ISSN 2618-1568 Vol. 8, Issue 4: 1-5, DOI: 10.25236/FAR.2026.080401

Research on the Information Visualization Promotion of Traditional Clay Sculpture Art: Taking Huaiyang Clay Dog as an Example

Aoxue Yue

Jingdezhen Ceramic University, Jingdezhen, Jiangxi, 333403, China

Abstract: *The Huaiyang Clay Dog is a typical traditional folk clay sculpture from the eastern Henan region. its forms, patterns and colours embody Fuxi culture, fertility worship and the concepts of the Five Elements and Five Colours.Taking the Huaiyang Clay Dog as the subject of this paper, it comprehensively employs methods of literature review, image analysis and design practice to examine its cultural connotations and artistic characteristics. It extracts information regarding form, patterns, colour and craftsmanship to construct an information visualisation system characterised by 'the flattening of forms, the categorisation of patterns and the narrativisation of craft processes', whilst exploring its practical value in light of the requirements for the dissemination of intangible cultural heritage.The research indicates that information visualization helps to lower the cognitive barrier for the public to understand intangible cultural heritage, expands the transmission carriers of clay figurines, and can provide a reference for the contemporary dissemination of traditional folk clay sculptures.*

Keywords: *Traditional folk clay sculpture art; Huaiyang Clay Dog; Information visualisation*

1. Introduction

Traditional folk clay sculpture uses clay as its raw material and is hand-moulded or cast by folk artisans; it is widely utilised in both daily life and ritual contexts, serving both practical and cultural heritage functions. The art of clay sculpture has a long and rich history, spanning several millennia, as evidenced by the pottery pigs and sheep from the Hemudu site, as well as the religious statues and clay toys of the Tang and Song dynasties.The Huaiyang Clay Dog is a quintessential example of this tradition; its origins are closely linked to the Taihao Mausoleum Temple Fair and the veneration of Fuxi, the progenitor of Chinese civilisation, embodying the ancient people's fertility cult and reverence for nature. However, amidst the processes of globalisation and modernisation, the scope for traditional folk clay sculpture has steadily diminished, and its transmission faces significant challenges.How to revitalise their value in the contemporary era is a subject of shared concern in cultural research and design practice. Accordingly, this paper takes the Huaiyang Clay Dogs as its subject, examining their cultural significance and artistic characteristics, and constructs an information visualisation design system centred on 'flattened forms, categorised patterns and visualised production processes', to explore their practical applications and dissemination strategies.[1]

2. Cultural Connotations and Artistic Value of Traditional Folk Clay Sculpture

2.1. Cultural Significance

In early societies, clay sculptures served the function of documenting daily life. Clay sculptures found in Neolithic remains depict scenes of our ancestors' labour and hunting; upon the transition to an agricultural society, clay sculptures of crops and children's toys reflected the level of agricultural development and children's aesthetic preferences. With the spread of religion, clay sculptures became material vessels for religious spirit, with Taoist immortals and Buddhist statues conveying doctrinal myths and images of compassion and solemnity respectively.

At the folk level, clay sculptures often symbolise auspicious wishes; for instance, the zodiac clay sculptures of 'Niren Zhang' in Tianjin add to the festive atmosphere during the Spring Festival, whilst in some parts of Shanxi, clay sculptures depicting 'mandarin ducks playing in the water' convey

ISSN 2618-1568 Vol. 8, Issue 4: 1-5, DOI: 10.25236/FAR.2026.080401

blessings for newlyweds.At the same time, the differences in subject matter, style and craftsmanship of clay sculptures across different periods also serve as a window through which to observe social change. Taking the Song Dynasty as an example, clay sculpture gradually became commercialised, giving rise to much-loved clay toys, which clearly demonstrates that the craft had reached a high level of maturity and had become integrated into everyday life. Overall, traditional clay sculpture is not only a vivid record of the myriad facets of daily life, but also a faithful testament to religious beliefs, auspicious wishes and the passage of time.[2]

2.2. Artistic Value

From the perspective of graphic design, traditional clay sculpture breaks free from the constraints of natural forms, employing techniques such as exaggeration, distortion and abstraction to imbue the works with powerful artistic tension. For instance, the 'Seated Tiger' from Fengxiang clay sculpture, with its exaggerated ears and condensed body, retains the tiger's majesty whilst adding a touch of childlike whimsy.Huaiyang Clay Sculpture Dog sculptures, on the other hand, employ abstract and stylised motifs—such as the 'nine-headed bird'—combining geometric and natural patterns to construct visual symbols brimming with vitality. Furthermore, through the organic fusion of geometric and natural motifs—such as the peony pattern symbolising wealth and prestige, and the spiral pattern signifying endless vitality—a visual symbol system full of vitality is established.

The use of colour serves as a vital medium through which clay sculpture conveys cultural significance. Folk artists employ high-purity colours to create visual tension, utilising different hues to convey distinct symbolic meanings; this colour logic is not a random combination but adheres to the aesthetic principle of 'using colour to enhance form'. Furthermore, by employing colours representative of regional religious culture as the base tones for the sculptures, they not only preserve the mystique of primitive religion but also enhance the visual impact of totem worship through colour contrast.

In terms of form and craftsmanship, traditional clay sculpture art relies on core techniques such as hand-modelling, moulding and painting to form a unique artistic language. These clay sculptures, imbued with the unique craftsmanship of the artisans, not only embody the creative wisdom of 'three parts modelling, seven parts colour' but also, through the oral and practical transmission of the master-apprentice tradition, make the craft of clay sculpture an important bond of regional cultural identity.

Through the symbolic expression of graphic design, the cultural metaphors conveyed by the use of colour, and the regional characteristics of its craftsmanship, traditional folk clay sculpture has constructed a multi-dimensional system of cultural values. This art form not only records the aesthetic consciousness and spiritual pursuits of our ancestors but also provides a rich source of creative inspiration for contemporary design, serving as a cultural bridge connecting tradition with modernity, and the local with the wider world.

3. Artistic Characteristics of the Huaiyang Clay Dog

3.1. The Origins and Development of Huaiyang Clay Dogs

The history of Huaiyang Clay Dogs dates back three thousand years; their origins are closely linked to the mausoleum complex of Taihao Fuxi and are deeply interwoven with the mythological traditions of Fuxi and Nüwa. As a quintessential product of the fusion between primitive religious beliefs and local folk culture, they were initially imbued with sacred symbolic significance as guardians of the mausoleums and temples dedicated to Fuxi and Nüwa.In their early days, they were primarily used in sacrificial rituals, embodying the totemic symbol system of primitive tribes and reflecting the ancient people's reverence and worship of nature and deities; they served both as spiritual symbols and as folk talismans to ward off disasters and evil spirits.[3]

Every year, from the second day of the second lunar month to the third day of the third lunar month, a grand temple fair is held at Taihao Mausoleum Square, attracting large numbers of devotees to pay homage to their ancestors and offer sacrifices to Fuxi and Nüwa. This folk custom, known as the 'Second-Month Fair', is essentially a historical remnant of the fertility cult culture of primitive society, and the abstract form of the 'Nini Dog' serves as a vital vehicle for this collective memory.Their artistic form profoundly reflects the ancient people's aspirations and pursuit of a better life, embodying the

ISSN 2618-1568 Vol. 8, Issue 4: 1-5, DOI: 10.25236/FAR.2026.080401

socio-cultural psychology of a specific historical period.

As a general term for a category of clay sculptures, Huaiyang 'Nini Dogs' feature a rich and diverse range of forms, characterised by abstract and grotesque artistic features, vivid and brilliant colours, and intricate and varied decorative patterns, all imbued with strong imagery of fertility worship.With the development of society and culture, their artistic forms have undergone continuous innovation. Contemporary inheritors of this intangible cultural heritage have incorporated cultural elements such as auspicious idioms into their creations, gradually transforming this traditional craft into an art form of collectible value and facilitating a functional transition from a folk utilitarian object to a cultural vehicle.

3.2. Artistic Characteristics of the Huaiyang Clay Dog

3.2.1. Characteristics of the Patterns

The decorative system of the Nini Dogs centres on fertility worship as its core motif; their patterns are often symbolic representations formed through the abstract interpretation of reproductive organs, such as vaginal motifs and triangular patterns. This artistic characteristic profoundly reflects the collective aspiration for the continuation of life held by ancient ancestors against the historical backdrop of a harsh living environment, where population growth was crucial to the survival of the tribe.As a material manifestation of primitive totem worship, the decorative motifs of the Nini Dog embody the cultural genes of procreation and survival, serving as a vital visual medium for the study of ancient reproductive cult culture.

The pattern system of the 'Nini Dog' contains a wealth of information on tribal culture, and its visual language is deeply intertwined with Fuxi culture. For example, the Bagua (Eight Trigrams) pattern, comprising a long solid line '—' (symbolising 'Qian') and a short dashed line '--' (symbolising 'Kun'), represents the ceaseless cycle of life and death in all things, implicitly referencing Fuxi's creation myth, in which he observed the natural world to derive symbolic meanings.Such patterns not only reflect an understanding of the laws governing the generation of all things in the universe, but also reinforce the dimension of nature worship through symbols such as the sun motif—the sun, as the source of light and life, was endowed with the divine symbolism of 'Taihao Fuxi', and its stylised representation serves as a tangible testament to our ancestors' veneration of natural forces.

3.2.2. Symbolism of Colour

The colour scheme of the Nini Dog strictly adheres to the traditional Chinese philosophy of the 'Five Elements and Five Colours', using the basic hues of black, red, yellow, white and blue shown in Figure 1, which correspond to the Five Elements—Metal, Wood, Water, Fire and Earth—and the Five Directions—East, West, South, North and Centre.Among these, black, as the base colour, carries dual symbolic significance: it aligns with the cosmological theory that 'the Taiji gives rise to the Two Instruments', whilst also resonating with the historical tradition of the Huaiyang region, where the Xiahou clan 'valued black'. This colour scheme not only constructs the philosophical framework of 'one gives rise to two, two gives rise to three, and three gives rise to all things', but also forms a complete system of symbolic order through the correspondence between the five colours, the cardinal directions, and the mythical beasts (such as the Azure Dragon in the East and the White Tiger in the West).

In terms of colour application, Nini Dog employs black as the base tone, complemented by red, yellow and blue as the primary decorative colours, whilst white is reserved exclusively for outlining. This colour scheme creates a striking visual tension: the calm, weighty quality of the black background contrasts with the vivid brightness of the red and blue; yellow acts as a neutralising colour to regulate the visual rhythm; and the precise white outlines reinforce the sense of order within the patterns.Viewed from a modern design perspective, this colour combination not only preserves the rustic beauty of primitive art but also creates a powerful visual impact through the contrast of high-purity hues, thereby achieving an aesthetic realm where 'splendour and simplicity coexist'.

3.3. Stylistic Characteristics

In terms of stylistic characteristics, Nini Dogs are primarily divided into two major types: the single-form and the composite-form. The single-form type features relatively concrete designs, with prototypes drawn from everyday life, such as monkeys, tigers, sheep and dogs. These designs are often subject to slight artistic treatment, retaining the basic characteristics of the animals whilst also

ISSN 2618-1568 Vol. 8, Issue 4: 1-5, DOI: 10.25236/FAR.2026.080401

embodying the unique, rustic style of the Nini Dog.For example, the dog figures in Nini Dogs may feature exaggerated proportions of the head or body; their lines are simple and flowing, without excessive detail, emphasising the dog's endearing, good-natured appearance. These single-form Nini Dogs are characterised by their simplicity, with an emphasis on capturing the overall form through clean, direct curves that are uncluttered and straightforward, conveying a strong sense of tension and power.Although they are derived from real-life animals, through the artisans' creative interpretation, they exhibit a rustic beauty bearing traces of primitive art.

Composite forms typically take the shape of human-animal hybrids, human-bird hybrids, or combinations of various animal features, such as dogs with human heads, fish with human faces, swallows with monkey heads, unicorns, multi-headed monsters, the 'four-unlikes', cats pulling monkeys, and straw-hat-wearing tigers.These figures have no real-life counterparts; they are fantastical, mysterious and bizarre forms created by the artisans based on their intuitive sensibilities. For example, the 'monkey-headed swallow' has the head of a monkey and the body of a swallow, combining the characteristics of two different animals to form a unique shape. The design of the 'straw-hat tiger', meanwhile, embodies the rich cultural significance of the tiger; its straw hat derives from the ancient custom of shielding one's face with a fan, and carries connotations of marriage.These composite 'Nini Dog' figures are bizarre and absurd in form, transcending the realistic forms found in nature and emphasising symbolism and allegory; their peculiar shapes endow the artworks with a divine quality and spiritual vitality. They represent a continuation and expansion of primitive totemic culture, embodying the concepts of yin and yang, totemism, and a strong desire for fertility worship; many are adorned with patterns depicting male and female genitalia, fully expressing the rituals of fertility worship from the primitive era.

4. Information Visualisation Design Techniques for the Huaiyang 'Nini Dogs'

The primitive forms of the Huaiyang 'Nini Dog' combine abstraction with rustic simplicity; their flattened representation forms the foundation of their information visualisation. The core approach lies in simplifying visual elements whilst retaining key identifying features, thereby adapting them to modern communication and design contexts.

4.1. Refinement through Flat Design

Adhering to the principle of 'simplifying the complex whilst preserving the essence and charm', we have discarded the overly intricate three-dimensional textures and decorative details from the Nini Dog's form, focusing instead on its core contours and iconic features. By clearly defining the hierarchy of primary and secondary elements in the core design of this '‌wealth-attracting beast', we ensure that its recognisability is not diminished following the flattening process.At the same time, we strictly adhere to the Nini Dog's 'black background with bright colours' colour scheme, maintaining the original colour proportions and symbolic meanings in the flattened representation to ensure that the cultural significance is not lost.

4.2. Visualisation of Pattern Classification

Based on the cultural significance and expressive forms of the 'Nini Dog' motifs, the motifs are categorised according to their cultural significance into those representing fertility worship—such as the female genitalia motif and the triangular motif—and those representing tribal culture, such as the sun motif; supplementary classification based on visual form divides them into geometric motifs—such as rope patterns—and natural imagery motifs—such as floral patterns and horseshoe patterns. Through this classification, the information contained within the motifs is organised across multiple dimensions, laying the foundation for their visual presentation.

4.3. Visualisation of the Craft Process

Using illustrations as the core medium, the production process, historical development and technical characteristics of the Nini Dog are visualised, transforming abstract technical information into vivid and accessible visual narratives.Sequential process illustrations are designed around the 'Nini Dog' production stages: 'selecting clay – pounding clay – rolling the clay – shaping – sun-drying – blackening – colour painting'. A linear narrative structure is adopted, with a timeline linking the various stages, each of which corresponds to a separate illustration.The illustration design adheres to

ISSN 2618-1568 Vol. 8, Issue 4: 1-5, DOI: 10.25236/FAR.2026.080401

the principle of ‘combining realism with artistic expression’, accurately recreating the core actions, tools and materials used in each stage, whilst incorporating the Nini Dog’s colour scheme to maintain a consistent overall visual style. Key process details and corresponding colour names are highlighted at the conclusion of each critical stage. Furthermore, brief textual explanations are embedded within the process illustrations to supplement the technical points and cultural significance of each stage, achieving an information-conveying effect where ‘images take precedence and text serves as a supplement’.

5. The Applied Value of the Huaiyang Clay Dog Information Visualisation Design

On the one hand, Huaiyang Clay Dog information visualization design can reduce the threshold of cultural cognition. Through intuitive planar image, classified pattern display and narrative process illustration, the complex cultural connotation and process information of Nini Dog are transformed into easy-to-understand visual language, which helps audiences of different ages and different knowledge backgrounds quickly understand its cultural value, and promotes Nini Dog culture from ' niche cognition ' to ' mass communication '. On the other hand, Huaiyang Clay Dog information visualization design can also support multiple inheritance carriers. The results of information visualization can be directly applied to the digital inheritance (such as online cultural exhibition hall, non-heritage science video) and physical inheritance (such as offline exhibition, cultural and creative product development) of Nini Dog, providing systematic visual materials for various inheritance carriers, enriching inheritance forms and strengthening inheritance effects.

6. Conclusion

Traditional clay sculpture art is a treasure of Chinese culture, carrying historical memory and national wisdom. As a typical representative of Huaiyang Clay Dog, its shape, color and pattern contain rich cultural connotation. By excavating the three core features of clay dog modeling, pattern and color, this paper constructs an information visualization content system with the core of ' image planarization expression, pattern classification display and process illustration presentation ' on the basis of retaining artistic features, and clarifies the design principles of each module. Through scientific information visualization design, the traditional cultural information of mud dog can be transformed into intuitive visual form, which is conducive to reducing the cognitive threshold and enriching the form of inheritance and communication.

References

[1] Liu Meishuang. The origin and development of Chinese clay sculpture art [J]. Master and Masterpiece, 2021, (12) : 100-101.
[2] Ni Baocheng, Duan Gaifang. The historical origin and humanistic connotation of Huaiyang Clay Dog [J]. Folk Art, 2019, (2) : 42-47.
[3] Wei Min. Analysis of the artistic value of Huaiyang Clay Dog [J]. Appreciation, 2015, (8) : 89.