

# Exploring the Architectural Art of Tang Dynasty Courtyards through Pottery Architectural Model: Spatial Layout, Architectural Features, and Cultural Connotations

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**Abstract:** This paper focuses on the architectural models of courtyards found in Tang Dynasty pottery. By analyzing their spatial layout, ritual logic, and architectural artistic features, this study reveals the significant value of these models as a microcosm of the prosperous Tang Dynasty civilization. The research shows that in Tang Dynasty pottery, the architectural models of courtyards not only represent the materialization of ritual order and craftsmanship aesthetics, but also profoundly influenced the development of subsequent architecture through the continuation of functional zoning, decorative styles, and settlement patterns, providing a microscopic perspective for understanding the evolution of ancient Chinese architecture.

**Keywords:** Tang Dynasty Ceramics; Courtyard Architectural Models; Spatial Layout; Ritual Culture; Decorative Art

## 1. Introduction

The Tang Dynasty, regarded as the zenith of ancient Chinese civilization, is renowned for its architecture, characterized by grandeur, rigorous adherence to ritual, and a harmonious blend of diverse cultural influences. This era set the core paradigm for East Asian architectural systems. The courtyard architectural models, as vital relics of Tang material culture, serve as miniature representations that embody the spatial logic, construction techniques, and social-cultural ethos of the prosperous Tang period. This paper focuses on the courtyard architectural models found in Tang Dynasty ceramics, analyzing the ritualistic logic, architectural artistry, and their profound influence on subsequent architectural developments. The aim is to reconstruct a micro-narrative of Tang architecture and offer insights into the evolution of ancient Chinese

architectural traditions.

## 2. Spatial Layout of Tang Dynasty Ceramic Courtyard Architectural Models

Central axis symmetry is the defining feature of courtyard architectural models in Tang Dynasty ceramics, establishing a spatial order that conforms to the hierarchical ritual system through courtyard arrangements, architectural forms, and structural configurations.

Central axis symmetry stands out as a prominent feature of Tang Dynasty courtyard models. In models such as those from Zhongbao Village Tang tombs, structures like the main gate, front hall, and rear hall align along the central axis, interspersed with pavilions, rockeries, and octagonal pavilions at the corners. The shallow-depth side corridors flank rectangular courtyards [1]. Similarly, architectural models unearthed from the tomb of Wang Xiutai in Changzhi, Shanxi, adhere to a central axis layout with east and west auxiliary rooms, emphasizing clear distinctions between primary and secondary spaces. Courtyard models excavated from places like Tongchuan and Changzhi further affirm the central axis as the backbone of ritualistic spatial organization [2].

Tang Dynasty courtyard models, grounded in timber structural systems, manifest a hierarchical organization progressing from bay → single structure → courtyard → complex. The primary typologies encompass single-courtyard, double-courtyard, and triple-courtyard quadrangles. For instance, courtyard models unearthed from Zhongbao Village belong to the double-entry category, consisting of front and rear courtyards. The front courtyard, or outer courtyard, typically housed servants with facilities like kitchens and guest rooms. The rear courtyard, or inner courtyard, represented the core of the structure, with the hall along the central axis being the most esteemed area used

for receptions, ancestral worship, and housing ancestral tablets. Double-entry courtyard architecture is also depicted in the 85th cave mural of Dunhuang, featuring main and central gates leading to inner and outer courtyards. The outer courtyard served as utility and guest rooms, while the inner courtyard included main and north halls, complemented by east and west side rooms, with livestock stables adjacent to the residence and farmers working outside [3].

In terms of roof forms and structural styles, Tang Dynasty courtyard architectural models predominantly feature suspended-eave roofs. Distinct from the hip-and-gable roofs commonly found in palaces and temples, the suspended-eave roofs are simpler in construction and widely used in folk architecture, characterized by eaves extending beyond the walls. A central hall with a triple opening in Sancai courtyard models exemplifies the suspended-eave roof, similar to those found in the courtyards of Wang Xiutai's tomb and Zhan Ziqian's *Spring Outing* painting. Moreover, the bracket sets supporting the roofs are another prominent feature of Tang Dynasty architecture, characterized by their interlocking “人”-shaped bracket arms.

### 3. Artistic Features of Tang Dynasty Ceramic Courtyard Architectural Models

The artistic value of Tang Dynasty courtyard architectural models is manifested in the perfect fusion of glaze craftsmanship, scene creation, and proportional aesthetics, reflecting the craftsmanship standards and aesthetic preferences of the flourishing Tang period.

The decorative techniques of Tang Dynasty courtyard architectural models serve as a tangible embodiment of both technical skill and aesthetic expression, with their core excellence lying in the sophisticated use of glazes and the hierarchical representation of patterns and symbols. The Tang Sancai (three-colored glaze) technique reached its zenith during the reigns of Emperor Gaozong to Emperor Xuanzong. By using lead oxide as a flux and copper, iron, cobalt, and other metal oxides as colorants, artisans created mottled glazes dominated by yellow, green, and white hues. For example, in the courtyard model unearthed from Zhongbao Village, certain structures are coated in green glaze, with columns and doors painted in vermilion, and the walls in white, giving the entire building a sense of calm majesty [4]. Similarly, the three-colored courtyard model from the Tang tomb of Lingzhao Village features roofs

coated in green glaze, while the other parts of the structure are glazed in white, preserving its shine as if new despite the passage of over a thousand years.

Through the amalgamation of objects, figures, and animals, Tang Dynasty courtyard architectural models depict a dual narrative of aristocratic and commoner lifestyles. Examining the unearthed courtyard models, it is evident that some of the more sophisticated Tang Dynasty courtyards feature additional ancillary facilities beyond the basic architectural layout. Taking the Zhongbao Village Tang tombs as an example, the main hall is accompanied by a group of figurines representing musicians, with attendant figurines standing in the corridors and rockeries set in the courtyard, vividly portraying scenes of aristocratic life. Conversely, the scenes depicted in commoner models unfold a different narrative logic. For instance, the courtyard model excavated from the Lingzhao Township tombs showcases three attendant figurines and twelve animal figurines. The attendants are adorned with hooded caps, wearing round-collared robes cinched at the waist, standing with bowed hands. The animal figurines, depicting images of chickens, ducks, dogs, and camels, exhibit various postures and actions. The ducks may stand or lie down, looking forward or glancing back; the dogs crouch in a lying position, gazing into the distance; the chickens stretch their necks in a crowing stance; and the camels bow their heads to feed within the courtyard. Their diverse actions and unique postures exude a vibrant essence of daily life. The Tang Dynasty three-color courtyard model unearthed from Wangshiao in Tongchuan features six miscellaneous items including a recessed-arch base couch bed, a well, and arrow turrets, reflecting the commoners' prioritization of practical functionality [5].

The choice of decorative patterns carries a profound narrative quality. In the courtyard architectural models unearthed from the commoner tombs in Lingzhao Township, the doors and windows are adorned with simple and practical straight lattice patterns. In contrast, courtyard architectural models found in noble tombs often feature diamond-shaped lattice windows, scroll-like railings with leafy motifs, and columns engraved with lotus patterns. These patterns not only showcase the aesthetics of craftsmanship but also resonate with the Tang Dynasty's concept of “decorative freedom under

ritual constraints”. It is noteworthy that some models bear imprinted swastika patterns or lotus flowers on the wall surfaces. The emergence of such composite patterns signifies a shift in Tang Dynasty decorative arts from singular symbolic representation towards an aesthetic paradigm of multicultural fusion.

Distinct from actual buildings, Mingqi (funerary objects) abandon the practical function of earthly architecture. While they retain architectural elements, the primary focus of Mingqi lies in their symbolic and functional role. Ancient Chinese architecture was primarily earthen and wooden, and Mingqi are clay models fired to represent miniature structures. Although the scale reduction and material transformation result in less intricate color decoration and formal variation compared to full-scale structures, these diminutive replicas still offer a glimpse into the architectural elegance of the Tang Dynasty. The proportion control seen in Tang Dynasty courtyard architectural models reflects the craftsmen’s precise understanding of real-world architecture and their artistic refinement. Through the measurement and analysis of Tang Dynasty courtyard models unearthed from tombs like Zhongbao Village and Lingzhao Township, it is evident that their proportion system adhered to the “scale determined by the foot” logic of construction. This precision in proportions not only demonstrates the high level of craftsmanship but also subtly conveys the funerary belief of “treating the dead as the living”. By meticulously replicating miniature buildings, the purpose was to ensure that the deceased’s domestic order would be preserved in the afterlife [6].

#### **4. The Cultural and Political Characteristics of Tang Dynasty Ceramic Courtyard Architectural Models**

The courtyard layout, particularly the Siheyuan (quadrangle) arrangement, served as an ideal spatial configuration within ancient Chinese society, structured by the patriarchal and ritualistic systems. It facilitated the organization of family residences, creating clear distinctions between social roles—such as those of senior and junior, male and female, master and servant. For instance, the spatial division of a three-courtyard layout subtly aligns with the ethical order of “the father as the backbone of the son”, reflecting Confucian filial piety. The outer courtyard serves as a reception area for guests, the middle courtyard functions as the living space for family

members, and the innermost, rear sleeping quarters are reserved for the elders, establishing a hierarchical structure of “outer-middle-inner”. This spatial segregation is not merely physical but also ethical, reinforcing the principle that younger family members should not enter the elders’ quarters without permission, thus shaping family spaces according to the “Xiao-Ti” (filial piety and brotherly respect) ethics. The courtyard model unearthed from the tomb of Wang Xiu illustrates this structure clearly. The main building in the first courtyard was primarily designated for the elders’ residence, while the east and west wings were for the younger generations. The second courtyard, when examined alongside the discovered domestic tools, is believed to have served as the kitchen, storerooms, and quarters for the servants. The third courtyard may have been designated for livestock, which reflects the principles of “Li” (ritual propriety) and is a direct product of the feudal patriarchal system.

During the Tang Dynasty, strict regulations governed the size and structure of official residences. The main building of the courtyard unearthed from Zhongbao Village, with five bays, adhered to the standard for residences of third-rank officials. In contrast, the courtyard model from Lingzhao Township, with only three bays in the main building, likely belonged to officials of fifth rank or lower. The courtyard at the Wang Xiu tomb, with just three rooms, suggests it was a residence for ordinary scholars or commoners. Variations in the number of bays and depth of the rooms served as direct indicators of social rank. Furthermore, the roof design carried significant hierarchical implications. For example, the main building in the Zhongbao Village model featured a “wu dian” roof (hipped roof with concave ridge), while the side wings had a “xuan shan” roof (overhanging gable roof), exemplifying the Confucian principle of “the noble resides in the noble position” in the architectural layout.

Among the Tang Dynasty ceramic courtyard models unearthed so far, some included supplementary structures and items such as pavilions, wells, stables, and archery targets. In some cases, rockeries and water features were incorporated into the design, reflecting the Tang people’s philosophical musings on the relationship between humans and nature, as well as their ideals and aspirations for an idyllic home [7]. Both the Wang Xiu tomb and Zhongbao

Village courtyards, featuring the traditional quadrangle format, divided the space into front and rear courtyards, offering a dynamic spatial experience. The latter, with a pavilion and rockery within the courtyard, represents a prime example of integrating residential space with garden landscaping.

### **5. The Influence of Tang Dynasty Courtyard Architectural Art on Later Architectural Development**

The articulated functional zoning within Tang Dynasty courtyard architecture, with forecourts for hosting guests and ceremonies, rear chambers for living spaces, and side rooms for auxiliary functions, laid the foundational framework for the functional zoning of future architectural designs [8]. Building upon this foundation, subsequent architectural developments continually refined and expanded. In the grand residences of the Ming and Qing dynasties, in addition to the essential living and reception areas, spaces such as studies, gardens, and theatrical stages were integrated based on the needs of the family [9]. Even today in Beijing, remnants of the traditional two-courtyard quadrangle courtyard, reminiscent of Tang Dynasty design, can still be found. The layout of the Beijing quadrangle courtyards mirrors that of the Tang Dynasty, divided into forecourts and rear courtyards, requiring passage through a long front courtyard to reach the main courtyard from the exterior premises. The front courtyard typically housed servants, kitchens, and guest reception areas. Upon passing through the central gate into the inner courtyard, one enters the main section of the structure, featuring halls and rooms for the homeowner and their relatives. This dual-courtyard quadrangle courtyard represents the most emblematic form of traditional Chinese residential architecture in feudal society.

The decorative style of Tang Dynasty courtyard architectural models was characterized by simplicity and elegance, emphasizing the intrinsic texture and colors of the building materials. This stylistic approach exerted a profound influence on the decorative elements of later architectural designs. While subsequent architectural embellishments gradually became more diverse and intricate, they retained the essence of simplicity and elegance [10]. For instance, in Ming and Qing Dynasty architecture, although techniques such as wood carving, stone carving, and brick carving reached exceptional levels of

craftsmanship, the overall decorative style emphasized harmony with the building as a whole. Instead of overly embellishing with decorative elements, artisans employed delicate carving, painting, and other techniques to accentuate key areas, achieving a subtle yet impactful effect. An exemplar is the woodcarving decoration in ancient Huizhou residences, where intricate carving techniques were applied to beams, brackets, doors, and windows, depicting figures, flowers, animals, and other patterns. This approach not only enriched the decorative appeal of the structures but also preserved the overall simplicity and elegance of the architectural style [11,12].

The concept of family-centered living, with the courtyard at its heart, deeply rooted in the Tang Dynasty courtyard architectural models, has profoundly shaped traditional Chinese culture and left a lasting impact on subsequent generations. This residential concept was carried forward in later vernacular architecture, such as the quadrangle courtyards and Tulou, which preserved this family-centric living arrangement. The quadrangle courtyard, or “Siheyuan”, places the courtyard at the core, with family members residing around it, thus fostering communication and interaction among them, while also nurturing familial culture and strengthening emotional bonds. The Fujian Tulou, as an exemplary model of large family dwellings, showcases a unique circular or square architectural design that unites numerous families within a single structure, forming a relatively self-sustained community. This layout highlights the cohesion and solidarity of the family unit. This residential ideology emphasizes familial harmony, stability, and interpersonal relationships, becoming an integral part of traditional Chinese housing culture.

### **6. Conclusion**

The Tang Dynasty ceramic courtyard architectural models, as miniature representations of the flourishing Tang civilization, serve as a vital link between architectural history, art history, and social history through the power of archaeological evidence. These relics, imbued with distinct features such as the central axis symmetry, the overhanging mountain-style roofs, and the “人-shaped” brackets, not only materialize the principles of ritual order but also epitomize the perfect fusion of technique and aesthetics. They stand as a testament to the paradigm shift in Tang craftsmanship, from a

singular symbolic expression to a more culturally integrated approach. The influence of these architectural forms transcends both time and space: the functional zoning of Ming and Qing aristocratic residences, the decorative logic of ancient Huizhou architecture, and the communal living patterns of the Siheyuan and Tulou all perpetuate the spatial wisdom of Tang architecture, affirming the millennial transmission of cultural genes under the concept of “honoring the deceased as the living”.

Today, these silent pottery architectural model continue to narrate the architectural artistry of the Tang Dynasty. They serve as dual vessels for both ritual and aesthetic values, standing as vibrant proof of the continuity of Chinese civilization. Revisiting these material remnants within the contemporary architectural context allows us not only to appreciate the ancient craftsmen’s precision in proportion, scale, and material, but also to grasp the eternal pursuit of the Chinese nation for ethical order, natural essence, and familial community. This deep continuity—from architectural space to cultural spirit—represents the most precious legacy left by the Tang Dynasty courtyard models to future generations.

### Acknowledgments

This work was financially supported by the National Social Science Fund Western Project “Research on the Cultural Heritage Connectivity of the Tang-Tibet Ancient Road” (23XMZ037).

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