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Rare and Complex Wares: A Study of Vessels and Sherds Decorated with Both *Mīnā'ī* and Lustre Techniques

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Abstract

The two most prestigious and technically challenging types of ceramic decoration used in the Islamic world during the sixth–seventh/twelfth–thirteenth centuries were *mīnā'ī* and lustre. By far the rarest type of mediaeval ceramic wares are the pieces featuring both types of overglaze decoration on the same vessel. This article examines the corpus of twenty-two sherds, including repaired and several previously unpublished examples. They are studied together to show the two main types of wares and their connection to other categories of *mīnā'ī* ware.

Keywords

ceramics – *haft-rang* – Iran – lustre – *mīnā'ī* – museums – sherds

1 Introduction

The two most prestigious and technically challenging ceramic decoration techniques used in the Islamic world during the sixth–seventh/twelfth–thirteenth centuries were *mīnā'ī* and lustre. *Mīnā'ī* (or *haft-rang*, seven colours) was in use in Iran, and seemingly primarily in the region of Kashan in central Iran, in the later part of the sixth/twelfth and the first few decades of the seventh/thirteenth centuries. It consists of a mix of in-glaze and overglaze applications of enamel pigments made of ground glass, with metal oxides providing the colour. The result is a brightly coloured miniature decoration that is largely figural, with a level of detail and polychromy not seen in other types of mediaeval ceramic wares.¹ Lustre is a process of creating a metallic sheen on the vessel's surface,² which can be either painted in detail or cover large areas and then have the pattern scratched to reveal the white glaze beneath.³ This latter approach allowed for finer detail than was generally possible with painted lustre.

By far, the rarest type of mediaeval Iranian fine-glazed ceramic wares is the pieces featuring both types of overglazed decoration on the same vessel. The pieces that combine both techniques are categorised as Style 9 in the new taxonomic framework developed for *mīnā'ī* ware.⁴ The rationale for mediaeval potters in Iran attempting to produce such wares is clear. The successful combination of the bright and crisp colours and miniature detail made possible with *mīnā'ī* and the flashing reflective metallic sheen of lustre would have resulted in a dazzling *tour de force* of the potters' art on a single vessel or tile.

The reasons that so few fragments survive lie in the extreme technical challenges created in the attempt to combine these two techniques. Each one alone is fraught with risk, and many pieces of *mīnā'ī* ware have over-fired colours, which turn blotchy or run.

There is an inherent risk for parts of the kiln to be hotter than others, causing the lustre to adhere to the glaze irregularly. In addition, having a different colour inside than outside is common with the lustre of Style 9 wares, and it is difficult to match the temperature requirements for the two techniques (Watson, 1985: p. 36). It was clearly an extremely challenging combination to execute successfully because if the temperature in the reducing kiln was not hot enough, the lustre would not fully bond with the glaze.⁵

The problems of authenticity with most seemingly complete *mīnāʾī* ware vessels are well-documented,⁶ and for that reason, sherds and bowl bases are studied alongside some seemingly complete but actually restored pieces. While incomplete, sherds have generally not been altered and are much more reliable as evidence for establishing both the nature of the production process and the main design principles.

The aim is to demonstrate the nature and scope of the corpus of these little-known types of mediaeval overglazed ceramic wares, including several previously unpublished sherds, and to examine the rich diversity within the two main sub-groups. Little is known about the production of *mīnāʾī* wares, but they were commercially successful and widely distributed across the Islamic world and beyond. While this is likely to have been the case with the Style 9 wares that are the focus here, none of the pieces has secure archaeological provenance, meaning the pieces have to be closely studied and examined as a group of technically and stylistically related wares to try and ascertain a clearer sense of how and why they were manufactured according to this process.

Very little has been written on the wares featuring *mīnāʾī* and lustre decorations. Arthur Upham Pope (1881–1969) addressed two examples briefly in *A Survey of Persian Art* (1938: pp. 1596–99), focusing primarily on a partial tile in Boston along with a bowl signed by al-Muqri owned by Franklin Mott Gunther (1885–1941). It was not until Oliver Watson's landmark book on Persian lustreware that additional examples were addressed concerning combining the two techniques (1985: pp. 36, 84).

The small corpus of twenty-two pieces spread across several major Islamic art collections worldwide consists of fragments and repaired vessels⁷ and can be roughly divided into two main groups. Firstly, there are finely executed pieces featuring superbly painted figures with delicate and intricate lustre decoration in the background, called Style 9a. The second group, Style 9b, features smaller and more crudely painted figures in *mīnāʾī*, and simpler and less well-executed lustre decoration, covering smaller areas in less detail. Having examined the two groups, attention will turn to two museum objects that appear to be part of the corpus but are actually composite vessels made up of elements of two or more unrelated pieces. The lustre decoration on Style 9 wares appears to be subordinate to the *mīnāʾī* and was used mainly for its surface effect, with the *mīnāʾī* used for the intricate miniature polychrome detail. The lustre tends to dominate the exterior, with the interior generally being the focus of combining the two different overglaze techniques.

2 Style 9a

In most pieces of the more complex and well-executed Style 9a sub-group, the lustre is combined with a distinctive cursive *Naskh* script in light green, delineated in black. Furthermore, several elements associated with Style 1,⁸ including in-glaze blue arabesque patterns, blue Kufic, and the associated light green elements delineated with overglaze black and red, can be seen on the Style 9a sherds and partially complete bowls. There are also three essentially complete, if repaired, bowls featuring the same type of green and black cursive inscription style. One is in the Sarikhani Collection⁹ (Figs. 1–2), one had been in the Gunther Collection (Fig. 3), and another is in the Musée du Louvre¹⁰ (Figs. 4–5). There is a lustre-painted bird inside the foot of the Sarikhani bowl and a similar lustre-painted animal in the foot of the Style 9a bowl base in Kuwait.¹¹ These

birds, in addition to the similar inscription styles, suggest that one particular workshop produced much of the surviving corpus of wares with both lustre and *mīnāʾī* decoration.

The lustre can be seen to have been applied both as a wash over the surface where patterns were scratched through revealing the white base glaze beneath, and also carefully applied to make the generally vegetal pattern itself in lustre, with the background white. However, unlike vessels exclusively decorated in lustre, there are only two examples of Style 9 wares with any figural lustre decoration.¹²

Although there are two known Style 9a bowls signed by al-Muqri, one has not been recorded fully, and its current whereabouts are unknown. The one in the Sarikhani Collection (Fig. 1) is well documented, and while virtually no lustre remains on the interior,¹³ there are large areas on the exterior (Fig. 2). It is a cavetto bowl on a narrow-everted foot ring, and while it appears to be unfinished, it probably just appears to be the result of over-firing in the kiln. The bowl has extensive restoration, especially to the rim, and features an exceptionally well-drawn horse and rider. Alongside much of the lustre failing to form fully, the blue in-glaze decoration has overfired slightly and sunk into the white base glaze. There is irregular adhesion of the lustre, with a combination of scratched and painted decoration and a dark brown lustre bird painted in the base on the underside of the bowl (Fig. 2c).

The cursive inscription on the exterior consists of a Persian quatrain, with areas of restoration (Fig. 2a), an Arabic couplet, and the artist's signature, and reads:¹⁴

Since my heart is a slave of love, what use is a free body? Like life, union with you is gone like the wind, what use is it? (...) your love, but since there is none to help me, what use is crying out? Learn the rule of writing, O you who would be cultivated, for what is writing other than the ornament of the cultivated? Muqri wrote it.



FIGURE 1
A Style 9a cavetto bowl signed by al-Muqri, the Sarikhani Collection, I.CE.2006.2132
© PHOTO BY RICHARD MCCLARY



FIGURES 2A–C
Details of a Style 9a cavetto bowl
signed by al-Muqri, the Sarikhani
Collection, I.CE.2006.2132
© RICHARD MCCLARY

The lustre in the background of the inscription is painted, and unlike some of the other examples, there is no white reserve left around the lettering (Fig. 2). Although only part of the name is given on this bowl, the form and the external decoration in-glaze blue decoration on both al-Muqri bowls are almost identical (Figs. 2–3).

The other Style 9a cavetto bowl signed by al-Muqri, also featuring a figure on horseback, was published by Arthur Upham Pope in 1936 (Fig. 3) and was then part of the Franklin Mott Gunther Collection (Pope, 1936: pp. 144–7). A top-down view was published in colour, along with a small black and white side view revealing extensive restoration, part of the cursive inscription with the name, and similar decoration to that found on the exterior of the Sarikhani bowl (Pope, 1936: p. 146, fig. 1). The present whereabouts of the bowl is unknown, and there is no known image of the underside, but it is one of the few pieces of Style 9 with even an indication of its origin, with Pope stating that it was found in Kashan (1936: p. 146).¹⁵ Assuming at least some of the colour on the horse and the rider's clothes are original, the bowl appears to be in a more finished



FIGURES 3A–B

A Style 9a bowl signed by Muhammad ibn Abu'l-Hasan al-Muqri, formerly in the F. M. Gunther Collection, current whereabouts unknown

AFTER POPE AND ACKERMAN, 1938: PL. 705 AND POPE, 1938: P. 146, FIG. 1

state than the Sarikhani piece but lacks the arabesque background decoration around the central figure. Although only a minute area of lustre is visible on the interior of the Gunther bowl, there is more intact detail than inside the Sarikhani bowl. Unfortunately, it is not possible to determine how much, if any, lustre survived on the exterior of the Gunther bowl due to the low resolution of Pope's 1936 image (Fig. 3b). As well as the form, general decoration, and signature, both al-Muqri bowls have the same in-glaze blue Kufic inscription around the top of the interior, in the manner of an undecorated Style 1 inscription band.

A significant Style 9a bowl base and rim section, currently embedded within a matrix of plaster fill and modern fired sherds to form a seemingly complete vessel, is in the Musée du Louvre.¹⁶ An image (Fig. 4) reveals the original sherds, with the modern material digitally removed for clarity. Alongside the leading central horse and rider in *mīnā'ī* decoration and the cursive cavetto and Kufic rim inscription bands, there are multiple surviving areas of lustre decoration in a variety of different tones. Unlike most examples, the bowl in its original state had a wide flat rim on the same plane as the base, with a shallow cavetto.

The outer section of the flat rim has ruby red lustre flashing on the narrow band above the inscription and darker red lustre on the small lobes of the edge itself. Below these are intricate areas of scratched and painted lustre infill around the upper sections and between the vertical shafts of the lettering of the main Kufic inscription with in-glaze blue (Fig. 5a).

The blue glaze colourant has bled due to over-firing on the rim's inscription and on the rider's textile, with the blue fabric and the red and black accents in slight relief. The blue inscription band has a matt finish, but there are some traces of gold that appear to have burned. These remain within the original confines of the letterforms, with the blue presumably spreading during one of the kiln firings.

The surviving portion of the cursive Persian inscription band in the cavetto of the bowl – in light green with a thin black outline – is delineated in the same manner as several other Style 9a sherds and partial bowls, and there appear to be traces of lustre around the cursive inscription. This light green with a fine black outline and the blue Kufic links the Style 9a wares with some general characteristics of the most common Style 1 *mīnā'ī* wares. While the cursive Persian inscription has eluded any meaningful translation, the text appears to be:

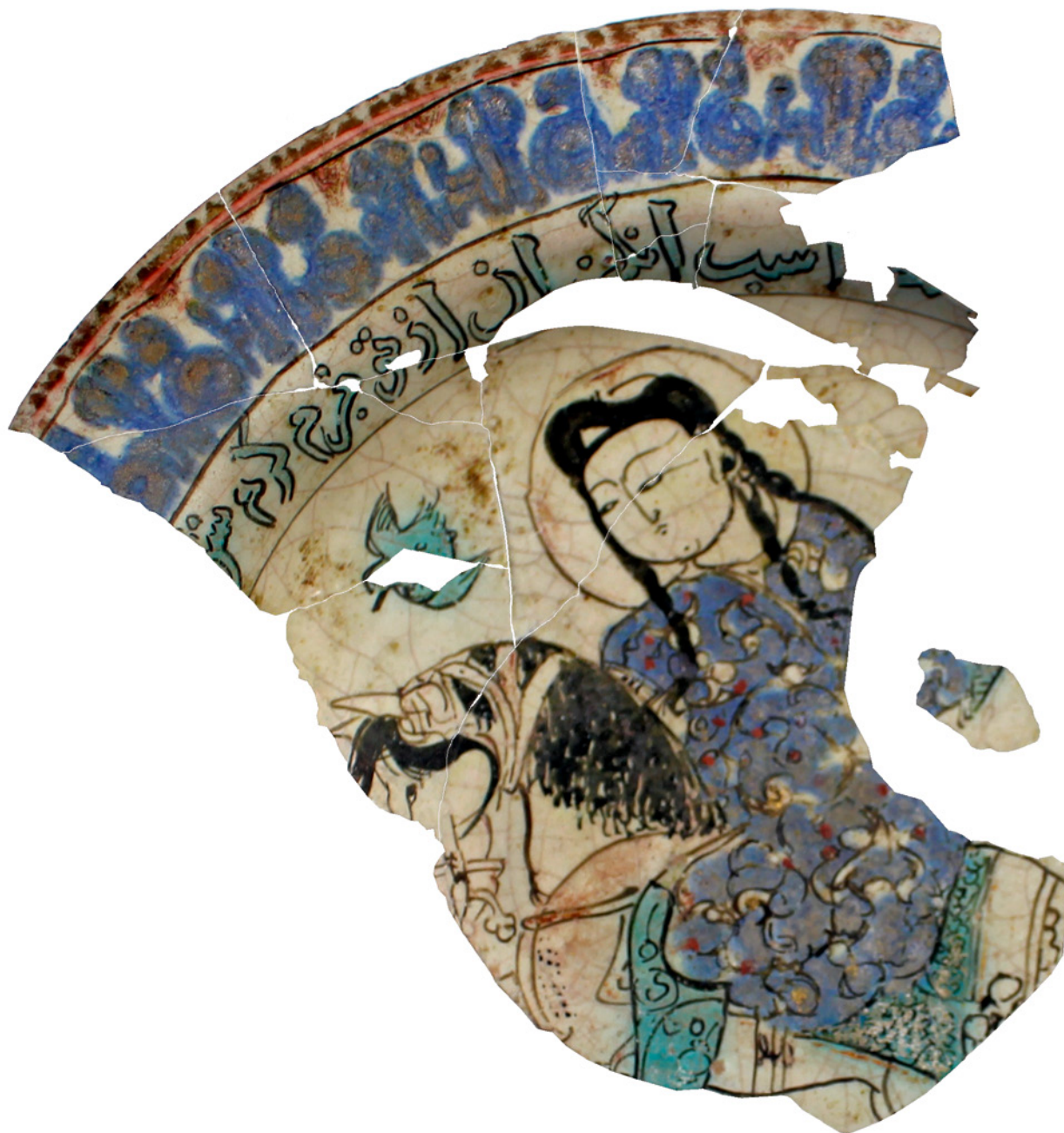
اسب افکن آب از تو بزم کرم شر

The main decoration on the bowl features a figure on horseback, and similarly to numerous other Style 9a bowls, the horse's features are incredibly well delineated. There seem to be traces of lustre around the figure, with two areas around the small bird to the left of the head of the figure, but it is hard to be certain if the white background was originally adorned with lustre.

There are traces of gilding on the red outlined halo around the head of the rider, and while these may be original, so many extensive interventions have been undertaken that it's hard to determine if they are original. The same is true of the horse trappings, but given the recent removal of some brown toning from the original and the more recently fired sections of the bowl, the level of the original decoration is hard to discern.

The only decoration on the exterior of the piece is lustre, with no evidence of any *mīnā'ī* over-glaze ornament, and while it has clearly suffered significant losses, it may never have had a great deal of lustre decoration bonded to the glaze.

The wide band on the exterior of the cavetto has a darker golden-brown lustre. Below are three narrow guard bands, the outer two are a more yellow-gold lustre, while the



middle band is a darker red lustre. The fragmentary remains make it hard to determine the nature of the decoration on the wide band, but the lobes on the underside of the large flat rim, similar in form to that seen on the inner rim of much earlier 'Abbasid lustre wares from Iraq,¹⁷ are mottled and abraded but clearly visible (Fig. 5b).

The foot ring is unglazed but with applied red lustre, and at the top of the footing on the lowest section of the glazed portion, there is a dark and glossy brown band of lustre.

Despite the fragmentary nature of the bowl, it's clear that the example was unusually shaped, and despite losing control of the blue, the piece was considered valuable enough to add lustre decoration in a variety of different compositions to give a multiplicity of colour tones, alongside the addition of areas with gold leaf. This significance was also recognised in the modern era when a great deal of effort was put into creating a newly fired section to complete the vessel, and despite the extensive repairs and less than a quarter of the original bowl having survived, it remains on display within the Islamic galleries in the Musée du Louvre.

FIGURE 4
Original sherds of the Style 9a
bowl in the Musée du Louvre,
MAO 44
© RICHARD MCCLARY

FIGURES 5A–B
Rim detail and exterior lustre
decoration of the Style 9a bowl in
the Musée du Louvre, MAO 44
© RICHARD MCCLARY



FIGURES 6A–B
Style 9a sherd, National Museum
of Iran, Tehran (67)
© HASSAN MORADI

While the majority of the corpus is now outside of Iran, there is a sherd in the National Museum of Iran in Tehran¹⁸ with a section of a standard Style 1 inscription band, and a portion of the green leaf outlined in black, on the exterior surface. In addition, there is also very finely executed lustre decoration with two different types of lustre pigment, a redder outline and a golden colour used for filling the delineated areas (Fig. 6). The quality of the lustre and the crispness of the *mīnāʿī* shows that the original piece was fired successfully. The sherd has a cursive green inscription with a black outline on the interior and bears the same sort of lustre decoration as seen on the al-Muqri bowl in the Sarikhani Collection. However, while fragmentary, the lustre on the sherd is much better preserved than on any of the Style 9a bowls. The exterior features blue lines and an area of turquoise with a fine black outline in the manner of the Style 1 wares but has a finely drawn lustre design in red with areas of golden-brown infill. The sherd is a piece from a bowl that successfully combined the two techniques on both the interior and exterior, making it a particularly important example. A small area of the white background was left around each group of connected cursive letters on the interior, and then dense lustre decoration was painted in the remaining space. This created a lustre band with the *mīnāʿī* inscription still clearly legible.

The same area of white reserve around the letters can be seen on the Style 9a bowl base in Kuwait. However, another Style 9a sherd in Tehran¹⁹ has a small fragment of a similar cursive inscription but lacks the reserved areas around each letter form, so there was clearly a degree of diversity across closely related types of Style 9a wares. Moreover, there appears to have been a Kufic inscription band in lustre above the green *Naskh* example (Figs. 7a–b), while another sherd,²⁰ seemingly part of the same vessel, has a combination of painted and scratched lustre decoration, along with the former (Figs. 7c–d).

Much like the Style 9a sherd in the Freer, the three sherds in Tehran retain a far more significant amount of lustre than the majority of seemingly complete Style 9a



FIGURES 7A–D
Style 9 sherds (128) top and (129)
bottom, National Museum of Iran,
Tehran
© HASSAN MORADI

bowls. There is no evidence of any loss of control of the in-glaze blue visible on two of the sherds. These all demonstrate that the combination of the two technically challenging surface treatments was perhaps more successfully executed than the corpus of bowls with faint, partial, or mostly missing lustre and blotchy in-glaze blue might suggest.

The better state of preservation also allows for some observations concerning the production process. It can be observed that the black overglaze lines were added above the lustre and fixed in the final firing of the vessel. Given the need to fire the base glaze and then the lustre, it's clear that these pieces had been fired at least three times.²¹

Another Style 9a sherd in Berlin²² is from the rim of a bowl and features light green decoration with black delineation. On the interior is a section of the Style 1 type inscription band above a section of a *Naskh* inscription in green with a black outline, the type seen on most Style 9a bowls and sherds. The exterior has a green bird delineated in black on a glossy layer of scratched lustre decoration. This small sherd shows that combining the two techniques was not entirely successful, especially on the interior. The blue of the Kufic inscription band around the rim is blurred and appears overfired (Fig. 8). The lustre covers the rim, and the decoration is scratched out of brown lustre on the better-preserved exterior.

There is a Style 9a bowl base in Kuwait²³ with extensive surviving lustre, and a *Naskh* inscription. The cursive green with a black outline text consists of a Persian quatrain and reads:²⁴



FIGURES 8A–B

A Style ga sherd, Museum für Islamische Kunst, Berlin, I.229

© RICHARD MCCLARY

ای بلبل دل فتنه گل زار رخت
 پرگار فلک شکسته درکار رخت
 جان بردیر و ندید کسی می بخرد
 صد دل بجوئی برون باران رخت
 برکه

The nightingale of my heart is lost in the rose garden of your face
 The compass of the constellation broke because of your face
 I survived, but you did not bother to hunt my heart
 (but) You hunt hearts by just a glimpse of your face
 Blessing²⁵

Only the bottom sections of the cavetto survive, but enough remains to see that the interior featured a series of nine blue outlined roundels, each containing a combination of in-glaze blue and thin lines of lustre decoration. In contrast, the exterior has larger areas of much darker brown lustre and traces of roundels in blue (Fig. 9). There are also lower sections of light green decoration visible on the exterior wall, but they are too fragmentary to identify clearly.

There are two colours of lustre employed in the interior, a browner one for most of the decoration and a redder one applied more finely around the cursive light green inscription in the form of delicate vegetal tendrils.²⁶ This bowl base features five different lustre techniques. There are two in combination, namely the fine tendrils painted with a red lustre and then the golden-brown lustre painted around them as the background. The same light brown lustre paint is applied in the four sections of the bowl's base through the form of split palmettes²⁷ (Fig. 9). On the underside of the bowl there is a dark brown lustre bird in the centre, and finally a band of the same dark lustre around the edge with a simple scratched lustre inscription repeated either two or three times, with each group separated by a simple spiral pattern (Fig. 10).

Unlike the Sarikhani al-Muqri and Paris bowls, and even the Tehran sherd, the Kuwait Style ga base has a line with a different mix of lustre painted to create the white reserve around each word and letter formation of the cursive inscription and a different mix of lustre used to fill in the delineated space (Fig. 10). As the al-Muqri, Kuwait, and Tehran examples reveal, a similar type of green cursive text with a black outline was used on both the interior and exterior of bowls.²⁸

Some types of decoration applied in lustre on Style ga wares can also be found on vessels entirely lustre-decorated. One example is a fragmentary and unrestored cavetto

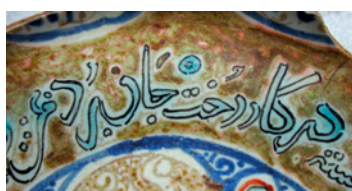


FIGURE 9

A Style ga bowl base, Al-Sabah Collection, LNS 877 C

© AL-SABAH COLLECTION, DAR AL-ATHAR AL-ISLAMIYYAH, KUWAIT

FIGURES 10A–B

Details of a Style ga bowl base, Al-Sabah Collection, LNS 877 C

© RICHARD MCCLARY

bowl section in Los Angeles.²⁹ The exterior decoration features the related vegetal designs, birds, and scratched decoration evident across the corpus of Style ga wares, demonstrating the shared ornament vocabulary. As the Los Angeles example shows (Fig. 11), the crispness of detail that is possible when only lustre is applied and no additional overglaze firing is required highlights the problems potters sometimes experience when trying to combine the two different techniques on the same vessel. While the quality of the lustre on the Style ga bowl base in Kuwait is among the best in the corpus, the difference between the finish of the decoration on the fragmentary lustre bowl in Los Angeles is striking.

A sherd in Washington DC³⁰ exhibits several details suggesting it's likely to have formed part of a Style ga bowl. It has the scratched lustre not seen in Style gb wares and a wider colour palette. The layer of lustre applied around the *mīnāṭ* bird is thinner than on the other panel of lustre on the sherd. While the former is a little lighter, it seems that there may have been too much applied to the other area, as the lustre has spread and caused light pink staining of the white sections, which was revealed by the process of scratching through the lustre layer before firing (Fig. 12). This effect, also observed on the base of the Style ga bowl in Kuwait (Fig. 10) is an example of red-flashing. It is caused by the copper becoming slightly volatile and staining the glaze around the design (Watson, 1985: p. 35) and is not commonly found on Style g wares.³¹



FIGURE 11
A partial lustre cavetto bowl, Los Angeles County Museum of Art, M.2002.1.187
© CREATIVE COMMONS



FIGURE 12
A Style 9a sherd, Freer Study Collection, FSC-P-4804
© CREATIVE COMMONS

In addition to the blue in-glaze colourant used for the lines providing the basic design and the brown under-drawing of the duck, many overglaze colours were used on this one small sherd. There is grey for the head, black for the outline and part of the neck, brown for the beak and the other half of the neck, pink for the main body, red for the feet and legs, and finally, green accents on the body and wing tip. This is a far greater range of colours than was applied to most pieces of *mīnā'ī* ware and indicates a higher-quality example.

A de-restored fragmentary cavetto bowl in the National Museum of Iran in Tehran³² appears at first glance to be Style 1d (Fig. 13). However, on closer examination, there are faint traces of scratched lustre decoration partly in the background of the interior inscription band (Fig. 14). Although only visible on a small area, it is enough evidence to suggest that the bowl should be considered an example of Style 9a.



FIGURES 13A–B
A Style 9a cavetto bowl, National
Museum of Iran, Tehran, 3985
© HASSAN MORADI

The bowl features the same cursive inscription in green with a black outline and the basic in-glaze blue design on other examples of Style 9a. In addition, the form, and the well-executed hands and faces of the two seated figures, albeit not single horsemen, are close to those found on the two bowls signed by al-Muqri. The bowl is particularly important as it bears the date *shawwāl* 604 (April 1208),³³ making it the only dated piece of a Style 9 ware.³⁴ As with many other examples of Style 9a, the in-glaze blue has not been controlled, it was overfired and then bled. This defect is especially clear in the case of the trunk of the central tree (Fig. 13).

In addition to the Style 9a pieces that share numerous characteristics with Style 1 wares, especially those with green and black outlined *Naskh* inscriptions, there are three more pieces also classified as Style 9a wares based on the quality of the painted and incised lustre. One of the most impressive and well-preserved bowls is in the Musée des Beaux-Arts in Lyon (Fig. 15).³⁵ It is a cavetto bowl on a high foot and features a

FIGURE 14
Traces of scratched lustre in
the background of the interior
inscription band of a Style 9a
cavetto bowl, National Museum of
Iran, Tehran, 3985

© PHOTO BY HASSAN MORADI



FIGURE 15
A Style 9a bowl, Musée des
Beaux-Arts, Lyon, E 698
© MUSÉE DES BEAUX-ARTS,
LYON



central horse and rider in the middle, albeit smaller than the one in the Louvre, or the two al-Muqri bowls. There is a blue Kufic inscription around the rim and well-executed detailed lustre decoration, and while it does not have a green and black outlined *Naskh* inscription, the quality of the piece suggests that it should still be considered a variant of Style 9a.

The Lyon bowl has been repaired with at least two new sections on the rim (Fig. 16b), but most of the decoration appears original. On the interior, there are four lustre roundels alternating with simple arabesques in the cavetto. There are also eight inverted triangles with a small pendant placed at the base of the inscription band between each of the main lustre motifs. The roundels are unique in the corpus of Style 9 wares because all feature a seated figure with stippling on the clothing and are surrounded by simple arabesque patterns (Fig. 16a).

Unlike the majority of the other Style 9a wares, the Lyon bowl does not have the scratched swirling lines through the lustre, which are indicative of Watson's Kashan style attributed to after 596/1200.³⁶ The lustre decoration on the Lyon bowl includes designs present on examples of lustre ware categorised as the Miniature style, with similar long-tailed birds seen on a jug in the Victoria and Albert Museum, London.³⁷ There



FIGURES 16A–B
Interior detail and exterior
of Style ga bowl, Musée des
Beaux-Arts, Lyon, E 698
© YVES PORTER



FIGURE 17
A lustre sweetmeat dish, the
Norma Jean Calderwood
Collection of Islamic Art, Harvard,
2002.50.59
© PHOTO BY CREATIVE
COMMONS

are also related arabesques and figural roundels typically associated with Monumental style wares.³⁸

Several lustre sweetmeat dishes, including one in the Khalili Collection³⁹ and another in the Harvard Art Museum⁴⁰ (Fig. 17), have similar seated figures with a stippled dress surrounded by split palmettes set into roundels. The Harvard example also has similar, if slightly simpler, triangular shapes with a circle at the lower tip as can be observed below the inscription band inside the Lyon bowl.

The exterior of the Lyon bowl reveals more clearly the restored areas, as the plaster sections have not been overpainted externally. There is the common lobed motif, but it's in lustre and externally placed rather than on the rim or internally placed, and below there is a blue cursive inscription band with a background of stippled lustre. The inscription band, framed by narrow lustre guard bands, reads:⁴¹

العز الدائم والاقبال الزائد والنصر [لسا] لم (?) والد [...] والدولة والسعادة والبقا لصاحبه

Perpetual glory and increasing fortune and al-[...] and bliss and prosperity to its owner.

Below is a band of silhouette birds in lustre on the lower half of the bowl's exterior. These are very similar to the one seen in the foot ring of the al-Muqri bowl in the Sarikhani Collection, suggesting they may well have been produced in the same workshop.

The presence of different motifs on the Lyon bowl that are common in examples of both Monumental and Miniature style lustre wares demonstrates just how little we still know about the production of lustre and related wares during the late sixth/twelfth and early seventh/thirteenth centuries in Iran. The presence of figures and the lack of the incised lustre decoration seen on the majority of other Style ga wares demonstrate the



FIGURES 18A–B

A Style 9a tile with a scene from the *Shah-nama*, Museum of Fine Art, Boston, Julia Knight Fox Fund, 31.495

© 2023 MUSEUM OF FINE ART, BOSTON

difficulties of piecing together a clear picture of the scope and diversity of joint *mīnāʿī* and lustre decorated wares from such a small corpus of sherds and repaired bowls.

The only tile in the corpus of Style 9 wares is in the Museum of Fine Art, Boston.⁴² It was one of the earliest examples of the Style 9 ware to be published along with the now-lost al-Muqri bowl.⁴³ Just over half of the tile survives, with only three and a half of the original eight points intact (Fig. 18a). While there are numerous pieces of *mīnāʿī* ware with an identifiable scene from the *Shāh-nāma* (Book of Kings), this is the only example that also has a cursive inscription describing what is depicted. The text reads: *the Iranians leaving Forud's fortress*.⁴⁴

The surface of the tile is packed with figures, and there is not a lot of background, but the remainder is adorned with very finely painted and scratched lustre (Fig. 18b). The beards of the two primaries are depicted in a distinctive and very sophisticated manner, and the lustre decoration is also very well executed and successfully fired. Despite the lack of many other characteristics of Style 9a wares, combining two types with refined lustre decoration suggests that the tile should be considered an example of Style 9a.

It has long been assumed that both *mīnāʿī* and lustre wares were luxurious, making the examples that combine both techniques especially desirable. While not as luxurious as textiles or precious metals, the multiple firings and in some cases, the use of gold indicate that Style 9 *mīnāʿī* wares were a luxury.⁴⁵ However, the level of luxury these wares represent remains unclear. These ceramics were produced at two levels of quality, given that the Style 9b wares are more quotidian in nature. Concerning luxury ceramics more broadly, Watson (2006: p. 328) notes that such wares are fragile, with no intrinsic value, and made with relatively cheap raw materials. They were essentially worthless when broken, yet still, large numbers were sold and traded in the late sixth/twelfth and early seventh/thirteenth centuries. Their existence indicates that many customers with surplus cash acquired these non-essential items.

Such material was clearly not the preserve of the highest echelons of society, and the only extant piece of Style 9 ware that might have had royal or elite associations is the partial tile in Boston. Individually, it is unlikely to have been prohibitively expensive compared to bowls or other vessels. However, assuming the tile was part of a much larger composition, it likely came from an elite structure.

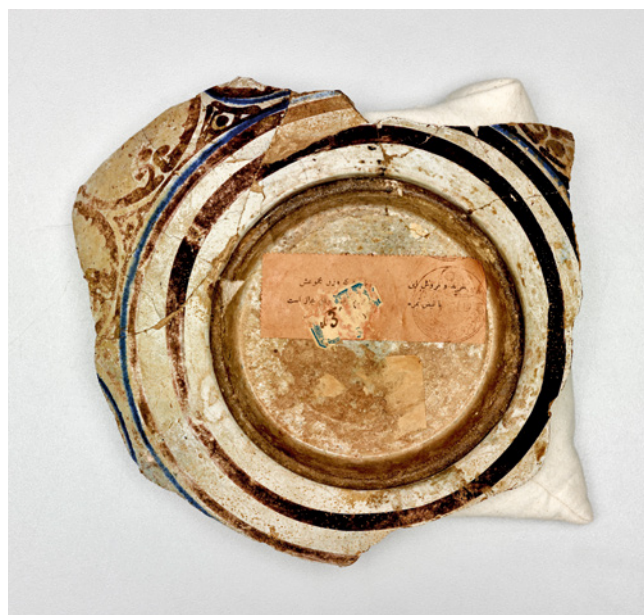
Another example of Style 9a ware with sophisticated use of lustre, both painted and scratched, is a jug in the Freer Gallery of Art (Fig. 19).⁴⁶ Jean Soustiel (1938–99) refers to the vessel as *mīnā'ī* based on the use of black overglaze for the hair and decoration of the textiles on the figures (Soustiel, 1985: p. 104). The jug contains the only painted cursive lustre inscription in the corpus of Style 9 wares,⁴⁷ with one of the sherds in Tehran (Fig. 7a) the only known fragment of what appears to be part of a lustre painted Kufic inscription identified as Style 9.⁴⁸

Even though there is limited stylistic detail relating the Freer jug to Style 1, it does have a comparable colour palette, with light green and blue in-glaze decoration, and glossy black overglaze detail. It is unusual because of the lustre inscriptions and the more common palmette and scratched swirls. As with almost all seemingly complete pieces of *mīnā'ī* ware, this a problematic object that really needs to be X-rayed and then possibly disassembled to differentiate the original elements from the modern clearly.⁴⁹

There is an unusual and very well-executed Style 9a cavetto bowl base in the Keir Collection of Islamic Art (Fig. 20).⁵⁰ It is much more of an anomaly than the Lyon bowl



FIGURES 19A–B
A Style 9a jug, Freer Gallery of
Art, 29.9
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FIGURES 20A–B
A Style 9a bowl base, the Keir
Collection of Islamic Art on loan
to the Dallas Museum of Art,
K.1.2014.837
© THE KEIR COLLECTION OF
ISLAMIC ART



FIGURE 21

A detail of a Style 9a bowl base, the Keir Collection of Islamic Art on loan to the Dallas Museum of Art, K.1.2014.837

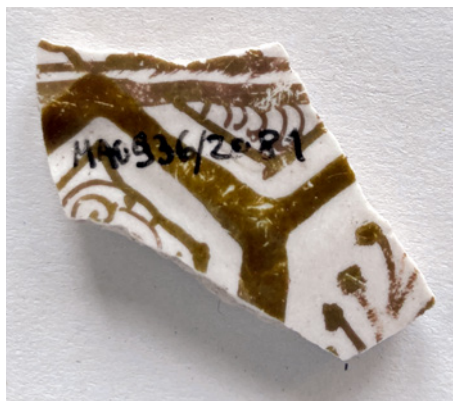
© THE KEIR COLLECTION OF ISLAMIC ART

because it does not appear to have any of the Style 1 characteristics evident on most examples of Styles 9a and 9b. It has a considerable amount of gold with red outline decoration, in the manner of Style 7.⁵¹ Alongside the sherd in the Louvre discussed below, this extremely well-painted piece reveals that while there was undoubtedly a close link between the production of Style 1 and the application of both lustre and *mīnāʾī* to the same vessel, it was not limited to that style, and Style 7 elements were also present. Nevertheless, with such a small corpus, it is impossible to determine the true scope of Style 9 ware production, but as the diversity of examples discussed here demonstrates, a great deal of information probably remains buried in the ground, and a fuller picture will only emerge over time as more material is excavated and published.

Although the hand of the figure to the right of the central tree is a replacement, the faint lustre decoration – both painted and scratched – all over the white background areas appears to be unaltered. The interior of the bowl features extensive overglaze decoration and intricate lustre in the background, but the exterior is far less decorative (Fig. 20b). The dark bands around the base and the roundels on the wall, all in much darker lustre than is found on the interior, are very similar to a large and recently conserved lustre bowl in the Ashmolean Museum, Oxford.⁵²

Similarly to the partial tile in Boston, most of the surface features overglaze *mīnāʾī* decoration, but the areas of background that remain are covered with very finely executed scratched and painted lustre patterns (Fig. 21).

There is a small Style 9a sherd in the Musée du Louvre⁵³ with a section of Style 7b decoration above the lustre. Much like most examples of Style 9b, there is no evidence for the use of scratched decoration, but it does retain stippled lustre on the area of white reserve (Fig. 22) in a similar manner to our Lyon bowl.



FIGURES 22A–B
A Style 9 sherd, Musée du Louvre,
MAO 936/2081
© RICHARD MCCLARY



FIGURE 23
A Miniature style lustre bowl base,
Freer Study Collection, FSC-P-4813
© CREATIVE COMMONS

Even though the sherd is small, a great deal of information about the production process of the vessel can be gleaned. There are three small dots of blue in-glaze colourant, and the red lines seem to have been applied after the lustre was fired. The areas of gold were then applied over the red, which bled into areas with gold in some places. The lustre is well-fired, and the sherd, along with the bowl base in the Keir Collection, is the only other example of a piece of *mīnā'ī* with a combination of lustre and Style 7 decoration. Much like other examples of Style 7 decoration, there is none of the surface crackling on the glaze, which is commonly found on most other styles of *mīnā'ī* ware. The red lines – one was smudged before firing – were applied after the lustre firing, as evident in the lowest red line (Fig. 22a). The sherd has no trace of *mīnā'ī* style decoration on the exterior, but its diminutive size⁵⁴ makes it impossible to be certain. The exterior has moulded hexagons, each one outlined in brown lustre, and although only parts of two hexagons survive, they have a different pattern painted within. Unlike the interior, there is no evidence of any scratched lustre, and two slightly different tones of lustre can be observed on the exterior. The two horizontal bands above are lighter brown, and the wider lines delineating the hexagons are darker, thicker and glossier, and have been applied over the top (Fig. 22b).

There are clear links between the decoration on some examples of lustre ware with figural decoration, and those found on numerous pieces of *mīnā'ī* ware. As the Miniature style lustre bowl base shows (Fig. 23), related figures, horses, the branch with dots motif, and even a Kufic inscription band with the lettering in reserve, as seen in Style 2 *mīnā'ī*,⁵⁵ are found on both types of wares. These similarities suggest at least some of the time that the same painters were working with both lustre and *mīnā'ī*. However, in the cases when both techniques were used on the same vessel, the lustre is generally used solely

as background decoration, with the polychrome overglaze pigments used for the main decoration.⁵⁶

3 Style 9b

The defining characteristics of the second group of Style 9, namely Style 9b, are smaller scale and somewhat more crudely executed figures, alongside Style 1 motifs combined with thicker and less decorative and seemingly poorer fired lustre decoration than with Style 9a wares. There are small and rapidly painted *mīnāʾī* figures and single lines of lustre applied with a relatively wide brush. There is limited detail in the areas of lustre, and it appears to have been used primarily for the surface effect rather than as refined and detailed decoration. The lustre was applied in a similar width and level of detail as the enclosing lines of in-glaze blue rather than the much thinner black overglazed details for the eyes, eyebrows, hair, mouth, and nose of the seated figures.

There are three known examples of bowl bases, two have Style 1c-type decoration. There is lustre applied in the areas around the figures on one from Kuwait, and on the partial base in Paris, also inside the band around the edge of the base. There are two seemingly complete bowls with very similar decoration to the two abovementioned examples, and together all four, as with most of the Style 9a pieces, retain numerous Style 1 characteristics. This commonality indicates that whatever workshops produced the Style 1 wares are likely to have also produced many of the Style 9 pieces.

The Style 9b bowl in the Sarikhani Collection⁵⁷ is carinated, sits on a large, tall, straight foot ring, and has been extensively reconstructed, with areas of plaster fill on the rim (Fig. 24). Much of the lustre has either burned off or never fully adhered, but enough remains to determine that it's fairly crude, with none of the delicacy and quality of execution known to the Style 9a wares. The *mīnāʾī* decoration is all Style 1c in nature, and it is apparent that along with the qualitative difference between Styles 9a and 9b, based on the limited evidence available, the cavetto form was reserved for the former and carinated for the latter. This is a general trend across the wider corpus of *mīnāʾī* ware, with the more luxurious and well-executed large-scale figural decoration generally found on cavetto rather than carinated bowls.

Lustre has replaced the green with black outline leaf and red dots used as background infill decoration on Style 1 inscription bands. The lustre consists of a single line applied with a fairly wide brush. None of the surviving examples of this second and less sophisticated group feature the sort of scratched lustre decoration on the Style 9a wares.

The closest comparable example to the Style 9b bowl in the Sarikhani Collection is a partial bowl base in the Musée du Louvre.⁵⁸ It has Styles 1b or 1c decoration, with lustre applied around the in-glaze and overglaze ornament (Fig. 26).⁵⁹ Both pieces have a single horse and rider on the base with blue zigzag lines on the tunic of the rider and the motif around the edges of the bases is identical.

The same iconography of a horse and rider is seen on both Styles 9a and 9b bowls, but the difference in scale and quality demonstrates the wider range of ware types produced using the same technical processes.

There is another Style 9b bowl base in Kuwait.⁶⁰ It has three figures within roundels similar to the bowl in Toronto, but the blue outline has degraded during burial and now has a rather greyer appearance (Fig. 27).

The only other seemingly complete Style 9b bowl is in the Aga Khan Museum, Toronto. It has experienced extensive restoration and had considerable areas of fill and overpaint.⁶¹ The carinated bowl conforms to the standard pattern of in-glaze blue lines delineating the overall pattern with a series of small seated figures surrounded by lustre



FIGURE 24
A Style gb carinated bowl,
Sarikhani Collection,
I.CE.2006.2132
© BY RICHARD MCCLARY



FIGURES 25A-B
A detail of the interior, and the
exterior of a Style gb carinated
bowl, Sarikhani Collection,
I.CE.2006.2132
© RICHARD MCCLARY



FIGURE 26
Partial Style gb bowl base, Musée
du Louvre, MAO 556
© RICHARD MCCLARY



FIGURE 27
Style gb bowl base, The Al-Sabah
Collection, LNS 783 C
© AL-SABAH COLLECTION, DAR
AL-ATHAR AL-ISLAMIYYAH,
KUWAIT



FIGURE 28
A detail of a Style 9b bowl base,
Al-Sabah Collection, LNS 783 C
© RICHARD MCCLARY

decoration. There is also a Kufic inscription band, but somewhat unusually, it runs around the bottom rather than the top of the wall of the bowl, and it's turquoise rather than the standard blue (Fig. 29).

The bowl holds a few areas with slightly finer quality lustre decoration than most Style 9b wares, although the majority of the lustre is comparable. There is a distinctive hatched lustre motif on the rim, with a finely painted series of sections below, and a stippled band underneath the Kufic inscription band (Fig. 30). While the in-glaze blue lines surrounding the figures in the base are not entirely circular, they are very similar to the ones on the Style 9b bowl base in Kuwait. In both cases, the lustre decoration is the same, and there are tri-lobed forms connecting the roundels containing the figures. The faces of the seated figures and the harpies above the Kufic inscription band are depicted in various ways across the bowl. The bowl features several areas overpainted with plaster fill (Fig. 30a). This bowl reveals that within this category – all are closely related to Style 1 – some pieces contained slightly more sophisticated use of lustre, albeit still quite far removed from the much more refined quality of the work on Style 9a wares.

The exterior of the bowl is exclusively decorated with lustre and features thin redder lines delineating the overall pattern and a more golden-brown mixture for the larger areas of the arabesque decoration (Fig. 30b). This arrangement indicates that alongside the use of multiple *mīnāʾī* pigments, the application of the external lustre was a two-stage process.

Where the re-joined pieces of the bowl did not meet smoothly, the restorers used a thin application of plaster to fill the gap. This decision obscured parts of the original decoration on both the interior and exterior of the same joint (Figure 30b).

Another bowl base that might be Style 9b is in Washington DC.⁶² It features a seated ruler with in-glaze blue and turquoise and small areas with thicker lustre lines typical of Style 9b. Without any trace of overglaze enamel decoration, it may be part of an unfinished waster (Fig. 31). What is unusual about this example is the presence of a small area with scratched lustre decoration on the left side near the figure's elbow. This anomaly indicates that there will always be exceptions when trying to categorise the characteristics of any given group of *mīnāʾī* ware.

In almost all the extant examples of Style 9b wares, the figures have *ṭirāz* bands on their upper arms in white, presumably for the application of gold leaf, but none has been applied. A seemingly unique Style 9b sherd in the Musée du Louvre⁶³ has lustre applied in lieu of gold leaf, filling the black outlined halo around a partial figure (Fig. 32). The style of the small-scale figure is typical of Style 9b wares, but the quality



FIGURE 29
A Style 9b carinated bowl, Aga
Khan Museum, Toronto, AKM773
© AGA KHAN MUSEUM

of the lustre, while not at the level of the Style 9a wares, appears to be somewhat better than most Style 9b wares. Corresponding to some parts of the lustre on the Toronto bowl, this sherd alludes to the degree of diversity in quality within Style 9b, despite the general trend for thicker and less well-executed finishes.

4 Fraudulent Wares

Having examined the extant corpus of Style 9 wares, attention now turns to examples that are not, despite initial appearances, true examples of combined lustre and *mīnā'i* ware.



FIGURES 30A–B

The interior and exterior details
of a Style 9b carinated bowl, Aga
Khan Museum, Toronto, AKM773
© AGA KHAN MUSEUM AND
RICHARD MCCLARY



FIGURE 31
An unfinished Style 9b bowl base,
Freer Study Collection, FSC-P-4778
© CREATIVE COMMONS



FIGURE 32
A Style 9b sherd, Musée du
Louvre, MAO 489/102
© CLAIRE TABBAGH

There is a heavily restored vase in the Walters Art Museum in Baltimore⁶⁴ with Style 2e decoration⁶⁵ on all parts except for the upper rim, which is lustre with a scratched cursive inscription (Fig. 33a). Upon closer inspection, it's clear that the lustre decoration below the inscription band ends abruptly with the use of plaster fill, and it seems that the upper part of a lustre vessel was added to a conglomerate of Style 2 sherds, creating a more appealing object for the art trade. Henry Walters (1848–1931) was warned that many such pieces were in the market by the dealer and tastemaker Dikran Kelekian (1867–1951), but he continued to buy *mīnā'ī* wares with questionable levels of authenticity.⁶⁶ Subsequently, several other pieces of *mīnā'ī* in his collection have also proven to be mismatches of fragments from multiple vessels (Johnston, 1999: p. 286).

Dissimilarly to the true examples of Style 9 ware, at no point do the two techniques intersect with each other on the Baltimore vase.⁶⁷ There are clear break lines between the sections with lustre and with *mīnā'ī*, and large areas of plaster fill the vicinity of where the sherds of the two styles join. Fine crackle lines are visible on the lower *mīnā'ī* section, but there are none on the lustre rim or the overpainted plaster fill sections (Fig. 33b). The large portion of plaster on the right side of the vessel (Fig. 33b) has a black line separating the lustre and *mīnā'ī* sections. In contrast, on the left side, some lustre decoration survives immediately below the inscription band without a black line.

There is another example that initially appears to be an example of Style 9, but is actually a composite of at least two different bowls. It was acquired by Doris Duke, and is now in her former home in Honolulu.⁶⁸



FIGURES 33A–B
A composite lustre and Style 2e
vase, the Walters Art Museum,
Baltimore, 48.1278
© CREATIVE COMMONS

5 Conclusion

This study of the corpus of wares combining both *mīnāʿī* and lustre techniques on the same piece has identified two main variants. Style 9a is the more detailed one, generally with a combination of painted and scratched lustre, refined and larger-scale overglaze painted figural decoration, and usually on cavetto bowls. Style 9b is more common with carinated bowls, features smaller and more crudely executed figures, and has a far less refined method of applying the lustre. The result is a rather muddy appearance with limited decorative detail and no scratched designs. In both Styles 9a and 9b, the majority of the *mīnāʿī* decoration is closely related to that found on Style 1 wares. The similarities among the Style 1 elements and the apparent difference in the quality of execution for both techniques suggest that many of the pieces might have been manufactured in the same workshop and possibly even at the same time. However, the two types may have been produced for different market sectors, with one undoubtedly having been more expensive than the other. Unlike most other styles of *mīnāʿī* ware, all known pieces featuring lustre decoration are on a white base glaze, with no evidence of turquoise examples having been produced.

Despite the small corpus of only twenty-two pieces, there is enough evidence to demonstrate that there was a wide variety of types in production, especially of the more refined Style 9a wares. This degree of diversity among a small corpus demonstrates the innovation and lack of standardisation by artisans in the still barely understood production context of these wares.⁶⁹ What seems likely is that at least some of the Style 9 pieces would have been fired at least three times, rather than the presumed two firings for wares with either wholly lustre or *mīnāʿī* decoration indicated by Abu'l Qasim al-Kashani (Matin, 2020: pp. 468, 474). While most of the pieces are closely related to Style 1 wares, there are two examples with aspects of Style 7 decoration.

The complex and unique nature of this material poses questions about the production process of the two techniques. While the evidence is lacking, the great majority feature Style 1 decoration alongside the lustre, suggesting that for a brief period, one possibly dominant production facility combined the two most challenging overglazed techniques.

Even though two broad styles can be identified, Styles 9a and 9b, there is wide diversity within them, especially in the case of the former. This alludes to other examples, awaiting excavation, inevitably shedding more light on both the production and distribution of these wares. Despite the small size of the corpus, their existence is a testament

to the culture of collaboration, experimentation, and innovation on the part of the artisans responsible for their production, working within a broad range of qualities.

It has been shown that the corpus of wares featuring both *mīnāʿī* and lustre, although small, is somewhat larger than has been understood in previous scholarship. Despite the apparent technical problems inherent in combining the two techniques, there were numerous pieces produced in a variety of different ways. These skilled artisans continued attempts to marry together the intricate polychrome overglaze decoration and the metal oxides that shined like the light of the sun⁷⁰ on the same glazed stoneware surface.

About the Author

Richard McClary received his doctorate, entitled “The Rūm Saljūq Architecture of Anatolia 1170–1220,” from the University of Edinburgh in 2015. He has lectured extensively on the topic of mediaeval Islamic architecture worldwide, is a specialist in the architecture and ceramic arts of the wider Iranian world from the fourth–eighth/tenth–fourteenth centuries, and has conducted fieldwork in Central Asia, India, the Middle East, and Turkey. From 2015–8, he was a Leverhulme Trust Early Career Fellow at the University of Edinburgh, researching the surviving corpus of Qarakhanid architecture in Central Asia. His first monograph, *Rum Seljuq Architecture 1170–1220, The Patronage of Sultans*, was published by Edinburgh University Press in 2017.

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Notes

- For an overview of *mīnā'ī* ware, see McClary (2021: pp. 120–5). I have received a great deal of help from people in numerous institutions, but I'm particularly indebted to Annabelle Collinet at the Musée du Louvre, Bitā Pourvash at the Aga Khan Museum, Ute Franke at the Museum für Islamische Kunst, Sheikha Hussah Sabah al-Salem al-Sabah and the staff at the Dar al-Athar al-Islamiyyah in Kuwait, and Ina Sarikhani at the Sarikhani Collection for facilitating access to items in their respective collections.
- Pradell et al. (2008: p. 123) describe lustre as “a metal glass nanocomposite thin layer made of metal copper or silver nanoparticles embedded in a silica-based glassy matrix.”
- The best study of mediaeval lustre ware remains Watson (1985: pp. 31–6, for details of the technique). See also Caiger-Smith (1985: pp. 221–36). The lustre film consists of two layers, a top metal layer and a mixed glaze and lustre layer below, so the glaze must be hot enough to soften (Caiger-Smith, 1985: pp. 223–5). Metal oxide salts have a practical firing range of 500–600 degrees Celsius (Pradell et al., 2008: p. 123). For a new translation and analysis of Abu'l Qasim al-Kashani's treatise on ceramics, see Matin (2020: pp. 461–79, especially 468). For an overview of the lustre process and chemistry details, see Leoni et al. (2019: especially pp. 231–2, 235–41).
- For an overview of the taxonomic classification, see McClary (2020: p. 337). Although nine main categories were identified, only Styles 1, 2, 7, and 9 are discussed in this article. A summary is given at the first mention in the main text. Style 9 is the only one with both lustre and *mīnā'ī* on the same vessel. The *mīnā'ī* elements of the decoration on Style 9 wares tend to correspond with Style 1 wares (summarised below at the start of the sections discussing Style 9a wares), but there is one that has elements of Style 7, which feature patterns or Kufic inscriptions in gold outlined with thin red lines.
- Either insufficient firing or reduction duration can lead to the formation of just a pale stain instead of the metallic lustre layer (Caiger-Smith, 1985: p. 234).
- Arthur Lane (1947: p. 42) was among the first to highlight the problematic nature of *mīnā'ī* ware, noting that many dated pieces should be viewed with extreme caution. More recently, Margaret Graves (2018: p. 99) has commented on the wholesale restoration many pieces have experienced.
- There are eight known repaired bowls (two in the Sarikhani Collection, one each in the Musée du Louvre, Aga Khan Museum in Toronto, Musée des Beaux-Arts in Lyon, National Museum of Iran in Tehran, Museum of the Middle East Culture Centre in Japan, in Tokyo, and the whereabouts of the eighth is unknown). There is one jug (in the Freer Gallery of Art in Washington DC); one partial tile (in the Museum of Fine Art, Boston); and five bowl bases (two in the Sabah Collection, Kuwait, and one each in the Dallas Museum of Art, Musée du Louvre, and Freer Gallery of Art). There are also seven

- sherds (three in the National Museum of Iran, one in the Museum für Islamische Kunst, Berlin, two in the Musée du Louvre, and one in the Freer Gallery of Art).
- 8 For an example of a typical Style 1 bowl, see McClary (2020: p. 333, fig. 11).
- 9 Acc. no. I.CE.2006.2132; see Watson (2020: pp. 266–9) for a description of the piece, several images, and the text and translations of the inscriptions.
- 10 Acc. no. MAO 440.
- 11 Acc. no. LNS 877 C.
- 12 A bowl in the Musée des Beaux-Arts in Lyon (E 698), and a partial tile in the Museum of Fine Art, Boston (31.495).
- 13 Watson (2020: p. 266) notes that some traces of lustre are visible when the bowl is examined in raking light.
- 14 Translation from Watson (2020: p. 269).
- 15 Even though the reliability of this statement is unclear, it remains the only evidence available.
- 16 The bowl (MAO 440) is 67 mm high, with an original width of 220 mm, and was purchased from Jean Soustiel in 1970. There are approximately thirteen original sherds glued together. The newly fired sections have glaze on the top that is rounded at the edge, rather than broken, as is found on the original sherds, and they are not crazed in the same way, nor is the lustre the same range of colours. Aside from the presumably early-twentieth-century significant interventions, the bowl has recently undergone substantial changes. The image of the bowl on the Louvre website <https://collections.louvre.fr/en/ark:/53355/cl010320158>, dated 2006, is quite different in appearance from the one dated 2011, and the bowl resembles the latter when examined in May 2022. Since the first image was taken, the black outline around the lettering on the original portion of the Kufic inscription band along the rim has been removed, the surface of the sherds has been cleaned, overpainted sections of lettering of the cursive inscription on small areas of plaster fill have been removed. However, the plaster body of the small bird to the left of the rider's head has been colour-matched green. The biggest changes are the arm and hand of the rider, and the bird of prey, which have all been completely repaired and repainted in a way unrelated to what was there before. One small original sherd of what appears to be the elbow has been moved slightly, and the newly painted hand is now unconnected to the arm. Moreover, areas of the fabric of the rider have been repainted, brown areas have been removed from the body of the horse on both new and old sections, and small areas of decoration have been removed from the right side of the rim of the nimbus around the rider's head as well. For a large colour image of the whole bowl before the latest interventions, see Soustiel (1985: p. 95, fig. 85).
- 17 For a bowl in Kuwait (LNS 13.C) datable to the tenth century, see Watson (2004: p. 193).
- 18 The sherd (67) is 39 × 22 mm. The three Style 9a sherds in the National Museum of Iran have only recently been catalogued for the first time. This process forms part of a research project examining the *minā'ī* ware in the museum I am directing in collaboration with Hassan Moradi, and the accession numbers are provisional.
- 19 The sherd (128) is 25 × 21 mm.
- 20 The sherd (129) is 19 × 12 mm.
- 21 Watson (2020: p. 268) suggests the same.
- 22 The sherd in the Museum für Islamische Kunst (I.2294) is 30 × 40 mm and 3.6 mm thick. Watson describes the sherd as being in the Miniature style (1985: p. 85).
- 23 The bowl base in the Sabah Collection (LNS 877 C) is 35 mm high and 138 mm wide. It reportedly came from Ghur, Afghanistan (Watson, 2004: p. 364), but the original source of this information is unclear.
- 24 Watson (2004: p. 364) gives a slightly different reading of the Persian.
- 25 Translated by Ahmad Yengimolki.
- 26 The same technique can be seen on a Style 9a sherd in Tehran (Fig. 6a) and the exterior of the Style 9b bowl in the Aga Khan Museum, Toronto (Fig. 30b).
- 27 The type of palmette, also visible on the partial tile in Boston (31.495), is categorised by Mason (2004: pp. 125, 149, fig. 6.5) as “ray-dot palmette” KL20 and is associated with Kashan.
- 28 The same inscriptions can be observed on similar Style 1 bowls without lustre. One example is a Style 1c bowl in the Keir Collection of Islamic Art, see Grube (1976: pp. 201–2, and no. 143).
- 29 The bowl (M.2002.1.187) is in the Los Angeles County Museum of Art. On stylistic grounds, the bowl has been dated to the early seventh/thirteenth century and attributed to the Kashani potter Abu Zayd (Blair, 2008: p. 165).
- 30 The sherd in the Freer Study Collection (FSC-P-4804) is 47 × 38 mm and is 6 mm thick.
- 31 Red-flashing is caused by overfiring, inadequate draught, and water vapour in the kiln (Watson, 1985: pp. 35–6).
- 32 The bowl (3985) was first published by Bahrami in its restored state (1946: p. 113, figs. 4–5). He refers to the example as a *minā'ī* bowl and does not mention the traces of lustre. The bowl was deconstructed, extraneous pieces were removed, and it was reconstructed in 1993 (Hassan Moradi,

personal communication, June 23, 2021). A detailed study of the bowl will be included in the catalogue of all the *mināṭ* ware in the National Museum of Iran (forthcoming).

- 33 There are no visible traces of lustre, so it is classified as a Style 1c bowl; see Grube (1976: pp. 201–2, no. 143). Pope first published the bowl, which was previously in the Moussa Collection (Pope and Ackerman, 1938: pl. 692a).
- 34 The date is followed by a Persian verse starting with *Goftam cho resad be-zolf dāni dastam*. The same anonymous verse also appears on an underglaze decorated openwork jug dated 612/1215–6 now in the Metropolitan Museum of Art, New York, acc. no. 32.52.1. I am indebted to the anonymous reviewer for bringing this to my attention.
- 35 The bowl (E 698) is 104 mm high × 224 mm wide, and was acquired by the museum in 1933 from Aziz Ezra. I am indebted to Yves Porter for bringing this piece to my attention, and for supplying me with his soon to be published information on the bowl and its inscriptions.
- 36 Watson (1985: p. 88); for a sherd formerly in the British Institute of Persian Studies collection in Tehran recently transferred to the National Museum of Iran in Tehran, see (Ibid., p. 83, fig. 44). Watson (1985: 84) notes that the earliest dated pieces categorised as Kashan style are from 595/1199.
- 37 Acc. no. C1230-1919; see Watson (1985: p. 77, fig. 47).
- 38 For a bowl in the Ades Family Collection with similar arabesques, see Watson (1985: p. 53, fig. 13) and another bowl in the same collection featuring a seated figure with stippled dress in a roundel (1985: p. 55, fig. 17).
- 39 Acc. no. POT168; see Grube (1994: p. 225).
- 40 Acc. no. 2002.50.59.
- 41 Translated by Martina Massullo.
- 42 The partial tile (31.495) is 270 × 225 mm and 20 mm thick. It was sold by the dealers H & H Stora, based in Paris and New York, to the Museum of Fine Arts, Boston, for \$1,200 in 1931 (<https://collections.mfa.org/objects/17690>). Last accessed June 18, 2021.
- 43 Pope discussed the tile in detail, suggesting it was produced in Kashan (1938: pp. 1596–7, pl. 706).
- 44 رقتن ایرانیان از دز فرود
- 45 Pradell et al., (2008: p. 123) note that the sophisticated process, multiple firings, and use of a broader range of raw materials would have made lustre ware vessels an expensive product.
- 46 The jug (F.1929.9) measures 180 × 148 mm and was supplied to Charles Lang Freer by the New York-based dealer Parish Watson.
- 47 However, Atıl (1973: p. 105) notes that the cursive inscription is illegible due to excessive restoration and overpainting.
- 48 The Style 9a bowl base in Kuwait is the only example with a scratched Kufic inscription.
- 49 For a recent example of the required study, see Leoni et al., (2019: pp. 239–49).
- 50 The bowl base (K.1.2014.837) is 209.6 × 212.7 mm. The Keir Collection of Islamic Art is currently on permanent loan to the Dallas Museum of Art.
- 51 The defining characteristic of Style 7 wares is the use of gold decoration with a thin red overglaze outline. Style 7a features a Kufic band on a blue background, Style 7b features Kufic or cursive inscriptions on the white base glaze, and 7c features arabesque decoration, often over an area of low relief.
- 52 The bowl (EA1956.88) has experienced extensive interventions, but it has been shown that 60 per cent can be dated to 596–617/1200–20, see Leoni et al., (2019: pp. 232–3, fig. 5b). The vessel in the Keir Collection retains a Qajar-era printed paper export permit label, but unusually it has not been filled with the relevant details, unlike most other surviving examples of these permits.
- 53 The sherd (MAO 936/2081) was formerly part of the Kiefer Collection (<https://collections.louvre.fr/en/ark:/53355/cl010322605>). Last accessed June 21, 2021.
- 54 The sherd has a maximum width of 40 mm. It is 4 mm thick at the top and 5.5 mm thick at the bottom.
- 55 For an example of Style 2 *mināṭ* decoration, see fig. 33a; the main characteristics are a white Kufic inscription band on a blue background, white base glaze, and sparse figural and arabesque ornament. The main difference regarding the motifs is the common use of the chequerboard tree on lustre ware, which is rarely seen on *mināṭ* ware.
- 56 The exceptions to this process are the Washington DC jug (F.1929.9) and the Lyon bowl (E 698).
- 57 The bowl (I.CE.2006.2132) is 220 × 93 mm.
- 58 The bowl base (MAO 556) is 107 × 63 mm and is 30 mm tall.
- 59 Alongside the standard Style 9b lustre, there are very faint traces of finer quality details between the rider's arm and the horse's tail, with a thin red outline. In addition, where the fine lustre line crossed the black overglaze of the horse's tail, some sheen remains, in contrast to the rather muddy appearance of most lustre on this example and other Style 9b wares.
- 60 Acc. no. LNS 783 C.

- 61 The bowl (AKM773) is currently undergoing examination in the museum, and the planned X-rays should help reveal its true nature and the extent of the modern interventions and repairs (Bita Pourvash, personal correspondence, July 17, 2021). The bowl was first published in Graves and Junod (2010: p. 280).
- 62 The bowl base in the Freer Study Collection (FSC-P-4778) is $87 \times 85 \times 31$ mm.
- 63 The bowl sherd (MAO 489/102) is 23×33 mm, and 3 mm thick.
- 64 The vase (48.1278) was acquired by Henry Walters in 1929. It is 227 mm tall and 135 mm wide (<https://art.thewalters.org/detail/36552/flower-vase-with-horsemen/>). Last accessed June 17, 2021.
- 65 This variant of Style 2 has alternating sections of blue, green, and red in the background of the inscription rather than exclusively blue. The latter is common with all other Style 2 wares.
- 66 Dikran Kelekian wrote to Henry Walters in May 1915, and while he congratulated him on his collection of Persian ceramics, he chided him for suggesting that such material could be had at moderate prices in New York and cautioned him about buying fragments misassembled for the market (Johnston, 1999: p. 195).
- 67 Watson (1985: p. 85) disagrees, noting that the Kashan style inscription scratched into the larger area of lustre indicates a date after circa 596/1200. He suggests traces of lustre elsewhere on the body but does not indicate where exactly. There are several areas of gilding on the horse trappings and the halo of the rider and the arm and halo of the seated figure on the lower portion of the neck, but the lustre appears to all be confined to the upper section.
- 68 For the bowl in the Doris Duke Foundation for Islamic Art (48–328), see Littlefield (2002: p. 36). The piece is clearly a composite of two separate vessels, a *mīnāʿī* bowl base, and the remainder from one or more lustre bowls confirmed by subsequent radiographic analysis (Leslee Michelsen, personal communication, April 26, 2021).
- 69 The only major collection of *mīnāʿī* wares with an archaeological provenance linked to specific sites is in the National Museum of Iran, Tehran. It has many pieces from Rayy and Sava and several from other sites across Iran, but not a single sherd or vessel is directly associated with Kashan (Hassan Moradi, personal communication, June 24, 2021).
- 70 For the English translation of Abu'l Qasim al-Kashani's description of lustre, see Matin (2020: p. 468).