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L. Sh. Mikayelyan

## Polychrome Masonry and Stone Inlays in the Décor System of Armenian Monuments of the 13<sup>th</sup>–14<sup>th</sup> Centuries and Their Seljuk Parallels<sup>1</sup>

### Introduction

The architecture of Armenia from the end of the 12<sup>th</sup> to the first third of the 14<sup>th</sup> century is distinguished by the extensive construction of both religious and secular buildings, the expansion of older monasteries, and the establishment of many new ones. The cultural flourishing of this period was driven by the victories of the Armenian–Georgian troops over the Seljuks at the end of the 12<sup>th</sup> century and the rule of the Zakarid dynasty with its capital in Ani. The liberation of Armenia from foreign rule and the subsequent political upsurge contributed to its active involvement in trade and cultural relations with the countries of the Near East, where a comprehensive exchange of artistic ideas occurred between the multiethnic Christian and Islamic populations [6]. In this historical context, a number of new constructive and decorative techniques appeared in Armenian architecture, which became iconic for this era and are also found in Islamic architecture (muqarnas, high portals with double frames, arabesque-type ornament, etc.).

Among the new artistic methods of Armenian architecture of the 13<sup>th</sup> century, a special place is occupied by the elaborated polychrome stonework and inlays of figured slabs. Similar principles of polychromy and mosaic decoration of buildings were also used in the Sultanate of Rum of the late 12<sup>th</sup> to early 14<sup>th</sup> centuries. These parallels were the result of general artistic processes across the Near East, expressed, among other things, in the tendency of mixing and interacting of techniques and materials, and in particular — in influence of brickwork and tiles on stonework and its décor [15, p. 49]. This issue has not been deeply examined in the context of Armenian architecture, and even less so — in its relationship with contemporaneous Seljuk monuments. Such an analysis could shed light on the actual and controversial problems of the relationship between the architecture of Armenia and Anatolia in the 12<sup>th</sup>–14<sup>th</sup> centuries, the comparative study of which remains in its early stages<sup>2</sup>. Until recently, a significant gap in this field was the limited knowledge of Armenian material among specialists in Seljuk art, and conversely, the one-sided study of Armenian monuments by Armenian scholars, who histori-

<sup>1</sup> The research was done within the framework of a grant for the project: “Medieval Armenian Sculpture of the 12<sup>th</sup> to the 14<sup>th</sup> Centuries: Patterns of Development, Symbolism and Style” (25RG-6E165), provided by the Science Committee of the Ministry of Education, Science, Culture and Sports of RA.

<sup>2</sup> The parallels between Armenian stone mosaics and Islamic tile panels were first noted by I. Orbeli [18]. His ideas were later developed by N. Tokarsky and A. Jakobson.

cally lacked the opportunity and/or willingness to incorporate Anatolian monuments into their research [7, pp. 79–106]. This study aims to examine, from a broad perspective, the issues of polychromy and inlaid décor in monuments of two cultures and to highlight their artistic parallels and local peculiarities.

### **The tradition and evolution of polychrome masonry in medieval Armenia**

Armenia is extremely rich in various types of building stone: ordinary and fine-grained felzit tuff, basalt, andesite, limestone, etc. In the architecture of the 6<sup>th</sup>–7<sup>th</sup> centuries, along with monochrome masonry, craftsmen employed contrasting combinations of colored stones to add greater picturesqueness to the façades. Thus, mixed polychrome masonry of red and black tuff was used in the cathedrals of Mren and Talin, and dark-gray and cream — in the church of Bulanik (present-day Turkey) [13, vol. 3, p. 226, fig. 1629–1633]. In a number of monuments, polychromy was used to accentuate certain architectural elements, such as blind arcades (Etchmiadzin Cathedral, Church of Zarinja) [13, vol. 1, p. 334, fig. 301; vol. 2, p. 228, fig. 661], squinches (Church of Artsvaber, present-day Turkey) [13, vol. 2, p. 29, 267, fig. 717–725]. In the Zvartnots Cathedral, gray-brown and reddish tuff was employed in the wall masonry, while dark-gray andesite — for the bases and capitals of the columns [13, vol. 2, p. 496, fig. 1039]. In addition to polychrome masonry, the painting of specific architectural elements has also been documented since the late 6<sup>th</sup> century: the squinches (St. Gayane, the Karmavor Church), the window archivolts (the churches in Nor Kyank, Pemzashen), and stones painted to imitate marble (Zvartnots) [13, vol. 2, pp. 501–502].

In the churches of Ani during the Bagratid dynasty (885–1045), the architectural traditions of the 7<sup>th</sup> century were essentially continued: both in the use of mixed polychrome masonry and in the coloring of its decorative elements (the Cathedral of Ani (989–1001), the Cathedral of Ishkhan in Tayk (Tao) during its reconstruction in the 11<sup>th</sup> century)<sup>3</sup>. Polychrome masonry appeared strikingly in the defensive structures of Ani as well. Thus, on the towers of the Smbat walls from the late 10<sup>th</sup> century, we observe alternating rows of red and dark-gray stones, as well as crosses crafted in a contrasting color, such as on the “Lion Gate”, etc. [11, fig. 34–37]. Simple layouts of multi-colored stones in the Bagratid fortifications of the 10<sup>th</sup>–11<sup>th</sup> centuries were further developed in the Zakarid period. Crosses, swastikas, merlons, and checkerboard patterns made from polychrome stones became characteristic of the 13<sup>th</sup>-century Ani towers (New Dvin Gate, Tower of Shanoosh — N 46, tower of Mkhitarich — N 6, Tower N 50) [11, fig. 45–47, 67, 81, 84, 86], where ceramic inserts also began to be used, as discussed below.

It was during the Zakarid period that architects began to more actively employ contrasting combinations of multi-colored stone to achieve artistic effects. Polychromy was most commonly used on portals, less frequently on altar elevations, ceilings, and drums. One notable example is the portal of the gavit (narthex) of Khoranashat Monastery (1222–1251), where four colors of felzit tuff were utilized [10, pp. 225–237]. The smooth tympanum above the entrance is

<sup>3</sup> In Armenia, stone coloring was also widely applied to figurative reliefs, as demonstrated by the painted busts of apostles on the drum of the Etchmiadzin Cathedral. Traces of paint are still visible on the 7<sup>th</sup>-century Odzun stelae. During the Bagratid period, sculpture was often painted, as evidenced by remnants of color and inlays on the high reliefs of the Akhtamar Church (915–921) and the polychrome statue of King Gagik I (990–1018) from Ani.

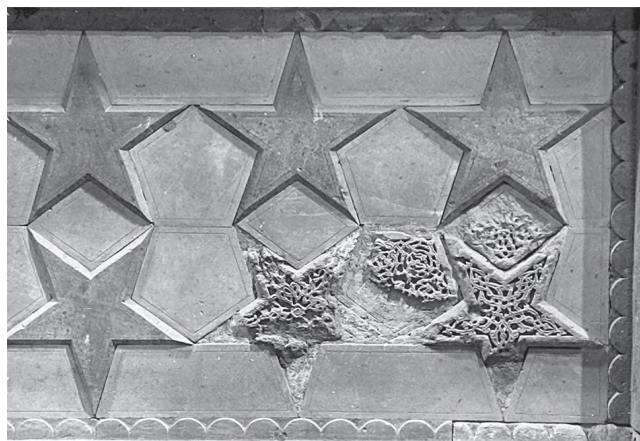


Fig. 1. Fragment of the altar elevation, St. Karapet church, 1216–1221, Hovhannavank Monastery, RA, Aragatsotn province. Photo by Lilit Mikayelyan

made of a pinkish–milky block, while the arch with muqarnas above it is crafted from turquoise stone. The second arch of a double torus is a lilac–brown, and the capitals, shaped as protruding animal protomes, are carved from yellowish felzit (Ill. 51). These particular shades of tuff were characteristic of the northeastern regions of Armenia (now the Tavush province), and their combination was used both in architectural components of the portals and in the mosaic sets.

The portal of another Tavush monument — the main church of Makaravank Monastery (1205) — is designed according to the same principle. It consists of an arched entrance and a wide rectangular frame made of brown felzit. The space inside the frame, as well as the tympanum, are filled with multi-colored figured slabs (hexagons, triangles, squares, and trapezoids), some of which are covered with fine ornamental carving [2, fig. 25, 87; 10, p. 72, fig. 26].

A brilliant example of bi-chrome artistic masonry is the Hovhannavank Monastery, whose main structures were built by the influential princely family of Vachutyans<sup>4</sup>. Inside the main church of the complex — St. Karapet (1216–1221) — the dome's sphere is adorned with twelve profiled vertical ribs made of red tuff [10, p. 68, fig. 12]. Outside, the cornice belt, window frames, and the reliefs of the labarum–rhipidions on the drum are executed in red. The rotunda above the monastery gavit (1250) stands out with the contrast of black columns with red capitals and arched rods. And finally, the altar elevation of the St. Karapet church is inlaid with carved stone figures of the same two colors (Fig. 1). The similar artistic principle of using red, black, and cream tuff in the masonry of certain architectural details can also be observed in two other monasteries of the Vachutyan family — Saghmosavank and in the 13<sup>th</sup> century buildings of the Monastery of St. Sargis in Ushi [4, p. 37–39, fig. 5, 11].

Alongside polychrome masonry, in Vachutyan constructions, stone painting was also extensively used, usually in red and white. In Saghmosavank, traces of red paint are clearly visible

<sup>4</sup> The Vachutians were one of the princely dynasties of Armenia, vassals of the Zakarids, who were granted estates in the southern and eastern foothills of Mount Aragats (present-day Aragatsotn province) for their military services in the struggle against the Seljuks.

on window frames and archivolts, as well as on rosettes and animal reliefs<sup>5</sup>. In the partially ruined gavits of Egipatrush and Astvatsnkal Monasteries (13<sup>th</sup> century), located within the Vachutyans domains, traces of red and white paint have been preserved on the muqarnas petals of the vaults, as well as on the frames of portals, niches, and windows. In the gavit of Neguts Monastery, likely also built by the Vachutyans in the mid-13<sup>th</sup> century [1, pp. 63–64], red paint accentuates the details of the columns and the mesh décor of the ceiling base [10, p. 140, fig. 17–18; p. 180, fig. 21; p. 296, fig. 8–9]. Thus, the painting of architectural details, often used by the Vachutians, should be considered a more accessible version of polychrome masonry with a similar visual effect.

### Stone mosaics and its imitations in Armenian architecture<sup>6</sup>

Another manifestation of stone polychromy in 13<sup>th</sup>-century Armenian architecture is mosaics of figured tiles — stars, rhombuses, or polygons — which could be either smooth or carved. Alongside such stone sets, their relief imitations, often painted, also appear on large blocks. If the buildings of the Tavush province were characterized by use of soft-toned felzit tuff, as seen in the portals of Khoranashat and Makaravank, then, in the capital Ani and its environs, local orange-terracotta and gray-black tuff were used. In Ani, mosaics primarily adorned civil structures, such as palaces, caravanserais, and khans (city inns), with a focus on their portals and window openings.

On the main façade of the Paron Palace in Ani (13<sup>th</sup> century), the entire space between the arched entrance and the outer frame, as well as the tympanum, were covered with eight-pointed red and cross-shaped black stone tiles decorated with carvings. The tympanum of the large window on the second tier of the façade was also adorned with bi-chrome shaped tiles, while the remaining area outside the arch was filled with a checkerboard pattern. The portal of another secular building in Ani — the Sarkis palace — features a similar wide frame, with its inner field clad in six-pointed red stars and black rhombuses with carvings. [5, pp. 191–194; 11, fig. 97–117]. The façades of two adjoining 13<sup>th</sup>-century khans in Ani were designed similarly to the palace ones, with a division into two tiers, the tympanum and the spandrels of which had identical inlays. Here the entrances were also embellished with reliefs of paired dragons, lions, and sphinxes — guardians of the threshold [11, fig. 132–136]. Ani also preserves examples of inlaid ceilings, the most ornate of which is the mosaic in the gavit of the Holy Apostles Church, built in the early 13<sup>th</sup> century [10, p. 69, fig. 18].

The tympanums of Harichavank and Gandzasar — monuments closely tied to the ruling Zakarid family and the capital's architectural school — are the most similar to the portals of Ani<sup>7</sup>. In Gandzasar (historical Artsakh), the tympanum above the western entrance of the St. Karapet Church (1216–1238) is decorated with a mosaic of carved stones: light stars and dark

<sup>5</sup> By the 13<sup>th</sup> century, the practice of stone coloring had become widespread on khachkars as well.

<sup>6</sup> A more detailed systematization and analysis of stone mosaics and their imitations in Armenian architecture of the 13<sup>th</sup>–14<sup>th</sup> centuries were carried out by the author in a separate article [17].

<sup>7</sup> The church and gavit in Harich were built under the patronage of Amirspasalar (commander-in-chief) Zakare (1191–1212), while the founder of the Gandzasar Monastery was Hasan Jalal — the prince of Artsakh-Khachen. His mother Khorishah, a faithful supporter of the church's construction, was the sister of the Zakarid brothers.



Fig. 2. Tympanum of the portal, hospital of Divriği, 1228–1229.  
Photo by Oya Pancaroglu

rhombuses. In Harichavank, a similar composition is found above the entrance to the gavit (early 13<sup>th</sup> century), composed of black pentagons and rhombuses, and orange triangles, all adorned with interlaced patterns [2, fig. 60, 84]. A unique example among all polychrome portals in Armenian architecture is the tympanum of the western entrance of the Gandzasar's gavit (1261). Unlike the usual figured tiles, it is decorated with concentric ribbon inserts of yellow felzit, which stand out against the background of brown slabs (Ill. 52).

As seen in examples from Ani and Gandzasar, tiles in the shape of stars (from four to eight-pointed) were most commonly used in stone mosaics, often combined with various figures between them. Such compositions are found in the portals of the church and gavit in Mshkavank (first half of the 13<sup>th</sup> century) [2, fig. 51, 64], the church in Khoranashat (1209–1221), and the gavit in Bardzrakash (1246–1247). Similar star-shaped compositions were also executed as false inlays, such as on the tympanum of the Sagmosavank gavit (first quarter of the 13<sup>th</sup> century). On it, five-pointed raised stars are carved, painted red, between which gray — the color of the slab itself — pentagons and rhombuses appear. Unlike in Sagmosavank, where all the figures are filled with carving, the tympanum of the church portal of the Astvatsnkal Monastery (13<sup>th</sup> century) features a mosaic imitation with smooth, painted figures: white cross-shaped forms with concave eight-pointed red stars in between [17, p. 66–68, 71–72, fig. 7–10, 15].

Similar stone mosaics and their relief imitations are also found in Seljuk monuments. A notable example is the tympanum above the northern entrance of the Alaeddin (Citadel) Mosque in Konya (1219–1220), featuring an inlay of eight-pointed stars crafted from gray marble (some with carvings) interwoven with cross-shaped figures of white marble and small inserts of yellow limestone placed between them [16, p. 212, fig. 6]. The mosaic composition of this tympanum is comparable to several examples from Ani, where eight-pointed stars are similarly combined with cross-shaped tiles. Figured incrustations are also used in the complex at Divriği [19, p. 172, fig. 3–10], where the tympanum of the Hospital's portal (1228–1229) is composed of five-pointed stars interspersed with pentagons and rhombuses (Fig. 2). An identical arrangement can be observed on the altar elevation in Hovhannavank (Fig. 1), the portals of the gavits in

Saghmosavank and Bardzrakash, and the Khan's portal in Ani [17, fig. 3, 9; 11, fig. 136]. In this case, a common source of inspiration for such stone compositions in both Armenia and Anatolia can be identified: ceramic tile facings. These were also based on polychromatic, repeating patterns, typically composed of stars, crosses, and polygons.

### **Peculiarities of polychromy in Anatolian architecture**

In the architecture of the Sultanate of Rum of the 12<sup>th</sup>–14<sup>th</sup> centuries, polychromy also played an important role in the artistic design of buildings. In Anatolia, as in Armenia, stone remained the primary construction material: often limestone or sandstone and also tuff, basalt and marble [14, p. 158–159]. However, unlike the Armenian examples, polychromy in Seljuk monuments was achieved to a much greater extent through the combination of materials, where stone masonry was paired with brick and inlaid with ceramic tiles, glazed bowls, and mortar inserts [14, pp. 168, 196–197, 213–214]. Similar to Armenian buildings, the main decorative emphasis was placed on high, recessed portals, which typically stood out against a monochrome stone wall.

The cultural heritage of Iran, whose territories were the first to be incorporated into the Great Seljuk Empire in the mid-11<sup>th</sup> century, played a predominant role in the formation of Seljuk architecture. Additionally, in Anatolia the Seljuks encountered Byzantine architecture, Syrian traditions of stone construction with extensive use of marble, and the artistic heritage of Eastern Anatolia, which was predominantly inhabited by Armenians. All these factors determined the rather eclectic character of Seljuk architecture during its formation, and in the 13<sup>th</sup>–14<sup>th</sup> centuries they were revealed in the diversity of artistic and local manifestations. The ethnicity of the craftsmen — Greeks, Persians, Syrians, and Armenians — who carried out the commissions of the ruling elite also played a significant role in it [6, p. 90; 15, p. 43–49].

The influence of Persian architecture in Anatolia is evident in the emergence of brick structures and the adaptation of brickwork features to the stone ones. This is exemplified in the portal of one of the early Seljuk buildings — the citadel mosque in Divriği (1180–1181) — which showcases a remarkable combination of techniques and materials. Its portal is constructed from light limestone, arranged on the arch and spandrels to replicate a brick masonry pattern, with inserts of small bricks and glazed blue tiles [20, pp. 189–190; 14, pp. 39–41, fig. 2.1]. The half-columns flanking the entrance are crafted from terracotta-colored stone.

From the early 13<sup>th</sup> century, Seljuk portals began to feature the so-called striped two-tone masonry, consisting of alternating light and dark shaped stone slabs tightly fitted together. This technique can be seen on the lintel of the north entrance of the Citadel Mosque in Konya (1219–1220), on the arch and broad framing of the portal of the Gök Medrese in Tokat (1277), and so on. A similar execution of lintels with wedge-shaped bi-chrome masonry is also found above the entrance of the Paron palace, on the inn's portals in Ani, and the lintel of the 13<sup>th</sup>–century gate in the Amberd Fortress [21, p. 34, ill. 36, 38].

Another characteristic form of polychromy in Anatolian buildings was stereotomic strapwork — geometric compositions with interlacing ribbons of gray and white marble, as seen on the portals of the Alaeddin Mosque and the Büyük Karatay Madrasa in Konya (both 1219–1220). Richard McClary traces the origins of such inlays to the decoration of Syrian mihrab niches, iwans and gates, particularly those known in Aleppo and Baghdad. On the portal of the



Fig. 3. Tile panel, Kubadabad palace, 1219–1237, Beyşehir, Turkey. [https://ar.m.wikipedia.org/wiki/%D9%85%D9%84%D9%81:Konya\\_Karatay\\_Ceramics\\_Museum\\_Kubad\\_Abad\\_Palace\\_find\\_2405.jpg](https://ar.m.wikipedia.org/wiki/%D9%85%D9%84%D9%81:Konya_Karatay_Ceramics_Museum_Kubad_Abad_Palace_find_2405.jpg)

Alaeddin Mosque, in addition to the two-tone marble on the protruding part of the arch and its spandrels, yellow limestone is applied inside the arch. The same three-colored stones were used in the aforementioned inlay with stars in its tympanum [16, pp. 209–215, fig. 6, 9].

The combination of yellowish and milky limestone is employed in the rich decoration of the Hudavent Hatun Mausoleum in Niğde (1312–1313): notably on the portals and windows with muqarnas arches, as well as on the wide frieze in the upper part of the building. The principles of polychromy in its portal compositionally and artistically echo those of the aforementioned portal of the Khoranashat Monastery, with the muqarnas arch emphasized in a different color (Ill. 51). Notably, in both examples, the openings are flanked by high-relief animal figures, and large rosettes are carved above the arches<sup>8</sup>.

Polychromy in the buildings of Seljuk rulers was often achieved through inlays of glazed tiles, which were primarily imported from Iran and installed by Persian craftsmen. Since the 12<sup>th</sup> century Iranian Kashan, Sultanabad, Ray, as well as Syria, became the main centers for the production of both domestic and architectural glazed ceramics. Tiles were produced both for the interior facing of palaces, tombs, and mihrabs, as well as for inserts on building exteriors. For example, tile mosaics with ornamental and figurative imagery were employed in the Seljuk palace complexes of the Kılıç Arslân II kiosk in Konya (1174) and in Kubadabad (1219–1237), near Konya [14, pp. 198–207, fig. 3.31–39] (Fig. 3). The expensive and refined art of painted, often lustre tiles became a distinct marker of high status and taste for the new rulers of Anatolia and neighboring regions [20, pp. 194–195]. By the 13<sup>th</sup> century, a certain fashion for ceramic decoration had emerged, which also influenced Armenia.

<sup>8</sup> The images of apotropaic animals flanking entrances were widely popular in both Armenia and Anatolia [9, pp. 188–191].

### Armenian examples of ceramic tiles and bowls

In Armenia, the use of architectural glazed ceramics is documented in a number of monuments, mainly in the interiors of secular buildings. As in Anatolia, most of the tiles were imported from Iran, as evidenced by finds in Ani, the Amberd Fortress, Garni, Metsamor, Etchmiadzin, etc. [3, pp. 128–131, Tab. 23.3–9]. The use of Iranian tiles of the late 13<sup>th</sup> to early 14<sup>th</sup> centuries is known in only two Armenian stone churches: the Spitakavor church (1321) and the church–tomb in Yeghvard (1301–1328) [8, pp. 851–856, fig. 33–36, 42–53]. In the upper part of the circular drum of the first church, ten eight-pointed blue tiles were inserted, while beneath the cornice of the Yeghvard church, fifty-four painted polychrome tiles of various shapes were placed, of which only eleven have survived. Some of them bear poetic inscriptions, including from the *Shahnameh*, serving as good wishes. Noteworthy, only one church in Armenia — in the Kirants Monastery (13<sup>th</sup> century), constructed of brick — features tile mosaic revetment. These panels, adorning all the niches of its tall drum, are composed of various combinations of six-pointed stars and rhombuses, covered with turquoise and red glaze. The decoration of the drum in Kirants is an exception in Armenian religious architecture; however, such tile cladding was quite typical for brick minarets, mausoleums, and mihrab in Anatolia, Iran, and Central Asia. The decoration of Kirants can be compared to the design of the drum niches of the Şifaiye Medrese (1217) in Sivas (Armenian Sebastia), which features similar tile compositions based on six-pointed stars.

In addition to tiles, glazed bowls were also used in Armenia. Early examples can be seen on the fortress walls of Ani, such as on the Tower of Shanoosh — N 46 [11, fig. 81], as well as on the walls of the Amberd Fortress, which came under the control of the Vachutyan family in the early 13<sup>th</sup> century. At Amberd, the Vachutyans constructed additional fortifications and new gates, incorporating two-tone inlays. One of the surviving hexagonal stones from this set contains a recess — a socket for a glazed ceramic insert — presumably located at the center of the tympanum. Such inserts, typically turquoise or blue in color, enhanced the polychrome masonry of the 13<sup>th</sup> century and most likely served as apotropaic devices against evil eye [21, pp. 31–36, fig. 37–39]. A similar glazed insert to the one at Amberd was also present on the portal of the Paron Palace in Ani, as evidenced by an archival photograph showing a socket on the upper central stone [11, fig. 99]. Glazed bowl inserts are also well-documented in Seljuk architecture. These can be seen on the portal of the Sultan Melik Tomb in Kemah (1190), built of bricks, as well as in the upper sections of the stone walls of the Kamedreddin Tomb in Divriği (1196) [14, pp. 40, 101, fig. 2.48–49].

Thus, ceramic tiles did not achieve widespread use in the Armenian architecture and remained foreign to church décor. However, their popularity in neighboring cultures, applying of imported tiles in Armenian secular buildings, and the resulting aesthetic norms and patterns they introduced significantly influenced the development of local stone mosaics. This is also evidenced by a comparative analysis of the imagery and style of Armenian carved stone tiles and their imitations with the images and decoration of Islamic tiles. The most striking example of this influence can be observed on the portal of the main church of the Nor Varagavank Monastery.

### **Inlay of the Nor Varagavank portal and its tile parallels**

Among all Armenian polychromatic portals, the portal of the main church of the Holy Mother of God (1224–1237) in Nor Varagavank has the most technically complex and richest in images mosaic. Here, the area between double framing of the entrance — arched and rectangular ones — is covered with shaped tiles crafted from felzit tuff of three shades (Ill. 53). At the upper section of the portal, elongated purple-brown hexagons with mostly figurative carvings seem to come to the fore, while turquoise and yellowish stars between them are perceived as the background. This method was common in ceramic mosaics as well, where large, often star-shaped pictorial tiles were paired with smaller, usually monochrome background ones, as seen in the tile sets from the Konya and Kubadabad palaces [14, fig. 3.33–34] (Fig. 3). In Nor Varagavank, some large hexagonal tiles feature carved figures, including an angel, a Crucifixion scene with an inscription, crosses, the Tree of Life with birds on its branches, feline predators and birds, a griffin, intertwined dragons, mirrored sphinxes sharing a single head, animal combat scenes, etc. Nearly all the images are set against an intricate vegetal background, almost merging with it, and the figures can only be distinguished upon close inspection. The remaining tiles are adorned with arabesque patterns (Fig. 4).

The inlay technique employed on Armenian portals, wherein stone tiles were first cut, then covered with refined carvings, and tightly arranged on mortar, closely resembles the creation and laying of ceramic tiles on the monuments in the Near and Middle East of the same period. Glazed tiles, shaped as stars, rhombuses, polygons or squares were produced with both smooth surfaces and relief modeling techniques. In Islamic art, tiles with figurative imagery were exclusively used in secular buildings, while in religious and memorial architecture, tiles were adorned with ornamental painting, often incorporating Quranic inscriptions. The tiles from Kubadabad depict sirens, sphinxes, double-headed eagles, fish, griffins, paired and single

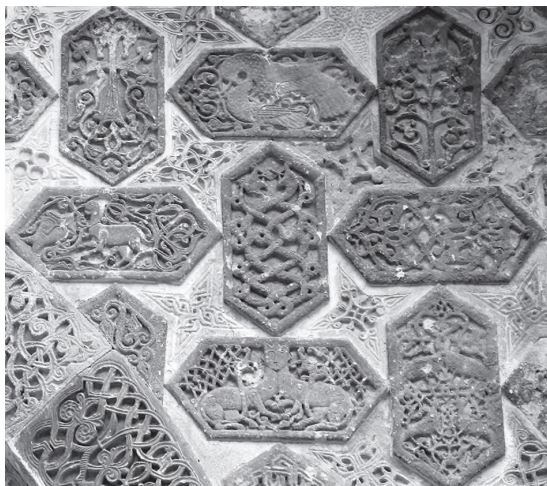


Fig. 4. Fragment of the stone mosaic, Western portal of Nor Varagavank church, 1224–1237, RA, Tavush province.  
Photo by Lilit Mikayelyan



Fig. 5. Fragment of the altar elevation, Vanstan church, 1212–1227, RA, Ararat province (archive photo of the Research on Armenian Architecture)

birds, and predatory animals, which echo the imagery of the stone tiles in Nor Varagavank, as well as the depictions within the eight-pointed stars in the false mosaics of the altar elevations in Makaravank and Vanstan (Fig. 5) [17, fig. 18–22]. In addition to the shared repertoire of animalistic, allegorical imagery on both Islamic and Armenian tiles, they also exhibit similar stylization and ornamentation of animals. As a result, the small figures on the Nor Varagavank portal are perceived primarily as a polychrome rhythmic pattern, much like the colorful, arabesque-covered ceramic mosaics of the 13<sup>th</sup>–14<sup>th</sup> centuries.

The elaborate incrustation of Nor Varagavank can only be rivaled by examples of the Ani portals, while the latter do not have any figurative images — at least none have survived to this day. The emergence of such a sophisticated work far from the capital, in the domains of the Kyurikid princes<sup>9</sup>, can be explained by two factors. According to epigraphic and written sources, the main church was commissioned by Vasak Kyurikyan, whose wife, Khatun, was the daughter of a prominent nobleman from Ani serving at the Zakarid court. Furthermore, based on the inscription on the church's altar conch, the architect of the structure was likely “ԱՆԵՑԻ ՎԱՐԴՊԵՏ ԳԱԶԱՆ” — a master from Ani named Gazan [12, pp. 69–71]. All of this points to the connection between the Nor Varagavank church and the capital's school of the first half of the 13<sup>th</sup> century. Notably, in the nearby Khoranashat Monastery, which also belonged to the Kyurikids, both the portals of the main church and its altar elevation also featured stone mosaics.

### Conclusion

In Armenia, the use of polychrome stonework to achieve artistic effects has been documented since the early medieval period<sup>10</sup>. In the 6<sup>th</sup>–11<sup>th</sup> centuries, mixed multi-colored ma-

<sup>9</sup> The Kyurikids were a junior branch of the Armenian royal Bagratid dynasty, who established the Kingdom of Tashir-Dzoraget in the northern part of the country in the second half of the 10<sup>th</sup> century. As their power gradually waned, the last Kyurikid princes continued to rule in the northeastern part of the Tavush region until the mid-13<sup>th</sup> century.

<sup>10</sup> No evidence of such a method in antique Armenian architecture has survived. Mosaics of polychrome stone tiles were used in the inner decoration of Urartian palaces [17, p. 61].

sonry of walls and highlighting of certain structural or decorative elements with variously colored stone (or its painting) were used. By the 13<sup>th</sup> century, in addition to these methods, inlays of polychrome shaped tiles and their relief imitations (sometimes painted) became widely employed. The art of stone mosaics was particularly advanced in monuments of Ani and its environs, as well as in northeastern Armenia, a region rich in felzits of various shades. In 13<sup>th</sup>–14<sup>th</sup>-century Seljuk Anatolia, polychrome decoration using marble, limestone, brick, and glazed inserts was most commonly concentrated on portals, a similar practice can be observed in Armenia. Figured sets or false mosaics were often applied on the altar elevations of Armenian churches, which can generally be compared to the principles of tile decoration in mihrab niches.

The 12<sup>th</sup>–14<sup>th</sup> centuries marked another phase of the expansion of Iranian culture across the Near East and South Caucasus, which also played a significant role in the formation of Seljuk architecture in Anatolia. One of its manifestations was the development of tiled decoration throughout the region. The popularity and fashion for Iranian tiles led to their widespread use not only in the brick architecture but also in the incrustation of stone structures, as frequently seen in Seljuk monuments and, quite rarely, in Armenian ones. Moreover, in Armenia and partly in Anatolia (Konya, Divriği), the art of ceramic tiles “transformed” into stone sets, with identical compositional schemes and pictorial repertoire. The analysis of reliefs on individual tiles and their imitations on the 13<sup>th</sup>-century Armenian monuments reveals that they were created not according to the canons of monumental sculpture, but following the principles of shallow relief and painting, typical of decorative tiles.

## References

1. Asryan A. A. Revealing the 12<sup>th</sup>–14<sup>th</sup> Century Hidden Architectural Monuments of Armenia: The Case of Neghuts Monastery. *Proceedings of the 4<sup>th</sup> International Conference on Architecture: Heritage, Traditions and Innovations (AHTI)*, 2022, pp. 59–64.
2. Azatyan Sh. R. *Portaly v monumental'noi arkhitekture Armenii IV–XIV vv. (Portals in the Monumental Architecture of Armenia of the 4<sup>th</sup>–14<sup>th</sup> cc.)*. Yerevan, Sovetakan grokh Publ., 1987, 55 p. (in Russian).
3. Babajanyan A. A. *Hayastani XIV–XVII dd. xeccegheny' (Ceramics of Armenia of the 14<sup>th</sup>–17<sup>th</sup> cc.)* Dissertation for the degree of candidate of historical sciences, Yerevan, 2015, 212 p. (in Armenian).
4. Babayan F. *Saint Sargis Monastery of Oushi*. Yerevan, Gitutyun Publ., 2005. 47 p.
5. Baeva O. V.; Kazaryan A. Yu. Palace Architecture of Ani: Preliminary Results of the Study. *Actual Problems of Theory and History of Art: Collection of articles*, vol. 13. Moscow; St. Petersburg, NP-Print Publ., 2023, pp. 185–199. <https://doi.org/10.18688/aa2313-2-15> (in Russian).
6. Cowe P. S. Patterns of Armeno-Muslim Interchange on the Armenian Plateau in the Interstice between Byzantine and Ottoman Hegemony. Peacock A. C. S.; Nicola B.; Yıldız S. N. (eds). *Islam and Christianity in Medieval Anatolia*. Farnham-Burlington, Ashgate Publ., 2015, pp. 77–106.
7. Donabédian P. Armenia — Georgia — Islam. A Need to Break Taboos in the Study of Medieval Architecture. Ferrari A.; Riccioni S.; Ruffilli M.; Spampinato B. (eds). *L'arte armena. Storia critica e nuove prospettive. Studies in Armenian and Eastern Christian Art*. Venezia, Edizioni Ca' Foscari Publ., 2020, pp. 63–112.
8. Donabédian P.; Porter Y. Éghvard (Arménie, début du XIV<sup>e</sup> siècle). La chapelle de l'alliance. *Hortus artium medievalium: Journal of the International Research Center for Late Antiquity and Middle Ages*, no. 23 (2), 2017, pp. 837–855.
9. Eastmond A. Other Encounters: Popular Belief and Cultural Convergence in Anatolia and the Caucasus. Peacock A. C. S.; Nicola B.; Yıldız S. N. (eds). *Islam and Christianity in Medieval Anatolia*. Farnham-Burlington, Ashgate Publ., 2015, pp. 183–214.

10. Hakobyan Z. A.; Mikayelyan L. Sh.; Asryan A. A.; Avetisyan T. R. *Hayastani 12-14-rd dd. xonarhvac' & qich owsowmnasirvac' ekeghetakan kar'owycneri qandakayin hardaranqy'* (*The Sculptural Decoration of Ruined and Little Studied Church Buildings of the 12<sup>th</sup> to 14<sup>th</sup> Centuries*), part I. Yerevan, YSU Publ., 2023, 356 p. (in Armenian). Available at: <http://publishing.ysu.am/hy/1712298628>
11. Karapetyan S. G. *Ani 1050*. Yerevan, Research on Armenian Architecture Foundation Publ., 2011.
12. Kartashyan G. K. The Architectural Complex of Nor Varagavank. *Lraber hasarakakan gitowt'yownneri* (*Bulletin of Social Sciences*), no. 7, 1984, pp. 60–73 (in Armenian).
13. Kazaryan A. Yu. *Tserkovnaia arkhitektura stran Zakavkaz'ia VII veka: formirovanie i razvitie traditsii* (*Church Architecture of the 7<sup>th</sup> Century in Transcaucasian Countries. Formation and Development of the Tradition*), 4 vols. Moscow, Locus Standi Publ., 2012. (in Russian).
14. McClary R. P. *The Rûm Saljûq Architecture of Anatolia, 1170–1220*, PhD Thesis. The University of Edinburgh, 2015. 494 p.
15. McClary R. P. Craftsmen in Medieval Anatolia: Methods and Mobility. Blessing P.; Gashgorian R. (eds). *Architecture and Landscape in Medieval Anatolia, 1100–1500*. Edinburgh, Edinburgh University Press, 2017, pp. 27–58.
16. McClary R. P. Geometric Interlace: A Study of the Rise, Fall and Meaning of Stereotomic Strapwork in the Architecture of Rum Seljuq Anatolia. *Anatolian Studies*, vol. 72, 2022, pp. 209–224.
17. Mikayelyan L. Sh. Returning to the essay of Joseph Orbeli “Muslim tiles”. Artistic Peculiarities of Stone Mosaics in the Decor of Armenian Monuments of the 13<sup>th</sup>–14<sup>th</sup> Centuries and Their Islamic Parallels. *Questions of the History of World Architecture*, 2024, no. 1 (22), pp. 59–82 (in Russian).
18. Orbeli I. A. Muslim tiles. *I. A. Orbeli. Izbrannye Trudy (Selected papers)*. Yerevan, Academy of Sciences of Armenian SSR Publ., 1963, pp. 252–268 (in Russian).
19. Pancaroğlu O. The Mosque-Hospital Complex of Divriği: A History of Relations and Transitions. *Anadolu ve Çevresinde Ortaçağ*, iss. 3, 2009, pp. 169–198.
20. Pancaroğlu O. Persianate and Anatolian: Tile Decoration and Its Architectural Context in Medieval Anatolia. Davidson O. M.; Simpson M. Sh. (eds). *The Arts of Iran in Istanbul and Anatolia, Seven Essays*. Boston, Massachusetts, Ilex Foundation Publ., 2019, pp. 186–207.
21. Tokarskii N. M. *Po stranitsam istorii armianskoi arkhitektury* (*Through the pages of the history of Armenian architecture*). Yerevan, Hayastan Publ., 1973. 87 p. (in Russian).

**Title.** Polychrome Masonry and Stone Inlays in the Décor System of Armenian Monuments of the 13<sup>th</sup>–14<sup>th</sup> Centuries and Their Seljuk Parallels

**Author.** Mikayelyan, Lilit Shavarsh — researcher. Yerevan State University; mikalil@mail.ru; SPIN-код: 7864-1907; ORCID: 0000-0001-8766-2872; Scopus ID: 57208114675

**Abstract.** The architecture of Zakarid Armenia (late 12<sup>th</sup> — first third of the 14<sup>th</sup> century) is characterized by the large-scale construction of secular and church buildings, novelty of structural and decorative executions, which have a number of parallels with the contemporaneous monuments of the Rum Sultanate. This was due to similar traditions of stone construction techniques and a wide exchange of artistic ideas in the region. Among them, polychrome stone masonry and mosaics of figured tiles stand out. In Armenia, rich in building stone, such sets were widely used in the capital Ani and its surrounding monuments, in which reddish and gray tuff was applied. In the north-east of the country, polychrome portals and their stone inlays were composed of local felzit tuff of soft shades. The compositions of Armenian mosaics and images on individual slabs and their relief imitations testify to the influence of the art of ceramic tiles. Similar inlays are also found on Seljuk monuments, also distinguished by the polychrome portals. In the latter, the mixing and mutual influence of different techniques and materials and the frequent use of tiles in building decor were especially relevant. The development of glazed architectural ceramics, with the main centers in Iran, resulted in the widespread popularity of this art form throughout the Near East, significantly influencing the technique and patterns of stone sets. While in Armenia, the architecture was characterized by stony, more restrained polychrome building decoration, the architecture of Seljuk Anatolia was more multi-colored due to the significantly greater use of glazed tiles.

**Keywords:** Medieval Armenian architecture, polychrome masonry, Ani, stone mosaic, inlay, portals, decorative ceramics, Seljuk monuments, Islamic tiles

**Название статьи.** Полихромная кладка и каменные инкрустации в декоративной системе армянских памятников XIII–XIV веков и их сельджукские параллели<sup>11</sup>

**Сведения об авторе.** Микаелян, Лилит Шаваршевна — научный сотрудник. Ереванский государственный университет, ул. Алека Манукяна, 1, Ереван 0025, Армения; mikalil@mail.ru; SPIN-код: 7864-1907; ORCID: 0000-0001-8766-2872; Scopus ID: 57208114675

**Аннотация.** Архитектура Захаридской Армении (конец XII — первая треть XIV в.) отличается масштабным строительством светских и церковных сооружений, новизной конструктивных и декоративных решений, имеющих ряд параллелей с единовременными памятниками Румского султаната. Последнее было вызвано сходными традициями каменной строительной техники и широким обменом художественными идеями в регионе. Среди них особо выделяется полихромная каменная кладка и мозаики из фигурных плиток. В богатой строительным камнем Армении такие наборы широко применялись в столице Ани и памятниках ее круга, в которых использовали красноватый и серый туф. На северо-востоке страны полихромные порталы и их каменные инкрустации составлялись из местного фельзитного туфа мягких оттенков. Композиции армянских мозаик и изображения на отдельных плитках и их рельефных имитациях свидетельствуют о влиянии на них искусства керамических изразцов. Сходные инкрустации встречаются и на сельджукских памятниках, также отличающихся полихромией порталов. В последних были особенно актуальны смешение и взаимовлияние разных техник и материалов и частое применение изразцов в отделке зданий. Развитие строительной глазурованной керамики, с основными центрами в Иране, привело к ее популярности на всем Переднем Востоке и влиянию ее техники и узоров на каменные наборы. Если в Армении преобладала каменная, более сдержанная полихромная декорация зданий, то архитектура сельджукской Анатолии была более многоцветной в силу значительно большего применения в ней глазурованных изразцов.

**Ключевые слова:** армянская средневековая архитектура, полихромная кладка, Ани, каменная мозаика, инкрустация, порталы, сельджукские памятники, исламские изразцы

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Ill. 51. Western portal, gavit of Khoranashat monastery, 1222–1251, RA, Tavush province. Photo by Lilit Mikayelyan



Ill. 52. Western portal, gavit of Gandzasar monastery, 1261, Historical Artsakh. Photo by Arsen Harutunyan



Ill. 53. Western portal, church of the Holy Mother of God, 1224–1237, Nor Varagavank monastery, RA, Tavush province. Photo by Lilit Mikayelyan