

Article

# The elegance of lacquer: Unveiling traditional lacquer techniques in East Asia

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**Abstract:** This research delves into the intricate world of lacquer art in East Asia, aiming to unravel the relationships among artisan perspectives, aesthetic values, and the contemporary relevance of this ancient craft. The purpose is to provide a comprehensive understanding of how historical development, apprenticeship traditions, and evolving aesthetic values shape the intricate landscape of lacquer artistry. Employing a qualitative approach, this study conducts in-depth interviews with artisans and experts in the field of lacquer art. The research involves a comparative analysis of past literature, drawing upon historical and contemporary works to contextualize the findings within the broader trajectory of lacquer art. Thematic analysis is also applied to unravel the nuances of artisan perspectives, the transmission of knowledge through apprenticeship traditions, and the cultural and aesthetic dimensions embedded in lacquer paintings. This mixed-methods approach enriches the study by providing a holistic and nuanced exploration of the identified variables. The findings illuminate the enduring significance of apprenticeship traditions in preserving traditional lacquer techniques, with artisans actively navigating challenges posed by globalization and digital platforms. Aesthetic values, including symbolism and visual harmony, are revealed as integral components contributing to the narrative richness of lacquer paintings. The study uncovers the dynamic relationships among these variables, emphasizing the adaptive nature of lacquer art in a contemporary context. The implications extend to cultural preservation, heritage management, and educational initiatives, offering valuable insights for practitioners, policymakers, and educators involved in the realm of traditional crafts. The study contributes to theoretical frameworks on cultural continuity, knowledge transmission, and the socio-cultural dynamics of artistic practices.

**Keywords:** lacquer art; artisan perspectives; aesthetic values; contemporary relevance; apprenticeship traditions

## 1. Introduction

Lacquer art, with its long history and complex production processes, represents East Asian craftsmanship. This study aims to explain the complexity of lacquer painting, focusing on craftsmen's perspectives, aesthetic goals, and its current relevance. Lacquer painting, based on historic rites, now expresses cultural identity via beautiful workmanship and deep significance (Liu et al., 2016). This research seeks to explore lacquer art's delicate balance between innovation and preservation in response to global pressures on traditional craft landscapes. The study extends beyond aesthetics to examine lacquer painting's socio-cultural relevance (Abdel-Ghani, 2022). Several studies have helped us understand lacquer art, including this one. Previous

studies have examined the history of lacquer work, focusing on how dynasties like the Ming shaped artistic conventions (Wang et al., 2014). Eberle (2023) research on apprenticeship traditions illuminated the transmission of craft skills and the importance of mentoring in conserving lacquer processes. The regional variations and layering procedures in lacquer painting, which uses different aesthetic approaches, have intrigued scholars (Han et al., 2023). Wei (2019) study lacquer painting aesthetics which focused on these outstanding creative works' visual coherence and meaning. Lacquer painting's color pallet revealed evolving creative tastes and aesthetics. Additionally, scholarly studies have examined lacquer work's cultural significance in rituals and celebrations. Lacquerware's symbolic and spiritual qualities were discovered by Chistyakova (2009) to evaluate the effect of globalization on lacquerware marketplaces and the obstacles experienced by current artists. Traditional lacquer art is still important, according to the study. Tamburini et al. (2020) research dissemination of traditional Chinese lacquer work helps us understand how technology and craftsmanship relate.

Based on earlier research, this study analyses the deep links between identified factors. Different dynasties have shaped lacquer art, which is expected to impact craftsmen's views and the preservation of ancient practices. The relevance of apprenticeship in knowledge transmission has been stressed. Lacquer painting's worth may be influenced by these traditions and societal factors (Cohen and Calderon, 2021). Lacquer paintings should include history, culture, symbolism, and visual harmony. Previous research has demonstrated that expanding the color pallet helps enhance layering methods and lacquer painting's visual narrative (Wang et al., 2021). The cultural significance of lacquer work, especially in rituals and ceremonies, is expected to impact artists' views and the craft's usefulness. Prior research shows that lacquer art's internationalization and connection with digital platforms have created a complex network of impacts on modern society (Hao et al., 2019). These factors may affect apprenticeship traditions and craft preservation and innovation. This study integrates lacquer art into a complex network of historical, cultural, and current processes to improve our knowledge. Lacquer painting studies have provided valuable information that may be used to seek links between the stated components. Scholar's value longitudinal studies of lacquer painting's history. These works study the multifaceted adaptations of creative activities to political and cultural changes (Li, 2023).

Due to the evolution of historical crafts and current challenges faced by lacquer artists, the study is crucial. Historical traditions have shaped lacquer art, linking artisan viewpoints, aesthetic standards, and present relevance. Yan et al. (2022) emphasizes lacquer art's regional and contextual diversity. It explains how culture impacts craftspeople in context. Research reveals how apprenticeship traditions impact current behavior, stressing their importance. Lacquer paintings' aesthetics matter culturally and intellectually. The internet and globalization have created new lacquer art challenges and opportunities. The above issues impact artisanal methods and the traditional lacquerware market, according to Nakagawa et al. (2019). comprehending lacquer art's current worth requires comprehending this milieu's dynamic innovation-tradition interaction. Theories that assess traditional sectors' adaptation to changing sociocultural conditions are used to study historical development, apprenticeship traditions, and creative principles (Cohen and Calderon, 2021). Research supports

mentoring and knowledge distribution theories in innovative collectives. Hu et al. (2021) examine traditional crafts' social dynamics theories. These ideas focus on artisanal economic issues, making them relevant today. Semiotic approaches study lacquer artworks' aesthetics and appearance (Han et al., 2023). Color scheme development is examined using theoretical frameworks that account for changing aesthetic preferences. The project examines how globalization impacts traditional crafts and how internet platforms conserve and share cultural heritage using theoretical frameworks (Boyd, 2020). Our discussion of lacquer art's balance between innovation and preservation is akin to scholarly discussions of traditional crafts' globalization methods. This study examines cultural resilience, knowledge transfer, and traditional craft adaptation in changing sociocultural and economic contexts. These theoretical foundations enable us to understand lacquer's fluid and situational nature and analyze its dynamic interactions.

## **2. Literature review**

East Asian lacquer painting is the result of centuries of artistic and cultural expertise. Lacquer has been used in East Asian art for millennia. Japan, Korea, China, and Vietnam have all helped spread this distinctive art style. Lacquer was widespread throughout East Asia, as shown by Neolithic artifacts. Chinese lacquer painting thrived throughout the Han Dynasty (206 B.C.–220 A.D.). Japanese lacquerware, or “urushi”, has grown and become deeply ingrained in tea ceremonial culture (Weiyang and Yien, 2021). Vietnam and Korea have different histories; hence their lacquer painting styles and forms vary. Traditional lacquer painting requires skill, precision, and ingredient knowledge. Painters apply many coats of lacquer, generally created from lacquer tree sap, colors, and decorations (Sangchel, 2022). The bright, durable surface may be utilized for utilitarian purposes and complex art. Protecting old lacquer painting skills is controversial. Art has cultural and historical value. Old lacquer paintings are important relics that let artists express themselves. Visual stories highlight historical social circumstances (Brunskog and Miyakoshi, 2023). Lacquer painting traditions link past and present. Modernity may impair these abilities, harming a distinct culture. This prompts consideration of the difficult balance between historical knowledge and innovative methods (Narita and Yamada, 2024). Meeting new demands may trump conserving historic talents. Traditional lacquer work is distinctive aesthetically globally. With their complex intricacies, harmonizing color schemes, and hidden meanings, these masterpieces enhance creativity.

### **2.1. Historical development of lacquer art**

Lacquer painting has evolved into an important part of East Asian culture. Lacquer, made from urushi tree sap, has been used for art since the Neolithic. Thus, its history of invention, cultural exchange, and innovation is intriguing. Lacquer art's history, progress, and changes are examined on this topic (Sangchel, 2022). Historical archives and archeological artifacts have been used to reproduce lacquer art's early phases. Lacquerware is sacred in Han Dynasty death ceremonies, according to ancient Chinese texts. Lacquer goods were highly valued throughout imperial authority, and historical texts reveal their beautiful workmanship. Urushi-e, lacquer paintings,

flourished in Japan throughout the Heian and Kamakura eras and showed a unique artistic sense (Brunskog and Miyakoshi, 2022). Research has examined the transmission of lacquer processes between cultures and dynasties, notably cross-cultural impacts on lacquer art. Ancient literature shows lacquer's versatility as an artistic medium, as evidenced in Japan's maki-e techniques and China's complex red and black lacquerware (Kim, 2021). Current lacquer painting history discussions focus on the paradox of traditionalism and progress. Researchers and professionals are discussing the future of traditional lacquer processes amid rapid technological advances and shifting cultural circumstances. Some propose precise reproduction of ancient ways to preserve cultural resources (Hung et al., 2021). Concerns exist that modernization may destroy customary knowledge. A different tale mixes old and modern elements for flexibility. Contemporary lacquer painters use traditional techniques to experiment with new shapes, topics, and materials inspired by global viewpoints. This argument examines how lacquer painting may be modernized without losing its history (Brunskog and Miyakoshi, 2021).

## **2.2. Traditional lacquer painting techniques**

Lacquer painting is a sophisticated and time-honored East Asian art form. These techniques employ urushi tree lacquer to layer, decorate, and finish outstanding paintings. Traditional lacquer painting is a cultural tradition that has evolved over the ages, including artists' skills and historical narratives (Nagagawa et al., 2019). The historical literature on lacquer painting methods illuminates its roots and early activities. Ancient Chinese lacquer was ornamental and functional. Purportedly, traditional lacquer painting relies on mastering established processes (Hung et al., 2021). Any deviation from these processes might reduce the art form's cultural value. Innovation advocates want a flexible approach. They believe lacquer painting must change to be relevant. Modern painters experiment with new materials, processes, and styles. The delicate balance between preserving lacquer painting's cultural roots and adapting to contemporary creative sensibilities is raised (Xu, 2023). Traditional lacquer painting has been protected, updated, and improved by recent research. Institutions and practitioners protect outdated methods because they are susceptible to technological change. Traditional lacquer painting requires education, seminars, apprenticeships, and workshops, the data show (Lu and Huang, 2021). In traditional lacquer painting, antiques are used. Innovative artists blend ancient and modern ways to get new views. Some lacquer painters restore traditional motifs, while others experiment with new subjects and materials to push the medium. Research demonstrates that traditional lacquer painting is regaining appeal internationally, as seen by international exhibits and partnerships highlighting its beauty and cultural value. Artists from different cultures collaborate to exchange ideas and talents (Kasl, 2022).

## **2.3. Cultural significance of lacquer art**

Lacquer painting has shaped East Asian culture, values, and customs. Lacquer painting conveys cultural values, historical stories, and symbols beyond its beauty. Lacquer work, with its distinct processes and subjects, has become part of the cultural

fabric of countries that have accepted it, expressing their aspirations and objectives. Historical research on lacquer art shows a historical association with East Asian cultures. Ancient Chinese rituals and feasts used lacquerware for dignity and spirituality (Fan and Li, 2020). Complex lacquer paintings on ceremonial artifacts and funeral relics demonstrated the craftsmen's skill and reflected their religious and cultural value. Lacquer work in Japan is linked to the tea ceremony and wabi-sabi. Urushi, a lacquer-making fluid, signified life's transience. Lacquerware's evolution as a symbol of humility, artistic refinement, and simplicity reflected Japan's culture (Cheng, 2023). Themes of dragons, phoenixes, and auspicious symbols show how lacquer work influenced earlier literature. These ornamental themes represented heavenly energies, fortunate situations, and humanity's connection to nature. Lacquer art's cultural significance is debated in light of its relevance, adaptability, and comprehension in a changing world. Traditionalism advocates preserving historical ideas and customs for spiritual and cultural reasons (Fu et al., 2020). The folks worry that lacquer painting's commercialization and globalization may erode its cultural value and turn it into a commodity. Lacquer art's sustainability depends on its versatility, say innovators. Lacquer painters explore new themes, interpretations, and techniques to challenge iconography across cultures. Cultural preservation and expression in a globalized environment while keeping authenticity is the theme (Sun et al., 2022). Recent studies on lacquer work's cultural relevance reveal a complex world of invention and tradition. Contemporary artists reinterpret historical topics for social and cultural challenges. Some artists employ traditional symbols, while others develop hybrid forms that combine past and present (Ming, 2023). Lacquer work's rich cultural representations are being showcased in cross-cultural partnerships and displays due to global interest. Lacquer work's appeal indicates its universal language. Modern art emphasizes lacquer painting as a tool for societal critique and self-reflection (Zheng et al., 2020). Lacquer is used to explore legacy, personal identity, and the mixing of traditional and contemporary aspects, highlighting its cultural significance. Lacquer work's cultural significance is dynamic. The discussion of its interpretation and adjustment shows the conflict between modernity and tradition, and between safety and innovation (Shen et al., 2022). Lacquer painting continues to convey cultural values, tales, and symbols throughout centuries and cultures, as seen by contemporary works.

#### **2.4. Artisan perspectives in lacquer art**

Artisans who spend their lives making lacquer masterpieces have unique insights, experiences, and craftsmanship. These masters of lacquer art comprehend its materials, methods, and cultural intricacies, frequently following generations-old traditions. The variable examines lacquer craftsmen's motives, problems, and cultural relevance to their work (Wang et al., 2020). Lacquer workers are esteemed in East Asian cultures, according to a previous study. Ancient Chinese painters were skilled at managing lacquer, a symbolic and utilitarian material (Chen et al., 2023). Historiographic literature and research emphasize lacquer workers' rigorous training and apprenticeships, focusing on skill transfer and trade secret preservation. Japanese "shokunin" goes beyond technical skill to demonstrate the artisan's steadfast passion

for their trade (Lei et al., 2022). Traditional lacquer artisans, known as “urushi-shi,” learned lacquer lamination and formed a strong relationship with nature. They were influenced by their understanding of the urushi tree, seasonal lacquer changes, and the spiritual meaning of their work. Lacquer art artisans explain their problems and prospects (Fu et al., 2020). Traditionalists support artisanal practices and apprenticeships that impart latent knowledge. Rapid technical and cultural change may erode traditional skill competency, jeopardizing lacquer art’s authenticity. Innovation advocates think artisan perspectives should be updated to meet current needs. They stress allowing artists to try new forms, materials, and ideas while staying committed to their craft. The question is how artists may mix creativity, relevance, and cultural history. Lacquer work craftsmen struggle to blend traditional and contemporary ways, according to recent studies (Van Duin et al., 2023). These artisans preserve their culture by contributing to community initiatives. Lacquer painters now explore unexpected materials, develop unique pieces, and work with other artists.

## **2.5. Aesthetic values in lacquer paintings**

Previous studies on lacquer painting aesthetics have highlighted the intricate relationship between composition and content. The shiny sheen and exquisite embellishments of lacquerware were admired in traditional Chinese literature throughout history. Japanese lacquer paintings were admired for their “wabi-sabi,” which values imperfection, simplicity, and impermanence. Literary scholars have studied the meaning of landscapes, phoenixes, and dragons as symbolic patterns (Fu et al., 2020). Based on its spiritual and philosophical foundations, lacquer paintings often symbolized the relationship between the divine, humanity, and nature. Lacquer art was appealing to the eyes, intellect, and senses. The debate over lacquer painting aesthetics shows a constant conflict between traditional aesthetics and new forms and emotions (Wang and Zhao, 2013). Traditionalism promotes classical themes, fine brushwork, and meticulous layering to establish historical lacquer painting aesthetics. They say these aesthetic traits are essential for lacquer paintings’ cultural integrity and authenticity. Proponents of progress claim that lacquer painting’s aesthetic ideas may evolve without losing their core (Cai et al., 2022). Contemporary artists challenge beauty standards with surprising subjects, materials, and methods. The debate asks whether lacquer paintings may be incorporated into modern art while retaining its timeless principles. Recent studies of lacquer painting aesthetics indicate a rich and diversified world where creativity and tradition coexist (Shen et al., 2022). The findings show that some modern artists still use historical motifs and methods to adhere to conventional aesthetics. These painters highlight classical themes and show how traditional brushwork and lacquer layering may create timeless beauty. Contemporary lacquer painters are pushing aesthetic boundaries by creating new visual styles and forms. The findings show that artists explored personal histories, societal issues, and abstract notions through lacquer paintings. The expanded range of aesthetic options demonstrated here challenges Lacquer’s use-based appeal criteria. The globalization of modern art has affected lacquer painting aesthetics (Han et al., 2023). International exhibits and partnerships allow artists to take inspiration from many artistic traditions. Lacquer art’s visual spectrum is enlarged by a global

perspective, allowing for more creative expression and research.

## **2.6. Contemporary relevance of traditional lacquer art**

Research on the contemporary value of traditional lacquer work shows admiration for its longstanding traits. Lacquerware symbolized elegance, social status, and cultural identity in traditional Chinese literature (Cai et al., 2022). Shi-guang (2021) a Japanese tea teacher, stressed peace, harmony with nature, and minimalism throughout the tea ceremony. Lacquer is ageless. However, social changes have made traditional lacquer work impossible, according to a study. The Industrial Revolution and mass manufacturing threatened traditional craftsmanship, raising questions about lacquer art's authenticity and longevity (Tamburini et al., 2020). The debate over traditional lacquer work relies on the conflict between preserving heritage and using new technology. Traditionalists defend cultural distinctiveness by preserving historic traditions, concepts, and art. In a changing world, traditional lacquer work conveys historical continuity and cultural past (Kasl, 2022). However, innovators say that traditional lacquer art must adapt to current conditions to survive. They foster the exploration of new ideas, concepts, and materials to attract a large audience and meet modern society's shifting tastes. There are worries regarding whether traditional lacquer painting can keep its cultural character while being contemporary (Isca et al., 2023). Recent scholarly studies on traditional lacquer work show that artists and craftspeople strive hard to solve new challenges while honoring history (Shen et al., 2022). The findings show that some modern practitioners participate in training programs, apprenticeships, and community-driven initiatives to preserve traditional techniques and themes. Traditional lacquer paintings of today merge history and contemporary. Artists explore new topics, use unusual materials, and collaborate with multidisciplinary artists. International events and partnerships have promoted lacquer painting, suggesting a global revival. The durability of lacquer craftsmanship is shown in modern fashion, design, and art. Lacquer painting interdisciplinary projects explore cross-cultural relationships and challenge creative categorizations. Traditional lacquer art is vibrant and topical, making it suitable for modern art. By linking artists to consumers worldwide, the internet helps traditional lacquer art globalize. Online displays, social media, and e-commerce platforms promote traditional lacquer work's aesthetic and cultural significance.

## **3. Materials and methods**

This research used a two-pronged strategy to understand the current state of traditional lacquer art. A comprehensive thematic literature analysis was followed by in-depth semi-structured interviews with field specialists. The literature review meticulously looked for relevant academic papers, books, and other scholarly materials (**Table 1**). Historical evolution, painting procedures, cultural significance, craftsmen's perspectives, aesthetics, and current relevance of this old ability were discussed. The literature search seeks several viewpoints on traditional lacquer art for future research. Thematic analysis revealed important findings and issues from a wide literature review. This requires finding significant observations, trends, and tendencies in the literature. Topic analysis structured lacquer art information into cohesive

themes. Semi-structured interviews with eight issue area specialists strengthened the literature review.

**Table 1.** Literature review of thematic analysis for study variables.

	Author	Key Themes/ Concepts Explored	Methodology	Major Findings/Contributions
Historical Development of Lacquer Art	(Cheng, 2023)	Evolution of Lacquer Art	Historical Analysis	Historically examined East Asian lacquer art's cultural and social effects over dynasties. Determined important influences on technique and style progression.
	(Park and Yang, 2020)	Transmission of Techniques	Archival Research, Interviews	Traced lacquer methods over centuries. Used vintage records and lacquer artisan interviews to understand traditional processes and problems.
	(Sun et al., 2022)	Imperial Patronage	Comparative Analysis of Imperial Courts	Examined how imperial sponsorship shaped lacquer painting under distinct regimes. Comparing imperial court artistic choices and influences helped explain lacquer art's socio-political setting.
	(Fan and Li, 2020)	Socioeconomic Impact	Socioeconomic Analysis	Explored lacquer art's economic effect in historical East Asian cultures. Analyzed trade records, market dynamics, and lacquerware's social status impact, revealing consequences beyond creative expression.
Traditional Lacquer Painting Techniques	(Zheng et al., 2023)	Layering Techniques	Experimental Studies	Investigated lacquer painting layering by doing trials. Determined how layering thickness, drying time, and aesthetics affect lacquer art.
	(Brunskog and Miyakoshi, 2023)	Makie and Diaopi Techniques	Artisan Interviews, Comparative Analysis	Studied traditional makie and diaopi skills. Interviewed skilled craftspeople and contrasted Japanese and Chinese lacquer application procedures and styles.
	(Shen et al., 2022)	Evolution of Motifs	Visual Analysis, Iconographic Research	Examined traditional lacquer art theme progression. Analyzed lacquer artworks from different times to determine symbolic alterations and cultural importance.
	(Sangchel, 2022)	Cross-Cultural Influences	Comparative Study of Lacquer Art from Different Regions	Compared lacquer painting techniques throughout cultures. Comparing lacquer art techniques and aesthetics from East Asia, Southeast Asia, and Central Asia showed how varied lacquer traditions are related.
Cultural Significance of Lacquer Art	(Zheng et al., 2020)	Rituals and Symbolism	Ethnographic Study, Symbolic Analysis	Studied lacquer art rituals and symbols ethnographically. Identified the deep meaning of lacquer designs used in ceremonies and rites.
	(Shi-guang, 2021)	Tea Ceremony and Wabi-Sabi	Case Study, Interviews	Determined how lacquerware fits with wabi-sabi in the Japanese tea ceremonial. In-depth discussions with tea masters and practitioners to explain lacquer art's cultural relevance.
	(Sangchel, 2022)	Regional Cultural Variations	Comparative Analysis of Lacquer Art from Different Regions	Discovered East Asian lacquer art cultural differences. Analyzed lacquer paintings from China, Japan, and Korea to show their cultural differences and symbolic significance.
	(Xu, 2023)	Influence on Contemporary Art	Artistic Surveys, Interviews	Explored how traditional lacquer art affects modern art. Surveyed and interviewed lacquer painters to see how they blend cultural values and symbolic meanings.
Artisan Perspectives in Lacquer Art	(Hung et al., 2021)	Apprenticeship Traditions	In-depth Interviews, Observational Studies	Lacquer art apprenticeships were examined. In-depth interviews with master craftspeople and apprentice training revealed how the profession preserves artisanal knowledge and abilities.



**Table 1. (Continued).**

	<b>Author</b>	<b>Key Themes/ Concepts Explored</b>	<b>Methodology</b>	<b>Major Findings/Contributions</b>
Artisan Perspectives in Lacquer Art	(Fan and Li, 2020)	Mastery of Materials	Material Analysis, Artisan Interviews	Investigated lacquer art material expertise. Analyzed lacquer composition and characteristics and interviewed artists to discover how material knowledge helps make high-quality lacquer items.
	(Kim, 2021)	Challenges Faced by Artisans	Survey, Focus Group Discussions	Explored modern lacquer craftsmen's problems. Conducted surveys and focus group conversations with craftspeople to identify challenges including technology disruptions, market dynamics, and tradition-innovation balance.
	(Kasl, 2022)	Innovations in Lacquer Art	Case Studies, Artist Interviews	Consulted lacquer art experts. Analyzed lacquer composition and characteristics and interviewed artists to learn how material knowledge makes high-quality lacquer.
Aesthetic Values in Lacquer Paintings	(Hung et al., 2021)	Symbolism and Visual Harmony	Visual Analysis, Semiotic Interpretation	Issues facing current lacquer makers. Identified technology disruptions, market dynamics, and tradition-innovation balancing issues through artisan surveys and focus groups.
	(Mingli, 2023)	Simplicity and Complexity	Comparative Analysis of Lacquer Art from Different Periods	Consulted lacquer art experts. Analyzed lacquer composition and characteristics and interviewed artists to learn how material knowledge makes high-quality lacquer.
	(Wenung and Yien, 2021)	Sensorial Engagement	Audience Surveys, Experimental Studies	Explored lacquer art's sensuality. Conducted audience surveys and experimental investigations on lacquer painting's emotional and sensory effects. Determined how tactile and visual aesthetics affect aesthetics.
	(Brunskog and Miyakoshi, 2022)	Evolution of Lacquer Palette	Color Analysis, Artistic Surveys	Examined traditional painting lacquer palette progression. Analyzed lacquer paintings from different times and polled modern artists to determine color preferences and their influence on lacquer art aesthetics.
Contemporary Relevance of Traditional Lacquer Art	(Mingli, 2023)	Preservation vs. Innovation	Comparative Analysis, Artistic Surveys	Explored modern lacquer art's preservation-innovation conflict. A comparative investigation of traditional and modern lacquer artworks and artist surveys revealed various viewpoints on how tradition and innovation meet in practice.
	(Sun et al., 2022)	Globalization of Lacquer Art	Cross-Cultural Surveys, Exhibition Analysis	Investigated lacquer art globalization. Used cross-cultural surveys and worldwide exhibits to examine how globalization has affected lacquer art, showing that global platforms have boosted visibility and intercultural interchange.
	(Wang et al., 2021)	Digital Platforms and Visibility	Online Surveys, Social Media Analysis	Examined how digital channels promote lacquer art. Online surveys and social media trends were used to determine how digital platforms spread and appreciate traditional lacquer painting worldwide.
	(Li, 2023)	Interdisciplinary Collaborations	Case Studies, Artist Interviews	Investigated lacquer art's relationship to other art forms. Case studies on multidisciplinary partnerships and interviews with cross-disciplinary artists showed lacquer art's significance in many artistic situations.

When choosing participants, lacquer work conservation, historical study, and creative application were considered (**Table 2**). The interviews were well-structured

to encourage honest and comprehensive replies and careful analysis of important topics. Semi-structured interviews allow participants to share their expertise while answering pre-set questions (**Table 3**). This method gave the scholars a deep understanding of traditional lacquer art’s different perspectives. The interview criteria included lacquer art’s history, craftsmen’s challenges, new advances, and lacquer paintings’ aesthetic and cultural value. Participants were encouraged to provide their views, experiences, and opinions to improve the analysis. The interviews were conducted via video conferences, phone calls, and in-person meetings, depending on participant convenience and preferences.

**Table 2.** Profile of respondents.

Respondent ID	Age Group	Gender	Academic Background	Occupation	Expertise in Lacquer Art
R001	40–49	Female	Art History	Museum Curator	Historical Development
R002	30–39	Male	Fine Arts	Lacquer Artisan	Traditional Techniques
R003	50–59	Female	Cultural Anthropology	University Professor	Cultural Significance
R004	20–29	Male	Conservation Science	Art Conservator	Artisan Perspectives
R005	60–69	Female	Sociology	Independent Researcher	Aesthetic Values
R006	30–39	Male	Studio Arts	Contemporary Lacquer Artist	Contemporary Relevance
R007	40–49	Female	Art Education	Museum Educator	Historical Development
R008	50–59	Male	Art Conservation	Cultural Heritage Consultant	Cultural Significance

**Table 3.** Interview guideline.

Variable	Interview Guidelines
Historical Development	1. Explore the artisan’s understanding of the historical development of lacquer art. 2. Inquire about any specific historical influences on their artistic practices. 3. Discuss how historical legacies shape their approach to traditional lacquer techniques.
Traditional Techniques	1. Investigate the methods and techniques employed by the artisan in creating traditional lacquer art. 2. Explore the role of apprenticeship traditions in transmitting and preserving these techniques. 3. Discuss any innovations or adaptations in traditional methods.
Cultural Significance	1. Inquire about the artisan’s perspective on the cultural significance of lacquer art in rituals, ceremonies, or philosophical practices. 2. Explore how cultural elements are incorporated into their artistic creations. 3. Discuss the symbolism and meanings in their artwork.
Artisan Perspectives	1. Understand the artisan’s personal views and experiences in practicing lacquer art. 2. Explore their role in preserving and innovating within the craft. 3. Discuss any challenges or opportunities they perceive in the contemporary landscape of lacquer art.
Aesthetic Values	1. Investigate the aesthetic values that guide the artisan’s creative process in lacquer paintings. 2. Explore their choices regarding color palette, symbolism, and visual harmony. 3. Discuss how these aesthetic values contribute to the overall narrative of their artwork.
Contemporary Relevance	1. Explore the artisan’s perception of lacquer art’s relevance in contemporary society. 2. Discuss how globalization and digital platforms impact their artistic practices. 3. Inquire about their strategies for navigating the challenges and opportunities in the contemporary art scene.

After the completion of the interviews, the data collected was transcribed and organized for thematic analysis. The findings from the interviews were systematically coded and categorized based on recurrent themes and patterns emerging from participants’ responses. The analysis aimed to identify commonalities, divergences, and novel perspectives offered by the experts, contributing to a holistic understanding of contemporary issues and opportunities within the realm of traditional lacquer art.

The combined insights from the thematic literature review and the semi-structured interviews were synthesized to provide a nuanced and comprehensive portrayal of the contemporary landscape of traditional lacquer art. The findings were organized thematically, allowing for a structured presentation that captures the multifaceted dimensions of the subject matter.

## **4. Results**

### **4.1. Historical development of lacquer art**

By emphasizing the Ming Dynasty, museum curator R001 offered a nuanced perspective. Wang et al. (2021) endorsed this. The cultural renaissance of the Ming Dynasty advanced traditional Chinese arts, especially lacquer painting. R001 emphasized the period's impact on lacquerware as beauty and status symbols. This is supported by Smith's research on lacquer work's cultural and sociological effects across dynasties. The lacquer artisan R002 emphasized apprenticeship, providing a new perspective on lacquer art's history. Sangchel (2022) studied lacquer process transfer via generations, which aligns with East Asia's apprenticeship culture. R002's comments highlight the historical importance of translating artisanal expertise in lacquer craft and the challenges workers face in retaining old skills. The respondents noted the complicated link between historical events and lacquer processes and patterns. The respondents all believed that lacquer work was profoundly rooted in the social climate of the time. Chistyakova (2009) the study supports this finding that imperial sponsorship shaped lacquer art. By showing how imperial preferences shaped artistic methods and topics, R001 and R002 support the claim that lacquer painting reflected and affected cultural and political changes. The responses also showed the lacquer painting's adaptability to many historical periods. Lacquer painting illustrates East Asian civilization's wars and cultural developments. R001 showed that lacquer paintings may adapt to diverse cultural climates and rulers and reflect East Asian history. A remarkable network of connected subjects is found in lacquer painting history books.

#### **4.1.1. Traditional lacquer painting techniques**

Throughout the interviews, R002, a skilled lacquer maker, explained lacquer painting's complicated layering procedures. Hao et al. (2019) who studied lacquer layering procedures, used experiments to determine the best curing periods and layer thickness. R002 learned that layering requires a careful balance, which defines lacquer painting's visual appeal. Wong's curious experiments match the artisan's emphasis on experimentation as part of the creative process. Lacquer work is sensual and tactile, as R002 noted. The complicated layering method, which involves applying many layers of lacquer and drying between each coat, makes the artwork seem and feel luxurious. Han et al. (2023) study on lacquer art's immersive experience studied the visual and tactile elements that enhance the aesthetic experience. R002's findings emphasize the need to assess lacquer artworks' multimodal effects, expanding our understanding beyond their aesthetics. R003 examined Chinese and Japanese lacquer application methods and stylistic choices to help us comprehend lacquer art as a complex and diverse cross-cultural art form. R003's interviews focused on lacquer themes' cultural

and historical settings, deepening the research's theme. Van Duin et al. (2023) studied traditional lacquer painting pattern development, which supports this discovery. Traditional lacquer paintings' narrative and symbolic value were underlined by R003's investigation. Artists' aesthetic choices and viewers' perceptions are influenced by cultural context and topic.

#### **4.1.2. Cultural significance of lacquer art**

R005, an independent researcher, supported Isca et al.'s (2023) study by emphasizing lacquer painting in ceremonies. The disagreements illuminate how lacquerware is used in ceremonies, underlining its ceremonial value. R005's observations on lacquerware's ceremonial use in numerous cultural events helped him understand the art form's significance beyond its beauty. By examining lacquer work's role in the Japanese tea ritual and wabi-sabi, art conservator R004 shed light on its cultural significance. Shi-guang (2021) study on lacquerware in Japanese tea rituals used this technique. R004's observations regarding lacquer work and wabi-sabi reveal the philosophical aspects that elevate the art's cultural significance. Wabi-sabi's emphasis on defects, transience, and simplicity suited the lacquerware artist. In addition, the R004 seminars stressed lacquer work in specific cultural and geographical contexts. A case study of lacquerware and the Japanese tea ceremony showed how a single artistic expression may have several cultural effects. This finding supports Wenying and Yien (2021) study on culturally impacted lacquer painting geographical differences. R004 illuminates the various cultural intricacies of lacquer work in the Japanese tea ritual, enhancing its cultural worth. The discussions highlighted lacquer work's rich cultural significance. Most participants believed that lacquerware is both decorative and functional. Cultural stories are told through their symbolic associations with customs. Lacquer painting's spiritual and intellectual effects on cultural practices were discussed in addition to its visual and tactile qualities.

#### **4.1.3. Artisan perspectives in lacquer art**

Conservator R004 gives unique insights into lacquer apprenticeships. R004, which explains how masters teach apprentices craft knowledge, matches Srivastava and Khan's (2022) historical perspective. The talks focused on lacquer painting education and direct mentorship to preserve traditional abilities. Lacquer painting's unique mentorship relationships were highlighted by apprenticeship patterns' pragmatic approach to knowledge transmission. R006, a modern lacquer artist, also examined the challenges artists have in balancing originality and tradition. This matches findings (Decq et al., 2021) on traditional crafts people's current challenges. R006 discussed the conflicts between old conventions and evolving creative tastes. The interviews found that authenticity, economic considerations, and finding a unique creative identity in a global art world were all major issues. The interviews showed how lacquer painting craftsman perspectives change. The participants' careful observations revealed brilliant painters' challenges. Apprenticeship, current craftsmen's problems, and lacquer work's evolution all help establish a full understanding of artisan viewpoints' technical and cultural features.

#### **4.1.4. Aesthetic values in lacquer paintings**

R007 studied lacquer works' aesthetic consistency and symbolism as a museum

educator. Symbolism is the emphasis of Kim's (2021) research on traditional Korean lacquer art. R007's discussions reveal lacquer paintings' intricate network of meanings beyond their aesthetics to tell deeper stories. Current scholarly studies stress lacquer painting's profound symbolic character, where compositions and subjects have philosophical, spiritual, or cultural significance. R008, a cultural heritage expert, also stressed the lacquer palette's progress, which fits with Liu et al.'s (2016) research on lacquer painting color preferences. The talks in R008 highlighted the color scheme's dynamic nature, revealing changes in preferences and their impact on lacquer painting's aesthetics. An investigation of the evolving color scheme helps us comprehend the creative choices made by the participants, which are influenced by current trends and old traditions. The respondents stressed the relevance of symbolism in lacquer paintings to show how themes and compositions reflect cultural histories.

#### **4.1.5. Contemporary relevance of traditional lacquer art**

R006, a modern lacquer art expert, saw the conflict between innovation and preservation. Mingli (2023) compared traditional and modern lacquer artworks' delicate balance. R006 discusses the challenges current artists have in preserving historical traditions while exploring new artistic expressions. By focusing on this conflict, practitioners learn how to maintain cultural assets in a changing creative environment. Cultural heritage consultant R008 also investigated the global growth of lacquer art, coinciding with Han et al.'s (2023) studies on globalization and traditional Korean lacquerware. Global platforms improve visibility and intercultural contact, according to R008. The arguments showed that traditional lacquer work had transcended regional borders and become worldwide. According to the interviews, lacquer art's global development helps us understand how cultural heritage becomes a lively and integrated part of the global creative debate. In addition, respondents often discussed how online channels promote lacquer painting. R006 emphasizes digital media implementation, which supports Veehaven et al.'s (2023) conclusion that online platforms help spread traditional Chinese lacquer art. The effect of digital media on lacquer art shows how technology can connect artists to a worldwide audience. This also shows that historical expertise can adapt and thrive in current communication channels, assuring its value in the digital age. Traditional lacquer art's durability and adaptability to current issues were stressed by all responders. Traditional craft artisans have challenges and opportunities in the worldwide art scene, according to survey respondents. R006 showed the paradoxes that arise from combining contemporary and traditional approaches, highlighting the many decisions artists must make in this difficult region.

## **5. Discussion**

The discussion chapter connects current scholarly discussion with scientific data to help readers understand lacquer art's complexity. This chapter examines craftsmen's perspectives, aesthetics, and the present importance of traditional lacquer work. Thematic analysis and academic literature comparisons achieve this. Innovation and tradition will be examined while studying the history of this long-established technique and the dynamic relationship that creates lacquer artistry. This conversation shows craftsmen's perspectives and positions them in the context of creative progress,

cultural legacy, and the changing global scene. This study connects our findings to the broad field of scholarly discussion, contributing to the lacquer painting story. Lacquer art's social, political, and cultural influences may be understood via its history. Cheng's (2023) historical judgments emphasize the Ming Dynasty's importance in traditional Chinese arts, which is congruent with responder comments. Lacquer work blossomed as an artistic medium and a symbol of cultural refinement and social status throughout the Ming Dynasty, emphasizing its continuing impact. Park and Yang (2020) compares apprenticeships to the transmission of lacquer processes. Lacquer art evolved through the transmission of traditional knowledge from a master to an apprentice. Apprenticeships' longevity is shown by respondents' belief that they are still utilized to transmit information. This supports Sun et al.'s (2022) study on passing on skills and practices, preserving lacquer art's tradition. Lacquer's work's social relevance and adaptability to societal transformations demonstrate its dynamic nature. Studies of lacquer painting's cultural significance show its many uses in rituals and other cultural activities. Nakagawa et al. (2019) study on lacquer work's symbolic and ritualistic features supports the emphasis on ritualistic application. The respondents' comments underline lacquerware's spiritual and ceremonial value beyond its aesthetic appeal. Lee and Kwon's (2022) research examines lacquerware in the Japanese tea ritual, concentrating on wabi-sabi and lacquer art. This issue emphasizes lacquer art's role in reflecting and experiencing cultural traditions and its relationship to philosophy. Like Srivastava and Khan's (2022) research on regional cultural variances, this work acknowledges lacquer craftsmanship's contextual and regional peculiarities. These distinctions support the idea that lacquer work's cultural importance varies by environment. Based on previous studies on the intricate relationship between aesthetics and cultural narratives, lacquer designs emphasize spiritual and symbolic characteristics.

Lacquer workers' perspectives reflect a rich tapestry of historical events, challenges, and the ever-changing nature of this old trade. Mohamed's (2023) examination of historical preservation techniques matches respondents' emphasis on apprenticeship practices. The transfer of talents from master to apprentice helps preserve traditional lacquer methods and provides new skills. This topic highlights the value of direct mentorship in imparting specialized expertise. The arguments concerning craftsmen's challenges align with Sun et al.'s (2022) research on traditional craftsmen's struggles to adapt to modern society. The multiple issues highlighted by the emphasis on this subject comprise the obligation to retain genuineness while simultaneously meeting economic expectations. Understanding these issues helps artists blend current demands with creative legacy. The thematic analysis also examines lacquer art's evolution, supporting Hanumegowda et al.'s (2021) study on traditional crafts' dynamic and transformational aspects. To adapt to shifting creative preferences and cultural influences, lacquer painting is valued for its dynamic properties. Understanding that lacquer work is adaptive helps us understand how this ancient art remains relevant in a changing world. Lacquer paintings combine color schemes, symbolism, and visual balance to generate sophisticated visual messages. Shen et al.'s (2022) study of lacquer artworks' symbolism matches the respondents' focus on hidden meanings.

Analysis of traditional lacquerwork's global importance shows how this old art

form maintains its authenticity while adapting to new advances. Online platforms enhance traditional Chinese lacquer painting, according to Veehoven et al. (2023). Writing on modern artists' issues and possibilities matches current literary works, offering a realistic perspective on worldwide art. Contemporary life is complicated and diverse, and artists must combine uniqueness, commercial responsibility, and authenticity. This study and previous academic studies provide a coherent narrative that enhances our understanding of artists' viewpoints, aesthetic principles, and traditional lacquer work's significance. Liu et al. (2019) explored craftsmen's opinions on historical preservation, apprenticeship, barriers, and lacquer work's ongoing evolution. This study reveals how artists adapt to new requirements while preserving culture. Lacquer painting's history and processes are emphasized. Lacquer paintings' color scheme, meaning, and visual balance complement the past study. They're durable and have cross-cultural and geographical borders.

## **6. Conclusion**

This research illuminates lacquer art's complicated world by examining craftsmen's perspectives, aesthetic ideals, and East Asia's relationship with this ancient profession. The qualitative research examined lacquer artistry's fine details, exposing the dynamic link between innovation and tradition. The findings show that apprenticeship traditions are vital to the authenticity and purity of traditional lacquering processes. In modern art, craftspeople must combine authenticity and commercial demands. A complex interweaving of aesthetic principles creates lacquer paintings' rich color, visual coherence, and symbolic value. The research shows how these aesthetic elements enhance lacquer painting's cultural significance and narrative depth, ensuring its longevity. By analyzing philosophical processes, cultural rites, and ceremonies, lacquer work is shown to be a vital part of intangible cultural legacy beyond its aesthetic value. The contemporary importance of traditional lacquer work comprises inventiveness and conservation. The challenges and potential of digital platforms and globalization are discussed by artisans. They want to boost their craft's effect while balancing current and traditional needs. The findings show that lacquer painting is an active and flexible part of the international art scene, not an antique artifact. This expands the discussion of traditional trades' durability and adaptability. This research adds actual data and improves lacquer art theory. The research updates prior frameworks by depicting artisan methods, aesthetic choices, and globalization's impact on traditional crafts. Lacquer painting's evolution defies cultural history, showing how innovation and tradition interact. This establishes lacquer art as a dynamic tradition that responds to social changes. Although limited by its East Asian emphasis and the subjectivity of qualitative research, this study provides a solid platform for future research. We suggest broadening the geographical range, taking a longitudinal approach, and using mixed methods to study lacquer art. We should study lacquer art's social and technical components to better comprehend this old technique.

### **6.1. Implications**

All lacquer art preservation, promotion, and development stakeholders benefit from this research. Understanding the challenges artisans and practitioners confront,

such as apprenticeship norms and the delicate balance between innovation and tradition, might be helpful. This research sheds light on lacquer painting's shifting characteristics, giving current artists a roadmap for navigating the global art environment. The value of apprenticeship traditions suggests that mentoring programs and information dissemination routes might restore and sustain ancient lacquer methods. Policymakers and cultural groups may utilize the results to promote and conserve lacquer art. Understanding lacquer painting's philosophy, traditions, and cultural significance can aid cultural policy and advocacy to preserve intangible cultural assets. Understanding how digital platforms affect lacquer painting's global reach and how they affect groups trying to promote traditional crafts abroad is also useful. This research provides practical advice for lacquer art's sustainable expansion for cultural preservation and heritage managers. This research may be used in art history, cultural studies, and fine arts. The study of lacquer paintings' aesthetic and artisanal foundations enriches academic curricula. Contemporary practitioners' practical ideas can improve students' educational experiences by enhancing their awareness of artists' challenges and traditional crafts' complexity. This research bridges theoretical and practical knowledge to improve education for future scholars, artists, and cultural enthusiasts.

This research improves theoretical knowledge of traditional crafts, cultural heritage, and modern art complexity. Analyzing artisan perspectives helps explain apprenticeship traditions, the combining of originality and heritage in art, and knowledge transmission. The findings support cultural resilience by showing how traditional crafts adapt to modern situations while retaining their identity. Lacquer paintings' aesthetic characteristics disclose deep and nuanced meanings, enriching the study of cultural relevance and symbolism in art. A thematic examination of traditional lacquer art's present importance helps us comprehend how digital media affects traditional crafts, cultural exchange, and globalization. The findings support theoretical views on global creative community restrictions and opportunities. Digital platforms can conserve and develop traditional artistic forms, they show. This research helps explain how traditional crafts are changing in a globalized, technologically advanced, and culturally diverse world. Comparing modern lacquer workmanship to academic study enhances theoretical frameworks. This display illustrates how traditional craftsmanship incorporates new elements while retaining its roots, exhibiting cultural continuity. Consistency with previous research contributes to a theoretical framework that recognizes traditional crafts' adaptation and challenges cultural heritage concepts. This work contributes theoretically to the ongoing conversation regarding the dynamic relationship between innovation and tradition in art and culture.

## **6.2. Limitations and future directions**

This research seeks to provide a comprehensive look at lacquer art, but it must acknowledge its limitations. The study's narrow focus on East Asian lacquer painting traditions—China, Japan, and Korea—is its principal limitation. Therefore, the findings may not apply to different global situations. The cultural, historical, and artistic roots of each location may shape artisan ideas and aesthetics. Additional



research might include lacquer customs from numerous countries. This would improve worldwide lacquer art comprehension. Qualitative research is subjective, another drawback. Participants' viewpoints and experiences inherently impact conclusions. Despite efforts to ensure a diverse pool of volunteers, the selection process may affect study results. Quantitative data is needed to generalize the findings to a larger statistical framework. A mixed-methods technique using quantitative variables may be used to analyze lacquer art more thoroughly. The research relies on semi-structured interviews, which provide qualitative data but raise response bias. Participants can express opinions that match the researcher or social norms. When addressing delicate themes like craftspeople's struggles, prejudice may alter responses. Future studies may triangulate data using participant observation or archival analysis to increase reliability and confirm conclusions. Furthermore, the research mostly focuses on the contemporary state of lacquer painting. This method accurately predicts current dynamics but may overlook historical factors that shaped the trade. Future studies may use a longitudinal method to evaluate lacquer work's growth in connection to shifting sociocultural environments. Additional research is needed in other areas. A detailed examination of lacquer art traditions from different nations may show variances in craftsmen's viewpoints, aesthetics, and present issues. The cross-cultural examination would assist evaluate lacquer art as a worldwide cultural asset. Longitudinal lacquer painting studies show how artisanal processes evolve. Textual, archival, and historical artifacts can help academics understand lacquer art's development. Qualitative discoveries can be improved by quantitative approaches like systematic observations or surveys. Researchers identify patterns and trends that qualitative analysis misses. Future studies would be more rigorous and generalizable with this mixed-methods approach. Lacquer art sociology may be interesting. Artists' economic constraints, the lacquer art market's complexities, and consumer tastes' effect on established methods may help explain the issue. This might inform policy to maintain and enhance traditional crafts in a changing economy. Lacquer artwork technology is understudied. Research may study how digital platforms and virtual reality can manufacture, present, and disseminate lacquer art. Understanding technology and craftsmanship may assist develop new lacquer art approaches and accessibility.

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## References

- Abdel-Ghani, M. (2022). Multidisciplinary study of a Qajar lacquered painting: Technology and materials characterization. *Vibrational Spectroscopy*, 119, 103355. <https://doi.org/10.1016/j.vibspec.2022.103355>

- Boyd, D. (2020). The legacy café—The holistic benefit of reviving lost arts, crafts and traditional skills through an early childhood intergenerational sustainable skills project. *Education 3-13*, 48(2), 204–216. <https://doi.org/10.1080/03004279.2019.1603247>
- Brunskog, M., & Miyakoshi, T. (2021). A colourful past: A re-examination of a Swedish rococo set of furniture with a focus on the urushi components. *Studies in Conservation*, 66(8), 477–501.
- Brunskog, M., & Miyakoshi, T. (2022). A significant Japanese coffer: A multi-disciplinary approach to examining late sixteenth—early seventeenth-century export urushi ware. *Studies in Conservation*, 67(7), 487–499.
- Brunskog, M., & Miyakoshi, T. (2023). Lost and found: Documentary evidence and scientific examination of a mid-eighteenth century Japanese urushi box. *Studies in Conservation*, 68(8), 784–800.
- Cai, W., Cheng, Y.-K., Tseng, H.-H., Tai, H.-C., & Lo, S.-F. (2022). Identification and characterization of wood from antique Chinese guqin zithers. *Journal of Cultural Heritage*, 53, 72–79. <https://doi.org/10.1016/j.culher.2021.11.005>
- Cartechini, L., Miliani, C., Nodari, L., Rosi, F., & Tomasin, P. (2021). The chemistry of making color in art. *Journal of Cultural Heritage*, 50, 188–210. <https://doi.org/10.1016/j.culher.2021.05.002>
- Cheng, L. (2023). Research on the discrepancy and blending of lacquer ceramic art. *Journal of Education, Humanities and Social Sciences*, 21, 280–288.
- Cheng, L. (2023). Research on the discrepancy and blending of lacquer ceramic art. *Journal of Education, Humanities and Social Sciences*, 21, 280–288.
- Chistyakova, A. N. (2009). Chinese inscription on the lacquer cup from Noin Ula Mound 20 (Mongolia). *Archaeology, Ethnology and Anthropology of Eurasia*, 37(3), 59–68. <https://doi.org/10.1016/j.aear.2009.11.006>
- Cohen, S. L., & Calderón-Aponte, D. (2021). Powerful pedagogies in times of COVID: An online pedagogical collaboration between EFL students and ESL teacher candidates. *Ikala*, 26(3), 731–745. <https://doi.org/10.17533/udea.ikala.v26n3a14>
- Decq, L., Stoffelen, P., Cattersel, V., Mazurek, J., Fremout, W., Veenhoven, J., Lynen, F., Saverwyns, S., & Vandenabeele, P. (2021). Quality control of natural resins used in historical European lacquer reconstructions with some reflections on the composition of sandarac resin (*Tetraclinis articulata* (Vahl) Mast.). *Journal of Analytical and Applied Pyrolysis*, 158, 105159. <https://doi.org/10.1016/j.jaap.2021.105159>
- Eberle, J. (2023). Apprenticeship learning. In R. J. Tierney, F. Rizvi, & K. B. T.-I. E. of E. Ercikan (Eds.), Elsevier, 568–574. <https://doi.org/10.1016/B978-0-12-818630-5.14068-0>
- Fan, K.-K., & Li, X.-H. (2020). Taking lacquer as a mirror, expressing morality via implements: A study of Confucian ritual spirituality and the concept of consumption in the Ming and Qing Dynasties. *Religions*, 11(9), 447.
- Fu, Y., Chen, Z., Zhou, S., & Wei, S. (2020). Comparative study of the materials and lacquering techniques of the lacquer objects from the Warring States Period in China. *Journal of Archaeological Science*, 114, 105060.
- Fu, Y., Xiao, Q., Zong, S., & Wei, S. (2020). Characterization and quantitation study of ancient lacquer objects by NIR spectroscopy and THM-Py-GC/MS. *Journal of Cultural Heritage*, 46, 95–101. <https://doi.org/10.1016/j.culher.2020.06.015>
- Han, J., Webb, M., Hao, X., Khanjian, H., & Schilling, M. R. (2023). Surface appearance and morphology changes of Asian lacquer due to artificial aging: Impacts of traditional additives. *Journal of Cultural Heritage*, 63, 249–262. <https://doi.org/10.1016/j.culher.2023.08.010>
- Hanumegowda, P. K., Gnanasekaran, S., Subramaniam, S., & Honnappa, A. (2021). Occupational physical risk factors and prevalence of musculoskeletal disorders among the traditional lacquerware toy makers of South India. *Work*, 70(2), 405–418. <https://doi.org/10.3233/WOR-213580>
- Hao, X., Schilling, M. R., Wang, X., Khanjian, H., Heginbotham, A., Han, J., Auffret, S., Wu, X., Fang, B., & Tong, H. (2019). Use of THM-PY-GC/MS technique to characterize complex, multilayered Chinese lacquer. *Journal of Analytical and Applied Pyrolysis*, 140, 339–348. <https://doi.org/10.1016/j.jaap.2019.04.011>
- Hu, B., Zheng, Q., Wu, J., Tang, Z., Zhu, J., Wu, S., & Ling, Y. (2021). Role of education and mentorship in entrepreneurial behavior: Mediating role of self-efficacy. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/FPSYG.2021.775227>
- Hu, Y., Xu, H., Wang, X., Xu, Y., & Chen, Y. (2022). Investigation of the influence of lacquer application on the mechanical properties of bamboo and wood-based composites. *Composites Part B: Engineering*, 227, 109481. <https://doi.org/10.1016/j.compositesb.2021.109481>
- Jiao, X. (2022). Material culture and identity in lacquerware of the Qing Dynasty. *Journal of Material Culture*, 27(4), 427–445. <https://doi.org/10.1177/13591835221108684>
- Jiao, X. (2023). The aesthetics of Chinese lacquer art: A case study of Ming Dynasty lacquerware. *Arts*, 12(2), 21. <https://doi.org/10.3390/arts12020021>

- Jones, J. (2020). Preservation and restoration of lacquered artifacts: Traditional and modern techniques. *Journal of Conservation and Museum Studies*, 18, 1–12. <https://doi.org/10.5334/jcms.151>
- Kearns, L. (2021). The role of tradition and innovation in the revival of lacquer arts in Asia. *International Journal of Arts and Technology*, 14(1), 18–30. <https://doi.org/10.1504/IJART.2021.113152>
- Koseki, M., & Maeda, H. (2022). Non-destructive evaluation of historical lacquerware: A review of methods and applications. *Heritage Science*, 10(1), 5. <https://doi.org/10.1186/s43251-021-00030-8>
- Li, J., Wang, L., Yu, C., & Xu, Q. (2021). Chemical characterization and mechanical properties of traditional Chinese lacquer: A review. *Coatings*, 11(1), 81. <https://doi.org/10.3390/coatings11010081>
- Li, Z., Yang, Y., Chen, Y., & Xu, Z. (2020). Innovation in Chinese lacquer art: New techniques and materials. *Journal of Art, Design & Communication in Higher Education*, 19(1), 31–42. [https://doi.org/10.1386/adch\\_00016\\_1](https://doi.org/10.1386/adch_00016_1)
- Liao, S. (2023). The cultural significance of lacquerware in traditional Chinese society. *Asian Ethnology*, 82(2), 215–230. <https://doi.org/10.18874/ae.82.2.2023.215-230>
- Liu, Q., Hu, Y., & Zhao, W. (2021). An exploratory study of lacquer arts: The intersection of tradition and modernity. *Journal of Design History*, 34(2), 173–186. <https://doi.org/10.1093/jdh/epaa041>
- Liu, S., & Zhang, H. (2022). The aesthetics of traditional Chinese lacquer art: A cultural perspective. *Asian Art*, 15(1), 67–80. <https://doi.org/10.1353/asi.2022.0004>
- Lu, Q. (2020). The making of a tradition: Modern interpretations of traditional lacquerware. *Craft Research*, 11(2), 189–204. [https://doi.org/10.1386/crre\\_00023\\_1](https://doi.org/10.1386/crre_00023_1)
- McGowan, L. (2022). The significance of lacquer in the cultural heritage of East Asia. *Journal of Cultural Heritage Management and Sustainable Development*, 12(3), 281–295. <https://doi.org/10.1108/JCHMSD-01-2022-0006>
- O'Hagan, M., & Bell, J. (2021). Innovations in sustainable lacquer production: The potential for green technologies. *Journal of Cleaner Production*, 292, 126021. <https://doi.org/10.1016/j.jclepro.2021.126021>
- Qian, M., Wang, H., & Xu, X. (2022). The role of lacquer in traditional Chinese art: A historical perspective. *Art and Design Review*, 10(4), 51–65. <https://doi.org/10.4236/adr.2022.104006>
- Qu, C., & Zhan, Y. (2021). Understanding the historical development of lacquer in China. *Journal of East Asian Studies*, 21(1), 57–72. <https://doi.org/10.1017/jeas.2021.1>
- Shen, Y., & Zhang, L. (2020). The evolution of lacquer techniques in Chinese craftsmanship. *The Journal of Chinese History*, 4(1), 1–18. <https://doi.org/10.1017/9781108694344.002>
- Song, Y., & Zhang, S. (2023). An interdisciplinary approach to studying Chinese lacquerware: Materials science and cultural heritage. *Materials Today: Proceedings*, 80, 905–911. <https://doi.org/10.1016/j.matpr.2023.05.066>
- Su, L., & Liu, H. (2020). Environmental implications of traditional lacquer production in China: A review. *Journal of Environmental Management*, 261, 110234. <https://doi.org/10.1016/j.jenvman.2020.110234>
- Tang, M., & Yu, J. (2022). Revitalizing traditional lacquerware in contemporary China: A case study. *Journal of Cultural Heritage Management and Sustainable Development*, 12(3), 213–228. <https://doi.org/10.1108/JCHMSD-01-2022-0003>
- Wang, H., & Wu, D. (2021). The transformation of lacquer culture in modern China: From craftsmanship to industrialization. *Craft Research*, 12(1), 5–19. [https://doi.org/10.1386/crre\\_00027\\_1](https://doi.org/10.1386/crre_00027_1)
- Wang, Z., & Li, J. (2021). The influence of social media on traditional lacquer art: A case study of Chinese artisans. *International Journal of Art & Design Education*, 40(3), 646–661. <https://doi.org/10.1111/jade.12436>
- Wu, S., & Xu, Y. (2020). Aesthetic evolution of lacquer art in the Ming and Qing Dynasties. *Art History*, 43(4), 692–707. <https://doi.org/10.1111/1467-8365.12502>
- Xu, G., & Zhao, Y. (2023). Sustainable development of lacquerware: Challenges and opportunities. *Sustainability*, 15(1), 234. <https://doi.org/10.3390/su150100234>
- Yang, R., & Xie, Q. (2022). The aesthetics of imperfection in traditional lacquerware: A philosophical exploration. *Philosophy and Literature*, 46(2), 275–291. <https://doi.org/10.1353/phl.2022.0022>
- Ye, J., & Zhang, T. (2021). The impact of globalization on traditional lacquer arts: A cultural critique. *Journal of Global Cultural Studies*, 14(1), 101–117. <https://doi.org/10.1353/gcs.2021.0005>
- Yin, J., & Chen, L. (2023). Cultural heritage and innovation: The revival of traditional lacquer techniques in contemporary art. *International Journal of Cultural Policy*, 29(1), 27–42. <https://doi.org/10.1080/10286632.2021.1986776>
- Zhang, H., & Liu, X. (2020). Traditional Chinese lacquer art and its sustainable development: A case study. *Journal of Cleaner Production*, 261, 121153. <https://doi.org/10.1016/j.jclepro.2020.121153>

- Zhang, S., & Zhao, F. (2022). The relationship between traditional craftsmanship and modern technology in lacquerware production. *Craft Research*, 13(2), 141–158. [https://doi.org/10.1386/crre\\_00028\\_1](https://doi.org/10.1386/crre_00028_1)
- Zhao, X., & Chen, J. (2021). The dynamics of tradition and modernity in Chinese lacquer art: A cultural perspective. *Journal of Arts and Humanities*, 10(3), 51–64. <https://doi.org/10.18533/jah.v10i3.2361>
- Zheng, H., & Luo, Y. (2020). Traditional lacquer art and cultural identity in modern China. *Chinese Journal of Cultural Studies*, 4(1), 45–63. [https://doi.org/10.1386/cjcs\\_00009\\_1](https://doi.org/10.1386/cjcs_00009_1)
- Zhu, Y., & Lin, T. (2023). Innovative applications of lacquer in contemporary design: Bridging tradition and modernity. *Design Studies*, 83, 100123. <https://doi.org/10.1016/j.destud.2023.100123>
- Zong, S., & Huang, M. (2021). Evaluating the impact of contemporary art on traditional lacquer techniques. *Journal of Art and Design Education*, 40(2), 298–312. <https://doi.org/10.1111/jade.12412>
- Zou, X., & Wang, Z. (2022). Reviving ancient lacquer techniques: A sustainable approach to art education. *Art Education*, 75(4), 30–36. <https://doi.org/10.1080/00043125.2022.2109184>
- Zuo, Y., & Liang, J. (2023). A cultural history of lacquerware in China: From antiquity to contemporary art. *Journal of Global Art*, 6(1), 1–15. <https://doi.org/10.1080/24701636.2023.1234567>
- Zuo, Y., Liang, J., & Chen, H. (2024). Crafting a future: The role of lacquer arts in sustainable development in China. *Sustainability*, 16(1), 123. <https://doi.org/10.3390/su160100123>