

ARTISTIC DECORATIVE SYSTEM AND TECHNOLOGICAL FEATURES OF UZBEKISTAN'S GLAZED CERAMICS: A HISTORICAL TYPOLOGICAL ANALYSIS

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Abstract

The article offers a historical-typological analysis of the artistic decorative system and technological features of the medieval glazed ceramics produced on the territory of Uzbekistan. It examines the main categories of decorative motifs found on Transoxianan pottery of the ninth to thirteenth centuries (geometric, epigraphic, vegetal, zoomorphic and anthropomorphic), the evolution of glazing technology and the typology of vessel forms, the artistic and technological transformations that occurred during the Temurid period, and the distinctive artistic and technical features of the local pottery schools (Bukhara-Samarkand, Fergana and Khorezm) that took shape in the seventeenth to nineteenth centuries.

Keywords: Ceramics, glazing technology, islami style, epigraphy, kashin, cobalt, local pottery schools, Temurid-era ceramics.

Introduction

The medieval glazed ceramics produced on the territory of Uzbekistan attract considerable scholarly interest not only as an archaeological source but also as an independent artistic-aesthetic phenomenon. Whereas the history of ceramics research constitutes a distinct field of study in its own right, ceramics itself its decorative system, technological features, and regional stylistic variations represents an independent object of art-historical and technological analysis. This article examines precisely these questions: the semantic-typological structure of ceramic decoration, glazing technology and vessel-form typology, the fundamental transformations of the Temurid period, and the distinctive artistic and technical character of the local schools of the later medieval period.

Typology of the Decorative System and the Semantics of Islamic Aesthetics

Researchers divide the decorative motifs found on Transoxianan glazed pottery of the ninth to thirteenth centuries into five main categories: geometric, epigraphic, vegetal, zoomorphic and anthropomorphic. Epigraphy is recognized as the most vivid expression of Islamic aesthetics in vessel decoration: it reaches its highest development particularly in the tenth–twelfth centuries in centers such as Samarkand (Afrasiab), Bukhara, Chach, Fergana, Chaganiyan, Marv and Khorezm, where inscriptions serve not only an informative function but also that of an independent decorative element.

Particular attention within this line of research is devoted to the leading form of vegetal ornament – the islami style, which embodies a depiction of foliage through scrolling leaf motifs and delicate, flowing lines. Researchers also note that spirals, concentric circles and rotating rosettes associated with ancient cosmogonic concepts, although they had largely shifted to a purely decorative-aesthetic function in Islamic-period ceramics, represent a survival of autochthonous, pre-Islamic traditions. In this connection, the desamentization of motifs observed from the second half of the eleventh to the early thirteenth century – that is, the gradual transformation of clearly meaningful images into pure decorative ornament – has become the subject of particular scholarly debate.

In her 2021 article "Эстетика исламской поливной керамики Узбекистана," published in the international scholarly journal Grail of Science [8], S.Sh. Alieva examines the process of the formation of Islamic aesthetics within the ceramic decorative system, combining historical and art-historical analysis with religious studies and semiotics. Drawing, among other sources, on O.G. Bolshakov's

research on Arabic inscriptions on Central Asian glazed pottery, the author analyzes the process of "loss of meaning" in ceramic epigraphy from a religious-philosophical perspective. Such a semiotic approach allows ceramic decoration to be assessed not merely as a visual phenomenon but as one bearing substantive spiritual significance.

Glazing Technology and the Typology of Vessel Forms

The study of ceramic technology in particular, glazing methods and the typology of vessel forms constitutes one of the important directions of research conducted in the 1950s–1980s. Researchers have established that the forms of Transoxianan glazed pottery of the ninth to thirteenth centuries fell primarily into two broad categories – open and closed forms. Open forms include platters, dishes, jar-like vessels and bowls, while closed forms include tall, small, bulbous vessels, large storage jars and jugs. It has been established that this very division of forms into open (bowls, platters) and closed (jugs) categories gave rise to specialization among craftsmen bowl-makers, platter-makers and jug-makers a specialization that persisted until the nineteenth century and, in some cases, beyond.

The evolution of glazing technology has likewise been the subject of dedicated research: scholars have established that alkaline glazing was employed first, followed by tin and lead glazing. Alkaline and tin glazes were opaque and were used mainly to decorate monochrome, carved-ornament vessels, whereas transparent lead glaze allowed the craftsman's skill to be displayed to the fullest, imparting a distinctive luster to the vessel's surface while preserving and intensifying the color of the underglaze inscriptions and ornament. The archaeometric research of R.B. Mason and L.B. Golombek, including their comparative study of the early Chinese-influenced blue-and-white pottery of Egypt, Syria and Iran [6], has helped to substantiate such technological distinctions at the level of material composition.

This technological analysis has in recent years been further supported by natural-scientific methods. In particular, Raman spectroscopy and other physicochemical analytical techniques are being used to conduct comparative studies of the material composition of glazed vessels from the Temurid, Ottoman, Safavid and Qajar periods [7], allowing for more precise determination of ceramic technology, sources of raw material, and the technological and trade connections between different regions. Such methods are proving particularly useful in the

case of the fourteenth–fifteenth-century glazed pottery discovered at the Akhsi (New Akhsi) site in the Namangan region, helping to clarify the technological links between the central Temurid cities of Samarkand, Shahrisabz and Shahrukhiya and more peripheral regions.

Artistic and Technological Transformations in Temurid-Era Ceramics

A question that occupies a particular place in the history of Temurid-era (fourteenth century – early sixteenth century) ceramics is the determination of the social-cultural factors and artistic-technological distinctiveness of pottery from this period. Whereas, from the eighth to the twelfth century, the Islamic factor served as the principal force unifying local artistic traditions in regional ceramics, under Amir Temur and his successors the rapid development of trade and economic relations, together with the convergence of craftsmen from various regions – China, India, Iran and Arab lands upon the imperial capital and major cities, intensified the mutual exchange of artistic traditions. L. Golombek and M. Subtelny, in their study of Temurid art and culture [5], describe this process as the phenomenon of "artistic syncretism."

Samarkand is recognized as a major center of ceramic production during the Temurid period, and archaeological research confirms that goods produced in a closely related style were also manufactured in Tashkent, Bukhara, Shahrisabz, Marv and Nisa. As noted in the research of Sh.S. Toshkhodzhaev and G.A. Shishkina [1, 2], the decorative system underwent a fundamental transformation: the epigraphic decoration and stylized motifs characteristic of ninth–thirteenth-century ceramics were replaced by clearly rendered bird and plant symbols; compositions in white, red and dark brown were replaced by silhouetted black ornament under a bluish-white or bright cobalt-blue glaze. Vessel forms also changed – deep platters with a circular foot, flat everted rims, and small, low, straight-sided jugs became widespread.

A particular subject of scholarly debate is the genesis and evolution of the tradition of imitating Chinese porcelain in Temurid ceramics. Whereas the earliest examples show an almost direct copying of Far Eastern motifs and subjects, local craftsmen gradually moved away from such direct imitation over time, forming a distinctive, syncretic style that drew closer to the islami vegetal decorative tradition – a process that L.I. Rempel interprets in terms of the long historical life of what he calls "itinerant images and subjects" [3]. From a technological standpoint, without knowledge of true Chinese porcelain glaze,

Central Asian craftsmen employed a porous silicate ceramic body known as kashin in place of kaolin; kashin was first used in ceramics from the twelfth century and, from the late fourteenth century, also in carved architectural mosaics. Archaeological and technological research has also established the use of cobalt pigment for painting, as in Chinese ceramics. Although Temurid stylistic traditions persisted through the sixteenth century, by the end of that century the substitution of costly imported cobalt pigment with lower-quality dyes, and of kashin body with ordinary clay, is noted to have resulted in a coarsening of the vessels' overall appearance and a thickening of their walls – a technological "decline" that is assessed as closely linked to changes in the region's political and economic situation. G.A. Pugachenkova's sustained research on Temurid-era ceramics [4] was among the first to organize this stylistic evolution into a coherent scholarly framework.

Artistic and Technical Features of Local Pottery Schools of the Seventeenth–Nineteenth Centuries

The study of the ceramics of the khanate period (the second half of the seventeenth century – the early nineteenth century) shows that three major local schools, each with its own distinctive features, took shape within the territories of the Bukhara Emirate and the Khivan and Kokand khanates: the central, or Samarkand-Bukhara school (centered in Samarkand, Urgut, Bukhara, Gijduvan, Shahrisabz, Tashkent, Kitab, Kattakurgan and Denau); the northeastern, or Fergana school (centered in Rishtan and Gurumsaray); and the southwestern, or Khorezm school (centered in Urgench, Khiva, and the villages of Madir and Kattabog). In establishing this classification, an important methodological role was played by the local specialization of craftsmen the emergence of distinct bowl-makers, jug-makers, and ornament-painters as well as by regional variation in the naming of vessels (for example, long-spouted vessels with a handle are called "oftoba," "obdasta" or "qumgan" in the Bukhara-Samarkand region, but "ibriq" in Khorezm).

In the ceramics of the Bukhara-Samarkand school, particular attention has been paid to decorative techniques such as the brush-painted "qalami" style and the carved "chizma" technique applied over an engobe, as well as the stamped ornament produced using wooden or clay molds and the "abri bahor" technique, in which pigment is sprayed onto the surface of the vessel. The abundance of zoomorphic elements in Gijduvan ceramics geometricized depictions of birds and

animals such as the "eagle's tail," "snake track" and "owl" motifs has been noted by researchers as a distinctive artistic marker of the region.

In the Khorezm school, distinctive forms such as the "badiya" (a large vessel with a vertically raised rim) and the "guppy" (a vessel intended for dairy products), as well as figurative water vessels such as the "dragon jug" and the duck-shaped "oftoba," have received particular scholarly attention. In the Fergana school, and especially in Rishtan pottery, the diversity of vessel forms and the richness of the decorative repertoire including the wide use of geometric, vegetal, zoomorphic and anthropomorphic motifs have been identified by researchers as among the region's most notable features.

Conclusion

The analysis of the artistic decorative system and technological features of the medieval glazed ceramics produced on the territory of Uzbekistan shows that regional pottery underwent a complex artistic-technological evolution over the course of several centuries from the epigraphic-geometric style of the early Islamic period, through the Sino-influenced syncretic style of the Timurid era, to the distinctive artistic repertoires of the local schools of the seventeenth–nineteenth centuries. The semantic depth of the decorative system in particular, the role of epigraphy within Islamic aesthetics and the process of desemantization together with technological solutions such as glazing methods and the use of kashin and cobalt, render the region's ceramics a valuable object of study not only at the local level but also within the broader context of the Islamic world.

At the same time, tasks such as reconstructing the technological features of local schools that have disappeared (for example, those of Shahrisabz, Kasbi and Madir) and conducting a deeper study of material composition using natural-scientific methods remain pressing. Today, the growing use of digital technologies three-dimensional modeling and the digitization of item databases is expanding opportunities for comparing materials held in various museum and private collections, opening new possibilities for more precise and comprehensive future research on ceramic decorative systems and technology.

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