

# Visual Elements and Symbolic Meaning in Puxian Opera Facial Makeup: A Peircean Semiotic Analysis

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## Abstract

As a living remnant of Southern Opera traditions from the Song and Yuan dynasties, Puxian Opera preserves distinctive performance conventions and visual systems. Facial makeup forms a structured visual language of color, form, and line, embedding regional belief, ethical symbolism, and aesthetic consciousness. Despite its status as intangible cultural heritage, its visual-symbolic mechanisms remain under-theorized, particularly regarding how meaning is generated in ritual and theatrical contexts. This study adopts a qualitative design grounded in Peirce's icon-index-symbol framework. Data include textual analysis of opera scripts and archives, fieldwork in Putian, 12 semi-structured interviews, and observation of three live performances. Materials were thematically coded and semiotically mapped to examine meaning construction. Findings offer three contributions: a typology of chromatic, morphological, and linear elements; a semiotic mapping model explaining layered sign functions; and an interpretive framework showing that meaning is dynamically reconstructed through narrative context and audience reception. Sustainable preservation, the study argues, requires digital reconstruction and multimodal dissemination, though broader comparative research remains needed.

**Keywords:** Puxian Opera facial makeup; visual symbolism; peircean semiotics; icon-index-symbol; intangible cultural heritage

## Introduction

Chinese opera is a composite art integrating music, literature, dance, ritual, and visual design, with each regional genre reflecting distinct cultural identity (Yu, 2017). CNKI data show that scholarship largely centers on major forms such as Peking Opera and Yue Opera, while Puxian Opera receives comparatively limited attention (Wen et al., 2022). Within this modest body of research, systematic studies of Puxian Opera facial makeup are particularly scarce (Chua, 2019). Although recognized as intangible cultural heritage, its visual–symbolic mechanisms remain under–theorized (Zifei et al., 2025).

Existing studies primarily document historical development and artistic features or explore applications in design and education (Li et al., 2025). However, insufficient attention has been given to how visual elements—color, line, and form—operate as structured signs generating layered meanings in ritual and theatrical contexts (Loo & Deng, 2025). Consequently, facial makeup is often aestheticized rather than analyzed as a coherent semiotic system.

To address this gap, this study applies Peircean semiotics to interpret how icon, index, and symbol interact in performance, conceptualizing facial makeup as a structured meaning–producing system.

## Research Objective

1. To analyze the structural organization of visual elements (color, form, and line) in Puxian Opera facial makeup and examine how these elements function within ritual and theatrical contexts.

2. To classify and interpret the symbolic system of Puxian Opera facial makeup based on Peirce’s triadic model of icon, index, and symbol, and to explore the mechanisms through which visual signs construct and transform ethical, religious, and regional meanings.

## Literature Review

### Research on Puxian Opera and Facial Makeup

Existing research centers on aesthetic transformation or digital preservation (Chia, 2018). Design studies emphasize visual features and cross–domain adaptation, while digital approaches focus on transmission technologies (Révész, 2024). However, both strands overlook facial makeup as a structured semiotic system, rarely examining its internal mechanism of meaning production within cultural and performative contexts.

## Semiotics in Visual and Intangible Cultural Heritage Studies

Semiotic theory, particularly Peirce’s Sign–Object–Interpretant model, is widely applied in ICH studies to analyze ritual and visual symbolism (Yaco & Ramaprasad, 2018). Classifying signs as icon, index, and symbol, it suits opera facial makeup, where visual forms encode resemblance, indication, and convention. Yet its systematic application to Puxian Opera remains limited.

### Identified Research Gap

Existing studies describe artistic features or preservation strategies but rarely provide a case–specific, theoretically grounded semiotic analysis (Wong et al., 2022). Few examine how modernization reshapes traditional sign relations. Addressing this gap, the study applies Peirce’s triadic model to systematically explain how Puxian Opera facial makeup functions as a dynamic visual–symbolic system.

### Theoretical framework

The framework positions Puxian Opera facial makeup as the central object, linking research objectives (visual structure and symbolic meaning) with historical development and semiotic theory (Lin, 2025). Grounded in Peircean semiotics, visual elements—color, form, and line—operate as icons, indices, and symbols, systematically generating meaning within performance tradition.

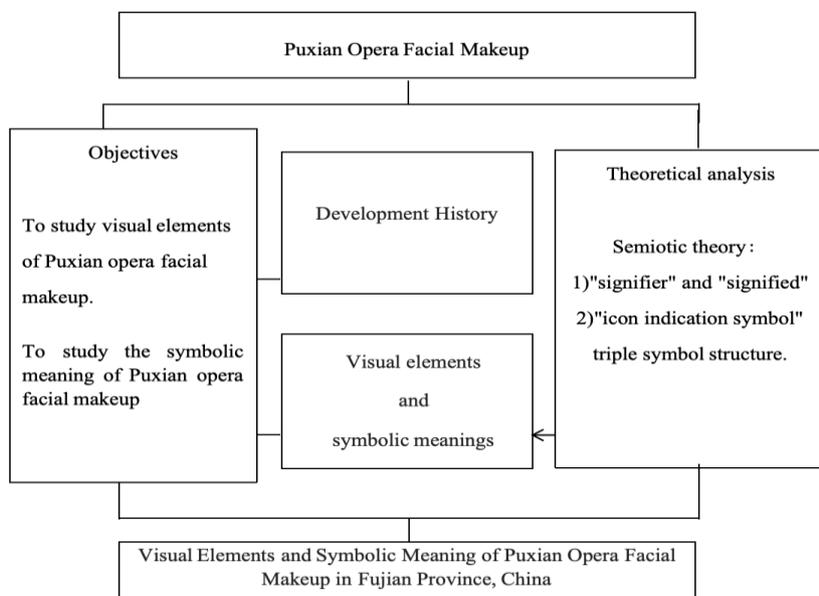


Figure 1 Theoretical framework

## Research Methodology

This study employs a qualitative design combining document analysis, semi-structured interviews, and non-participant observation (Armstrong, 2021). Fieldwork (March–July 2025) was conducted in Putian and Xianyou, key centers of Puxian Opera. A review of 42 core sources established the historical framework. Twelve professionals (5–32 years' experience) were purposively sampled, and 18 hours of observation documented performance practice. Data were analyzed through three-stage coding integrating thematic analysis and Peircean semiotics. Visual elements were interpreted via the Sign–Object–Interpretant model and classified as icon, index, or symbol to systematically explain meaning production.

## Research Results

### Visual elements of Puxian opera facial makeup in Fujian Province, China.

According to Pierce's semiotic theory, this study extracted the visual elements of Puxian opera facial makeup through color, form, line work and emotional changes, and collected the data as follows:

This section presents findings derived from 42 archival documents, 12 semi-structured interviews, and approximately 18 hours of field observation, in line with the two research objectives: constructing a typology of visual elements and mapping their semiotic functions.

### Color

In its early stages, Puxian Opera facial makeup employed a relatively simple chromatic scheme dominated by black, red, and white (Junyou & Chantamala, 2024). Color categories in this study were derived through open and axial coding of interviews and observations (Liu et al., 2022), generating three clusters: binary contrast (black–white), dominant triadic composition (red–black–white), and extended chromatic symbolism (blue, green, gold, etc.). Traditionally, red signifies loyalty, black integrity, and white treachery. However, rather than treating these as fixed correspondences, the study interprets color within Peirce's triadic relation: color as sign, moral attribute as object, and audience recognition as interpretant. During the Republican period, additional colors enriched visual expressiveness and expanded symbolic nuance (Wu, 2026).

Black-and-white facial makeup in Puxian Opera demonstrates strong visual contrast and structural clarity. Analysis of 36 documented cases shows that 28 (77.8%) follow an approximate 3:7 ratio (black ≈30%; white ≈70%), especially in Jing and Chou roles. White enhances visibility

iconically, while black contours index expressive zones; through repetition, this configuration has stabilized symbolically. Red combines with black and white to create dynamic chromatic balance, functioning iconically through contrast, indexically through role differentiation, and symbolically through moral coding. Additional colors such as blue and green appear in 8 cases, mainly in mythological roles, extending the semiotic system while remaining selectively applied. Representative examples of these extended chromatic applications are illustrated in Table 1, which presents typical aquatic–spirit roles such as the tortoise, carp, snail, crab, shrimp, and fish goblins.

**Table 1** Legend of color facial makeup (picture source: Puxian opera traditional repertoire series, Volume 22)

Illustration			
Character	Tortoise goblin (龟精)	Carp goblin (鲤鱼精)	Snail goblin (螺精)
Illustration			
Character	Crab goblin (蟹精)	Shrimp goblin (虾精)	Fish goblin (鱼精)

### Form

Symmetrical facial makeup, found in 24 of 36 cases—especially in general roles—functions iconically as balance, indexically as authority, and symbolically as righteous order. Yu Chigong’s design, structured along the nasal axis with balanced black and red elements on a white base, exemplifies moral stability through symmetry. While symmetry dominates, asymmetry appears in roles expressing blindness or inner tension. Zheng En’s imbalance signals impairment, and Wu Song’s “bird-head” reinterpretation reflects active semiosis shaped by audience

perception. Such controlled asymmetry enhances expressive dynamism within an overarching semiotic structure.

### **Line work**

In Romance of the Three Kingdoms, Guan Yu is described with distinctive features such as a red face and silkworm eyebrows. Puxian Opera transforms these textual descriptions into visual symbols through a red base, white brows, and black phoenix eyes, while the rounded contour conveys harmony and integrity consistent with traditional aesthetics.

Artists consciously “break the face” by reconfiguring elements to match narrative identity (Lawrence, 2020). For example, Dian Wei’s facial makeup incorporates halberd motifs to symbolize his weapon expertise and martial strength, demonstrating how representational signs visually encode character traits and historical attributes.

### **The symbolic meaning of Puxian opera facial makeup in Fujian Province, China.**

In Puxian Opera facial makeup, symbolic meaning operates primarily through culturally learned conventions rather than resemblance or causality. Color functions at the symbolic level: red signifies loyalty and bravery, while white implies treachery, meanings formed through long-term performer–audience interaction. Bao Zheng’s predominantly black makeup encodes dignity and impartiality, strengthened by black–white–red contrast; seven–star eyebrows and a crescent motif further symbolize celestial authority and moral judgment. Form works iconically and indexically: Dian Wei’s halberd pattern signals martial identity, while dragonfly, crab, and the split “Wang” character metaphorically convey personality and tragic destiny. Line variation also indexes temperament—sharp, rigid strokes suggest cunning or dominance. Embedded motifs, such as Han Zhongli’s peach, integrate narrative context with broader cosmological symbolism.

## **Discussion**

Building on prior research, this study shifts analysis from aesthetic description to semiotic mechanism. While earlier work emphasizes artistic features or digital preservation, it rarely explains how facial makeup generates meaning as a structured sign system. Applying Peirce’s icon–index–symbol framework, the findings show that color proportion, line structure, and symmetry operate across layered semiotic levels, with meaning emerging through performer–audience interaction. The black–white ratio, for instance, functions iconically, indexically, and symbolically within cultural convention. The study further argues that sustainable preservation

should maintain sign–object–interpretant relations rather than merely replicate visual form, clarifying the internal logic of symbolic stability and transformation.

## Conclusion

This study applies Peircean semiotics to analyze Puxian Opera facial makeup as a dynamic visual–symbolic system shaped by regional culture and audience interpretation. It clarifies how icon, index, and symbol interact to generate meaning, while acknowledging methodological limits and proposing comparative, mixed–method research to strengthen intangible heritage interpretation.

## Suggestions

The theoretical integration and strategic innovation proposed in this paper provide an operation path for the cultural transmission and visual regeneration of Puxian opera facial makeup. It is suggested that in future research and practice: 1) we can further explore the digital construction of Puxian opera facial makeup and enrich its research materials; 2) Expand the cross media narrative scene, integrate traditional culture into modern media, such as putting relevant cultural creation products into the market, integrating AR or VR for cultural secondary processing, so as to promote the key to the "creative transformation and innovative development" of traditional opera visual culture.

## New Knowledge from Research

This study produces three forms of new knowledge: a visual typology, a semiotic mapping model, and a cultural–narrative activation model. First, it systematizes color, form, and line as structurally interrelated dimensions, establishing the first comprehensive visual typology of Puxian Opera facial makeup. Second, grounded in Peirce’s icon–index–symbol framework, it maps each visual element onto layered semiotic functions, clarifying how meaning is generated through interpretant formation. Third, it proposes a cultural–narrative activation model explaining how stable visual structures dynamically produce moral and regional meanings in performance. Together, these models offer a replicable analytical paradigm for intangible heritage research.

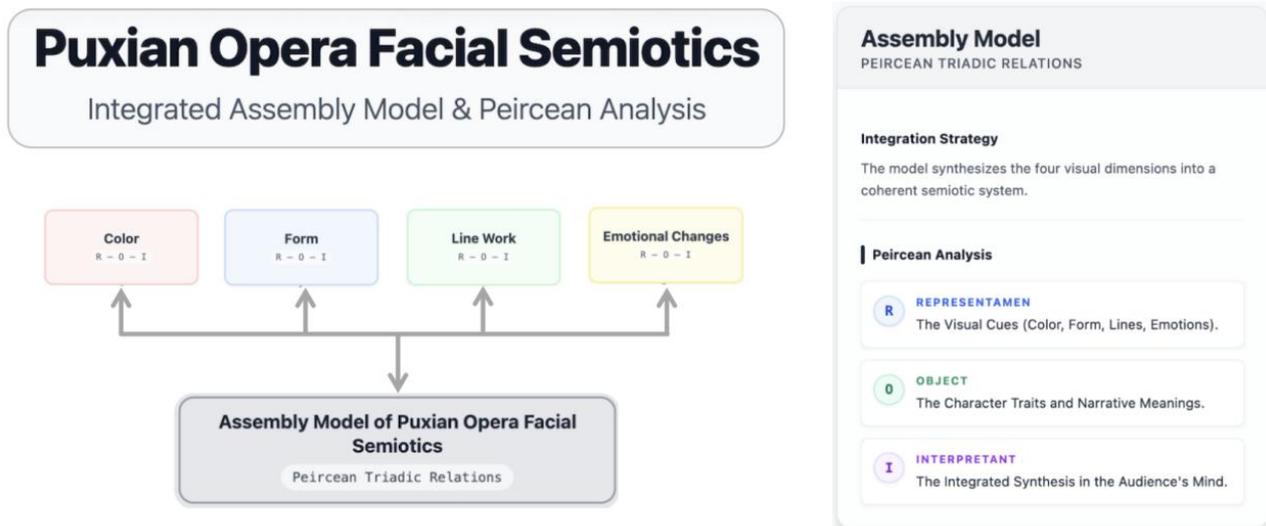


Figure 2 Puxian opera facial makeup semiotics integrated assembly model & analysis

## References

- Armstrong, C. (2021). Key methods used in qualitative document analysis. *OSF Preprints*, 1(9), 1–9. <http://dx.doi.org/10.2139/ssrn.3996213>
- Chia, C. (2018). In search of the origins. In *Hokkien theatre across the seas* (pp. 11–32). Springer. [https://doi.org/10.1007/978-981-13-1834-4\\_2](https://doi.org/10.1007/978-981-13-1834-4_2)
- Chua, S. P. (2019). Chinese performing arts. In *A general history of the Chinese in Singapore* (pp. 573–614). World Scientific. [https://doi.org/10.1142/9789813277649\\_0026](https://doi.org/10.1142/9789813277649_0026)
- Junyou, C., & Chantamala, O. (2024). The lead male in the Puxian opera: maintaining cultural identity and traditional body practice in the context of Chinese contemporary dance. *The International Journal of Critical Cultural Studies*, 22(2), 155. <https://doi.org/10.18848/2327-0055/CGP/v22i02/155-174>
- Lawrence, P. (2020). Policing, ‘science’, and the curious case of photo-fit. *The Historical Journal*, 63(4), 1007–1031. <https://doi.org/10.1017/S0018246X19000530>
- Li, S., Li, S., Fong, L. H. N., & Li, Y. (2025). When intangible cultural heritage meets modernization—Can Chinese opera with modernized elements attract young festival-goers?. *Tourism Management*, 107, 105036. <https://doi.org/10.1016/j.tourman.2024.105036>
- Lin, J. (2025). Inheritance and innovation of Puxian opera: from the perspective of fieldwork—a case study of the living practice of local opera. *Lecture Notes in Education, Arts, Management and Social Science*, 3(5), 237–243. <https://doi.org/10.18063/lne.v3i5.1107>

- Liu, K., Zhou, S., Zhu, C., & Lü, Z. (2022). Virtual simulation of Yue Opera costumes and fashion design based on Yue Opera elements. *Fashion and Textiles*, 9(1), 31. <https://doi.org/10.1186/s40691-022-00300-0>
- Loo, F. Y., & Deng, S. X. (2025). Female roles in Western-style Chinese opera: From confucianist female archetype and political allegory to postmodern complexity. *Women's History Review*, 34(3), 401–419. <https://doi.org/10.1080/09612025.2024.2360300>
- Révész, Á. (2024). Xiqu and cultural identity. In *Economy of identities in traditional Chinese theatre* (pp. 1–40). Springer. [https://doi.org/10.1007/978-981-97-7463-0\\_1](https://doi.org/10.1007/978-981-97-7463-0_1)
- Wen, M., Ma, H., Yang, J., & Yang, L. (2022). Main acoustic attributes and optimal values of acoustic parameters in Peking opera theaters. *Building and Environment*, 217, 109041. <https://doi.org/10.1016/j.buildenv.2022.109041>
- Wong, E. C., Maher, A. R., Motala, A., Ross, R., Akinniranye, O., Larkin, J., & Hempel, S. (2022). Methods for identifying health research gaps, needs, and priorities: a scoping review. *Journal of General Internal Medicine*, 37(1), 198–205. <https://doi.org/10.1007/s11606-021-07064-1>
- Wu, J. (2026). The application of color in modern design: A visual transformation from emotional expression to cultural identity. *Art & Design for Humanity*, 2(02). <https://adh-journal.com/index.php/journal001/article/view/26>
- Yaco, S., & Ramaprasad, A. (2018). Cultural heritage semiotics. In *digitisation of culture: Namibian and international perspectives* (pp. 49–64). Springer. [https://doi.org/10.1007/978-981-10-7697-8\\_4](https://doi.org/10.1007/978-981-10-7697-8_4)
- Yu, N. (2017). Life as opera: A cultural metaphor in Chinese. In *Advances in cultural linguistics* (pp. 65–87). Springer. [https://doi.org/10.1007/978-981-10-4056-6\\_4](https://doi.org/10.1007/978-981-10-4056-6_4)
- Zifei, L., Aris, A. B., Nor, Z. B. M., & Siyu, C. (2025). An analysis of traditional Chinese opera costume research on the current status and emerging trends. *Cogent Arts & Humanities*, 12(1), 2469459. <https://doi.org/10.1080/23311983.2025.2469459>