

Research on Historical Evolution, Cultural Connotation and Inheritance and Innovation Design of Main Patterns in Jingdezhen Imperial Kiln

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Abstract: As the imperial porcelain production center in Ming and Qing dynasties, Jingdezhen Imperial Kiln's decorative patterns represent China's traditional ceramic culture and decorative arts, with profound historical significance and national sentiment. Based on field research at Jingdezhen Imperial Kiln Museum and China Ceramic Museum, this paper focuses on four core patterns: imperial dragon, fish - algae, entwined lotus, and auspicious beast motifs. It traces their historical evolution from Yuan to late Qing, analyzes their cultural symbolism and artistic characteristics, and explores inheritance and innovation of imperial kiln motifs in contemporary cultural IP, porcelainware design, and souvenir development through modern design cases. The study offers theoretical and practical insights for integrating traditional national art with modern visual communication design.

Keywords: Jingdezhen Imperial Kiln; Pattern Art; Historical Evolution; Cultural Connotation; Modern Design; Inheritance and Innovation

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1. Introduction

The history of Jingdezhen Imperial Kiln dates back to the Yuan Dynasty and developed through Ming and Qing. Its porcelain patterns are diverse, representing the peak of China's ceramic art. The porcelain here was a royal treasure. It is not only a carrier of cultural symbols but also the primary force for preserving and innovating contemporary ceramic culture, embodying the integration of traditional craftsmanship and modern times. As the core of porcelain decoration, imperial kiln patterns blend imperial authority, religious beliefs, folk culture and aesthetic pursuits, and have formed a unique artistic system after centuries of evolution. With the modern design industry's development, the value of traditional patterns has been rediscovered. How to inherit imperial kiln patterns and transform cultural symbols into contemporary design language is an important research topic in visual communication design.

Based on field research at Jingdezhen Imperial Kiln Museum and China Ceramic Museum from October 12 to 31, 2025, and relevant academic findings, this paper uses the historical development of patterns, analysis of their artistic connotations and cultural innovation design attempts as the writing framework, aiming to provide new ideas for traditional patterns' innovative development.

2. Historical Evolution and Artistic Characteristics of Core Patterns in Jingdezhen Imperial Kilns

The evolution of Jingdezhen imperial kiln patterns is closely related to historical changes, social dynamics and aesthetic trends. From the Yuan to Ming and Qing, these patterns have a distinct evolutionary trajectory. This study focuses on four core motifs: dragon, fish - and - algae, entwined lotus, and auspicious beast patterns. By integrating museum collections and academic research, we analyze their historical development and artistic characteristics as follows.

2.1 Dragon Pattern: A Concrete Expression of Imperial Authority and Contemporary Spirit

Dragon patterns, an iconic motif in Jingdezhen Imperial Kiln porcelain, are intertwined with imperial authority. Their stylistic changes across dynasties reflect social landscapes and royal power. In the Yuan Dynasty, imperial

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dragon designs were sophisticated, with robust bodies, defined scales and claws, showing Mongol grandeur. In the early Ming Dynasty, Emperor Taizu's central - authority consolidation and Zheng He's expeditions emphasized imperial grandeur. Dragon motifs then showed masculine solemnity and regal dignity, with vigorous lines representing imperial authority. During the mid - MingIn the Chenghua and Hongzhi reigns of the Ming Dynasty, imperial authority weakened, and dragon motif styles shifted to refined and subdued forms, losing the early Ming's fierce dynamism. In the Jiajing and Wanli eras, emperors' devotion to Taoism influenced dragon depictions, with paired wings and intricate religious details, resulting in graceful designs; some had the "Wang" character on their foreheads. In the late Ming Chongzhen reign, national decline was evident as dragons looked aged and feeble, symbolizing the nation's waning fortunes.

In the late Ming and early Qing, Shunzhi-era dragon motifs inherited ancient traditions with fierce designs symbolizing new regimes' power. The Kangxi period had more aggressive "Ghost-Headed Dragons" highlighting imperial authority consolidation. From Yongzheng to Qianlong, as society stabilized, dragon motifs became refined and auspicious. In the late Qing, from Daoguang to Tongzhi, dragon motifs weakened. Lines reflect cultural decline amid national decline ^[3]. Artistically, Ming Dynasty imperial kiln dragon motifs have distinct temporal features. In the Hongwu era, they were "cat - faced dragons" with slender bodies and diamond - patterned scales. Yongle and Xuande periods had "fat - bodied dragons" with large heads, flamboyant manes, and 3 - 5 segmented claws, showing social hierarchies. The Chenghua period had more delicate and soft dragon designs, often in doucai. Qing Dynasty imperial kilns focused on realism and craftsmanship. Kangxi - era dragons were robust and bow - shaped, Yongzheng - era designs had delicate brushwork and gentle expressions. The Qianlong period had exceptional craftsmanship, using gold - piling and powder - splashing, with gold inlays in dragon eyes for high - end decoration.

2.2 Fish - algae Pattern: It combines folklore symbolism and artistic aesthetics

Rooted in fish and aquatic plants, it originated in the Yuan Dynasty, reached its peak in the Ming and Qing periods, integrating folk culture, religious symbolism, and artistic craftsmanship. The Yuan era was the start. The pinnacle of fish - algae painting techniques is seen in Yuan blue - and - white porcelain designs with intricate and grand compositions. These motifs often adorned large household vessels like jars and plates, showing fish among algae, lotus flowers, and duckweed. In the Yuan Dynasty, common fish included mandarin fish, mackerel, carp, and silver carp, whose names phonetically related to "noble," "clean," "profitable," and "honest," expressing aspirations for integrity in official careers. The mandarin fish symbolized ferocity, strength, and the ethnic minorities' pursuit of power.

In the early Ming Dynasty, artists inherited and refined previous styles. Fish remained lively, and algae were depicted more precisely. In the Chenghua period, the style became delicate and graceful, with polychrome fish - and - algae patterns as exemplary works. During the Jiajing reign, the emperor's Taoist beliefs gave these motifs symbolic meanings like "fish leaping through the dragon gate" and "freedom and transcendence," and the artistic approach evolved. The style is rustic and spontaneous, with exaggerated fish forms and ribbon - like algae, creating unique charm.

In the Kangxi, Yongzheng, and Qianlong reigns of the Qing Dynasty, fish - and - algae motifs continued traditions but evolved into significant decorative patterns, with a shift to highly stylized and patterned designs. Painting techniques became extremely sophisticated, with artisans precisely rendering fish scales and eyes. Yet, works lost the natural spontaneity of the Song and Yuan periods and the grandeur of the Yuan Dynasty. Compositions emphasized technical mastery over artistic expression, moving from symmetrical layouts to open - spaced arrangements for more visual depth and complexity.

2.3 Bougainvillea Pattern: Unity of Religious Connotations and Secular Wishes

The entwined lotus motif from Buddhist art reached its peak in the Ming and Qing dynasties. Centered on the lotus with intertwining vines, it combines symbolic meanings from religion, philosophy, and secular culture. In

Buddhism, the lotus means "rebirth through Nirvana," and the continuous vine - like growth reflects the Buddhist The "unceasing samsara" concept leads to the entwined lotus motif often depicting reincarnation and the Pure Land. The lotus's purity, "emerging from mud yet unstained," conveys moral integrity. The coiling branches, also called "Longevity Vine," symbolize "descendants for generations" and people's aspirations for fertility and family lineage.

The Ming Dynasty's entwined lotus patterns have era - specific traits. In the Hongwu period, floral designs were regular with gourd - shaped parts, having a sparse style with underglaze red lotus motifs in freehand brushwork. The Yongle era used double - line outlining and coloring for balanced density, with large flowers and delicate leaves in horizontal bands. The Xuande period had vibrant blue - and - white porcelain with entwined lotus and passion fruit motifs, fluid lines, and often paired with Buddhist Eight Auspicious Symbols. In the Jiajing era, imperial kiln lotus paintings were meticulous with a bluish - gray glaze.

The Qing Dynasty's entwined lotus motifs innovated on Ming traditions. In the Kangxi era, floral centers mainly had realistic open lotus pods. Compositions and leaves curled like ribbons. The Yongzheng period had a fresh and elegant style with line - drawing and dense patterns. In the Qianlong era, intricate designs covered artifacts, combined with gold and alum - red, showing high decorative value. These motifs evolved into variants like peony, plum blossom, and hibiscus patterns, enriching imperial kiln decorations.

2.4 Rui Beast Pattern: Integration of Nature Worship and Multiculturalism

The auspicious beast motif came from animal totem worship in primitive societies. By the Ming Dynasty, it became a key decorative element in imperial kiln porcelain, combining nature worship, imperial authority, and folk blessings. Dragons, phoenixes, cranes, and parrots were prominent in Ming designs, with clear auspicious meanings. The color scheme combined blue - and - white elegance with polychrome vibrancy, creating a soft and layered effect. These motifs were paired with natural elements, embodying harmony and prosperity and creating a regal court atmosphere. The auspicious beast motif Qing Dynasty porcelain exhibited greater realism, with themes expanding to include mythical and exotic animals. For example, the Kangxi-era five-color qilin general jar portrays qilins boldly, the Qianlong-period Jun red-glazed sculptures of auspicious beasts create a festive atmosphere, and the Yongzheng-era doucai sea-water auspicious beast pattern jar combines waves and beasts, reflecting exploration aspirations and the influence of capitalism and cultural integration. Artistically, Ming Dynasty auspicious animal motifs were meticulous and stylized with strong symbolism, while Qing Dynasty patterns had more complex techniques, diverse themes, realistic techniques, and multicultural elements, enhancing expressiveness. Subdivided motifs like phoenix, lion, and qilin patterns had distinct characteristics and were important in imperial kiln designs.

3. Analysis of Cultural Connotations of Jingdezhen Imperial Kiln Patterns

The patterns of Jingdezhen Imperial Kiln are a manifestation of decorative art and an embodiment of China's traditional culture, national sentiments, and aesthetic pursuits. Their cultural connotations are mainly in three aspects: symbols of imperial power, religious thoughts, and folk aspirations, which form the spiritual core of the patterns.

Regarding imperial symbolism, dragon motifs are the most direct manifestation. In the Ming and Qing dynasties, there were clear hierarchical distinctions in imperial kiln dragon patterns: five - clawed dragons were for royalty, and three - and four - clawed dragons were for officials and nobility, reflecting the feudal social hierarchy. Also, auspicious animal motifs like phoenixes and qilins symbolized imperial authority.

In terms of religious symbolism, the entwined lotus motif represents the Buddhist concept of eternal rebirth, and the fish - and - algae patterns reflect Taoist ideals. Dragon motifs and auspicious beast designs in the Jiajing era, influenced by Taoism, had a strong religious atmosphere. These patterns integrated religious concepts with ceramic art. Not only disseminating religious culture but also enriching the spiritual depth of designs, it demonstrates the profound fusion of religion and art in the Ming and Qing dynasties ^[4]. In folk cultural symbolism, fish-and-algae motifs embody "prosperity and abundance" and moral integrity, while entwined lotus patterns reflect "numerous offspring and blessings" and lineage continuity. Auspicious animal designs convey prayers for "blessings and good

fortune" and wishes for "evil warding off and home stability", all reflecting the people's yearning for happiness. Imperial kiln patterns integrate folk traditions into royal artistry, blending ordinary people's hopes with royal aesthetics. This fusion builds a cultural bridge between imperial courts and common life, and temples and communities.

4. Inheritance and Innovative Practices of Jingdezhen Imperial Kiln Patterns in Modern Design

With traditional culture revival and modern design advancements, Jingdezhen Imperial Kiln patterns, a valuable cultural heritage, are widely applied in contemporary visual communication design and cultural product development. By extracting elements, integrating modern aesthetics, and innovating presentation methods, they achieve dynamic preservation of traditional motifs. Based on field research findings, their modern inheritance and innovation mainly show in three key aspects.

4.1 Cultural IP Design: Personalization and Youth - oriented Expression of Traditional Patterns

Cultural IP brands, a key medium for modernizing imperial kiln motifs, enhance traditional patterns' appeal by adding contemporary personalization and youthful elements, creating recognizable visual identities and improving dissemination. The "Sui Sui Duck" cultural IP from Jingdezhen Ceramic Museum is a good example. Inspired by a Ming Dynasty Huasu Sancai duck - shaped incense burner in the museum, it uses digital 3D modeling and ancient ceramics gene - bank specimen data to reconstruct the artifact. It keeps the green, yellow, and purple tri - color palette and adds modern attributes. This has led to various products, connecting traditional motifs with modern lifestyles.

The "Ma Shangyou" IP promotes innovation and preservation of imperial kiln patterns. Inspired by a Ming Chenghua period doucai sea horse motif on a Tian character - shaped jar, it includes core design elements like sea horses and cloud dragons, combined with modern minimalism. Its lines and colors create an IP persona blending traditional charm with contemporary sophistication. Its homophone "shang ma you" resonates with young people's life aspirations. The trend - driven merchandise like collectibles, apparel, and cultural items propels imperial kiln patterns' evolution towards youth - oriented and fashionable expressions.

4.2 Modern Porcelainware Design: Integration of Traditional Techniques and Practical Functions

Modern porcelainware design is the primary method for inheriting imperial kiln patterns. By combining imperial kiln patterns with the practical functions of modern porcelainware, it achieves a unity of "practicality + cultural significance." The "Harmony and Unity Cup" designed by Jingdezhen China Ceramic Museum takes a Yuan blue-and-white plum vase with entwined peony patterns from its collection as the prototype. The vase's patterns are divided into two parts and applied to the cup design, accurately presenting the intricate craftsmanship and auspicious symbolism of the entwined peony patterns while meeting the practical needs of modern life, thus realizing a deep integration of traditional patterns and functional design ^[13].

This design approach preserves the cultural significance and artistic beauty of imperial kiln patterns while incorporating modern aesthetics and user preferences. By simplifying and reimagining traditional motifs, it seamlessly integrates ancient ceramic designs into contemporary daily life, thereby enhancing the cultural value of the products.

4.3 Souvenir Design: Concrete Representation and Communication of Cultural Symbols

Souvenir design serves as a vital medium for disseminating the cultural heritage of imperial kiln patterns. By incorporating core imperial kiln motifs into various commemorative items, this approach facilitates tangible cultural transmission. Master Zhang Tonglu's commemorative seals titled "Ten Timeless Designs" feature quintessential imperial kiln elements—including bats, ruyi cloud motifs, and entwined lotus patterns (Baohanghua)—arranged into a border frame. The five bats symbolize the Five Blessings of Prosperity, while the three lotus motifs represent the cycle of creation and renewal. This design not only highlights the cultural significance of imperial kiln patterns but

also achieves a harmonious balance between artistic value and collectible appeal ^[14].

Furthermore, the Jingdezhen Ceramic Museum has transformed imperial kiln motifs such as blue-and-white lotus patterns with scrolling branches, dragon designs, and fish-algae motifs into compact and portable cultural products. It has developed a range of souvenirs including seals, refrigerator magnets, postcards, and stickers, which not only meet tourists' commemorative needs but also promote the widespread dissemination of imperial kiln motif culture.

5. Conclusion and Prospects

The traditional imperial kiln patterns of Jingdezhen, after evolving through the Ming and Qing dynasties, achieved a leap from imitation to independent artistic creation, with styles becoming increasingly diverse and rich. This transformation not only vividly reflects the historical evolution of Chinese porcelain art but also serves as a microcosm of the long-standing history of Chinese graphic decorative art. The imperial kiln patterns of the Ming and Qing periods, with their intricate and varied curves and dynamic layouts, fully demonstrate the Chinese people's profound understanding of decorative aesthetics.

Within those elegant flowing patterns lie subtle yet profound meanings of good fortune, longevity as enduring as the southern mountains, and family reunions filled with happiness—precisely embodying humanity's fervent aspirations for a fulfilling life. The rich symbolism of these designs transcends mere decorative artistry; they serve as profound expressions of ethnic sentiments. The beautiful visions they represent continue to resonate widely in contemporary society, holding boundless potential for future development.

The inheritance and innovation of imperial kiln patterns in contemporary design have achieved notable progress. Through creative IP applications, modern ceramicware designs, and commemorative products, traditional motifs have been seamlessly integrated with modern lifestyles and aesthetic sensibilities. However, challenges persist including insufficient innovation momentum, homogenized pattern applications, and inadequate exploration of cultural depth. As professionals in visual communication design, we must intensify research on the historical and cultural significance of imperial kiln patterns, delve into their cultural essence and artistic characteristics, and leverage digital technologies alongside modern design philosophies to achieve innovative transformations. This approach requires preserving the core cultural DNA of traditional motifs while aligning with contemporary aesthetics and practical needs, ultimately creating designs that harmonize cultural value, artistic expression, and functional utility.

At the same time, efforts should be made to strengthen the dissemination and promotion of imperial kiln pattern culture. Through diversified design practices, ancient imperial kiln patterns can be integrated into modern life, thereby better inheriting and developing China culture, and creating outstanding artistic design works that not only possess traditional Chinese style but also embody contemporary characteristics.

References:

- [1] Wang Guangyao. Research on the Imperial Kiln System of the Ming Dynasty[J]. *Journal of the Palace Museum*, 2004(06):6-24. (Source: CNKI; Author: Wang Guangyao; Affiliation: Archaeological Research Institute of the Palace Museum).
- [2] Wang Jianhua. The era characteristics of dragon-patterned porcelain from the Ming and Qing dynasties in Jingdezhen imperial kilns[J]. *China Ceramics*, 2018, 54(08):89-94. (Source: CNKI, Author: Wang Jianhua, Affiliation: School of Fine Arts, Jingdezhen Ceramic University).
- [3] Wang Yanling. Aesthetic Evolution and Cultural Connotations of Dragon Patterns in Qing Dynasty Imperial Kilns[J]. *Decoration*, 2016(05):134-135. (Source: CNKI; Author: Wang Yanling; Affiliation: School of Art, Soochow University).

- [4] Wang Ning. Religious Influence and Artistic Expression of Dragon Patterns in Ming Dynasty Imperial Kilns[J]. *Journal of Ceramics*, 2020, 41(03): 421-426. (Source: CNKI; Author: Wang Ning; Affiliation: School of Fine Arts, Jiangxi Normal University).
- [5] Wang Li. Cultural implications and artistic evolution of fish-algae patterns in Jingdezhen ceramics during the Yuan, Ming, and Qing dynasties[J]. *China Ceramic Industry*, 2019, 26(02): 45-48. (Source: CNKI; Author: Wang Li, Affiliation: School of Ceramic Fine Arts and Design Art, Jingdezhen University).
- [6] Li Juan. Artistic Characteristics and Cultural Connotations of Blue-and-White Fish and Algae Patterns in the Yuan Dynasty[J]. *Art View*, 2017(11): 68-69. (Source: CNKI; Author: Li Juan; Affiliation: Xi'an Academy of Fine Arts).
- [7] Zhang Min. Evolution and Cultural Connotations of Entwined Lotus Patterns in Ming and Qing Dynasty Jingdezhen Imperial Kilns[J]. *China Ceramics*, 2021, 57(04): 102-107. (Source: CNKI; Author: Zhang Min; Affiliation: Hubei Institute of Fine Arts).
- [8] Liu Fang. Religious symbolism and secular expression of the entwined lotus motif in Ming and Qing imperial kiln porcelain[J]. *Decoration*, 2018(09): 140-141. (Source: CNKI; Author: Liu Fang; Affiliation: Central Academy of Fine Arts).
- [9] Zhao Yang. Multicultural Integration Characteristics of Auspicious Animal Patterns in Ming and Qing Imperial Kilns[J]. *Journal of Ceramics*, 2019, 40(05): 678-683. (Source: CNKI; Author: Zhao Yang; Affiliation: Jingdezhen Ceramic University).
- [10] Chen J. Realistic style and cultural connotations of auspicious animal patterns in Qing imperial kilns[J]. *Art Research*, 2022(02): 108-110. (Source: CNKI; Author: Chen J; Affiliation: China Academy of Art).
- [11] Jingdezhen Ceramic Museum. Minghua Su Sancai Duck-shaped Aromatherapy Cultural IP Development Practice[J]. *China Museum*, 2024(01): 78-83. (CNKI source; Author: Jingdezhen Ceramic Museum; Institution: Jingdezhen Ceramic Museum).
- [12] Li L. Innovative Application of Traditional Ceramic Patterns in Cultural Creative IP Design: A Case Study of the "Ma Shangyou" IP[J]. *Packaging Engineering*, 2024, 45(04): 389-396. (Source: CNKI; Author: Li L.; Affiliation: School of Art, Tianjin University of Science and Technology).
- [13] Wang Hao. The inheritance and innovation of imperial kiln patterns in modern ceramicware design: Taking "Harmony and Unity Cups" as an example[J]. *China Ceramics*, 2023, 59(07): 98-103. (Source: CNKI; Author: Wang Hao; Affiliation: Jingdezhen China Ceramics Museum).
- [14] Zhang Tonglu. Application of traditional imperial kiln patterns in commemorative seal design-A discussion on seal creation in "Ten Legacy Seals"[J]. *China Arts and Crafts*, 2022(06): 76-79. (Source: CNKI; Author: Zhang Tonglu, Affiliation: China Arts and Crafts Master Studio).
- [15] Liu Min. The dissemination and application of Jingdezhen imperial kiln patterns in tourist souvenir design[J]. *Journal of Tourism Studies*, 2023, 38(03): 156-163. (Source: CNKI; Author: Liu Min; Affiliation: School of Tourism and Urban Management, Jiangxi University of Finance and Economics).