innovative consumption scenes by launching the "Tang Fantasy" AR guide experience project (fig. 1 a, b).

a b

Fig. 1. Examples of decorations: a) Flying Maid Performance; в) Naked eye 3D screen [5]

Interaction is the user's perceptual experience while using the product. On the other hand, human-computer interaction is the use of technology to provide communication between the user and the system, to transmit commands and information. Interaction experience helps improve human-computer interaction, such as ease of use, usability, and feedback, and helps users control the system

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more effectively, thus improving the user experience. Nowadays, socio-economic development has become faster, the population's income and quality of life are getting better and better, and often more and more people are beginning to enjoy the phenomenon of smart life [6].

As the most artistic landscape objects in the urban environment, sculptures often convey a certain characteristic and spiritual culture to the public. They not only improve the landscape atmosphere, but also attract people's attention. Visitors will stay near the sculptures with artistic beauty or experience interactive functions and perform contact activities, including photographing, talking with them and enjoying them. It can be seen as a process of interaction between people and landscape sculpture. For example, the street sculpture «Tree of Knowledge» from New York consists of a large hollow apple and a road of lemons, which not only attracts attention, but also provides a space for visitors to relax. Inspired by the work of Van Gogh, Rotgaard's Van Gogh Trail combines innovation and design for cultural heritage and tourism. At night, visitors will marvel at the combination of light and color as the path is illuminated by thousands of shimmering stones, creating a drama of light and poetry. The Crown Fountain in Millennium Park, Chicago, USA, uses changing images to interact with the public and is now used as one of the icons of the new city of Chicago. It provides the public with a fully open space for interactive water games. People can find their own images while enjoying the image of faces on the LED screens. Or they can play in the pool, sit, lie or move around. When the water pours upwards and creates an interactive climax, the role relations between the subject and the object are reversed (fig. 2) [7].

Fig. 2. Examples of interactive landscape vignettes: a) Van Gogh Trail; b) Crown Fountain in Millennium Park; c) Wind moving mural wall; d) Landscape wall lighting interaction system [7].

The wind-driven landscape wall located at Xi'an Jingkai International Primary School in Shaanxi Province can be either a wall mural or a stage backdrop. The design of the campus mural landscape wall should fully consider the relevance of the landscape mural wall color to all parts of the campus. This design is bright, light and vibrant in color in the general arrangement, which enriches the campus environment and reinforces the artistic decision of the building space. This not only fits the cultural characteristics of the campus, but also plays a role in promoting its culture. During the movement of air, aluminum elements in contact with it can create a clear sound, similar to a bell; at night, the interactive lighting system can show various lights according to the effect of the scene. The creation of murals and the integration of the public space of the school fully reflects the vitality of the campus culture, and strengthens the connection between students and public art.

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CONCLUSIONS

The application of interactive landscape vignettes in environmental design helps to improve the spatial sense of architectural space, enhance its flexibility and appropriateness, promote humanistic emotions in public space, and stimulate people's creative imagination and experience. new technologies such as VR and holographic projection combine the real and the unreal, directly influencing the communication and interaction mode between environmental art and people from the visual system, further blurring the physical world of environmental art and the digital world, thus achieving the real wisdom of environmental art. The interactive landscape features are more diversified, humanized and technological in environmental design, which can form a closer interaction and communication relationship between users and landscape features, and make a better relationship between people and the environment, thus providing people with a more comfortable, elegant and relaxing living space.

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МИХАЙЛЮК О., ЦЗІТУН Л.
ЗАСТОСУВАННЯ ІНТЕРАКТИВНИХ ПЕЙЗАЖНИХ ВІНЬЄТОК У ДИЗАЙНІ СЕРЕДОВИЩА

У роботі здійснено огляд існуючих різновидів інтерактивного оздоблення у дизайні середовища. Акцентовано увагу на пейзажній віньєтці як своєрідному екологічному просторі, що забезпечує спілкування людини з природою. Розроблено рекомендації щодо застосування інтерактивних пейзажних віньєток у дизайні середовища.

Ключові слова: *екологічний дизайн, інтерактивний дизайн, пейзажні віньєтки, інноваційні ідеї, фрески.*