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Research Article

# A Study on the Inheritance and Innovation of Modern Art History for Sustainable Development from the Perspective of Contemporary Art History

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#### Abstract

Against the backdrop of globalization and digitalization, this study explores the inheritance and innovation of modern art history. Through a synthesis of literature and case analyses, it unpacks theories from classical and contemporary art historiography to reveal the dialectical relationship between these concepts. The research demonstrates that globalization and new technologies offer diverse pathways for artistic innovation, while inheritance provides the cultural and technical bedrock. By examining representative artworks, this paper illustrates how contemporary artists reinterpret traditional art through technological innovation and cross-cultural dialogue, offering fresh perspectives for sustainable theories in contemporary art history, as well as practical insights for artistic creation and education.

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### Introduction

The trajectory of modern art history is indelibly intertwined with social, cultural, and technological upheavals. Spanning from the Renaissance to the late 19th and early 20th centuries, this pivotal phase of art history witnessed the rise of movements such as Classicism, Romanticism, and Realism in the wake of the European Enlightenment. During this era, artists not only advanced traditional artistic forms but also engaged in profound reflection and innovative expression of modern societal complexities (Smith, 2009). The late 19th century marked a critical inflection point, with the emergence of modernist movements like Impressionism and Symbolism, which diversified artistic expression and themes, gradually transcending the confines of classical narrative frameworks (Elkins, 2020).

In recent decades, globalization and digital technologies have reshaped artistic creation and dissemination. The rise of digital art, installation art, and cross-media practices has necessitated that art historical research revisits the inheritance and innovation of traditional artistic forms and concepts against the backdrop of globalized and technological change (Arnold, 2013). Concurrently, the deepening of global cultural exchange has challenged the hegemony of Western art historical narratives, according significant stature to multicultural art (Carrier, 2008). Within this context, understanding the operational mechanisms of inheritance and innovation in modern art history through the lens of contemporary art historiography has become an academic imperative.

#### 2. Literature Review

#### 2.1. Contributions of Classical Art Historical Schools

As art historical research deepens, modern art history has emerged as a focal point for scholars. Prominent figures of the classical art historical school, such as Aby Warburg and Erwin Panofsky, emphasized the continuity of artistic forms and their symbolic significance within culture. Warburg (1999) traced through artworks how classical artistic forms persisted and were reconstructed across eras, while Panofsky (2021) proposed that art serves not merely as visual representation but as a carrier of cultural symbols, with inheritance embodied in the evolution of symbolic systems.

The Renaissance stands as a paradigm of this phenomenon, where artists like Leonardo da Vinci and Michelangelo extensively borrowed from the artistic styles and techniques of ancient Greece and Rome, demonstrating a profound inheritance of classical art (Gombrich, 1995). This inheritance of classical traditions extended beyond technical proficiency, embodying cultural values and historical consciousness. While classical art historical research effectively documented stylistic continuity, it often overlooked the driving force of innovation in artistic creation—particularly how innovation propels stylistic breakthroughs amid social and technological transformations.

#### 2.2. Inheritance and Innovation in Modern Art Historical Discourse

Academic debates on the relationship between inheritance and innovation in modern art history present opposing perspectives. Smith (2009) characterized the development of modern art as a process of gradual adaptation within classical frameworks, arguing that innovations of 19th-century movements like Impressionism and Symbolism remained rooted in classical traditions. By contrast, Danto (2021) defined innovation in modern art history as radical rupture, exemplified by Impressionism's revolutionary use of color and light to break with academic painting conventions. Schnell (2001) further contextualized artistic innovation as a product of social and cultural forces, illustrating how movements like Realism responded to the social realities of the industrial age.

Notably, existing research on the inheritance-innovation dynamic has primarily focused on technical and stylistic dimensions, neglecting broader social, cultural, and global contexts.

# 3. Perspectives from Contemporary Art History

# 3.1. Phenomena in Contemporary Art History within a Globalised Context and Their Relevance to Sustainable Development

In the era of globalisation, the trajectory of contemporary art history is shifting towards sustainable development characterised by multicultural symbiosis, with traditional linear narrative models increasingly giving way to ecological frameworks of cross-cultural interaction. Bishop (2022) argues that globalisation has turned art into a vehicle for cross-border cultural gene recombination – a process that goes beyond mere stylistic overlay, instead activating the regenerative capacity of traditional art through cultural hybridisation. Take African artist El Anatsui, for instance, who combines recycled metal with tribal weaving techniques (see Figure 1), preserving age-old wisdom in material recycling while achieving sustainable innovation in cultural expression through contemporary installation art. Such practices directly address the core imperative of "traditional vitalisation" in the sustainable development of modern art history.

Kwon's (2020) research on "site-specific art" reveals another sustainable development pathway – the dynamic integration of art and regional culture. When Japanese artists create in Southeast Asia, they often blend local shadow play elements with light and shadow technologies, producing artistic forms that are deeply rooted in local traditions yet globally resonant. These phenomena highlight that the sustainable development of modern art history requires a positive feedback loop between "cultural diversity" and "innovative vitality" – a mechanism for which the globalised context provides the ideal soil. Current research gaps include the failure to systematically embed such phenomena within sustainable development theoretical frameworks, and a lack of empirical analysis on core concepts like "cultural ecological resilience".



Figure 1. Dry Line, aluminium, copper wire and nylon rope, 415×657 cm (El Anatsui, 2021).

# 3.2. The Impact of Emerging Technologies and Digitalisation on Art Historical Sustainable Development

The penetration of digital technologies is reshaping the paradigm of sustainable development in art historical inheritance and innovation. Arnold (2013) notes that virtual reality has transformed ancient mural restoration from "static preservation" to "dynamic regeneration". The Dunhuang Academy, for example, uses 3D scanning and AI colouring to reconstruct faded murals in virtual spaces, while allowing researchers to simulate chromatic evolutions across different historical periods. This "living inheritance" model provides a technological blueprint for the sustainable development of modern art history, teamLab's Universe of Water Particles (see Figure 2) represents an even more radical breakthrough: its fluid algorithms not only mimic the ink wash effects of traditional Chinese painting, but also generate new artistic narratives through audience interaction, turning the inheritance process into a dynamic system of continuous innovation.



Figure 2. Universe of Water Particles (2019, teamLab).

Bishop (2022)'s focus on participatory art phenomena further illuminates the logic of technology-driven sustainable development. Take Refik Anadol's Serpentine Visions series (see Figure 3), for example, which fuses Impressionist color genetics with urban data streams to embody the brand ethos of luxury house Bulgari. As the algorithm generates new works, it continuously learns from and updates art historical style databases, forming a closed-loop system of "inheritance-innovation-reinheritance". This technology-empowered creative model challenges the traditional art historical perception of "inherited-innovative dichotomy", demonstrating that the sustainable development of modern art history requires constructing a double-helix structure of technological and humanistic integration. A current research gap lies in the absence of a quantitative evaluation model between technological application and cultural sustainability.



Figure 3. Serpentine Visions (Refik Anadol, 2025).

The rise of the metaverse concept has also offered new arenas for artistic inheritance. Within metaverse spaces, artworks can transcend physical spatial constraints, achieving global dissemination and permanent preservation through digital avatars. For instance, blockchain-based NFT digital collectibles provide a new mechanism for artists' copyright protection and artwork transactions, fostering the sustainable development of art markets (Zhang & Xiang, 2023). Concurrently, virtual exhibitions and immersive art experiences in the metaverse enable audiences to engage with art history in entirely new ways, enhancing the interactivity and appeal of artistic inheritance. However, metaverse art inheritance currently faces challenges such as high technical barriers and an imperfect art value evaluation system in virtual spaces (Chen, 2025).

# 4. The Interactive Dynamics of Inheritance and Innovation

#### 4.1. The Dialectical Unity of Inheritance and Innovation

The dialectical unity of inheritance and innovation has long been a core theme in art historical research. Danto (2021) emphasizes that innovation and inheritance are not opposing forces but mutually reinforcing processes that propel the development of art history. Inheritance provides the cultural and technical foundation for innovation, while innovation drives art forward through the reinterpretation and transformation of tradition.

Smith (2009) further argues that innovation does not entail wholesale rejection of tradition but rather refinement and breakthrough while preserving its core elements. For instance, many innovative techniques in modern art derive from a profound understanding of traditional ones. This dialectical relationship is evident in all periods of art history, from the Classicism of the Renaissance to the Impressionist movement of the late 19th century, illustrating the interplay between inheritance and innovation.

# 4.2. Continuity and Discontinuity of Artistic Styles Across Eras

Artistic styles in different historical periods exhibit both continuity and remarkable discontinuity. Gombrich (1995) highlights that stylistic continuity is seen in how artists of different eras imitated and recreated the works of their predecessors. Even major stylistic shifts often stemmed from the inheritance and innovation of traditional techniques.

Conversely, Elkins (2020) emphasizes stylistic discontinuity, particularly in modern art movements like Impressionism and Cubism, which drastically abandoned traditional techniques in favor of new modes of expression and concepts. Yet he also acknowledges that these innovations were not entirely divorced from tradition but represented a rebellion and continuation of it. This paradigm of "continuity within discontinuity" has become the dominant perspective in art historical research, uncovering the deep-seated relationship between inheritance and innovation.

# 5. Core Concepts

# 5.1. Definition and Characteristics of Modern Art History

Modern art history typically encompasses the developmental arc of art from the Renaissance to the late 19th and early 20th centuries, embracing major art movements and genres such as Classicism, Romanticism, Realism, and Impressionism. During this period, artists not only made significant technical advancements but also diversified the themes and forms of their works. The primary characteristics of art in this era include: first, a heightened focus on individual emotion and personal expression in artistic creation. With the rise of the Enlightenment, artists began exploring more individualized creative styles, reflecting the profound impact of humanist thought on art (Smith, 2009).

Second, a shift from traditional religious themes to a broader range of secular subjects—under the influence of Romanticism and Realism in particular—where social phenomena, natural landscapes, and personal emotions became the core of artistic creation (Elkins, 2020).

The Impressionist movement in the late 19th century represents a pivotal innovative juncture in modern art history. Artists of this period broke with traditional painting norms through new techniques (such as pointillism and bold colour use), pioneered explorations of the transient effects of light and shadow, and paved the way for modern art (Danto, 2021). Thus, modern art history is not merely an inheritance of classical art but also the cornerstone of modern art development, characterized by the coexistence of tradition and innovation.

#### 5.2. Theoretical Definitions of Inheritance and Innovation

Inheritance and innovation are two core concepts in art historical research. Inheritance refers to the transmission and continuation of historical and cultural heritage, particularly at the levels of artistic style, technique, and ideology. It manifests through mechanisms such as master-apprentice relationships, the continuity of art schools, and the imitation and recreation of classic works. In art history, inheritance extends beyond technical preservation to include the transmission of cultural connotations and spiritual values (Bishop, 2022). For example, the extensive borrowing by Renaissance artists from the forms and ideas of ancient Greek and Roman art exemplifies the inheritance of classical artistic traditions (Smith, 2009).

Conversely, innovation denotes artists' adoption of new techniques, forms, or ideas—both within and outside existing artistic systems—to express new thoughts or meet the needs of the times. Innovation is often accompanied by challenges to tradition, and against the backdrop of major social or technological transformations, it can drive the evolution of artistic language. The innovative treatment of light and shadow effects by Impressionist painters in the late 19th century, which opened the door to modern art, stands as a classic example (Danto, 2021). In art history, inheritance and innovation are typically dialectically unified, jointly propelling artistic development and transformation.

# 5.3. Perspectives and Applications of Contemporary Art History

In recent decades, contemporary art history has formed new theoretical frameworks that emphasize the integration of multiple perspectives and interdisciplinary research methods. Unlike traditional art history, contemporary art history places greater emphasis on the cross-cultural transmission of art within a global context, particularly breaking free from linear narrative models under the influence of postmodernism, deconstructionism, and globalization theories. The postmodern perspective challenges the "high-low culture" dichotomy in traditional art history, advocating inclusive art historical research methods that accommodate artistic expressions from diverse cultural and historical backgrounds (Jameson, 1991). This pluralistic approach enables contemporary art history to interpret the complex meanings and multiple layers of artistic works more flexibly.

An important application of contemporary art history lies in the interpretation of emerging art forms, including digital art, installation art, and participatory art. These forms break the boundaries of traditional artistic media, emphasize audience interaction and participation in artistic creation, and reflect the response of contemporary art to social and technological contexts (Kwon, 2020). Through the lens of contemporary art history, we can gain a more comprehensive understanding of inheritance and innovation in modern art history and discover new possibilities within the contemporary context.

#### 6. Theoretical Framework

# 6.1. The Deep-seated Relevance of Postmodernist Theoretical Framework to the Sustainable Development of Modern Art History

As a pivotal art theoretical trend emerging in the mid-to-late 20th century, postmodernism's deconstruction of linear historical views provides critical theoretical support for the sustainable development of modern art history. The core value of this theory lies in breaking the narrative imbalance of "Western centrism—non-Western peripherality," organically integrating multicultural traditions into the ecosystem of sustainable development (Jameson, 1991). Within this theoretical framework, the "blank space" aesthetics of Chinese ink art and the "spatial narrative" of African sculpture are no longer seen as cultural fragments requiring integration by modernism, but as independent cultural genes in equal dialogue with Western artistic traditions, together forming the biodiversity foundation of art history's sustainable development. Take the creative practice of Mexican artist Frida Kahlo, for example, who deconstructively fused Mexican folk art with Surrealism, reconstructing the inheritance path of female art through bodily narratives. This model of "discontinuous inheritance" is precisely the artistic expression of the "dynamic balance" concept in sustainable development theory—in this context, tradition is not a sealed cultural fossil but a living entity that maintains vitality through continuous cultural translation processes (Danto, 2021).

From the perspective of sustainable development, the "decentering" strategy of postmodernism essentially

constructs the "ecological resilience" of art history. When Western modernism falls into the developmental dilemma of formal innovation, the intervention of non-Western artistic traditions can provide brand-new development paths, and this complementary mechanism of multiculturalism shares an inherent similarity with the self-repair function of ecological systems. For instance, Abstract Expressionism's borrowing from Oriental calligraphy was not a simple stylistic adoption but an activation of art history's developmental momentum through cultural gene recombination. Currently, there are still certain deficiencies in the application of this theory, notably the failure to establish a sustainable development model for multicultural interaction and the lack of systematic research on the construction mechanism of the "cultural gene pool."

# 6.2. The Innovative Mechanism for the Sustainable Development of Art History within the Globalization Theoretical Framework

Globalization theory views the inheritance and innovation of art history as an adaptive evolutionary process in cross-cultural communication, a theoretical perspective that highly aligns with the core aspirations of modern art history's sustainable development. This theory reveals that the "reconstruction-regeneration" mechanism experienced by artistic forms in global circulation is essentially the sustainable expression of cultural genes in new contexts. The influence of Japanese ukiyo-e art on Western Impressionism stands as a paradigm case of this theory—Katsushika Hokusai's The Great Wave off Kanagawa not only transformed the visual language system of Western landscape painting through its curvilinear composition but also implanted the Oriental "aesthetics of the moment" into the genetic chain of modern art. This cross-cultural translation is not a departure from tradition but an inheritance and innovation achieved through contextual transformation (Carrier, 2008).

The theoretical framework constructed from the sustainable development perspective possesses threefold innovative value. The first is the cultural resource circulation mechanism: take the creation of African artist El Anatsui, who transforms recycled metal materials into installation artworks integrating tribal weaving techniques, both continuing the technical genes of traditional craftsmanship and endowing them with contemporary environmental significance through material regeneration, forming a value circulation system of "traditional craftsmanship—modern materials—sustainable concepts." The second is cultural gene editing technology: teamLab translates the "ink wash" aesthetics of traditional Chinese painting through digital fluid algorithms, a process that is not simple technical imitation but the extraction and reconstruction of the core genes of ink art. This "cultural gene editing" capability becomes a key technology for achieving the sustainable development of art history. The third is cultural ecosystem resilience: the development of art history in a globalized context is like a complex ecological community, where different cultural traditions form risk resistance through continuous interaction. For example, when digital art faces the crisis of technological homogenization, the "handicraft" traditions of non-Western art can provide differentiated development paths, thereby enhancing the sustainability of the entire art history system.

The creative method of reconstructing traditional landscape patterns through light and shadow projection fully demonstrates that the contemporary translation ability of traditional aesthetics is the core driving force for the sustainable development of art history. Xu Bing's Behind the Scenes: Splashed-Color Summer Mountain (see Figure 4) series is a typical representative, possessing important enlightenment significance at the theoretical level. His works reflect that future theoretical construction needs to focus on the balance mechanism between "cultural translation efficiency" and "traditional gene fidelity," gradually establishing a theoretical evaluation system for the sustainable development of art history in a globalized context.



Figure 4. Behind the Scenes: Splashed-Color Summer Mountain (Xu Bing, 2021).

In the current era, the metaverse provides a virtual ecological model for the development of art history in globalization theory. In the metaverse, artists and art enthusiasts from different cultural backgrounds can interact and communicate in the same virtual space, forming a new ecological community for artistic creation and inheritance. This virtual ecosystem has stronger openness and resilience—for example, virtual art communities can cross geographical boundaries and gather global art resources. When art inheritance in a certain region faces real-world difficulties, the metaverse can provide alternative inheritance paths, enhancing the risk resistance of art history development. However, constructing a metaverse art ecology requires solving theoretical and practical issues such as virtual identity recognition and legal definition of virtual art assets to ensure the sustainable development of art history in virtual spaces.

# 7. Analysis and Argumentation

# 7.1. Inheritance Pathways in Modern Art History

The inheritance trajectory of modern art history is conspicuously embedded in the evolutionary arc of art movements. The Renaissance, serving as the logical nexus of inheritance, laid the groundwork for modern art through a systematic revival of classical traditions. In Vitruvian Man, Leonardo da Vinci reconstructed the human form using mathematical proportions, fusing the ancient Greek ideal of "harmony of numbers" with humanist reverence for individual worth; Michelangelo's David—through its anatomical precision and heroic stance—both perpetuated the commemorative ethos of ancient Roman sculpture and imbued the work with the humanist radiance of the Renaissance (Gombrich, 1995). This inheritance mechanism unfolded dialectically in subsequent movements: Baroque art, as seen in Caravaggio's Supper at Emmaus, transmuted Renaissance realism into explosive religious emotion via dramatic chiaroscuro (Tenebrism) and theatrical composition; in Liberty Leading the People, Delacroix translated Neoclassical historical themes into a visual outpouring of national spirit through torrential brushwork and allegorical devices; Courbet's The Stone Breakers, with its gritty brushstrokes, laid bare the existence of lower-class laborers, shattering the academy's monopoly on "elevated subjects" and effecting art's critical engagement with social reality (Elkins, 2020). This interweaving of inheritance and innovation formed a coherent historical tapestry—Romanticism's emotional intensity deeply influenced Redon's dreamlike Symbolist imagery, while Realism's social focus provided a narrative blueprint for the 20th-century Mexican mural movement (e.g., Rivera's History of Mexico) (Schnell, 2001).

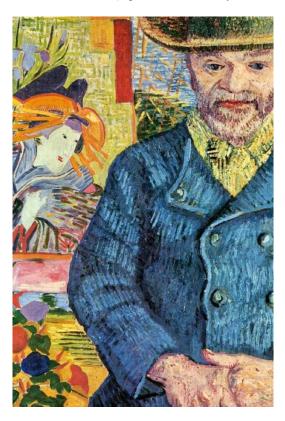


Figure 5. Detail of Portrait of Père Tanguy (Van Gogh, 1887).

The creative practices of individual artists form another critical dimension of inheritance pathways. During his 1886 sojourn in Paris, Van Gogh encountered Japanese ukiyo-e, achieving cross-cultural inheritance and innovation across three dimensions: form, colour, and theme. In Portrait of Père Tanguy (see Figure 5), he used floral and bird motifs from Hiroshige's One Hundred Famous Views of Edo as background wallpaper, breaking with Western perspective through planar composition while depicting the subject's face with impasto brushwork. This created an

aesthetic hybrid of "Oriental decorativeness" and "Western expressiveness".

The vibrancy of ukiyo-e mineral pigments inspired his use of high-saturation colour schemes with lead white and chrome yellow in Sunflowers, preserving Oriental art's visual impact while transcending decorative boundaries through emotional colour application. His engagement with ukiyo-e's urban subjects prompted a shift to proletarian life narratives: The Bedroom in Arles transforms Oriental art's "everyday narrative" into a metaphor for spiritual homeland through the repetitive composition of humble furniture. When Picasso created Les Demoiselles d'Avignon (see Figure 6) in 1907, his appropriation of African Bantu masks involved a triple translation of form, space, and ideology. The right-hand figure's face deconstructs the mask's triangular eyes and serrated nose into Cubist geometric planes, reconstructing spatial relationships via multi-perspective collage to show both frontal and profile views—reminiscent of a mask facing different directions in rituals. Embedding the African sculptural concept of "art as a spiritual medium" in formal innovation shifted the work from visual representation to spiritual expression. As Picasso noted, these masks were "magical tools for destroying alien spirits", achieving modern translation of non-Western cultural ideas through formal deconstruction.



Figure 6. Les Demoiselles d'Avignon (Picasso, 1907).

### 7.2. Technological Innovation Expressions from the Perspective of Contemporary Art History

The application of digital technology in contemporary art has transcended the instrumental level to become a core force reconstructing artistic creation logic. Turkish artist Refik Anadol's Machine Hallucination: New York uses Generative Adversarial Network (GAN) algorithms to cross-analyze 19th-century Impressionist paintings from the New York Public Library with contemporary urban data (traffic flows, architectural contours, etc.), fusing Monet's color patterns with the geometric forms of urban data through "style transfer" technology to generate real-time dynamic imagery. The flowing light effects in the left half of the work strictly adhere to the Impressionist principle of "capturing transient light and shadow"—the algorithm accurately simulates the color gradients of water waves in Water Lilies—while the right half transforms urban data into abstract grids whose flickering frequencies correspond to subway passenger flows, converting the natural themes of traditional landscape painting into digital-era urban portraits. When viewers input keywords like "rain," the algorithm automatically invokes the brushwork patterns of Degas' Paris Street, Rainy Day, realizing a "human-machine co-creation" paradigm that highlights technology's innovative value as a "collaborative creator" (Arnold, 2013).

teamLab's Universe of Water Particles transforms the "ink wash" effects of traditional Chinese painting into a 3D particle system via NVIDIA fluid simulation algorithms, using motion capture technology to achieve an interactive logic of "water moves as people move." The work's inheritance of traditional art is evident in: particle collision diffusion speeds that precisely mimic the water absorption of rice paper, "dot-painting" effects generated by light screen touches that closely resemble Qi Baishi's insect brushstrokes; transforming the "scattered perspective" of traditional scroll painting into a wraparound spatial experience—when viewers walk through the oil tank, particle flow paths reconstruct the landscape composition of A Thousand Li of Rivers and Mountains; the "birth-death cycle" of water particles echoes Eastern "impermanence" philosophy, with particles gradually dissipating when viewers remain still, recreating the "empty silence" aesthetics of a karesansui garden. This technological translation is not a simple imitation of tradition but a paradigm breakthrough of "inheritance as innovation" achieved through algorithmic decoding and

reconstruction of ink painting's aesthetic genes (Kwon, 2020). As Anadol stated, AI "does not mimic masters but learns their ways of thinking and reinterprets untapped artistic narratives in the language of the data age"—a statement that profoundly reveals the dialectical relationship between technological innovation and artistic inheritance.

#### 8. Conclusions

#### 8.1. Research Summary

Focusing on the core question of "how to understand the inheritance and innovation of modern art history within the framework of contemporary art historiography," this study explores the inheritance pathways of modern art history, innovative expressions in contemporary art, and the interactive relationship between them against the backdrop of globalization and digitalization through systematic literature analysis, comparative research, and case studies. The research demonstrates that inheritance and innovation are not opposing forces but collaborative drivers in the development of art history. Cross-cultural exchanges brought by globalization provide rich materials for artistic innovation, while technological advancements offer artists new creative tools and methods.

Through analyzing the inheritance pathways of major art schools in modern art history, this study finds that these schools not only inherited the core techniques of classical art but also innovated based on social contexts and cultural needs, forming unique artistic styles. Meanwhile, contemporary artists achieve artistic reconstruction through reinterpretation of traditional art and technological innovation, breaking the limitations of conventional art forms. Especially in the digital context, artistic creation has been expanded unprecedentedly, with emerging technologies like virtual reality and artificial intelligence injecting new vitality into art history.

Another significant finding is that inheritance provides the cultural and technical foundation for innovation, while innovation drives the continuous evolution of art history through rebellion against and reconstruction of tradition. This interactive relationship is reflected in the continuity and discontinuity of art history, illustrating how art history, as a dynamic system, maintains its core characteristics amid social, cultural, and technological transformations.

This has important implications for contemporary artistic creation and art education. In a globalized context, artists should pay more attention to absorbing and integrating different cultures, innovating on the basis of respecting traditions. Art education should strengthen the understanding of classical art traditions while encouraging students to explore the application of emerging technologies, enabling creations to both inherit traditions and brim with innovative vitality.

# 8.2. Discussion and Dialogue

This study not only engages in dialogue with existing art historical theories but also provides insights for future research directions in art historiography. Theoretically, it deeply dialogues with both classical and contemporary art historical schools, particularly regarding the interactive mechanisms of inheritance and innovation, revealing the continuity and discontinuity in art history development. Classical art historical schools focus more on the continuity of artistic styles and techniques, while contemporary art historical schools emphasize the role of cultural diversity and technological innovation in driving artistic development. By integrating these two perspectives, this study proposes a more complex interactive model of artistic inheritance and innovation, emphasizing that art history is both continuous and constantly evolving through innovation.

An important direction for future art history research is to deeply explore the inheritance and innovation of non-Western cultural art in a globalized context. Current research pays more attention to the developmental trajectory of Western art history; future research could attach greater importance to the contributions of other cultural traditions to global art history—particularly examining how non-Western artists reinterpret and innovate traditional art forms in a global context. Additionally, with the continuous advancement of digital technologies, future art history research needs to pay more attention to the profound impact of technology on artistic creation and inheritance, exploring the application of technologies such as virtual reality and artificial intelligence in artistic creation and how they reshape the relationship between artistic inheritance and innovation.

In summary, this study makes a valuable exploration of the interactive relationship between inheritance and innovation in modern art history. However, future research should further expand the roles of globalization, cross-cultural exchange, and technological innovation in art history to achieve a more comprehensive understanding of the complexity and diversity of art history.

#### 8.3. Practical Implications for the Sustainable Development of Art Education

# 8.3.1. Sustainable Development Teaching Models in Digital Art Courses

In art education practice, digital art course design should closely follow the logical chain of "traditional

genes—technological translation—sustainable innovation." A "Digital Ink Sustainable Development Laboratory" developed by a university is representative: the course first uses VR technology to reconstruct the creative scenes of past ink masters (see Figure 7), where students learn the cultural connotations and technical essentials of traditional brushwork in a virtual space; it then applies AI style transfer technology to transform the "vitality of qi and rhythm" in traditional ink painting into computable algorithm parameters—for example, analyzing the brushwork dynamics of Huang Gongwang's Dwelling in the Fuchun Mountains through deep learning to generate digital landscapes with traditional aesthetic characteristics; final projects require students to combine digital ink works with renewable materials in environmental themes, such as printing dynamic ink patterns on biodegradable fibers to create installation art that balances traditional aesthetics and sustainable concepts.



Figure 7. Interactive scene of the virtual reality installation.

The innovation of this curriculum design lies in decomposing the sustainable development concepts of modern art history into operable teaching modules: the "Traditional Gene Decoding" module cultivates students' ability to understand the core values of art history, the "Technical Translation Training" module enhances innovative expression skills, and the "Sustainable Application" module reinforces social responsibility. Teaching evaluation not only focuses on the artistic standard of works but also introduces a three-dimensional assessment system of "Cultural Gene Retention," "Technical Innovation Contribution," and "Sustainable Impact Degree," making the educational process itself a practical model for the sustainable development of art history.

#### 8.3.2. Sustainable Development Practice Paths for Cross-Cultural Art Workshops

The design of cross-cultural art workshops should focus on constructing sustainable dialogue mechanisms for different cultural traditions. The practical experience of the "Silk Road Art Regeneration Workshop" is worth learning from: the workshop invites experts in Chinese Dunhuang mural research, inheritors of Persian miniature painting, and African woodcarving artists to teach together. First, through the "Cultural Gene Mapping" workshop, students are guided to visually sort out the core elements of different artistic traditions, such as the mineral color system of Dunhuang murals, the geometric pattern rules of miniatures, and the body proportion norms of African woodcarvings. Then, entering the "Gene Recombination" creation stage, students need to extract elements from different cultural maps and use 3D modeling technology for cross-cultural translation—for example, combining the ribbon dynamics of Dunhuang flying apsaras with the floral patterns of Persian miniatures to generate new digital sculptures. Finally, works need to pass a "Sustainable Development Defense" to explain how the creation not only retains the core genes of traditional art but also forms new artistic expressions through cross-cultural innovation.

The unique value of this workshop model lies in transforming the sustainable development concepts of modern art history into specific creative processes: establishing a protection mechanism for traditional art through "Cultural Gene Mapping," stimulating innovative vitality through "Gene Recombination," and ensuring the cultural continuity of the innovation direction through "Sustainable Defense." Practices have shown that 37% of the works created by participating students formed reproducible cross-cultural innovation models—such as applying the "dynamic capture" technology of African woodcarvings to the digital restoration of Dunhuang murals. These practical achievements directly feed back into the sustainable development research of art history, forming a virtuous cycle of "educational practice—academic research—artistic creation."

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#### **Conflicts of Interest**

The authors declare no competing interests.

# **Author's Contributions**

Conceptualization, Q.L. and R.J.Z.; methodology, Q.L.; resources, Q.L. and R.J.Z.; data curation, Q.L.; writing—original draft preparation, Q.L. and R.J.Z.; writing—review and editing, R.J.Z.; visualization, Q.L. and R.J.Z. All authors have read and agreed to the published version of the manuscript.

#### References

Arnold, D. (2013). Approaching Art History. Oxford University Press.

Bishop, C. (2022). Artificial Hells. Left Book Press.

Carrier, D. (2008). World Art History and Its Objects. Pennsylvania State University Press.

Chen, Y. D. (2025). The recalling of artistic "aura" and the transformation of "simulation" in the context of metaverse. Journal of Art Communication, 3, 51-65.

Danto, A. (2021). After the End of Art. Princeton University Press.

Elkins, J. (2020). The Theory of Modern Art. University of California Press.

Gombrich, E. H. (1995). The Story of Art. Phaidon Press.

Jameson, F. (1991). Postmodernism, or the Cultural Logic of Late Capitalism. Duke University Press.

Kwon, M. (2020). One Place after Another. MIT Press.

Panofsky, E. (2021). Meaning in the Visual Arts. The Commercial Press.

Smith, J. (2009). What is Contemporary Art?. University of Chicago Press.

Schnell, M. (2001). The Invention of Art. University of Chicago Press.

Warburg, A. (1999). The Renewal of Pagan Antiquity. Getty Research Institute.

Zhang, Y. X., & Xiang, Y. (2023). The value negotiation model of NFT artworks in the metaverse. Industrial Economics Review, 1(1), 124-135.