

## ORIGINAL ARTICLE

Urban landscape and symbolic ornamentation:  
The role of Liao Tricolor in multi-ethnic  
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## Abstract

Liao *Sancai*—also known as Liao tricolor ceramics—has long been treated and dismissed as purely funerary ware. This study argues that such a view is too narrow and obscures the role of these ceramics in the everyday and urban visual culture of the Liao dynasty (907–1125 CE). Drawing on Umberto Eco's semiotics of ornament and concepts of non-verbal communication, the present study combines archaeological evidence from kiln sites with a typological analysis of ceramic motifs. Dragons, lotus scrolls, and vegetal arabesques are interpreted as more than decorative efflorescences: They functioned as a unifying visual language that helped bind a multi-ethnic state. Produced in ethnically diverse kilns (such as Longquanwu, Gangwayao, and Balinyouqi) and distributed to city centers like Dalian, Liao *Sancai* adorned not only funerary vessels but also sacred and civic architecture. Their repeated ornamental patterns structured urban experience, creating a semiotic infrastructure that mediated cultural plurality without imposing assimilation. This article, therefore, proposes the notion of “visual diplomacy” to describe how Liao *Sancai* crossed ethnic boundaries and articulated a shared imperial identity within a politically and culturally stratified field. The study further situates Liao decorative strategies within broader comparative perspectives on symbolic rule in multi-ethnic polities, and examines how contemporary Chinese museums are rebranding Liao *Sancai*. By mobilizing themes of harmony and common heritage, these institutions recast Liao tricolor ceramics as a vehicle for narratives of ethnic unity and cultural coexistence that continue to resonate today.

**Keywords:** Visual semiotics; Architectural ornamentation; Imperial identity; Material culture; Cultural diplomacy

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**1. Introduction**

Chinese imperial buildings were not merely architectural but also ideological, with stone, ceramic, and timber elements functioning as carriers of meaning. Symbolic visual culture mediating identity, political power, cosmology, architecture, ornament, and urban form played an essential role in imperial discourse (Thorp, 1986). Visual forms provided a symbolic language shared by the ruling elites, in contexts where linguistic and ethnic differences made governance difficult (Shen & Wang, 2024). One of the most interesting case studies of the practice of using ornament as a non-verbal tool

of cohesiveness and authority is that of the Liao dynasty (907–1125 CE), a multi-ethnic empire whose main people were the Khitan (Gao, 2018).

The ethnically diverse Liao realm extended from the Mongolian steppe to the North China Plain and included Khitan and Han, as well as the Bohai and other ethnic groups (Fei, 2017). This necessitated a complicated imperial incorporation that ultimately led to a compromise between cultural freedom and symbolic assimilation. Although traditional scholarship has focused on institutional structures, such as the dual systems of administration, the current research argues that ornament also played an important role in the formation of collective identity. Ornament, especially in Liao *Sancai* (遼三彩; Liao Tricolor ceramics), became an esthetic form of interethnic communication, not a passive embellishment, but a coded language in architecture, ritual, and everyday life (Zhang & Sirisuk, 2024).

The focal corpus in this study is Liao *Sancai*, a category of glazed ceramic ware characterized by flowing yellows, greens, and whites. These ceramics have principally been studied in relation to funerary rites, but their forms and iconography closely parallel those of architectural ornamentation, such as wooden temple brackets, painted ceiling coffers, and roof tile ends. This overlap suggests a broader spatial role than previously thought. Religious and administrative buildings used the same *Sancai* patterns, implying that they were employed in the creation of a semiotic space—a rhythmic pattern of visual images that linked Khitan palaces, Buddhist temples, and administrative regions (Jiang, 2009).

This work presents *Sancai* as a symbolic infrastructure of urban space rather than merely as an ornament or as a feature confined to tombs. The research conceptualizes ornament as a visual language, using the semiotic theory developed by Umberto Eco (1932–2016), which comprises signs (motifs) (Bondanella, 2009), grammar (repetition and placement), and syntax (spatial distribution) (Eco, 1986). In this perspective, *Sancai* ceramics, particularly those featuring dragons, lotus blossoms, and vegetal arabesques, can be interpreted as circulatory signs that work across ethnic, geographic, and architectural lines. They derived meaning not only from what they portrayed but also from how, where, and how frequently they appeared (Shojaee & Saremi, 2018).

This form of interpretation must be interdisciplinary. Traditional archaeologists are more preoccupied with the type of kiln and technical production, whereas architectural historians primarily focus on building form, yet they do not discuss symbolic detail (Rutkiewicz *et al.*, 2017). Semiotic meanings, in their turn, are not typically

connected to material context. This study is a synthesis of these views, bringing together the following components in an analytical model:

- Archaeological evidence on kiln sites (e.g., Longquanwu and Balinyouqi);
- Motif mapping of ceramics and architecture; and
- Eco's semiotic notion of codes and cultural texts.

The study provides a new conceptual framework: *Sancai* ceramics were infrastructures of meaning, structures for how space was read, interpreted, and felt. Identity was not imposed through such ornamentation but was negotiated through a strategy of symbolic consensus-building through common esthetic forms—a process this study terms visual diplomacy (Quanjin, 2024). Its central claim is that Liao *Sancai* was a key medium of urban semiotics, contributing to emotional reconciliation among ethnically differentiated communities in both spatial and political terms. The reuse of motifs in cities such as Shangjing, Zhongjing, and Dongjing created an imperial visual rhythm that enhanced a shared sense of familiarity and cohesion rather than strict homogeneity. This historical visual system also resonates with contemporary debates in material culture and architectural theory, including the mediation of identity through surfaces and the politics of esthetic depth. In addition, the study discusses the display of Liao ceramics in contemporary Chinese museums as a remnant of ethnic cohesion. It also considers how these signs are reconstituted as tools for constructing modern national histories.

Finally, the work re-evaluates ornament not as an unnecessary addition to architectural structure or historical discourse, but as a technology of ideology that, when activated by Liao elites, traversed boundaries, ideas, and bodies.

## 1.1. Historical framework

The Liao dynasty emerged during a period of political fragmentation and ethnic fluidity following the fall of the Tang dynasty (618–907). The Liao state grew rapidly under the Khitan, a semi-nomadic people who introduced Chinese administrative models while retaining their cultural institutions. This duality of coexistence without full assimilation defined its rule, as reflected in the built environment (Fu, 1950).

The Liao state maintained a two-level administrative system, consisting of the Northern Chancellery that governed Khitan and nomadic issues with the aid of tribal codes and oral law, and the Southern Chancellery that ruled the lands of the Han population with the assistance of Chinese-style bureaucracy (Fu, 1950). Segregation was pervasive, affecting cities as a whole, their separate quarters, their legal systems, and even their built forms.

However, despite institutional bifurcation, a key concern of Liao urban planning was visual unity, particularly in significant political and religious metropolises (Endicott-West, 2020).

Shangjing (Upper Capital) functioned as a highly symbolic capital city. It was planned to combine the Chinese grid system with steppes-influenced spatial logics (Xu, 2019). The ornamental forms were repeatedly applied to the palaces and Buddhist temples to develop a shared identity. Tile-and-beam engravings of dragons were produced, lotus medallions were painted on temples and tombs, floral arabesques were carved in metal fittings, and architectural forms were even imitated in pottery. These were not mere decorations but coded messages intended to suggest sovereignty, piety, and cosmic harmony (Glazier, 1899).

The production of *Sancai* ceramics extended across the empire, with the Longquanwu kiln (Hebei) and the Balinyouqi kiln (Inner Mongolia) being especially active. Archaeological reports indicate that these wares circulated widely. Furthermore, motif analysis reveals that they were converging on symbolism: Whether east or west, the artisans were working with the same subjects—dragons, phoenixes, and flowered medallions—indicating a broad symbolic convergence employed throughout the empire (Li, 2014).

This was combined with a broader policy of imperial rule that acknowledged plurality rather than seeking to suppress it. The Buddhist iconography, Daoist motifs, and native Khitan patterns amalgamated to create a multi-vocal symbol—a symbol that can be deciphered in multiple ways by different communities. The dragon could represent political power among the authorities of Han, supernatural power among Khitan elites, and spiritual power among Bohai monks (King, 2004).

These signs were open, polysemous, and highly context-dependent texts, semantically valid across the empire; in Eco's terms, they functioned as open texts. They became an arm of imperial semiotics, extending not only to state temples and tombs but also to the more prosaic structures of city and house. Urban identity was shaped not merely by the regulated existence of walls, markets, and temples, but by a repetitive visual discourse that bound communities together (Bell & De-Shalit, 2013).

A key element that held the empire together was the use of Buddhism, with Emperor Shengzong (r. 982–1031) proving the most adept in this strategy. Dule Temple and Fogong Pagoda exemplify large temple complexes that combine Han architectural forms, Khitan patronage, and popular decoration. Their decorations closely parallel the motifs found on *Sancai* ceramics, a correspondence

that may be called a cross-media translation of symbolic images (Sattler, 2024). The lotus bracket carvings in Dule Temple closely mirror the *Sancai* lotus medallions found in tombs. It is easy to understand the role ornament played in this regard: it was not merely embellishment, but a form of silent rulemaking. It conveyed imperial ideology to its citizens, encouraged cross-ethnic identification, and helped create a semiotically integrated urban experience.

Museological reinterpretation in the 20<sup>th</sup> and 21<sup>st</sup> centuries continues this logic. Institutions such as the Liaoning Provincial Museum and the Inner Mongolia Museum often present Liao *Sancai* as evidence of early multicultural harmony, reconstructing the past as a mirror of modern Chinese state ideology and emphasizing unity through diversity (Wang, 2020). Liao architecture was characterized by a hybrid visual language—fusing Tang-inspired construction techniques with nomadic spatial logics and Buddhist cosmology. The Guanyin Pavilion at Dule Temple (984 CE), the Fogong Pagoda (1056 CE), and the Wenshu Hall at Geyuan Temple (966 CE) each demonstrate a blend of Central Plains and steppe influences (Taylor, 2020).

Although most glazed elements have not survived, the iconographic parallels between architectural motifs and surviving ceramics suggest that *Sancai* ornamentation was integral to the visual logic of built space. Notably, dragons—a symbol of imperial authority in Han culture and protective power in steppe cosmology—and lotus scrolls—connoting purity and transcendence in Buddhist traditions—appear consistently across media, reinforcing their role as a shared symbolic language (Di Cosmo, 2010).

Liao *Sancai* was produced in multi-ethnic settings such as Longquanwu (Beijing), Gangwayao (Inner Mongolia), and Balinyouqi (Tongliao), reflecting the multi-ethnic character of craft economies. These areas supplied urban centers such as Shangjing (Linhuangfu) and Dongjing (modern Beijing), where ceramic ornamentation contributed to the construction of urban identity and imperial cohesion. The repetition of motifs in both portable ceramics and architectural components created a visual rhythm—an organized repetition of symbols that allowed non-verbal communication across space and ethnicity (Vasyutin, 2015).

Even though most historiography describes Liao governance as a bifurcated administrative system balancing Khitan and Han practices, few works recognize ornamentation as a non-verbal tool of political imagination (Vasyutin, 2015). Liao *Sancai* ornamentation was not a decorative practice but a semiotic infrastructure—a dispersal esthetic that made imperial authority visible and legible to diverse audiences (Dong, 2020).

This work offers not only a new paradigm for understanding Liao ceramics but also a comparative paradigm applicable to other empires that sought unity through material culture, such as the Ottomans, or symbolic meaning, such as the Abbasids. It implies that ornamentation was not coincidental but central to imperial space and symbolic architecture (Li, 2014). In summary, the historical framework confirms that Liao *Sancai* ornamentation was spatially grounded, politically charged, and deeply intentional. It functioned within a symbolic system that shaped the visual, material, and ideological experience of empire (Steinhardt, 1994).

## 1.2. Research objectives

This study aims to reinterpret Liao *Sancai* ceramics as symbolic architectural ornamentation that reinforced imperial identity, spatial coherence, and multi-ethnic integration in the Liao dynasty, through an interdisciplinary synthesis of archaeological, semiotic, and urban-spatial analysis.

## 1.3. Research questions

The research questions are as follows:

- (i) How did Liao *Sancai* ceramics operate as symbolic ornamentation across sacred, civic, and funerary spaces in the Liao dynasty?
- (ii) What semiotic meanings were embedded in recurring motifs (e.g., dragons, lotus scrolls, and vegetal arabesques), and how were these interpreted across Khitan, Han, and Bohai cultures?
- (iii) How did regional kiln production and artisan collaboration reflect the ethnic diversity of the Liao state, and what does this reveal about visual coherence in imperial cities?
- (iv) In what ways can the concepts of “visual rhythm” and “visual diplomacy” be applied to understand the ornament’s role in fostering imperial unity without forced cultural assimilation?
- (v) How is Liao *Sancai* reframed in modern museum exhibitions, and what does this reveal about the political uses of ornament in contemporary heritage narratives?

## 2. Theoretical and methodological framework

### 2.1. Ornament as cultural code

In the Liao context, Eco’s framework shows that repetitive motifs, such as dragons, lotus scrolls, and vegetal arabesques, are not merely esthetic but function as semiotic devices. These motifs served as multi-vocal icons, communicating various meanings to different audiences

depending on cultural background and spatial context. For example:

- (i) The dragon symbolized Han imperial power, Khitan animist cosmic protection, and celestial protection in Bohai imagery.
- (ii) The lotus flower, with Buddhist cosmological centrality, signified spiritual purity and enlightenment. Its consistent use in funerary ceramics and temple architecture created sacral continuity between life and the afterlife.
- (iii) Floral scrollwork and arabesques, influenced by Central Asian and Tang designs, exemplified cross-cultural influence while preserving symbolic harmony.

These motifs, according to Eco’s theory, form an esthetic code—a visual system of signs organized by repetition, position, and scale. These motifs functioned relationally, interpreted in context with other signs across architecture, ceramics, textiles, and ritual paraphernalia. Using what Eco refers to as semantic redundancy, the repetition of some signs in various spaces and materials established visual consistency, reinforcing their symbolic meaning (Trilling, 2003).

### 2.2. Visual diplomacy and urban semiotics

The concept of visual diplomacy is introduced in this study to demonstrate that the Liao ornamentation served as a means of mediating ethnic diversity. Liao visual culture did not impose a single set of cultural esthetics; instead, it deployed motifs that were flexible enough to be perceived differently by different groups yet consistent enough to create a symbolic unity. These decorations can be understood as what Eco terms open texts—polysemous images permitting variable readings while retaining ideological stability (Louis, 2003).

This symbolic system enabled shared urban semiotics in multi-ethnic cities such as Shangjing and Dongjing, where Khitan, Han, Bohai, and others coexisted. *Sancai* ceramic motifs appeared on architectural elements such as temple brackets, roof tiles, and coffered ceilings. Such visual rhythm created a spatial language connecting the living with the sacred, the elite with the common, and the imperial with the daily.

This study frames Liao *Sancai* as a semiotic infrastructure—an empire-wide system of visual coherence and a distributed, non-verbal cultural code embedded in spatial logic.

### 2.3. Archaeological methodology

Although Eco’s theory provides the interpretive approach, the empirical basis of this study is archaeological (Zhang & Sirisuk, 2024). Material culture, particularly ceramic



production, is treated not as art but as evidence of cultural practices, labor organization, and spatial symbolism. The methodological approach is triangulated along three axes:

- Kiln site studies (production background) (Xu, 2019).
- Motif typology and time mapping (form and time).
- Urban correlation (spatial integration and distribution).

These approaches trace the circulation of pottery across the empire and reveal how its designs linked various cultural areas under a unified imperial style.

### 2.3.1. Kiln sites and regional production

The research focuses on significant kiln regions such as Longquanwu, Gangwayao, and Balinyouqi. These sites are associated with multi-ethnic artisan groups in which Khitan, Han, and, possibly, Bohai craftspeople collaborated or lived in proximity to one another. The archaeological layers of these areas, such as kiln furnishings, glaze residues, and mold fragments, provide insights into technical adjustments and stylistic changes.

The lack of cobalt blue, common in Tang *Sancai*, has been linked to the relative dearth of this mineral locally and is thought to have prompted the development of new glaze recipes. Excavations at Gangwayao revealed bright yellow-green glazes characteristic of Liao *Sancai*. This stylistic hybridity reflects not only technological experimentation but also an esthetic blending across ethnic boundaries.

It is worth pointing out that kiln centers were more than production sites; they were cultural intersections. Their proximity to major cities and trade roads facilitated distribution while reinforcing symbolic connections to imperial centers.

### 2.3.2. Typology and overlaying of the motifs by time

Using museum catalogs, excavation reports, and online archives, this study classifies *Sancai* motifs according to:

- Form (dragon, lotus, floral scroll, and phoenix).
- Figure type (diamond, heart, fleur-de-lis-like forms, pot lip, spiral, flower, star, and rainbow).
- Chronological layer (10<sup>th</sup>–12<sup>th</sup> century).

These motifs are then chronologically mapped to track how symbolic vocabularies evolved during the Liao rule. Early *Sancai* works tend to imitate Tang styles, while later pieces incorporate more pronounced Khitan iconography and geometric abstraction, particularly in religious settings.

Such diachronic reading reveals ornament not as a fixed style but as a living semiotic system, responsive to political shifts, dynastic messaging, and artisan innovation.

### 2.3.3. Urban correlation and urban spatial function

The final procedure entails mapping the distribution of these materials within the urban landscape of the Liao dynasty. By mapping kiln production sites against known architectural locations, this study reveals how motifs resonated across urban building landscapes. This includes:

- Fragmentary glazed appliques on eaves and doors.
- Ornamented caisson ceilings in temples.
- Bracket arm carvings resembling *Sancai* floral scrolls.

In many cases, motifs first seen on funerary ceramics reappear in civic or religious contexts. This repetition supports the hypothesis that *Sancai* ornamentation was part of a shared visual regime, extending beyond mortuary symbolism into the everyday esthetics of imperial space.

### 2.4. Integrative logic: Ornament as spatial narrative

The integration of semiotic theory and archaeological methodology allows for the proposal of a new model: Ornament as spatial narrative. Liao *Sancai* ceramics are not treated as static artifacts but as textual elements within a visual language composed across urban environments.

Each motif is a sign whose meaning arises in relation to other signs, through repetition, placement, and medium. According to Eco, meaning does not exist in individual signs but in the form of the text—in this case, the city itself.

With this model, the following questions are addressed:

- What do *Sancai* motifs contribute to the visual systems in the city?
- What was their encoded ideological message?
- How does ornament mediate cultural difference among artisans/patrons?

In the research, *Sancai* ceramics are framed as a semiotic infrastructure, demonstrating how visual repetition fosters symbolic coherence through cultural familiarity, without enforcing assimilation.

### 2.5. Implications of the framework

This framework contributes to various fields:

- (i) Architectural history: It rejects the dichotomy of surface/structure and regards ornament as the architectural language of space.
- (ii) Material culture studies: It redefines ceramics as objects imbued with power.
- (iii) Semiotics: It applies Eco's abstract theory to concrete archaeological facts.
- (iv) Urban space studies: It conceptualizes visual rhythm as an instrument of soft governance in multi-ethnic settings.

Moreover, it provides a transposable paradigm for analyzing ornament in other imperial traditions, such as

Abbasid stucco, Ottoman tile, and Mughal floral inlay, in which the heterogeneity was controlled through esthetic convergence.

## 3. Results

This study demonstrates that Liao *Sancai* ceramics were not merely decorative and funerary artifacts but were part of a rich urban visual system founded on semiotic reasoning and imperial ideology. Viewed through Eco's semiotic theory and verified against archaeological evidence, these decorations illuminate the role of visual media in communicating identity, unity, and power within the urban setting. A key feature of the urban environment is the integration of spatial and functional components, uniting different areas and uses into a cohesive whole.

### 3.1. Spatial and functional integration

The integration of spatial and functional zones thus becomes a defining characteristic of Liao urbanism. Excavations at kiln centers such as Longquanwu, Gangwayao, and Balinyouqi have demonstrated that *Sancai* ceramics circulated within urban networks that incorporated multi-ethnic populations, including Khitan elite, Han administrators, and Bohai clergy. Cities such as Shangjing and Dongjing were not only population centers but also hubs of architecture, ritual, and ornamentation.

Liao *Sancai* was not limited to tombs; it was distributed throughout space, particularly in temple precincts and palace territories. While physical architectural installations are rare due to their fragility, iconographic parallels appear in:

- Lotus scrolls carved into caisson ceilings (e.g., Dule Temple).
- Timber elements embellished with dragon medallions.
- Fragments of colored tiles bearing related motifs were recovered from architectural debris.

These overlaps suggest a shared ornamental vocabulary spanning sacred, civic, and domestic spaces.

This is further supported by spatial patterns linking major temple complexes and kiln areas (e.g., Guanyin Pavilion at Dule Temple and Fogong Pagoda), suggesting intentional coordination. Although few architectural *Sancai* tiles survive, their iconographic echoes imply symbolic continuity across media, as seen in:

- Lotus-scroll carvings on temple ceilings.
- Dragon appliqués on burial vessels.
- *Sancai* ewers featuring arabesques.

Motifs in *Sancai* ceramics mirror and repeat architectural elements, reinforcing symbolic cohesion across spatial domains.

### 3.2. Motif continuity and symbolic redundancy

Three central motifs dominate the Liao *Sancai* ornamentation:

- Dragons
- Lotus blossoms
- Vegetal arabesques

These motifs were not randomly distributed; rather, their intentional repetition across objects, structures, and public spaces exemplifies Eco's concept of semiotic redundancy, where meaning arises from form, repetition, and spatial familiarity.

- Dragons symbolize imperial sovereignty, cosmic power, and ritual guardianship across Liao territories.
- Lotus signifies purity and rebirth in Mahayana Buddhism, resonating with both Han and Khitan converts.
- Arabesques and scrolls suggest continuity, cosmic harmony, and architectural movement.

These motifs, while shared across ethnic communities, were not culturally neutral. Their meanings were context-sensitive, shifting subtly depending on whether they appeared in a funerary, temple, or domestic setting.

Validation comes from museum artifacts (e.g., *Sancai* vessels at the Metropolitan Museum of Art), mural iconography from Dule Temple, and comparisons with Song-era (960–1279) symbolism, all confirming consistent symbolic value amid recontextualization.

The cross-cultural symbolic readings summarized in Table 1 show how *Sancai* ceramics mediated ideological meaning in pluralistic settings.

### 3.3. Interethnic craft collaboration

The physical characteristics and production contexts of Liao *Sancai* reveal how artisans of different ethnic backgrounds worked together. Kiln excavations have shown the following:

- Linked workstations adjacent to imperial roads.
- Differences in glaze composition (e.g., iron-based green glazes in contrast to Tang cobalt blue), reflecting technical differences.
- Mixed designs combining Han-style dragons with Khitan lotus petals.

**Table 1. Symbolic meanings of recurrent motifs**

Motif	Symbolic meaning	Cultural reference
Dragon	Imperial authority, divine protection	Khitan, Han, Bohai
Lotus	Buddhist purity, enlightenment	Han, Bohai, Khitan converts
Arabesques	Cosmic order, esthetic continuity	Cross-cultural

The absence of cobalt blue, a dominant color in Tang *Sancai*, can be interpreted not only as a material limitation but also as a deliberate esthetic break with previous dynasties, marking Liao's stylistic individuality.

These ceramics are highly standardized and localized, supporting the argument that Liao *Sancai* functioned as a flexible visual code decipherable across ethnic boundaries.

Validation comes from technical adaptations and symbolic innovations traced to Tang *Sancai* of the Liquefang kilns, indicating local production rather than imitation.

### 3.4. Urban identity infrastructure

The imitation of *Sancai* forms in urban settings created a semiotic infrastructure of visual signals that fostered a shared sense of identity across ethnicities. This infrastructure operated in the following ways:

- Incorporating identical motifs across architecture, ceramics, murals, and tiles.
- Placing visual markers in high-traffic locations such as temples, marketplaces, and gateways.
- Establishing a visual rhythm that shaped the spatial and symbolic experience of the city.

As Eco suggests, culture functions as a text, with these motifs acting as grammatical elements within the symbolic "sentence" of urban space.

Validation comes from the repeated presence of motifs in both public and sacred spaces, which confirms their symbolic continuity despite material disintegration, as the absence of complete ceramic tiles is offset by the survival of these motifs across media.

### 3.5. Museological confirmation

Modern exhibitions of Liao *Sancai* in museums across Shenyang, Chifeng, and Beijing provide indirect confirmation of their symbolic and political value. Curators often frame these objects as embodiments of:

- Cultural harmony
- Interethnic exchange
- Visual diplomacy

For example, the Liaoning Provincial Museum highlights *Sancai* as a key example of Khitan material culture synthesized with Han esthetics. These modern framings mirror the original function of *Sancai* as a symbolic medium of cohesion within an empire that resisted forced cultural homogenization.

Validation comes from exhibition narratives and public interpretation, supporting the thesis that Liao *Sancai* acted as a symbolic mediator both historically and contemporarily.

### 3.6. Summary of key results

This study confirms that:

- (i) Liao *Sancai* ceramics were embedded in urban sacred and civic life, not limited to funerary spaces.
- (ii) Recurring motifs functioned semiotically, using repetition and spatiality to communicate imperial values.
- (iii) These motifs operated trans-ethnically, offering cultural flexibility without erasing differences.
- (iv) Artisan practices reflected interethnic cooperation, evident in hybrid glaze and form innovations.
- (v) Modern exhibitions reflect *Sancai*'s lasting ideological resonance as symbols of pluralism.

These findings reframe Liao *Sancai* as an urban semiotic system—a distributed symbolic infrastructure that enabled a multi-ethnic polity to imagine unity without uniformity.

## 4. Discussion: Ornament, identity, and urban semiotics

The findings presented in Section 3 confirm that Liao *Sancai* ceramics functioned not as passive decoration but as active semiotic instruments embedded in the urban and architectural landscapes of the Liao dynasty. This discussion elaborates on their function as non-verbal signifiers, interpreting motifs and spatial patterns through Umberto Eco's semiotics, while highlighting their broader cultural and theoretical implications.

### 4.1. Ornament as semiotic infrastructure

All ornaments, according to Eco, follow a system of esthetic codes embedded with cultural meaning. These codes can be interpreted through their form, context, repetition, and distribution. In the Liao dynasty, the repetitive use of dragons in both ceramics and architecture created a symbolic system accessible to a multi-ethnic society.

This system functioned as a visual grammar—a semiotic infrastructure that mediated power, belief, and identity. The rhythm of these motifs throughout cities linked sacred precincts, civic spaces, and burial areas, providing visual continuity. Among the Khitan, Han, and Bohai communities, the repetition of shared signs helped consolidate an imperial order that transcended the need for linguistic and doctrinal standardization.

### 4.2. Multimedia image politics and visual diplomacy in the Liao dynasty

The Liao system of governance was dual, and this dualism allowed diverse groups a degree of cultural autonomy. In this context, ornamentation functioned as visual diplomacy—a local, non-verbal negotiation enabling

different ethnic groups to coexist within a shared symbolic framework. Rather than enforcing assimilation, the state promoted shared symbols whose meanings were flexible and multi-layered:

- The dragon could signify heavenly power in Khitan mythology, political authority in Han philosophy, or divine protection in Bohai artistic work.
- The lotus symbolized Buddhist transcendence, embraced by Han literati and converted Khitan.

This flexibility aligns with Eco's concept of open texts—visual signs inviting interpretation while maintaining a cohesive semiotic system. Thus, *Sancai* ornamentation did not eradicate cultural differences but enabled a stratified symbolic cohesion that helped hold the empire together.

### 4.3. Ornament and urban identity

*Sancai* decoration was not confined to monumental centers such as Shangjing and Dongjing; it permeated everyday urban environments. The underlying themes embedded in monumental architecture and ordinary items fostered a shared sense of identity among inhabitants, uniting them within the symbolic world of Liao.

This process echoes Eco's concept of sign functions: symbols incorporated into daily life silently convey shared knowledge. The ornament in architecture served as a visual boundary between the imperial space and peripheral or foreign spaces, while creating a sense of belonging for all ethnic groups within the empire.

### 4.4. Archaeological sense to museological sense

Another manifestation of the semiotic afterlife of ornament is the recent exhibition of Liao *Sancai* in Chinese museums. These artifacts are periodically showcased as symbols of ethnic concord and cultural integrity, reflecting contemporary national identity narratives. *Sancai* patterns are frequently featured in exhibitions in cities such as Shenyang and Chifeng to illustrate the coexistence of multiple cultures.

This reframing in contemporary times demonstrates the enduring power of these motifs as signs, aligning with Eco's argument that the meaning of signs shifts with contexts. For example, the lotus that once adorned a caisson now serves as a metaphor for state-sponsored multiculturalism.

### 4.5. Implications and contributions

The redefinition of Liao *Sancai* ceramics as urban semiotic tools is beneficial to various domains:

- Architectural history: Challenges the dichotomy between structure and ornament by treating ornament as spatial logic.

- Material culture studies: Elevates glazed ceramics as ideologically significant—not peripheral artifacts, but imperial media.
- Urban theory: Introduces the concept of “visual rhythm” as a mode of soft governance in multi-ethnic spaces.
- Semiotic anthropology: Demonstrates how motifs operate differently across cultures while retaining mutual intelligibility.
- Museology: Highlights how curatorial practices repurpose historical symbols to construct contemporary heritage narratives.

### 4.6. Future research implications

This work opens a number of new directions:

- Reconstruction of Liao ornament in digital architectural models.
- Additional validation of urban ceramic use through further archaeological excavation.
- Semiotic comparisons with other Eurasian imperial systems.
- In-depth discussion of museum interpretation and its political packaging.

Ultimately, Liao *Sancai* ceramics are not merely beautiful artifacts but signs, in Eco's fullest sense, carrying political, spiritual, and cultural meanings across centuries. They remind us that ornament is not merely a supplement to architecture but a language of imagination and unity that shapes architectural meaning.

## 5. Conclusion

This study redefines Liao *Sancai* ceramics not as isolated funerary relics but as symbolic architectural ornamentation woven into the visual, spatial, and ideological fabric of Liao dynasty urban landscapes. Drawing on Eco's semiotic theory and archaeological analysis, the research reveals that recurring ornamental motifs—dragons, lotus blossoms, and arabesques—operated as an esthetic language mediating imperial identity across ethnic, geographic, and architectural boundaries.

Tracing the distribution of *Sancai* ceramics from multi-ethnic kiln areas to sacred and civic buildings, this study demonstrates that ornament was used as a semiotic infrastructure of the empire. Visual rhythm and unity were achieved through repetition, not uniformity, embodying what this study terms visual diplomacy—a non-verbal approach fostering cohesion amid pluralism without cultural assimilation.

Moreover, the results indicate that interethnic cooperation in ceramic manufacturing paralleled the administrative dualism of the empire, while urban identity



was built through symbolic repetition across architectural and ritual contexts. The study also addressed the modern museological repackaging of Liao ornamentation in China, where *Sancai* wares are still used as curated symbols of ethnic unity, history, and state discourse.

The key contributions include:

- (i) Theoretical: Introducing Eco's semiotics to Chinese studies of architectural ornamentation, where repetition of motifs is viewed as a form of imperial communication.
- (ii) Methodological: Demonstrating how archaeological evidence can be interpreted not only typologically but also semiotically and spatially.
- (iii) Historiographical: Challenging the framing of Liao *Sancai* as solely funerary, repositioning it as integral to architecture and politics.
- (iv) Comparative: Offering a guide applicable to other multi-ethnic empires where ornament functions as a soft infrastructure of inclusion (e.g., Abbasid tilework and Ottoman floral motifs).

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## Conflict of interest

The author declares no conflict of interest.

## Author contributions

This is a single-authored article.

## Ethics approval and consent to participate

Not applicable.

## Consent for publication

Not applicable.

## Availability of data

The data used in this study consist of published archaeological reports, museum collection catalogs, and previously published scholarly literature. No new datasets were generated or analyzed during the current study. All sources are cited within the article and are publicly accessible through academic publications and museum archives.

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