

Research on the Digital Inheritance Path of Gold Repair Skills Under the “Unity of Heaven and Man” Ideology

Changru Wang^{1*}, Xinyu Zhang¹

¹ School of Art and Design Zhengzhou University of Light Industry, Zhengzhou, China

*Correspondence: Changru Wang

Received: 27 March 2026; **Accepted:** 18 April 2026; **Published:** 9 May 2026

Abstract:

As an intangible cultural heritage culture that contains the traditional Chinese philosophical idea of “heaven and man are one”, the gold lacquer repair art has the characteristics of a high degree of fusion of its technical content and cultural values. However, today, it faces the dilemmas of lack of successors, gradual loss of inheritors’ knowledge and poor cultural transfer. Digital technology has brought new opportunities for the protection and inheritance of intangible cultural heritage, but in the existing research, most of the researches are carried out from the perspective of digital reproduction of craft process, but few researches are carried out from the perspective of “one hand of heaven and man”. Based on one, this paper sorts out the craft features, cultural value and realistic problems of gold lacquer repair, and attempts to construct and test a collaborative path combining three elements of “digital reconstruction-contemporary transformation of cultural value-multi-dimensional living inheritance” by combining traditional philosophy, intangible cultural heritage craftsmanship and digital methods. It will provide theoretical support and realistic samples for the living inheritance and contemporary value of gold lacquer repair, and also provide reference for the digital protection and innovative transformation of similar kinds of intangible cultural heritage.

Keywords:

Unity of Heaven and Man, Gold Craftsmanship, Craftsmanship Inheritance, Design Translation

1. Introduction

1.1. Research Background

Under the dual background of modern social change and cultural context reconstruction, the gold lacquer repair art as an intangible cultural heritage carrier of the traditional philosophical idea of “one of the heaven and man” facing serious legacy crisis. The oral teaching and personality cognition characteristics of the traditional master-apprentice model make it difficult to inherit tacit knowledge of artisanal techniques such as the adaptation to the temperature and humidity of the craft and the timing of the drying of lacquer, and with the narrowing of the living space of modern lacquer art, the vitality of living inheritance is also constantly declining. The continuous development of various digital technologies has brought

new ideas to the protection of intangible cultural heritage, which can be recorded and popularized in an accurate way by virtual modeling technology such as 3D scanning technology and artificial intelligence virtual rendering technology. However, the predecessors are more focused on the digitalization reproduction of technology, and the underlying connection between the “unity of heaven and humanity” and the natural attribute of gold lacquer repair has not been further excavated. There is also a lacuna in research on the transmission path that combines the two sides, making it an urgent issue to systematically conduct research to reflect the coordinated inheritance of the entire craft and then the essence of the craft.

1.2. The Connotation of the “Unity of Heaven and Humanity” Thought

As the core thought of traditional Chinese philosophy, “the unity of heaven and man” not only belongs to a single school of thought, but also has the existence of multi-school embodiment in Confucianism, Daoism and Mohism, and the essence of its core connotation is the interdependence and harmonious coexistence of heaven, earth and human and everything. It is not so much an issue of “heaven and humanity”. It is the organic unity of the laws of natural existence, human activities and the creation of artifacts. “Heaven” implies not only the objective natural world but also the laws of the heavens and rhythms and endless vitalities of nature. “Humanity” implies not only human practical activities as also spiritual pursuits, as well as human artifact - making activities. This philosophy advocates that human beings should worship nature and pursue the Way of Heaven. And in the process of transforming the world and creating things, not to violate the nature of things, but to integrate with the nature of things with the state of “doing things according to things”. In the process of craftsmanship, it is reflected in the respect for natural material, the correct application of techniques, the coexistence between the function and aesthetics of the object, and the coexistence between the natural attributes and humanistic connotation of the object, with the ideal state of “the unity of vessel and way” and “the coexistence of humanity and nature”. It is not only a cosmological concept, but also a value orientation of human behavior, artistic creation and cultural inheritance, which contains profound ecological wisdom and harmonious philosophy. [1,2,3]

1.3. The Characteristics and Cultural Value of Gold Lacquer Repair

Gold lacquer repair takes natural lacquer as the core, gold powder or gold leaf as the decoration, “make actions according to the matter”, combines the shape and status of the damaged object, and designs the decorative line, so as to achieve the unity of the functions and aesthetics through the preparation of lacquer, ash, polishing and gold powder tracing. Due to the characteristics of natural properties, the effect of temperature and humidity on hand-made lacquer is very obvious, whether it is the preparation of lacquer, drying of lacquer or the formation of film, it can be traced back to nature and have the characteristics of “one side of heaven and man”. In addition, the craft pays more attention to individualized creation, no fixed formula, each piece is different from pattern cracking and gold decoration, full of handmade power. [4]



Figure 1. *Schematic Diagram of Gold Lacquer Repair of a Porcelain Bowl.*

In terms of cultural value, gold lacquer repair embodies the concept of “cherishing objects and revering nature.” Through the restoration of damaged objects, it conveys a sense of respect for nature and objects, advocating a lifestyle of making the best use of things [5]. It transforms “imperfection” into a unique aesthetic, carrying the life wisdom of “embracing imperfection,” and resonates deeply with the Eastern philosophies of inclusiveness and harmony. As an intangible cultural heritage, gold lacquer repair continues the essence and cultural lineage of traditional Chinese lacquer art. Its integration of utility and aesthetics, as well as technique and art, offers inspiration for the innovative application of traditional elements in contemporary design, holding significant value for contemporary dissemination and transformation.

2. Existing Problems in the Transmission of Gold Lacquer Repair under the Thought of “Unity of Heaven and Humanity”

2.1. Insufficient Adaptation between Craftsmanship Transmission and Natural Attributes

In the philosophy of “unity of heaven and humanity”, the problem of insufficient adaptation between the inheritance of gold lacquer repair and natural characteristics has become increasingly prominent. The meaning of gold lacquer repair is about coexistence with nature; natural lacquer properties and gold powder properties are highly integrated with natural conditions, and gold lacquer should follow the law of nature. But in the present way of transmission and inheritance, the inherent link between the two is being severed day by day. The inherent way of oral teaching and personal cognition does not deliver the implicit knowledge of craftsmen who “know nature by experience” in an organized way, and it is difficult for young learners to master the essence of combining the craft with nature. Existing digital protection efforts emphasize the visualization of technical processes, while ignoring the interactive connection between gold lacquer repair and nature. Roving the craft from the basis of nature, it cannot retain the necessary natural state of living together with nature, and it is difficult to maintain the life state of “the unity of heaven and humanity.” Moreover, the closed transmission model and the outdated transmission method not only restrict the spread of the craft itself but also do not really make the philosophical connotation of “the unity of humanity, things and nature” reach the public, especially the young generation. As a result, this ancient wisdom struggles to resonate in contemporary times.

2.2. Limitations in Cultural Concepts and Communication Models

In the dissemination of cultural concepts and the model of inheriting and inheriting gold lacquer repair under the “unity of heaven and man” philosophy, there are problems such as lack of expression methods and public cognition in the dissemination of its cultural level, which are rooted in the traditional philosophy of the East “respecting life object, respecting nature” and “coexistence and imperfection”, but there is no way to translate the modern public. In the dissemination, it still stays in the form of process display. Consequently, the young generation cannot effectively absorb the “harmonious coexistence between humanity and nature” contained in the craft, resulting in a lack of cultural identity. [6]

In the transmission modes, the traditional inheritance modes focusing on oral transmission and master-experience transmission and limited in radius are offline-centred, which are difficult to meet the requirements of dissemination in the digital age. Despite the efforts of some short videos or online courses to promote the craft, they are mostly still on the level of superficial technology introduction, lacking profound experience design of immersion and interaction, so that the public cannot deeply experience the blend between craftsmanship and philosophy. In the meanwhile, the single communication channels with inadequate application of new media platforms such as VR/AR and digital cultural creativity, it is challenging to make the cultural concepts of gold lacquer repair to publicize among a wider range of audiences. However, the wisdom and aesthetic significance of the craft still need to be further appreciated and inherited.

3. Systematic Pathway Design for the Inheritance and Innovation of Gold Lacquer Repair under the Philosophy of “Unity of Heaven and Humanity”

3.1. A Digital Replication Pathway for the Natural Attributes of the Craft Guided by “Unity of Heaven and Humanity”

The design path of digital reproduction of the natural features of gold lacquer repair based on the idea of “the unity of heaven and man”, the key is to avoid technical means to tamper with the craft of the natural genuine, unity between the technical replicaeconomy and natural core, build a digital carrier with scientific value and philosophical meaning to the craft transmission. The work *Gui Shan* (Return to Restoration) is a wonderful short drama, made by AI-powered creators in Wenzhou, which is a more vivid practical case of this path. In the new form of digital narrative, it extends the propagation of the craft nature. Under the guidance of the concept of “the unity of heaven and man,” the creative team deeply embedded the traces of the interaction between nature and man into the digital text, linking the regional natural geographic landscapes, cultural heritage sites like Shuomen Ancient Port and Ou Kiln, creating a virtual story scene that conforms to the natural nature of the craft.

In the creative process, the team relied on AI virtual rendering technology to meticulously reproduce the primary links of gold - lacquer repairs, from the gathering and processing of natural lacquer in accordance with temperature and humidity changes, to the natural effect given by the adhesion of gold powder to the lacquer layers, and even to the guiding principle of “following nature and following the conditions” in the restoration process, all presented in the form of visual narration. The digital copying mode breakthroughs the time and spacial restriction of craft inheritance. On the one hand not weakening the nature of craft with technology while on the other hand not restricting the accessibility by simplifying the barrier of

cognition by accepting the popular form of short drama. Through digital content transmission, the inherent characteristics of gold lacquer repair are broken through geographical and class barriers, and the public's recognition of the art and the concept of "twin of heaven and man" are promoted, creating a practical reference for innovative exploration of digital copy paths.

3.2. A Contemporary Translation Pathway for Cultural Value Integrating the Connotation of "Unity of Heaven and Humanity"

The contemporary translation path of gold lacquer repair cultural value with the connotation of "the unity of heaven and humanity" is to open up the connection between traditional philosophy and modern comprehension. Through content concretization and experiential scenarization, it enables contemporary audiences, particularly in the younger generation, to truly understand abstract words such as "cherishing things and revering nature" and "following nature". The path of educational practice represented by the Intangible Cultural Heritage Mini-Class in Kaifeng Cultural Center is a good example for the intergeneration of cultural value. The Mini-Class takes the lacquer fan making as a concrete carrier, with the inheritor Xu Qingsong as the leading teacher, avoiding preaching abstract theories, emphasizing more on the essence of gold lacquer repair - the logic of the application of natural materials. [7]

In the teaching process, XU Qingsong integrates the explanation of natural lacquer properties and the adaptation relationship of lacquer materials to the natural environment into a way of explaining, in a way that is easy for elementary school students to understand, the philosophy of "following nature" in "unity of heaven and man", and at the same time guides students to make lacquer fans in steps, intuitively experiencing the texture changes of natural materials and the craft following the natural rhythm in the process of polishing and lacquer. It is this kind of "concretized medium + accessible theory + intimate experience" model that transforms deep philosophy into concrete practical activities, which realizes the translation of gold lacquer repair cultural value from the level of introduction. Not only can it let young students experience the natural beauty of traditional craft first-hand, but also let the cultural genes of "loving objects and revere nature" into their hearts, and lay a foundation across the generational inheritance of the cultural value of gold lacquer repair.

3.3. A Multidimensional Living Inheritance and Innovation Pathway Driven by the Philosophy of "Unity of Heaven and Humanity"

The essence of the inheritance and innovation path of multiple dimensions of fine living under the philosophy of "one of heaven and man" is to build an ecological pattern of "philosophy guidance - multiple cooperation - penetration of conditions". "Acting according to circumstances" and "symbiosis and harmony" are the core logical relationship in the path, aiming to integrate the gold lacquer repair into modern fine life and achieve a virtuous cycle of inheritance and innovation. From the practical exploration of the Qihe Restoration Studio in Beijing, this path is shown with material significance. Xihe Restoration Studio deeply incorporates the concept of "combination of heaven and man" into its inheritance and innovation from natural and daily life. Located in the natural geographical area between Cangshan Mountain and Erhai Lake, on the basis of restoration, the artisan draws creative inspiration from the texture of the natural environment, and always follows the principle of "doing by the

situation” in the restoration, completely respecting the original damage and natural form of the object, and no need to artificially decorate it. They combine gold lacquer repair and metal Stapling, restored damaged areas to the full of vitality through the exquisite craftsmanship.

As for creative reform, the studio delves into the beauty of natural material, and create the “shell restoration” series of jewelry by using the ingenious combination of natural shells and gold lacquer. The fusion forms a unique appearance with natural materials and traditional craftsmanship, not only retaining the use of natural materials by gold lacquer repair, but also broadening the application scenarios of the craft. Even more unique is that the studio pays great attention to listening to the human stories behind the things during the restoration process, and integrates the restoration of things with the healing of emotions, so that participants - through the restoration process or its results - can better understand the profound connotation of “the unity of the vessel and the Way”. Through deeply integrating crafts and transmissions with natural places, daily life, and human emotions, this mode truly brings the “unity of heaven and humanity” of “cherishing things and revering nature” to practice. It not only realizes the breakthrough of gold lacquer repair from niche intangible cultural heritage to resonate with the audience, but also provides a certain realistic paradigm for multi-dimensional living inheritance and innovation.

4. Conclusions

As an intangible cultural heritage of traditional wisdom of craftsmen and the essence of Eastern philosophy, the inheritance and innovation of gold lacquer repair is a major issue in the contemporary construction of excellent traditional Chinese culture. Under the thinking of “the unity of heaven and humanity” as the core theoretical system, it is sorted out and accurately pointed out the main problems at present in the inheritance of gold lacquer repair, such as the imbalance of adaptation to natural properties and the isolation of cultural dissemination. It summarizes and verifies the inheritance and innovation path of “digital reproduction-mirror contemporary translation-cultural value” three-in-one and “contemporaneous excavation-multidimensional living inheritance”. It realizes the deep integration of inheritance of traditional craft and contemporary society from three levels of technical empowerment, cognitive transformation and context integration, overcome the shortcomings of the traditional form of knowledge transmission in the master-apprentice system “words are silent”, fully embody the core of gold lacquer repair “pursuing things and respecting nature” and “symbiosis and harmony” of Chinese cultural connotation. In the future, the inheritance and dissemination practice of gold lacquer repair needs to further deepen the integration of traditional thought, the meaning of knowledge intangible cultural heritage craftsmanship and modern digital technology, so that contemporary traditional craftsmanship gold lacquer repair continue to radiate vitality and vitality, and provide some practical value for the creative transformation and innovative development of Chinese outstanding traditional culture with path support and theoretical reference.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

References

- [1] Zhang, D.N. Analysis of the Thought of 'Unity of Heaven and Man' in Chinese Philosophy'. *Journal of Peking University (Philosophy and Social Sciences Edition)*, 1985, 01, 3-10.
- [2] Ding, S.H. On the Concept of 'Unity of Heaven and Man' in Ancient China. *Journal of Anqing Teachers College (Social Science Edition)*, 1990, 01, 35-42.
- [3] Ji, X.L. Rethinking the Thought of 'Unity of Heaven and Man'. *Chinese Culture*, 1994, 02, 13-22.
- [4] Yu, Y. The Inheritance and Development of Ancient Ceramic Restoration Techniques. Shanxi University, 2015.
- [5] Zhai, Z.H. Cherishing Things · Creating Things - Lacquer and My Ceramic Art Creation . China Academy of Art, 2015.
- [6] Li, S.Y. Cherishing Things: Continuing the Story of Utensils -Taking Kintsugi as an Example. *Masterpiece of Nature*, 2024, 09, 54-56.
- [7] Ren, Y. Research on the Inheritance and Innovative Development of Kintsugi Craftsmanship. Shanxi University, 2020. DOI: 10.27284/d.cnki.gsxiu.2020.000201.



© 2026 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)