Innovation and Expansion Pathways for Environmental Art Design Practice Courses Anchored in Regional Cultural Features

Kaili Zhang

School of Design, Hainan Vocational University of Science and Technology, Haikou, Hainan Province 571126

Abstract: *Against the backdrop of globalization and cultural convergence, environmental art design is confronted with the dilemma of absence of cultural identity. Regional culture is the core source of design innovation. Its deep integration with the practice courses in environmental art design has become the key to breaking through the bottlenecks. This paper takes the exploration and transformation of regional cultural features as the core, in combination with the problems such as cultural lag and monolithic practice patterns in current practice courses of environmental art design, by analyzing typical regional cultural design cases, explores the innovative directions and expansion pathways for courses from three dimensions: course content reconstruction, practice model innovation, and resource integration pathways, and aims to cultivate environmental art design talents with regional cultural literacy and innovative design ability, and promote the dynamic inheritance and development of regional culture in modern environmental design.*

Keywords: *Regional Culture; Environmental Art Design; Practice Courses; Course Innovation*

DOI:10.12417/3029-2344.25.08.011

1.Introduction

As a bridge connecting people and nature, culture and space, results of environmental art design are not only the combination of functions and aesthetics, but also the visual presentation of regional cultural traits. However, at present, some practice courses in environmental art design are influenced by the standardized teaching system, overemphasize technical operations and universal design theories, and do not delve deeply enough into regional culture. As a result, students' design works lack cultural identity and regional uniqueness, making it difficult to meet the local needs for environmental design with cultural connotations [1]. Therefore, it has become an urgent problem to be solved in current environmental art design education how to effectively integrate regional cultural features into the practice courses in environmental art design to break the status quo of "emphasizing technology over culture" and "emphasizing theory over transformation", and build a curriculum system that combines cultural character and practicality.

2.Problems in the Integration of Current Environmental Art Design Practice Courses with Regional Culture

2.1 *The Exploration of Regional Culture Is Fragmented and Is Not Systematic and Deep Enough*

At present, when integrating regional culture, most practice courses in environmental art design are often confined to extracting surface symbols, such as simply replicating local traditional patterns and architectural components into design works, and lack the exploration of the deep implications behind regional culture. For instance, in design projects involving the culture in Jiangnan water towns, courses often guide students to focus on visual elements such as white walls, black tiles, water flowing beneath a little bridge, but they overlook the influence of the ecological notion of "harmony between man and nature" and the humanistic spirit of "advocating culture and valuing education" in Jiangnan culture on environmental design. This fragmented cultural exploration leads to that students' design works only have "regional resemblance", but no "cultural resemblance", and are difficult to truly express the core value of regional culture. In addition, the exploration range of courses is relatively small to regional culture. And the exploration of courses mostly focuses on traditional explicit culture, while paying less attention to

Foundation Item: Research Project on Educational and Teaching Reform of Hainan Vocational University of Science and Technology in 2024: "The Industry-University-Research-Application Collaborative Talent Development Model of Design Science in Vocational Colleges and Universities Amidst Hainan Free Trade Zone Construction" (No. HKJG2024-43).

regional folk customs, intangible heritage skills, oral history and other invisible culture, which further restricts the innovative transformation of culture in design.

2.2 *The Practice Patterns Are Monotonous and Disconnected from Actual Local Needs*

The practice steps in practice courses of the environmental art design are mainly based on "virtual projects", that is, teachers set virtual design sites and requirements, and after students complete the scheme design, the results are only presented in the form of drawings and models, lacking alignment with actual regional projects. Although this practice pattern can train students' basic design ability, it cannot enable students to truly confront complex issues in the regional environment, such as local ecological protection requirements, restrictions on the restoration of historical buildings, and differences in residents' demands of life, etc. [2] For instance, in the practice of rural environmental design, virtual projects often overlook the needs of the actual industrial structure of rural areas for environmental functions, nor do they take into account the villagers' using habits of public space. As a result, although students' design schemes are theoretically feasible, they are difficult to be implemented in actual regional scenarios. In addition, the practice steps lack cooperation with local governments, enterprises and inheritors of intangible cultural heritage. Students cannot obtain real local needs. Their design results are disconnected from the regional actual development, and are difficult to play the role of design in promoting the inheritance of regional culture and economic development.

2.3 *The Integration of Course Resources Is Insufficient, and Provides Weak Teaching Support for Regional Culture*

There is a problem of "disconnection between internal resources and external resources" in the resource integration process of practice courses in environmental art design. On the one hand, school resources have not been fully combined with regional culture. For instance, most of the school laboratories and training bases are built in accordance with universal design criterion, and lack training scenarios with regional features. On the other hand, off-campus regional cultural resources have not been effectively integrated into the courses. For instance, local museums, intangible cultural heritage workshops, traditional villages, historical and cultural districts and other resources are only used as "visiting places" for a short period of time and have not been deeply integrated with the course content to form stable teaching resource libraries. In addition, the carriers of course resources are relatively monolithic, mainly in the form of text and image materials. There is a lack of dynamic and immersive teaching resources such as digital museums of regional culture and 3D scanned models of historical buildings. This makes it difficult for students to intuitively understand the spatial forms and historical evolution of regional culture, and affects the efficiency of cultural transformation in design practice.

3.Innovative Directions of Environmental Art Design Practice Courses Anchored in Regional Cultural Features

3.1 *Constructing a Systematic Instructional Content Framework for Regional Culture Centered Around "Layered Exploration of Culture"*

In response to the fragmented issue of regional cultural exploration, the courses need to establish a hierarchical exploration system of "surface symbols-middle structures-deep connotations" to guide students to understand regional culture from multiple dimensions. At the level of surface symbols, the courses should focus on the explicit elements of regional culture, such as traditional architectural shapes and structures, traditional colors, and traditional Chinese arts and crafts, and enable students master the techniques of element extraction and reconstruction through field research, symbol deconstruction, and other methods. At the level of middle structures, the courses should conduct deep analysis of the spatial logic and eco-wisdom of regional culture, such as the traditional Chinese garden-making philosophy of "Man's artistry, Nature's masterpiece" and the settlement layout principle of "near the mountain and by the river" of southwestern ethnic minorities in China, to guide students to transform these structural logics into the spatial organization patterns of modern environmental design. At the level of deep connotations, the

courses should explore the humanistic spirit and values of regional culture, such as the philosophy of "good faith" in Shanxi merchant culture and the spirit of "clanship" in Hakka culture, and integrate them into the emotional expression and functional orientation of environmental design, achieving the transformation of culture from "symbolic application" to "spiritual transmission" [3].

3.2 *Innovating a Regionalized Practice Pattern Driven by "Real Projects"*

It is necessary to break through the limitations of virtual projects and build a practice pattern of "real projects + local needs" to enable students to complete design practice while solving practical problems. The courses can collaborate with local governments, cultural and tourism enterprises, and rural cooperatives to introduce real regional environment design projects, such as the renewal of historical and cultural blocks, the renovation of rural public space, and the environmental design of intangible cultural heritage workshops. During the practice process, students are required to complete the whole process of "research-scheme- implementation-feedback". Firstly, students can obtain the real local needs and restricted conditions by visiting local residents, inheritors of intangible cultural heritage and project leaders. Secondly, they can complete design schemes based on the results of layered exploration of regional culture, and communicate and adjust them with the partners. Finally, when conditions permit, they can participate in the implementation of segmentation schemes, such as assisting in on-the-spot drawing of intangible cultural heritage elements, participating in the installation and commissioning of rural public facilities, and collecting user feedback, to optimize the design schemes [4]. Taking the "Public Space Renovation Project of Xizhou Ancient Town, Dali, Yunnan" as an example, the courses divided students into groups and asked them to align with the Government of Xizhou Ancient Town and be responsible for the design of the entrance square of the ancient town and the surrounding space of the tie-dyeing workshops of intangible cultural heritage. Through research, students found that the entrance square of the ancient town had problems such as chaotic tourist transportation and lack of space for regional cultural presentation. The area around the tie-dyeing workshops is hard to attract tourists to stay due to the lack of experience space. Based on this, students extracted the structure of "three workshops and one screen wall" and tie-dye patterns of the vernacular architecture of Bai nationality in Xizhou, designed the "Cultural Display Wall" and "Tourism Signs & Symbols" at the entrance square, and establish a "tie-dye Experience Corridor" around the tie-dye workshops to present the making process of tie-dye crafts in the form of landscapes. After the scheme was implemented, the students collected feedback from tourists and local residents, adjusted the height of the seats and the display lighting in the experience corridor, and eventually formed a design result that combines functionality and cultural significance. This real project-driven practice pattern not only enhances students' design ability but also enables the design results to truly serve the inheritance of regional culture and tourism development.

3.3 *Constructing a Regional Cultural Instructional Resource Library Supported by the Integration of Internal and External Resources*

It is necessary to integrate on-campus and off-campus resources to build a multi-dimensional and dynamic regional cultural instructional resource library to provide support for course practice. In terms of on-campus resources, it is necessary to renovate the on-campus training bases and establish training areas of regional cultural features, such as establishing "Training Areas with Traditional wooden structure" and "Regional Color and Material Laboratories" for different regional cultures. At the same time, it is necessary to develop digital instructional resources, such as using 3-D Laser Scanning Technology to build digital models of local historical buildings and traditional settlements, and make regional cultural documentaries, allowing students to directly experience the spatial forms of regional culture through virtual simulation technology. In terms of off-campus resources, it is necessary to establish long-term cooperative relationships with local museums, protection centers for intangible cultural heritage, historical and cultural blocks, and traditional villages, use these as "off-campus practice bases", and regularly organize students to conduct field research and skills learning. Meanwhile, invited are inheritors of local intangible cultural heritage, senior researchers of regional culture, and local designers to serve as "off-campus mentors" for the

courses. Through lectures and workshops, they impart regional cultural knowledge and practical design experience to students. In addition, a "real regional project database" can be established by collecting the regional development planning documents issued by local governments, the demand of enterprises for environmental design, and the materials of rural construction projects to provide a continuous source of real projects for practice courses. The courses can form a three-dimensional resource system of "on-campus training + off-campus practice + digital resources" by integrating internal and external resources to provide solid support for the integration of regional culture into the courses.

4.Expansion Pathways for Environmental Art Design Practice Courses Anchored in Regional Cultural Features

4.1 *Interdisciplinary Integration Pathways: Breaking Down Disciplinary Barriers and Enriching the Dimensions of Regional Cultural Design*

Environmental art design itself is an interdisciplinary field, and the complexity of regional culture also determines that its exploration and transformation require the support of multi-disciplinary knowledge. The courses can expand the dimensions of regional cultural design through interdisciplinary integration. On the one hand, the courses can collaborate with history, sociology and anthropology to guide students to understand the formation of regional culture from the perspective of historical evolution and analyze the needs of the regional environment from the perspectives of social structure and folk customs. For instance, they can cooperate with history to offer a special course on "The Historical Evolution of Regional Architecture" to enable students to understand the reasons for the changes in local architectural styles over time, and provide basis for the transformation of historical elements in design. On the other hand, they can collaborate with ecology and materials science to combine regional eco-wisdom with modern technology. For instance, they can cooperate with ecology to conduct research on the "application of traditional regional ecological philosophy in modern environmental design", and cooperate with materials science to develop "modern improvement technology for traditional materials" to address the durability and environmental friendliness issues of traditional materials in modern environmental design.

4.2 *Regional Linkage Pathways: Establishing a Regional Synergetic Mechanism and Expanding the Scope of Course Practice*

Different regions have unique cultural features, and there are often cultural connection and differences between adjacent regions. The courses can establish a "regional linkage" mechanism, and enable students to deepen their understanding of regional culture and broaden their design horizons in comparison and communication through cross-regional design practice. On the one hand, the courses can carry out "cross-regional joint design projects". For example, students majoring in environmental art design from different institutions can collaborate on design around the theme of "regional differences within the same cultural context". As another example, in response to "the culture of the Yangtze River Basin", local waterfront space can be respectively designed by students from Sichuan in the upper reaches, Hubei in the middle reaches, and Jiangsu in the lower reaches, and through online communication and sharing, and comparing the interpretations and design expressions to the culture of the Yangtze River Basin in different regions, those students can develop a series of design schemes of waterfront space along the Yangtze River Basin. On the other hand, regions with similar regional culture should establish a "course resource sharing mechanism". For instance, Hunan and Hubei, both belonging to the Chu cultural circle, can share the resources of Chu cultural museums and the projects of intangible cultural heritage in both places, and jointly develop a special course on "Chu Cultural Environmental Design" to allow students to come into contact with more abundant regional cultural resources and avoid rigid design thinking caused by the limitations of resources in a single region.

4.3 *Digital Expansion Pathways: Utilizing Digital Technology to Innovate the Transformation and Presentation Patterns of Regional Culture*

The development of digital technology has provided new possibilities for the exploration, transformation and

presentation of regional culture. Through digital expansion, the courses can enhance the innovation and dissemination power of regional culture in design. During the stage of cultural exploration, big data technology can be utilized to collect documents, images, and oral records related to regional culture, and establish a "regional culture database" to help students quickly identify core cultural elements. Drone aerial photography and 3D laser scanning technology can be used to obtain accurate spatial data of local traditional settlements and historical buildings, and provide accurate basic materials for design. During the stage of cultural transformation, parametric design software can be utilized to transform regional cultural elements into editable digital models, and realize rapid reconstruction and innovation of cultural elements. For instance, the circular structure ratio of Fujian Tulou can be transformed into a parameterized algorithm to help generate design schemes for circular communities that meet modern housing needs.

5.Conclusion

It is a key pathway for solving the problem of cultural deficiency in current design education and cultivate talents with cultural innovation ability to innovate and expand environmental art design practice courses anchored in regional cultural features. By establishing the instructional content framework of "cultural layered exploration", the "real project-driven" practice pattern, and the "internal-external integrated" resource support, and combining the expansion pathways of cross-disciplinary integration, regional linkage, and digitalization, we can truly integrate regional culture into every aspect of course practice, guide students from "cultural understanding" to "design transformation", and then to "implementation of schemes", and form a complete chain for cultivating cultural design capabilities.

References

[1] *Jingyun Xie.(2024)Inheritance and Innovation of Regional Culture in Environmental Art Design[J].New Horizon,7,89-91.*

[2] *Yingying Ma,Tiantian Guo and Guowei Liu.(2023)Activating the Artistic Vitality of Distinctive Culture in Qingdao[J].Chinese Historic Geography,11,27-29.*

[3] *Lijuan Zeng.(2022,November)Construction and Practice of Curriculum System for Environmental Design in Colleges and Universities Integrating Innovation and Entrepreneurship Education[M].China Water&Power Press, 214.*

[4] *Jun Wu.(2021)Inheritance and Innovation of Regional Culture in Environmental Art Design[J].Literati and Artisi of China,4,52-53.*