

THE INTEGRATION OF SHANGHAI-HIPAI PRINTMAKING AESTHETICS INTO CONTEMPORARY PUBLIC ART SPACES

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ABSTRACT

This study systematically traces the historical development and aesthetic characteristics of Shanghai-Haipai printmaking, focusing on core elements such as line, diversity, and imprinted texture, and explores how these elements are translated into three-dimensional sculptural design. This paper adopts an interdisciplinary approach to construct a comprehensive design framework from "historical interpretation to spatial production." A mixed-methods research design was employed: qualitatively, archival research was conducted at the Shanghai Art Museum and the Lu Xun Memorial Hall to reconstruct the history of Shanghai printmaking (and Lefebvre's theory of the "triple dialectic of space"); quantitatively, a survey of 370 community residents was conducted to assess public acceptance, supplemented by expert interviews with printmakers, sculptors, and cultural managers; in design practice, a double diamond model guided the development of a steel slag sculpture prototype, testing the aesthetic consistency between industrial materials and traditional prints, and achieving the transition from flat to three-dimensional form through three-dimensional modeling. The study yielded three main contributions: theoretically, the four key visual grammars of Shanghai printmaking (line, yin-yang contrast, diversity, and imprinted texture) were identified and their spatial scalability verified; practically, the steel slag sculptures installed in Zhong ye Tiangong Square demonstrated the artistic regeneration potential of industrial waste, while survey results showed that the process of abstracting and reinterpreting Shanghai's cultural symbols (termed here as the 'three-depersonalization' process: de-familiarization, de-contextualization, and re-symbolization) significantly enhanced community identity; methodologically, the double diamond model was combined with spatial production theory to provide a systematic process for public art design, including cultural gene extraction, cross-media transformation, and urban spatial implantation.

Keywords: Shanghai-Haipai Printmaking, Double Diamond Model, Steel Slag Aesthetics

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INTRODUCTION

In 2025, public art had become a key link between urban culture and citizen life. As the birthplace of Chinese modern art, Shanghai's unique print art is facing unprecedented opportunities for inheritance and innovation challenges. According to policy documents such as the Implementation Plan for Cultural Protection, Inheritance and Utilization Project (National Development and Reform Commission, 2024) and the Notice of the Ministry of Housing and Urban-Rural Development on Strengthening the Management of Large-scale Urban Sculpture Construction (Ministry of Housing and Urban-Rural Development, 2024), the country's emphasis on traditional culture and intangible cultural heritage has reached a record high. In particular, the "Chinese Civilization History Theme Art Creation Plan" launched in 2012 and the National Theme Art Creation Project of the Ministry of Culture and Tourism in 2017 have provided institutional guarantee and resource support for the modern translation of Shanghai-Haipai prints, a precious art form Shanghai-Haipai printmaking originated in Shanghai at the end of the 19th century and the beginning of the 20th, is the product of the integration of traditional Chinese woodcut printmaking and modern western art thoughts (Chen, 2022). Its artistic essence is mainly reflected in three aspects: the visual language of combining Chinese and western elements: Shanghai-Haipai prints break the plane limitation of traditional prints, absorb western perspective and light and shade processing techniques, and form a unique spatial expression (Li, 2018). Narrative expression of urban life: As a representative of urban art, Shanghai prints record the daily life of Shanghai civil society and urban landscape, with a strong sense of The Times and regional characteristics (Bourdieu, 1993). The perfect combination of craftsmanship and art: Shanghai print masters, combine the traditional skills of "brilliant workmanship" with modern creation concepts, and achieve a high degree of unity of technology and art (Dai, 2024). We should give full play to the important role of fine arts in serving economic and social development, apply more fine arts and artistic elements to urban and rural planning and construction, improve the aesthetic charm and cultural taste of urban and rural areas, and better serve the people's high-quality life needs with fine arts results. (Academy of Fine Arts, Tsinghua University, 2021) High-quality development is the hard truth of the new era. To promote modernization with Chinese characteristics, we must keep economic development as the central task and take high-quality development as the top priority.

At present, Shanghai is in a new stage of urban renewal and development. The improvement of the artistic level of urban public space should be included in the overall consideration of urban renewal and closely centered on the construction of "five centers". By creating a public space full of artistic flavor and appeal, popularize and enhance the artistic aesthetic of the general public. To create and present a better urban environment, more beautiful artistic communities and a higher quality of life for citizens. At the meeting, everyone agreed that the foundation of public art and culture in Shanghai is very solid. At present, there is an urgent need to create a batch of public art works that conform to the spirit of the city and carry forward Shanghai culture, so as to strengthen and consolidate the social consensus on art. (Shanghai Sculpture and Public Space Art Expert Symposium, 2024) Through sculpture and public art, relying on the quality improvement of public space on both sides of the Huangpu River, the cultural connotation of public space on the waterfront should be continuously enriched, and more diversified and rich activity space and experience should be provided for citizens, so as to create a world-class waterfront on both sides of the Huangpu River in Shanghai. Efforts should be made to create a public art gathering zone along the river that is full of urban vitality and waterfront charm, and to create a demonstration zone for people's livelihood in urban life. (Shanghai Sculpture Art Expert Seminar, 2024)

In the art system of China, Shanghai-Haipai print art, with its unique artistic style and aesthetic value, has shown great application potential in public art design. (Fu & Peng, 2000) However,

there are many problems and challenges in how to effectively integrate Shanghai print art into public art design.

Research Objectives

This research aims to study the history and development of Shanghai-Haipai printmaking art to apply it to the design of three-dimensional sculptures.

LITERATURE REVIEWS

The historical context and core characteristics of Shanghai-Haipai printmaking

The regional cultural background of Shanghai

The geographical identity of Shanghai originated from the "Hu Du" geographical unit shaped by the dynamics of the Wu Songjiang water system. The hydrological changes in the late Southern Song Dynasty triggered a crucial turning point: the southward shift of the main channel of the Wu Songjiang River led to the relocation of the shipping hub to the tributary "Shanghai Pu", catalyzing the initial spatial production centered around the maritime tax office (Shi Huizhou) (Braudel, 1982). Through cloth trade network, Shanghai gradually established its secondary regional center status as a "Southeast Strong County", completing the second transformation from an administrative settlement to an early industrialized city (Schaeffer, 1977). This process confirmed the transitional feature of the "Economic Growth Stages Theory" proposed by W. Rostow from a traditional society to the take-off preparation period. The treaty port system established by the Treaty of Nanjing restructured the urban spatial order. The establishment of concessions triggered the "passive modernization" process (Fei, 1953). This colonial modernity gave rise to a unique cultural hybridity (Bhabha, 1994)-"Shanghai Culture" was formed in the tension between the concession/Han District space, embodying the aesthetic essence of "elegant and popular appreciation" that stems from the cultural negotiation mechanism of the immigrant society (Lu, 1999).

After 1949, urban development in Shanghai presented a dual path dependence: industrial base construction continued the manufacturing genes from the opening-up period, while the reform and opening-up (Especially the Pudong development in 1990) activated the global capital channels (Yusuf & Wu, 2002). The current goal of building a "Socialist International Metropolis" is essentially to address the scale reorganization challenges of the "Third Stage of Capital Urbanization" as described by Harvey (2012), with the core being to balance the dialectical relationship between global network connectivity and the local cultural subjectivity (Sassen, 2001). As the core growth pole of China (with an area of 6,340 square kilometers and a permanent population of 24.89 million), Shanghai practices the "Open, Innovative, Inclusive" urban character, through the construction of "Four Major Brands" to build international "Five Centers", aiming to become a world-class socialist metropolis (The Shanghai Overview, 2022). Baoshan District, as the strategic fulcrum of the "North-South Transformation" strategy, urgently needs to explore the collaborative paths of technological innovation, industrial upgrading, and institutional innovation under the drive of new quality productive forces, to achieve the paradigm shift from a traditional industrial stronghold to a scientific and technological main base and a low-carbon transformation zone (Baoshan District Government, 2024).

Technological innovation and artistic integration. About 400 years ago, Xu Guangqi (1562-1633), a native of Shanghai, first introduced advanced European scientific knowledge into China, making Shanghai a bridgehead for the exchange of Chinese and Western cultures. Xu Guangqi collaborated with the Italian Jesuit priest and missionary Matteo Ricci (1552-1610) and translated some classic works into Chinese, including the first six volumes of Euclid's 13-volume work "Elements". The rise of monthly cards in the 1900s-1930s exemplified the "symbolic consumption" logic as described by Jean Baudrillard: the production entity: institutions such as Commercial Press established the "drawing-printing-advertising" industrial

chain; visual strategy: Zheng Manduo's creation of the brush-watercolor technique, which gave the characters' skin a "porcelain texture". (Figure 1)



Figure 1 One page from Euclid's "Elements" translated by Xu Guangqi (left) Early monthly-themed New Year paintings (right)

The Emerging Woodcut Movement

The story of modern Chinese woodblock printmaking begins in 1931 at the Shanghai Woodcut Studio. At this historic moment, thirteen Chinese art students, previously trained in painting, were exposed to the technical, stylistic, and sociocultural potential of woodblock printing. Established art historical narratives often emphasize Lu Xun's role in orchestrating this event and his role as mentor. (Grasskamp, 2023) Uchiyama's ability to teach printmaking culture to Chinese art students in Shanghai in 1931 can be directly traced back to Yamamoto Kanae's initiatives, which introduced printmaking into the connection is operationalized as follows curricula and made printmaking tools affordable on the market. He brought the concept of "creation printmaking," which had emerged in Japan in 1905, to China more than two decades later, in the 1930s. The Chinese term "creation printmaking" is clearly borrowed from its Japanese predecessor, "creation printmaking," and is written as "creating printmaking." And Li Hua of China, thanks to his study abroad, was able to read Japanese. (Uchiyama, 1972) The Chinese term "woodcut painting", likely influenced by the Japanese term "knife picture" (tōga), which emphasized cutting wood blocks, has been replaced. The Chinese term "woodcut painting" emphasizes the printing process. The term "knife painting" refers to the direct method and minimal equipment used to produce prints using traditional printing tools, but in a modern manner. (Helen, 1990) After the fall of Shanghai in 1937, most woodcut artists moved to Wuhan. From most artists involved in the woodcut movement, I have selected the following three artists for analysis. All three studied and created in Shanghai. Even though Hu Yichuan and Li Hua later left Shanghai, their influence cannot be ignored. Yang Keyang did not leave Shanghai, and the following analysis includes works from 1999. I will observe the changes during their brief stay in Shanghai and the changes that followed. As the birthplace of the woodcut movement, Shanghai has great historical significance. Many great artists emerged during this revolutionary art process. Based on various events of the time, they rapidly disseminated their ideas through the pluralistic medium of wood cutting, bringing the spirit of revolutionary art to its fullest potential. After the founding of the People's Republic of China, revolutionary artists from this period played important roles in Shanghai's schools and art institutions. (Figure 2)



Figure 2 Lu Xun at the woodcut workshop (printmaking)-Li Hua; Tide of Rage-Struggle-Li Hua 1946

The Aesthetic Language and Contemporary Transformation of Shanghai Haipai Printmaking

Lines and Imprint Texture: The formative concept of printmaking emphasizes the unity of purity and spirituality. Huang Qiming (2023) proposed that there is an essential difference between the traditional Chinese "using objects to represent images" and the Western "using objects to represent images." In the process of printmaking, the transmission and transformation of images between different media prompts the creator to shift from "viewing objects through my own perspective" to "viewing objects through objects." This transformation process itself embodies a profound spirit of critical thinking. Artists need to continuously refine their formative language in practice, both reflecting the ontological characteristics of printmaking and conveying the spiritual connotations of their work. For example, the potential for plane-space transformation in Lu Zhiping's silkscreen print "Flowing Silhouette No. 2". (Figure 3)



Figure 3 Lu Zhiping "Flowing Silhouettes No. 2" Silkscreen print

Aesthetics of Pluralism: Pluralism is the essential characteristic that distinguishes printmaking from other visual forms. Xu Bing (2021) noted that "plurality and the prescriptive nature of impressions are key to printmaking's distinction from other forms of painting." For example, the work of Andy Warhol demonstrates a particularly close relationship with modern art, with its plural characteristics forming a "rhythmic form imbued with a modern sensibility." In his creative practice, the deconstruction and reconstruction, juxtaposition, and interweaving of printing plates not only fail to dissolve the visual imagery of the painting but instead create multiple visual possibilities. The non-mechanical plural reconstruction of the embossing technique, combined with the material properties of paper grain and wood texture, creates a unique visual experience (Chen, 2022). This plural expression, with its own independent and original value, constitutes a core characteristic of the contemporary printmaking paradigm.

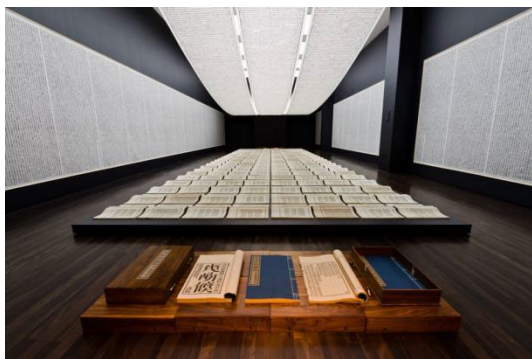


Figure 4 Xu Bing, “Book from the Sky,” ca. 1987-91

The "Aesthetic Isomorphism" of Indirect Creation between Steel Slag and Printmaking

The term "aesthetic isomorphism" here refers to the structural correspondence and formal resonance between two distinct creative processes—industrial steel slag recycling and Shanghai-Haipai printmaking—despite their differing materialities. Both are processes of indirect creation involving transformation and impression. The industrial properties of slag and the indirect creative process of Shanghai Haipai printmaking share a profound aesthetic isomorphism. This connection manifests itself primarily in three dimensions: the isomorphism between texture and creative logic, the strengthening of local expression, and the symbiotic relationship between ecology and humanity. First, the rough surface of steel slag visually echoes the knife-marked texture of woodcut prints. For example, the "Steel Print" series at the Baoshan International Folk Art Expo uses etching techniques to simulate the effects of woodcuts. This synergy transforms industrial waste into an artistic medium, continuing the "imprint aesthetic" of printmaking. Steel slag strengthens local expression through its connection to the site's history. For example, the Yangpu Riverside project, drawing on the connection between steel slag and Shanghai's steel mills, significantly heightened public emotional engagement. Its oxidation process simulates the aging marks of prints over time, becoming a medium connecting industrial memory and cultural identity.

Theoretical Framework of Co-Art Design

Spatial Production Theory: A model linking Lefebvre's "Tripartite Dialectics of Space"(physical-social-spiritual space) and the intervention of Shanghai Haipai printmaking in urban renewal. Connection is operationalized as follows: The physical space is shaped by the material presence of steel slag sculptures, whose textures and forms directly derive from printmaking aesthetics (e.g., lines, imprints). The social space is activated as these artworks become focal points for community gathering and interaction, fostering a shared sense of place. The mental/representational space is evoked by the artworks' ability to symbolize and stimulate reflection on Shanghai's hybrid cultural identity and industrial heritage, making abstract cultural concepts tangibly experienced in daily life. As a demonstration of the end of traditional Chinese woodblock New Year paintings, its hybrid lithography-woodcut production model foreshadows Benjamin's (1936)"aura regeneration" mechanism: traditional crafts gain vitality through the absorption of new technologies. In this context, Benjamin's "aura regeneration" describes how the unique presence and authority ("aura") of a traditional artwork can be renewed rather than lost when reproduced or reinterpreted through new technological means. The integration of steel slag sculpture—a new industrial material and technology—with traditional printmaking aesthetics does not merely replicate the past; it imbues the resulting public art with renewed vitality and contemporary meaning. It transforms the "aura" from being based on ritual and tradition to one rooted in material innovation, ecological sustainability, and contemporary urban identity, thus ensuring its continued relevance.

Carriers of Urban Memory: Woodblock prints of art shops such as "Fang Ji" and "Yun Xiang Ge" unearthed from Xiao jia chang Road constitute material evidence of Lefebvre's "Tripartite Dialectics of Space," inscribed with the cultural geography of late Qing Dynasty Shanghai civil society.

Modernity Laboratory: Its selective absorption of Western perspective (e.g., "Shanghai Four Roads, Foreign Lands") became a visual model for the theory of cultural hybridization (Homi, 1994). Double Diamond Design Model: Integrating green design theory, space making theory, and the UK Design Council's Double Diamond Design Model into the three-dimensional sculpture design process. Research included fieldwork and direct interviews with artists and experts in related fields, establishing a solid foundation for subsequent analysis.

RESEARCH METHODOLOGY

This study employs a mixed-methods approach, integrating qualitative analysis with quantitative evaluation. The specific research framework is structured as follows:

Literature Review

A systematic search was conducted across Chinese and English academic databases (including CNKI, Science Direct, Scopus, Springer-Verlag, PROQUEST, Shanghai Library, and Baoshan District Library) to comprehensively collect scholarly literature, monographs, and research reports related to Shanghai Hai Pai print art, three-dimensional sculpture design, and slag processing technology.

Literature was screened and evaluated based on criteria such as thematic relevance, academic impact, and publication date to ensure the authority and timeliness of the data sources.

Adhering strictly to academic ethics, the selected literature was synthesized and analyzed to extract the artistic characteristics, cultural significance, and transformative applications of Hai Pai print art in three-dimensional sculpture, thereby establishing the theoretical foundation for this research.

Community Audience

The primary subjects for the quantitative assessment were employees and their family members residing or working long-term in the MCC Group community, with an approximate total population of 5,000. This community was selected as the core sample for several reasons. Firstly, MCC Group (China Metallurgical Group) has deep historical and industrial ties to Baoshan District, a key area in Shanghai's industrial history and current urban renewal efforts. The community members, often connected to this industrial heritage, possess a lived experience of the transition from industrial production to cultural regeneration, making them highly relevant stakeholders for assessing public art that engages with these very themes of industrial material (steel slag) and cultural identity (Haipai prints). Secondly, their high stability and strong regional cultural identity suggest they can provide insights into long-term cultural acceptance and integration, beyond transient aesthetic appeal. To account for potential bias from surveying this specific, industry-linked community, the study also incorporated 370 post-90s participants with prior print art experience but potentially different backgrounds, aiming to introduce generational diversity and mitigate over-reliance on a single perspective.

Specialized Committee

Print Art Experts (3 individuals): Each possesses over 15 years of professional expertise in print art. The members are:

Huang Qiming: Deputy Party Committee Secretary, Guangzhou Academy of Fine Arts; Doctoral Supervisor; Deputy Director, Print Art Committee, China Artists Association.

Shen Xuejiang: Director, Art Department, Shanghai Municipal Culture and Tourism Bureau; Director, Print Art Committee.

Zhou Guobin: Head, Printmaking Department, Academy of Fine Arts, Shanghai University.

Three-Dimensional Sculpture Experts (3 individuals): Each has over 15 years of research and practical experience in three-dimensional sculpture and has published relevant academic works. The members are:

Wu Guoxin: Vice Chairman, Shanghai Creative Design Association; Professor and Doctoral Supervisor, Tongji University; Former Deputy Chief Engineer, Shanghai World Expo Coordination Bureau.

Hu Guanghua: Professor and Doctoral Supervisor, Academy of Fine Arts, East China Normal University.

Liu Yingwu: Professor, Guangzhou Academy of Fine Arts; Art Director, Guangzhou Academy of Fine Arts Jimei Group.

Community Members

Three community cultural inheritors were selected as key informants. All have worked and lived in Shanghai's Baoshan District for over 10 years, actively support Hai Pai culture and three-dimensional steel slag sculpture design, and possess deep knowledge of local culture, public policy, and slag technology. The individuals are:

Jin Qiang: Vice President, Shanghai Circular Economy Association; Deputy General Manager, MCC Baosteel Technology.

Zhou Qing: Chairman, China Minmetals MCC Tian Gong Group.

Li Yi: Manager, MCC Tian Gong Shanghai Company, China Minmetals Corporation.

Data Collection and Analysis Methods

Quantitative data were collected through questionnaire surveys administered to community audience. Qualitative data from in-depth interviews with the Specialized Committee and community members were analyzed using NVivo software, employing coding, modeling, and theoretical construction techniques based on grounded theory. This integrated approach aims to systematically validate the artistic correlation between Hai Pai print art and three-dimensional sculpture, and to evaluate the cultural communication efficacy and public aesthetic reception of the design practices.

RESEARCH RESULTS

Tourists' perception of Shanghai print art

According to the 2024 sampling survey (N=370) of Shanghai Culture and Tourism Bureau, tourists' cognition of Shanghai-Haipai prints shows the binary characteristics of "high interest and low depth": About 78% of the respondents recognized Shanghai prints as representative of Shanghai cultural symbols (such as "Yuyuan Garden Lantern Festival" and "Morning on the Bund"), but only 29% understood the artistic innovation of the "combination of Chinese and Western elements" (such as the integration of wood carving and stone plate technology). Cognitive differences are mainly reflected in three dimensions.

Using the SPSS software, the internal consistency reliability of each variable (cultural connotation, production technology, design concept, enterprise valuation) in the assessment scale was evaluated. By calculating the Item-Total correlation corrected for each item and the Cronbach's α value after deleting a certain item, the influence of the items on the reliability of the scale was determined.

Analysis of Visitor Feedback Results

The analysis of the data presents compelling insights into the population characteristics and their corresponding implications.

Table 1 Analysis of Visitor Feedback Results

Population Characteristics	Highly Correlated Option	χ^2 Value	P Value	Practical Implications
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Age: 18-28 years	Cross-border Collaboration (73.6%)	19.32	0.001	Need to strengthen digital interactive function design
Length of Residence: >10 years	Completely Suitable (31.4%)	24.17	0.001	Traditional symbol transformation needs to maintain authenticity
Monthly Income: >20,000	Benefit >20% (24.7%)	15.89	0.003	Significant potential for high-end derivative product development
Occupation: Art Practitioner	Stanford Model (71%)	31.45	0.001	Professional group tends towards systematic design processes

It is evident that individuals aged between 18-28 years show a strong inclination towards cross-border collaboration, highlighting the importance of enhancing digital interactive function design to cater to this demographic effectively. Those with a residence duration exceeding 10 years exhibit a preference for maintaining the authenticity of traditional symbol transformation, emphasizing the need for cultural preservation in design practices. Furthermore, individuals with a monthly income exceeding 20,000 demonstrate a notable interest in high-end derivative product development, suggesting promising opportunities for market expansion in this segment. Lastly, art practitioners, as indicated by the Stanford Model preference, lean towards systematic design processes, emphasizing the significance of structured approaches in design within the professional realm. These findings collectively underscore the importance of understanding and integrating population characteristics into design strategies to align with consumer preferences and market trends effectively.

DISCUSSION & CONCLUSION

The history and aesthetic study of Hai Pai print art are deeply rooted in Shanghai's unique cultural context, closely intertwined with the evolution of modern Chinese art in the 20th century. Marlin (2023) systematically delineates the development of modern Chinese art in "The Art of Modern China," positioning Hai Pai print art as a significant medium bridging tradition and innovation, with its characteristic of "fusion of Chinese and Western elements" prominently displayed in works like monthly plaques. Chen (2015) further reveals the social critique function of print art through a century-long perspective of Hai Pai cultural changes, showcasing the sharp presentation of class conflicts in the left-wing woodcut movement of the 1930s. This viewpoint finds support in Zhang's (2024) study of the early stages of the emerging print art movement (1931-1937), where the analysis of folk narrative techniques (Such as the color overlay craftsmanship in xiao jiao chang New Year prints) provides a visual symbol repository for contemporary design.

This research constructs an aesthetic system for Shanghai-style prints at the theoretical level, extracting four core elements—lines, contrast of yin and yang, multiplicity, and imprint texture—as the visual grammar for three-dimensional sculpture design. Through the integration of interdisciplinary methodologies, it combines Lefebvre's "trinity dialectic of space" (Physical-social-spiritual space) with the double-diamond design model to form a complete chain of public art design framework: "historical decoding-contemporary translation-space production". At the practical level, the research validates the feasibility of artistic regeneration of industrial waste through the steel slag sculpture prototype (The ground project of China Metallurgical Tian Gong Square), responding to the policy demands of art intervention in urban renewal in Shanghai's "2035 Master Plan". By transforming public art based on Shanghai-style prints, it strengthens urban cultural identity and achieves systematic innovation from theory to practice.

The broader implications of this work are twofold. Firstly, it provides a transferable model—integrating theoretical framework (Lefebvre), design process (Double Diamond), and material innovation (steel slag)—for other cities facing similar challenges of urban renewal and cultural identity preservation. This model demonstrates how to actively engage different public demographics (e.g., youth via digital interfaces, long-term residents via symbolic authenticity) rather than applying a one-size-fits-all approach. Secondly, beyond the specific focus on Shanghai-Haipai prints, this research contributes to the broader fields of art, urban studies, and cultural heritage by demonstrating a viable methodology for the spatial translation of two-dimensional traditional arts and the sustainable integration of industrial waste into the cultural ecosystem, setting a precedent for culturally-grounded and ecologically-conscious public art.

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