

CLASSIFICATION AND TYPOLOGY OF MIDDLE AGES POTTERY IN THE NEYSHABUR MUSEUM

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Abstract: Pottery, as one of the most important arts of ancient times, made considerable progress in the Middle Ages, especially during the Seljuk period. With the devastating attacks of the Mongols, pottery stopped in many Iranian cities. However, during the Ilkhanid period, with the establishment of relative peace, pottery production resumed in the centers of many Iranian cities, including Rey, Kashan, Saveh, and Neyshabur. There are a number of pottery made in different cities of Iran in the Neyshabur Museum that have not been studied so far. This research aims to date the mentioned pottery by typology and classification. Data collection is done by documentary and field methods and this research is based on description and analysis. In this museum, tallow burners, candlesticks, mashrabeh, seals, pendants or lids, molds, plates, bowls with carved patterns, bowls with radial patterns, bird figurines, and tiles were identified. The results show that the pottery in the Neyshabur Museum is divided into two categories, unglazed and glazed. Unglazed pottery includes simple unglazed, unglazed with molded patterns, clay molds, unglazed with stamped patterns, and unglazed with added patterns. Glazed pottery includes single-colored glazed pottery, glazed pottery with sgraffiato decoration, underglaze painted pottery, and overglaze painted pottery. These pottery were made during the fifth to eighth centuries AH.

Keywords: Pottery, Classification and Typology, Middle Ages, Neyshabur Museum.

چکیده: سفالگری، به عنوان یکی از مهمترین هنرهای دوران باستان، در قرون وسطی، به ویژه در دوره سلجوقی، پیشرفت قابل ملاحظه‌ای کرد. با حملات ویرانگر مغول‌ها، سفالگری در بسیاری از شهرهای ایران متوقف شد. اما در دوره ایلخانی، با ایجاد آرامش نسبی در ایران، در مراکز بسیاری از شهرهای ایران از جمله ری، کاشان، ساوه و نیشابور، تولید سفال مجدداً از سر گرفته شد. در موزه نیشابور تعدادی سفال ساخته شده از شهرهای مختلف ایران وجود دارد که تاکنون مورد مطالعه قرار نگرفته است. این تحقیق با هدف تاریخ‌گذاری نسبی سفال‌های مذکور با روش گونه‌شناسی و طبقه‌بندی انجام میشود. گردآوری داده‌ها به روش اسنادی و میدانی است و بر شیوه توصیفی - تحلیلی استوار است. در میان سفال‌ها پیه سوز، شمعدان، مشربه، مهر، آویز یا درپوش، قالب، بشقاب، کاسه با نقش کنده، کاسه دارای نقوش شعاعی، پیکرک پرنده و کاشی شناسایی شدند. نتایج نشان می‌دهد که سفال‌های موزه نیشابور به دو دسته، بدون لعاب و لعابدار تقسیم می‌شوند. سفال‌های بدون لعاب شامل بدون لعاب ساده، بدون لعاب با نقش قالب‌زده، قالب‌های سفالی، بدون لعاب با نقش مهرزده و بدون لعاب با نقش‌افزوده است. سفالینه‌های لعابدار شامل سفالینه‌های با لعاب تک‌رنگ، سفال دارای لعاب با تزئین اسگرافیاتو، سفالینه‌های نقاشی زیر لعاب، سفالینه‌های نقاشی روی لعاب است. این سفال‌ها بین قرون پنجم تا هشتم هجری قمری ساخته شده‌اند.

کلیدواژه: سفال، طبقه‌بندی و گونه‌شناسی، قرون میانی، موزه نیشابور.

I. Introduction

Pottery has been one of the most important arts in the past centuries (Watson, 2004). Medieval pottery is characterized by the ceramics of the Seljuk, Khwarazmian, Ilkhanid, and Timurid periods. Ceramic production progressed significantly during the Seljuk era (Allan, 2004). This activity, however, was disrupted by the devastating Mongol invasions. Some time after, during the Ilkhanid period, a relative calm returned to Iran, which saw many cities such as Rey, Kashan, Saveh, and Neyshabur, resume their ceramic production (Blair and Bloom, 1996).

The Neyshabur Museum houses numerous ceramics obtained from archaeological excavations in the region. However, no study has been done on some pottery groups belonging to the Middle Ages. Therefore, in this study, the characteristics of these ceramics are examined and an attempt is made to estimate their age.

From a methodological perspective, this is a fundamental research conducted in a descriptive-analytical and comparative manner. Data collection was

carried out through documentary methods as well as by examining 130 pieces of pottery provided to the author by the Neyshabur Museum. These pottery pieces belonged to different cultural periods, although most of them were attributed to the Islamic era. In this research, the pottery pieces from the middle Islamic period in this collection have been studied.

II. Research background

Charles Wilkinson, in his book titled "Neyshabur: Pottery of the Early Islamic Period", examines the pottery pieces discovered during excavations in Neyshabur. In this work, he does not limit himself to merely cataloging the findings but strives to place the various types of pottery within the broader context of Islamic ceramic history. He compares these pieces with those from other regions, particularly Afrasiyab (near Samarkand in present-day Uzbekistan) and other ceramic centers in Iran. The pieces listed in this book are exclusively those excavated by the Metropolitan

Museum of New York between 1935 and 1940, as well as in the late 1940s (Wilkinson, 1973: x-xxiv).

Fehérvári, in his book "Islamic Pottery: A Comprehensive Study Based on the Barlow Collection", investigates Islamic pottery pieces from the Barlow Collection. He notes that despite the publication of numerous books on Islamic pottery, precise information about the time and place of production for many of these vessels remains elusive. However, he points out that the presence of pieces with dates and signatures during the medieval Islamic period made it easier to identify and date these vessels (Fehérvári, 1973: 21-22).

Grube, in his book "Islamic Pottery: Eighth to Fifteenth Century in the Keir Collection", examines pottery pieces from Iran and other Islamic countries collected in the Keir Collection. This collection includes not only pieces favored by collectors but also those that played a significant role in the development of Islamic pottery, dating from the early periods to the end of the fifteenth century. Grube emphasizes that this book focuses solely on the Islamic pottery in the Keir Collection and does not provide a comprehensive catalog of Islamic ceramics. Additionally, the content is not organized in a traditional catalog format, nor does it follow a strict chronological sequence. Instead, the author categorizes the objects based on their geographical origins, ceramic schools, and decorative techniques, addressing both the general issues of each group and the specific problems of individual pieces (Grube, 1976: 11-19).

Rante, in his book "Greater Khorasan and Beyond: A Political-Cultural Framework", explores the region of Khorasan, particularly during the Sasanian and Islamic periods. By compiling articles from researchers who have recently conducted archaeological excavations in Khorasan, he aims to highlight this region as an ancient cultural domain. The book examines early and medieval Islamic pottery obtained from excavations in Neyshabur and other parts of Khorasan (Rante, 2015: 9).

Grube, in another book titled "Islamic Pottery", introduces and analyzes pottery pieces from the early to the ninth century in the Middle East, Mesopotamia, and Iran. This book is significant for its detailed documentation and presentation of the earliest examples of stone-paste pottery, signed Samanid jars, and a group of ceramics with famous inscriptions. It also introduces a collection of Bamyán pottery, which has been less studied. In this work, the classification of pottery is based on visible features such as glaze and production techniques rather than focusing solely on decorative motifs. The book is a collaborative effort by several authors, each specializing in specific types of pottery (Grube, 2005: 8).

Pope and Ackerman, in the ninth volume of their book "A Survey of Persian Art from Prehistoric Times to the Present", include images of various pottery pieces and provide brief explanations about their type, age, and place of production (Pope et al., 2008: 1).

Bahmani et al. in their article titled "Locating the Production Sites of Islamic Period Pottery from the Narenjestan Ghavam Collection in Shiraz through Comparative Analysis (Case Study: 10 Pottery Pieces)", study ten pottery pieces from the Narenjestan Ghavam Collection in Shiraz. These pieces belong to various Islamic periods, from the Tahirid and Samanid eras to the Safavid period, and their production sites were previously unknown. Using a comparative method, the study attempts to identify the production locations of these pottery pieces (Bahmani et al., 2016: 10-11).

Neyshabur Museum

The Archaeological Museum of Neyshabur is one of the most important museums in Iran, located in the city of Neyshabur, Razavi Khorasan Province. Recognized as a center for displaying the historical and cultural artifacts of the Khorasan region, particularly those from the Islamic period, the museum is situated in a historic area near the tomb of Attar of Neyshabur. It houses a rich collection of pottery, coins, stone tools, and decorative objects from various historical periods, including pre-Islamic, Seljuk, Ilkhanid, and Timurid eras. The Neyshabur pottery, especially the painted and glazed pieces from the middle Islamic period, are among the museum's most significant artifacts. The museum serves not only as a hub for archaeological research but also as a cultural attraction for both domestic and international tourists.

III. Classification and Typology of Pottery

III.1. Unglazed Pottery

The most common type of pottery in Iran is unglazed pottery. Archaeological excavations at ancient sites in Iran reveal that the production of unglazed pottery has persisted throughout Iran's history and has undergone a process of evolution. The abundance of unglazed vessels compared to other types of pottery attests to their widespread use in the daily lives of ordinary people (Karimi et al., 1985: 9).

In general, the unglazed pottery in the Neyshabur Museum includes the following categories: plain unglazed pottery, unglazed pottery with molded designs, pottery molds, unglazed pottery with stamped designs, and unglazed pottery with applied decorations.

III.2. Plain Unglazed Pottery

The paste of plain unglazed pottery exhibits a range of colors, including buff, brick-red, red, gray, and green. While some pieces in this group have a self-slipped surface, many are covered with a clay slip (Slip). This group of pottery can be classified into four types based

on the color of the surface slip: buff, brick-red, red, and gray. The temper or binding material in these pottery pieces is mineral-based, and most of the pieces are sufficiently fired (Mousavi Haji et al., 2019: 1054).

In the Neyshabur Museum, examples of this type of pottery with a buff paste have been found. Oil lamps are among the notable examples of this pottery, appearing in two forms: one with a saucer-shaped base

and a handle, and the other without a base but with a handle. Based on comparative analyses, these oil lamps date back to the 5th to 7th centuries AH (Tables 1 and 2). Another example is pedestaled ceramic candleholders, which feature protrusions on three parts: the body, neck, and rim. According to comparative studies, these candleholders are also attributed to the 5th to 7th centuries AH (Table 3).

Table 1: Samples of Pottery in the Neyshabur Museum and Comparison with Similar Samples



| Sample |
|--|
|  <p>Simple unglazed oil lamp (Neyshabur Cultural Heritage and Tourism Department website)</p> |
| Similar Samples |
|  <p>Oil lamp, unglazed, Hamedan (Saman), mid to late centuries, especially the Ilkhanid period (Hamati Azandariani et al., 2017: 192, Fig. 3).</p> |

Table 2: Pottery samples in the Neyshabur Museum and their comparison with similar samples



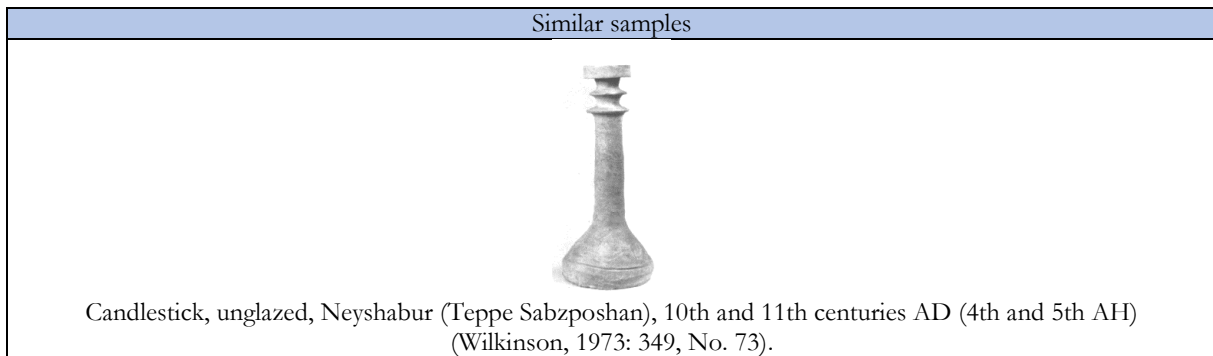
| Sample |
|--|
|  <p>Simple unglazed cup-shaped oil lamp (Neyshabur Cultural Heritage and Tourism Department website)</p> |
| Similar samples |
|  <p>Unglazed oil lamp, Hamedan (Saman), Middle Ages to Late Period, especially the Ilkhanid period (Hemati Azandaryani et al., 2017: 192, Fig. 3)</p> |

Table 3: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample |
|---|
|  <p>Simple unglazed candlestick with a buff paste, on a base (Neyshabur Cultural Heritage and Tourism Department website).</p> |



III.3. Unglazed Pottery with Molded Designs

This type of decoration is found on smaller unglazed pottery, particularly on vessels with bodies that are not entirely spherical and are sometimes made in polygonal shapes, imitating metal vessels (Tohidi, 2013: 259). In the 4th century AH, motifs or inscriptions were executed on the band around the neck of the vessel (Bahrami, 1948: 45-47). By the 5th century AH, pottery pieces had buff and red paste (Tohidi, 2013: 264). The motifs on these vessels, created using molds, were highly diverse and included examples such as pearl-filled medallions, Sasanian-style petals, bird images, simple

Kufic inscriptions, and occasionally human faces (ibid.). In the Neyshabur Museum, several examples with reddish-buff paste have been observed. One example is a jug decorated with floral and checkerboard patterns, which, based on comparative analysis, dates back to the 5th to 7th centuries AH (Table 4). Another example is a clay seal with reddish-buff paste, featuring raised geometric motifs such as circles, floral patterns, and linear protrusions, attributed to the 5th century AH (Table 5). Yet another example is an unglazed pendant or lid with buff paste, likely decorated with feline motifs and dated to the 6th century AH (Table 6).

Table 4: Pottery samples in the Neyshabur Museum and their comparison with similar samples








| Sample | | | | |
|--|--|--|--|---|
|  <p style="margin-top: 10px;">Pitcher, unglazed with molded pattern (Neyshabur Cultural Heritage and Tourism Department website).</p> | | | | |
| Similar samples | | | | |
|  <p style="margin-top: 10px;">Pottery fragment, unglazed, Neyshabur, probably 12th century AD (6th AH) (Wilkinson, 1973: 359, No. 173).</p> |  <p style="margin-top: 10px;">Pottery fragment, unglazed, Neyshabur, probably 12th century AD (6th AH) (Wilkinson, 1973: 359, No. 170).</p> |  <p style="margin-top: 10px;">Pottery, unglazed, Markazi Province (Tahiq), 5th 7th centuries AH (Sharahi et al., 2019: 146, Fig. 11).</p> |  <p style="margin-top: 10px;">Pottery fragment, unglazed, Markazi Province (Tahiq), 5th 7th centuries AH (Sharahi et al., 2019: 146, Fig. 12).</p> |  <p style="margin-top: 10px;">Pottery fragment, unglazed, Markazi Province (Meshkin Tepe), 12th 13th centuries AD (5th to 7th AH) (Mahjour et al., 2009: 118, Fig. 3).</p> |

Table 5: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample |
|--|
|  <p style="margin-top: 10px;">Pottery, probably in the shape of a circle (seal), with molded decorations (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 1605</p> |








| Similar samples |
|---|
|  <p>Pottery, unglazed, Gorgan, 11th century AD (5th AH) (Kiani, 2001: 35).</p> |

Table 6: Pottery samples in the Neyshabur Museum and their comparison with similar samples


| Sample | | | | |
|---|--|---|--|--|
|  <p>Pendant or lid, unglazed with cast or molded decorations (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 165</p> | | | | |
| Similar samples | | | | |
|  <p>Lid, unglazed, Khuzestan (Askar Makram) (Ataie, 2016: 456, plate 16, Fig. 1).</p> |  <p>Lid, unglazed, Khuzestan (Askar Makram) (Ataie, 2016: 456, plate 16, figure 2).</p> |  <p>Lid, unglazed, Susa (Ataie, 2016: 456).</p> |  <p>Decorative pendant, unglazed, Iran or Iraq, 12th century AD (6th AH) (Grube, 1976: 107, No. 66).</p> |  <p>Decorative pendant, unglazed, Iran or Iraq, 12th century AD (6th AH) (Grube, 1976: 107, No. 67).</p> |

III.4. Pottery Molds

In the 11th and 12th centuries AD, potters in Neyshabur changed their approach to vessel production (Wilkinson, 1973: 260). One of these changes was the use of molds, which had been used to a lesser extent in the 10th century AD (4th century AH). These molds, which were used for glazed vessels, were made from natural clay and pebbles (Wilkinson, 1973: 261). Among the pottery pieces in the Neyshabur Museum, negative pottery molds with reddish-buff paste and Kufic

inscriptions have been observed. These molds also feature intricate bands and are attributed to the 5th and 6th centuries AH (Table 7). Another example is a negative pottery mold with buff paste, featuring incised lines, medallion motifs, and circular patterns around part of its body, dated to the 6th and 7th centuries AH (Table 7). Yet another example is a positive pottery mold with a convex body and geometric and floral motifs on its exterior, belonging to the 5th to 7th centuries AH (Table 8).

Table 7: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample |
|---|
|  <p>Negative pottery mold (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 16</p> |





| Similar samples | | | |
|---|--|--|--|
|  <p>Mold, Neyshabur, 11th and 12th centuries (5th and 6th AH) (Wilkinson, 1973: 285, Nos. 58 B and c).</p> |  <p>Mold, Neyshabur, Seljuk period (5th or 6th centuries AH) (Kambakhshfard, 2001: 501, Figs. v and h; Kambakhshfard et al., 1970: 58 and 59, Figs. 30 and 31).</p> |  <p>Mold, Neyshabur, Seljuk period (5th or 6th centuries AH) (Kambakhshfard et al., 1970: 63, Fig. 37).</p> |  <p>Mold, Neyshabur (stork nest), Seljuk period (Kambakhshfard, 2001: 506, Fig. z) (Kambakhshfard et al., 1970: 64, Fig. 38).</p> |

Table 8: Pottery samples in the Neyshabur Museum and their comparison with similar samples







| Sample |
|--|
|  <p>Negative pottery mold (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 16</p> |
| Similar samples |
|  <p>Mold, Iran, 12th -13th century AD (6th - 7th AH) (Fehervari, 2009: 97, Fig. 89).</p> |

Table 9: Pottery samples in the Neyshabur Museum and their comparison with similar samples




| Sample | | |
|---|---|---|
|  <p>Positive clay mold with convex body (Neyshabur Cultural Heritage and Tourism Department website)</p> | | |
| Similar samples | | |
|  <p>Pottery fragment, unglazed, Shahr-e Rey, medieval (Sharahi et al., 2019: 147, Table 2).</p> |  <p>Pottery fragment, unglazed, Markazi Province (Meshkin Tepe), medieval (5th -7th centuries AH) (Sharahi and Sedighian, 2019: 147, Table 2; Sedighian and Mahjour, 2009: 118, Fig. 3).</p> |  <p>Pot, unglazed, southern Iran, 12th century AD (6th AH) (Pope et al., 2009: 753).</p> |

III5. Unglazed Pottery with Applied and Stamped Decorations

Applied decorations, technically known as the *barbotine* technique (Tohidi, 2013: 259), were typically used on pottery adorned with floral patterns, arabesques, and leaf motifs (Kambakhsh Fard, 2001: 257). Other motifs, such as animal, human, and mythological designs inspired by Achaemenid and Sasanian metal vessels, were also incorporated into these decorations (Jenkins, 1983: 5). The production of this type of pottery reached its peak during the Islamic period (Gorjestani, 2000: 242). The use of stamps for

decorating pottery dates back to the Sasanian era. In the early Islamic period, the use of stamps in pottery was influenced by Sasanian stamp designs, but these stamps were much smaller (Kian Asl, 2008: 33) and included motifs such as lotuses, knots, palm leaves, animals, and even human figures (Wilkinson, 1973: 295). Among the pottery pieces in the Neyshabur Museum, a clay jar with applied, stamped, and molded decorations has been observed. This piece has a reddish-buff paste and features geometric and floral motifs. Based on comparative analysis, this pottery dates back to the 6th and 7th centuries AH (Table 10).

Table 10: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample | |
|---|--|
|  <p>Pottery jar with embossed, stamped and molded decorations (Neyshabur Cultural Heritage and Tourism Department website)</p> | |
| Similar samples | |
|  <p>Jug, unglazed, Iran (Khorasan), 12th to 13th centuries AD (6th to 7th AH) (Fehervari, 2009: 96, Fig. 85).</p> |  <p>Pottery fragment, unglazed, Neyshabur, 12th century AD (6th AH) (Wilkinson, 1973: 360, No. 188).</p> |

III6. Glazed Pottery

Glazed pottery from the medieval period in the Neyshabur Museum includes monochrome glazed pottery, pottery with sgraffito decoration, underglaze painted pottery (black pen), and overglaze painted lusterware.

III6.1. Monochrome Glazed Pottery

The use of monochrome glazed pottery dates back to ancient times. The peak of this technique is seen in the glazing of clay coffins from the Parthian period (Tohidi, 2013: 269; Bahrami, 1948: 48) and in jars and flasks from the Sasanian period (Tohidi, 2013: 269). This type of glaze was applied either on a white or monochrome background or directly on the clay surface. This method became popular in eastern Iran during the 3rd century AH and was subsequently used in other regions of the Islamic world (Wilkinson, 1973: 229). By the 5th century AH, this technique regained the attention of potters. Population growth, mass production, speed, and the beauty of turquoise glaze were the main reasons for the use of monochrome glaze decoration. Designs created through sgraffito (Tohidi, 2013: 269), molded or linear relief patterns, and

needlework designs were typically applied beneath the transparent monochrome glaze. The glass-like transparency of the glaze, in colors such as turquoise, milky white, white, lapis lazuli, greenish turquoise, and bluish turquoise, gave a unique appearance to the pottery. This method was widely used during the Seljuk and Khwarazmian periods. Studies indicate that potters used soft clay, porcelain paste, glass paste, and ash to prepare the paste for this type of pottery (ibid., 271). During the Seljuk and Khwarazmian periods, blue and turquoise colors were also used (Tohidi, 2013: 270). In the Neyshabur Museum, a sample of a plate with turquoise monochrome glaze and a buff-colored body, dating back to the 5th to 7th centuries AH, is displayed (Table 11). Another example is a jug with a reddish-buff body and alkaline glaze in light blue (pale turquoise), attributed to the 5th to 6th centuries AH (Table 12). Another sample is a cross-shaped tile with turquoise monochrome glaze, belonging to the 6th to 8th centuries AH (Table 13). Yet another example is a rectangular tile with a frit body and transparent turquoise glaze, featuring a raised inscription and dating to the 6th to 7th centuries AH (Table 14).

Table 11: Pottery samples in the Neyshabur Museum and their comparison with similar samples

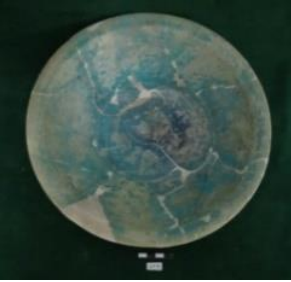






| Sample | | | | | |
|---|---|---|--|--|---|
|  <p>Plate, with turquoise monochromatic glaze (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 864</p> | | | | | |
| Similar samples | | | | | |
|  <p>Bowl, monochromatic glaze, Iran, 12th - 13th centuries (6th - 7th AH) (Watson, 2004: 318, cat.L.15).</p> |  <p>Pottery fragment, monochromatic glaze, Neyshabur, medieval (Collinet, 2015: 278 ,fig 8=3).</p> |  <p>Pottery fragment, monochromatic glaze, Jiroft, Seljuk period (Chubak, 2012: 109, Fig. 35).</p> |  <p>Pottery fragment, monochromatic glaze, Hamedan (Zinoabad), medieval (Mohammadi et al., 2016: 144, table 7).</p> |  <p>Pottery fragment, monochromatic glaze, Hamedan (Samen), medieval to late period, especially Ilkhanid period (Hemati Azandaryani et al., 2017: 195, Fig. 9).</p> |  <p>Plate, monochromatic glaze, Markazi Province (Tahiq- Khomein underground troglodytes), medieval (6th and 7th centuries AH) (Sharahi et al., 2019: 149, Table 4, Fig. 1).</p> |

Table 12: Pottery samples in the Neyshabur Museum and their comparison with similar samples




| Sample | |
|---|---|
|  <p>Pitcher, with blue (light turquoise) alkaline glaze (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 2</p> | |
| Similar samples | |
|  <p>Pitcher, monochromatic glaze, Neyshabur, 11th and 12th centuries AD (5th and 6th AH) (Wilkinson, 1973: 283, No. 56).</p> |  <p>Pitcher, monochromatic glaze, Neyshabur, 12th century AD (6th AH) (Wilkinson, 1973: 281, No. 32).</p> |

Table 13: Pottery samples in the Neyshabur Museum and their comparison with similar samples








| Sample | | |
|--|---|---|
|  Tile, glazed in blue (light turquoise) (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 1401 | | |
| Similar samples | | |
|  Tile, with motifs on a turquoise background, Takht-e-Soleyman (Abaqa Khan Palace), Ilkhanid period (Talebpour, 2008: 20, Fig. 2). |  Iran, Ilkhanid period, second half of the 13 th century (7 th AH) (Carboni and Masuya, 1993: 18, Fig. 13). |  Tile, monochromatic glaze, Khuzestan (Askar Makram), 12 th to 14 th centuries (6 th to 8 th AH) (Ataie, 2016: 305, Fig. 4-63, Fig. 3). |

Table 14: Pottery samples in the Neyshabur Museum and their comparison with similar samples








| Sample | |
|--|--|
|  Ferrite body tile with transparent turquoise glaze (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 291 | |
| Similar samples | |
|  Turquoise-glazed ferritic tile with composite body inscription, molded and glazed, Iran, 12 th century AD (6 th AH) (Carboni and Masuya, 1993: 7, Fig 2). |  Bahu wall inscription, ferritic body with transparent turquoise glaze, Kashan, 13 th century AD (7 th AH) (Kian-Asl, 2008: 35, Fig 19). |

III6.2. Pottery with Sgraffito Decoration

Engraving on the surface of pottery was one of the early and common techniques developed by Muslim potters during the medieval period (Grube, 2005: 101). One type of engraving is called sgraffito, which means scratching. In this technique, the object was covered with a thin layer of slip, and then designs were engraved before the main glaze was applied (Wilson-Allen, 2004: 16). The final result was a raised surface with delicate and intricate details (Grube, 2005: 101). The origin of this technique dates back to Egypt (Grube, 2005: 103) and later spread to Mesopotamia, Syria, and Iran

(Tohidi, 2013: 266-267). Three types of Iranian sgraffito pottery include Amol sgraffito ware, Garrus engraved pottery, and Aqkand sgraffito ware (Fehervari, 1973: 63). In the Neyshabur Museum, a sample of an Amol-type bowl with sgraffito decoration and semi-controlled green color is displayed. It has a reddish-buff body and features engraved motifs of birds, plants, and geometric patterns. This vessel takes its name from the Amol region, as it was first discovered in this area and its surroundings (Fehervari, 1973: 63). Based on comparative studies, this bowl dates back to the 5th and 6th centuries AH (Table 15).

Table 15: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample | | | | | | |
|---|--|---|---|--|--|--|
|  | | | | | | |
| Bowl, glazed with sgraffiato decoration and semi-controlled green color (Amol type) (Neyshabur Cultural Heritage and Tourism Department website) | | | | | | |
| Similar samples | | | | | | |
|  |  |  |  |  |  | |
| Jug, sgraffiato, Iran, probably Amol region, 11 th -12 th century AD (5 th -6 th AH) (Morgan, 2005: 115, Fig. 128). | Bowl, sgraffiato, Mazandaran, 12 th century AD (6 th AH) (Fehervari, 2009: 29, fig. 17). | Bowl, sgraffiato, Amol, 12 th or 13 th century AD (6 th or 7 th AH) (Pope et al., 2008: 628). | Bowl, sgraffiato, Iran, Mazandaran region, 11 th or late 11 th century AD (5 th AH) (Fehervari, 1973: Plate 19, a No. 37). | Bowl, sgraffiato, Mazandaran region, late 12 th or 13 th century AD (6 th or 7 th AH) (Fehervari, 1973: Plate 20, b No. 38). | Bowl, sgraffiato, Amol, 11 th and 12 th centuries AD (5 th and 6 th AH) (Pope et al., 2008: 623). | |

III.6.3. Underglaze Painted Pottery

Underglaze painting has been common since the early use of glaze (Tohidi, 2013: 271). During the 3rd and 4th centuries AH, this technique was practiced in Syria and Egypt using transparent, colorless glaze (Fehervari, 1973: 94; Watson, 2004: 333). Later, this technique was developed and refined by Seljuk potters in Iran (Fehervari, 1973: 94). During the Seljuk period, painting was combined with engraving under the glaze, and during the Ilkhanid period, especially in the Timurid era, this technique reached its peak of evolution (Tohidi, 2013: 271). In this type of pottery, colors such as black, cobalt blue, turquoise blue, and green were used for decoration. The choice of colors depended on the glaze used; sometimes all three colors (black, cobalt blue, and turquoise or green) were used together under a transparent, colorless glaze (Fehervari, 1973: 94). Examples of underglaze painted pottery include Silhouette-decorated underglaze painted pottery, 7th-

century underglaze painted pottery known as Soltaniyeh ware, and black-pen turquoise pottery (Tohidi, 2013: 272-273). This type of pottery belongs to the 6th and 7th centuries AH (Tohidi, 2013: 271). In the Neyshabur Museum, three samples of underglaze painted pottery have been found. One sample is a bowl with black-pen turquoise decoration, featuring radial black motifs, geometric and plant patterns, and a white inscription on a band under turquoise glaze, dating back to the 7th century AH (Table 16). Another example is a plate with underglaze turquoise painting, known as black-pen turquoise, with arabesque designs in the center and Kufic script around the inner rim, belonging to the 6th and 7th centuries AH (Table 17). Another sample is a bowl with a white body and radial black motifs, geometric and plant patterns, and a white inscription under a transparent glaze, attributed to the 5th to 8th centuries AH (Table 18).

Table 16: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample |
|---|
|  |
| Bowl, turquoise, black ink (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 823 |












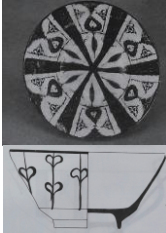
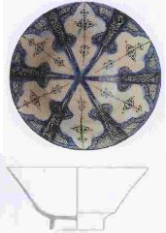



| Similar samples | | | | |
|---|--|---|--|---|
|  |  |  |  |  |
| Bowl, black ink, Kashan, 13 th century AD (7 th AH) (Pope et al., 2008: 735). | Bowl, black ink, Kashan, 13 th century AD (7 th AH) (Pope et al., 2008: 737) | Bowl, black ink, Iran, Kashan, early 13 th century AD (7 th AH) (Fehervari, 1973: Plate 49, b No.112. | Bowl, black ink, Gorgan, 13 th century AD (7 th H) (Kambakhshfard, 2000: 532, Fig. 194). | Ceramic, black ink, Gorgan, Khorazmshah period (Kiani, 2001: 158). |

Table 17: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample | | | | | |
|---|--|---|---|--|---|
|  | | | | | |
| Plate, Qalam-Meshki turquoise (Neyshabur Cultural Heritage and Tourism Department website) | | | | | |
| Similar samples | | | | | |
|  |  |  |  |  |  |
| Bowl, black ink, Gorgan, 13 th century AD (7 th AH) (Kambakhshfard, 2001: 532, Fig. 200). | Pottery fragment, black ink, Sistan, 7 th to 15 th centuries AD (1 st to 9 th AH) (Mousavi Haji et al., 2019: 1086, Fig. 19) | Bowl, black ink, Kashan, 13 th century AD (7 th AH) (Kambakhshfard, 2001: 532, Fig. 199). | Mashreba, black-penned turquoise, Kashan, 13 th century AD (7 th AH) (Shafie Sararodi et al., 2019: 73, Table 3). | Pottery fragment, turquoise, black ink, Hamedan (Saman), Middle Ages to Late Period, especially Ilkhanid period (Hemati Azandaryani et al., 2017: 198, Fig. 12). | Pottery fragment, black ink, Markazi Province (Tahigh), 12 th and 13 th centuries AD (6 th and 7 th AH) (Sharahi et al., 2019: 150, Table 5, Figure 4). |

Table 18: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample | | | | |
|---|---|--|---|--|
|  <p style="text-align: center;">Bowl, underglaze pottery (Neyshabur Cultural Heritage and Tourism Department website) Registration number: 851</p> | | | | |
| Similar samples | | | | |
|  <p>Underglaze painting bowl, Rey, 14th century AD (8th AH) (Karimi et al., 1986:197, Fig. 60).</p> |  <p>Bowl, underglaze painting, Kashan, late 11th and 12th centuries AD (5th and 6th AH) (Rafiei, 1998: 223, Fig. 125; Frye, 1995: 263, Fig. 18).</p> |  <p>Bowl, underglaze painting, Kashan, 13th century AD (7th AH) (Pope et al., 2008: 736).</p> |  <p>Bowl, underglaze painting, Iran, Kashan, early 13th century AD (7th AH) (Fehervari, 1973: Plate 49, a No. 109).</p> |  <p>Bowl, underglaze painting, Iran, Kashan, 12th century AD (6th AH) (Watson, 2004: 339, cat.N.7)</p> |
|  <p>Bowl, underglaze painting, Gorgan, Khwarazmian period (Kiani, 2001: 157)</p> |  <p>Bowl, underglaze painting, probably Gorgan, 13th century AD (7th AH) (Morgan, 2005: 177, Fig. 213)</p> |  <p>Bowl, underglaze painting, Kashan, early 13th century AD (7th AH) (Jenkins, 1983: 22, Fig. 23).</p> |  <p>Bowl, underglaze painting, Iran Kashan, early 13th century AD (7th AH) (Wilson-Allen, 2004: 29, Fig. 11).</p> |  <p>Bowl, underglaze painting, probably Gorgan, 13th century AD (7th AH) (Morgan, 2005: 177, Fig. 214).</p> |

III6.4. Overglaze Painted Pottery

Overglaze painted pottery can be divided into three categories: lusterware, minai or seven-color ware, and lajvardina ware (Tohidi, 2013: 273).

Lusterware

One of the most beautiful and high-quality types of pottery in the Islamic era is lusterware, which is renowned for its glossy and transparent glaze and the use of purple and brown glazes. Evidence suggests that this type of pottery was common in both pottery and

glassmaking from the 3rd century AH (Tohidi, 2013: 273). The peak production of these wares occurred during the Seljuk, Khwarazmian, and Ilkhanid periods (6th and 7th centuries AH) (Tohidi, 2013: 274). In the Neyshabur Museum, a sample of lusterware in the form of a bird figurine (dove) with ochre and brown lines is displayed, dating back to the 6th and 7th centuries AH (Table 19). Another example is a lusterware tile in the shape of a sunburst or eight-pointed star with floral motifs, attributed to the 6th and 7th centuries AH (Table 20).

Table 19: Pottery samples in the Neyshabur Museum and their comparison with similar samples









| Sample | | |
|--|---|---|
|  <p>Pigeon statue, Zarinfam (Neyshabur Cultural Heritage and Tourism Department website)</p> | | |
| Similar samples | | |
|  <p>Ghosh, Zarinfam, Rey or Saveh, 13th century AD (7th AH) (Pope et al., 2008: 647).</p> |  <p>Falcon, Zarinfam, Rey, late 12th and early 13th centuries AD (6th and 7th AH) (Fehervari, 1973: Plate 43, a,b No. 100)</p> |  <p>Statue, Zarinfam, Iran, Seljuk to Ilkhanid period The Metropolitan Museum of Art</p> |

Table 20: Pottery samples in the Neyshabur Museum and their comparison with similar samples

| Sample | | |
|---|---|--|
|  <p>Pigeon statue, Zarinfam (Neyshabur Cultural Heritage and Tourism Department website)</p> | | |
| Similar samples | | |
|  <p>Tile, Zarinfam, Rey, late 12th century (6th AH) (Arabbeighi et al., 2016: 50, Fig. 4a; Pope et al., 2008: 1794).</p> |  <p>Tile, Zarinfam, Kashan, 12th century (607 AH), (Frye, 1995: 276, Fig. 7).</p> |  <p>Tile, Zarinfam, Kashan, 13th and 14th centuries (7th and 8th AH) (Abdollahi et al., 2021: 23 Fig. 3, Sample 2).</p> |

IV. Conclusion

Based on the studies conducted, the medieval pottery in the Neyshabur Museum is divided into two categories: unglazed and glazed. Unglazed pottery includes simple wares (oil lamps, candlesticks), unglazed wares with molded designs (jugs, seals, pendants, or lids), clay molds (negative, positive), unglazed wares with stamped designs, and unglazed wares with added designs (jars). Glazed pottery includes monochrome glazed wares (plates, jugs, tiles), pottery with sgraffito decoration (bowls), underglaze painted pottery (black

pen) (bowls and plates), and overglaze painted pottery (lusterware) (bird figurines, tiles). Based on comparative studies and comparisons with similar pottery from other regions such as Hamedan (Samen and Zinoabad), Markazi Province (Moshkin Tepe and Tehiq), Neyshabur, Gorgan, Khorasan, Jiroft, Amol, Mazandaran, Kashan, Rey, Susa, Khuzestan (Askar Mokram), southern Iran, Takht-e Soleyman (Abaqa Khan Palace), and Sistan, these pottery pieces date back to the 5th to 8th centuries AH.

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