



Monochrome Fritware from the 12th and Early 13th Century

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The introduction of a new type of material to the pottery workshops in Iran and further east led to a proliferation of styles and techniques in pottery making of the 12th century.¹ The new body, an artificial mixture of ground quartz, possibly a bit of fine white clay and ground glaze mixture, itself composed of quartz and potash with a high amount of alkaline salts², is commonly referred to as 'fritware' or 'stone-paste'.³ It fuses at lower temperatures than clay and thus reduces firing temperatures. Depending on the quality of the preparation of the mass and of the finished object it could be easily pressed into moulds or worked into thin-walled shapes on the wheel. In addition, the invention of vitreous alkaline glazes, which due to their essentially similar composition fuse with the body during firing, prevented spalling and reduced the need to apply slips in order to achieve a better colour contrast. Copper continued to be used as colouring agent, but in alkaline glazes it produces a light blue tint instead of green as in lead glazes, while cobalt was used for dark blue tinges.⁴

Originally it was assumed that the development of this material was related to attempts to copy Chinese porcelain and stoneware⁵, and that it spread proposedly from Egypt after 1168, together with lustre-painting technology.

However, the date and manner of its introduction and mode of distribution are discussed and now rather considered to have emerged independently and prior to lustre production in the Islamic world: The use of fritted glass in pottery making has been confirmed for Abbasid Opaque White Ware, while the date of the earliest, securely dated fritware vessel from Iran is 1139-40. It thus pre-dates the oldest dated lustre objects and supports an independent development.⁶ P. Morgan refers to a 10th-century text by Abu Dalaf (*Risalah*), preserved in a later compilation by Yaqut, in which the production of pottery out of quartz, tin oxide and glass in Fars is described.⁷ Morgan also quotes a reference to the local production of 'Chinese bowls' out of quartz and flint mixed with clays in al-Biruni's book on precious stones and metals, dedicated to Sultan Mahmud of Ghazna (r. 1041-50 CE). The famous treaty written in 1301 by Abu'l Qasim Abdallah Kashani from a potters family in Kashan, active from the late 12th to the 14th century CE⁸, is much younger.

The production of the high-quality Saljuq White and Coloured Ware, followed by other types such as Silhouette, Lustre and Mina' i, was centred in the major Iranian workshops such as Kashan and most likely Rayy and Jurjan.⁹ Still, other kilns also produced vessels with a frit body. Apart from Samarqand and Nishapur, where fritware was made in the 'East Kilns' from the 1030s through the mid-12th century¹⁰, Shahr-e Gholghola in Bamiyan apparently was also a production place active until 1221/22, but few fritware vessels pre-dating the later 12th century have been found.¹¹ The 'Bamiyan' fritware vessels, first published by J.-C. Gardin in 1957, *de facto* constitute only a small part of a collection of objects from illegal excavations and visitors' collections at Shahr-e Gholghola.¹² They are distinguished from Iranian fritware by a lower quality of the frit body, often with a pinkish tinge¹³, an inferior, frequently crackled glaze, and a different though limited range of shapes, mostly bowls with flaring sides and ring bases.

The destruction of the town by Djinghiz Khan and the end of its existence provide a *terminus ante quem* which leaves only a short time frame for pottery production, taking into account the post-10th-century appearance of 'fritted' clay bodies and, most likely, the late 11th or 12th century for

1 Referred to by E. Grube (1994e, 147) as „the most important event of ceramic-making in the Muslim world...“.

2 Watson 1985, 32.

3 The term 'frit' refers to the presence of fritted and ground glass. Since this is not necessarily present in coarser products, Morgan (1994d, 155) proposed the term 'stone-paste'. However, due to the similar composition, the presence of fritted glass is almost impossible to detect macroscopically and the term 'fritware' or 'frit body' continues to be commonly used.

4 For analyses from Nishapur see Wilkinson 1973, 259, for more detailed analyses recently Rante/Collinet 2013, 56-135. For Jam: Gascoigne 2010.

5 It is, in fact, a re-invention of a technique already employed since the 4th millennium BCE in the Ancient World to produce faience objects.

6 Grube 1994e, 147-152, cat. no. 148: Iran, dated 1139/40. - Morgan (1994d, 156) compares this high-quality bottle, signed by 'Ali Buhuni', on the basis of the quality of its fabric to Bamiyan fritware and its moulded roundels from Lashkari Bazar.

7 Morgan 1994d, 155.

8 Allan 1973; Allan et al. 1973.

9 Fehérvári 2000, 98. - Watson 2004, 303. - Kiani 1984.

10 Wilkinson 1973, 259.

11 Fehérvári (2000) mentions the production of turquoise-blue glazed fritware (p. 98), but later also discusses a sgraffiato bowl (p. 162, cat. no. 200) and Afghan Saljuq White Ware, assigned to Afghanistan on stylistic grounds (p. 165, cat. nos. 213-217).

12 This collection was sold in 1977 in Paris (Soustiel 1985, 234-236 note 2. - Watson 2004, 327).

13 Also noted by Fehérvári 2000 cat. no. 190.



Fig. 1 Turquoise glazed miniature vessels and bottle (cat. nos. MF11; 20; 10)



Fig. 2 Moulded 'White Ware' bowls with colourless glaze and painted patterns (cat. nos. MF3; 2; 1)

the beginning of a large-scale production of fritware in Iran. Considering the regional political constellations, Gardin discussed the beginning of production in Bamiyan around 1175, when – shortly after the final fall of Ghazna in 1174 – the Ghurids successively took over Bamiyan, Herat, Ghur, and Balkh.¹⁴ A critical point is that no comparable ceramics were excavated at e.g. contemporary Ghazna, where rather Iranian ware was found at Lashkari Bazar, at Bust and other close-by sites.¹⁵ Gardin therefore suggested that production took place only between 1215, when Bamiyan was re-conquered by the Khorezm Shahs, and its destruction in 1221/22.¹⁶ The argumentation in favour of the establishment of a potters' workshop in

Bamiyan, with artisans coming from Nishapur after the defeat of its Khorezm Shah rulers by the Ghurids in 1190 and the instalment of a Ghurid prince as governor of Herat, was later extended by Morgan.¹⁷ At present it appears difficult, however, to pinpoint production to such a short period on technological and stylistical grounds.

The appearance of both earthen- and fritware 'Bamiyan Ware' on the art market after the late 1980s and subsequent publications of various private collections made them well known, but also raised doubts as to their authenticity.¹⁸ These doubts can only be clarified in the course of new excavations.

The Collection in Herat

The number of glazed fritware with a fritbody and a transparent clear, turquoise or blue glaze in the Herat Museum is limited. The objects were assigned to groups by the colour of the glaze and sorted by shape and type of decoration, regardless of additional colour applications, mostly blue and purple. The bodies reveal different qualities, ranging in texture from large, gritty and looser to finer, more compact bodies which frequently have a reddish tint; finer white examples are rare. No examples with more extensively painted turquoise and manganese-coloured patterns are present. Their technical and stylistic variability implies that they came from different workshops.

Few objects could possibly be regarded as imports, based on the shape and quality of fabric and glaze, for example from Nishapur or even Kashan (e.g. cat. nos. MF5; 6; 11; 18; 20; 21). Although otherwise unreported shapes are attested in the collection (e.g. cat. nos. MF7–14; 19), these fit well into the overall assemblage, particularly of the monochrome green glazed earthenware.¹⁹

14 Gardin 1957b, esp. 242–245. See on Ghurid history and territory most extensively Thomas 2012.

15 One bowl, similar to cat. no. MF5, does not belong to the 'Bamiyan' type, see Gardin (1963, 131): Group XIV/2: no. 531, dated to the late 12th and early 13th century, along with other sherds from group XIV, 2–5.

16 Gardin 1957b, 243. Morgan's comment (1994e, note 17) that in this case the pottery should be named 'Khwarezmshah ceramics' would imply that the production was strictly related and confined to dynastic eras, which is rather unlikely (see also Gardin 1963, 137).

17 Morgan 1994e, 295; 299s.

18 Watson 2004, 327. – See also Soustiel 1985, 236 cat. nos. 271; 273. – Morgan 1994e, 295–329. – Fehérvári 2000, 165–168. The different thermoluminescence datings achieved for two stylistically and technically similar bowls reveal the ambiguity of the method, which is often noted, rather than supporting modern fabrication (Watson 2004, 327 cat. no. M5).

19 See Müller-Wiener, Monochrome Earthenware, this vol.



Fig. 3 Bowl with moulded decoration of human heads (HNM 010.03.94), modern fabrication



Fig. 4 Pierced 'Saljuq White Ware' (HNM 010.03.62), mostly modern

The collection also comprises small or miniature vessels (Fig. 1; cat. nos. MF7–14), with a colourless, blue or turquoise glaze, the latter sometimes with a fluted body, which can be compared to pieces from Nishapur²⁰, but is different from the carefully executed, rather geometric patterns following metal types known from the finer wares, e.g. in the Khalili Collection and in the Tareq Rajab Museum.²¹

Turquoise-glazed juglets with a long conical neck or a trefoil rim (cat. nos. MF15–17) find counterparts in earthenware as well as fritware shapes from Iran and Afghanistan, although the heavy pear-shaped body of cat. no. MF17 is particular to the eastern shapes, while the finer Iranian examples are more

20 Wilkinson 1973, 278 cat. nos. 11.11–13; 15.

21 Morgan 1994e cat. nos. 391; 392 and Fehérvári 2000 cat. no. 100.

slender.²² Of a very typical, fine jug with a rather greenish hue only the uppermost neck with neatly executed rings and rivets, following metal proto-types, is preserved (cat. no. MF18). A bottle with a very short neck and pronounced rim, a cylindrical small flask and a footed lobed bowl (cat. nos. MF19–21) share a rather good quality of fabric, the strong glaze and careful finishing.

Twelve of the 32 vessels published here represent types, shapes and decorations well known from the so-called Afghanistan or Bamiyan fritware. As in the other collections, they are also in Herat by and large attested only by bowls and plates (Fig. 2; cat. nos. MF1–4; 23–30).²³

The provenance of some objects is doubtful, due to the quality of the fabric, which is marked by a harsh touch and pinkish colour, a coarse manufacture and quality as well as the colour of the glaze. Noteworthy is the poorly made modern copy of a well-known type of lobed 'face bowls', showing a frieze of strapwork and birds above a frieze depicting human faces (Fig. 3). It attests modern production of poor quality somewhere in the area, possibly based on published pieces. Two almost identical examples, one in White Ware and a turquoise one, are published by Fehérvári, two others belong to the Khalili Collection.²⁴ Another example is the imitation of a White Ware bowl (Fig. 4). Badly smeared with a rubber-like substance and misfigured, the piercings and the nature of the stripes indicate a fake, confirmed by the composition and colour revealed in a fresh break. Both pieces come from the same convoluted, confiscated in 2010, with an alleged provenance from Badghis.

The clearly visible – and rather clumsy – retouches on the other pieces and the poor quality of the modern reproductions might in fact support the authenticity of other pieces, which – although partly reworked – contain more original substance. Ongoing stylistic studies based on a larger, and eventually stratified – or at least contextualised – body of materials and an increasing number of archaeometric analyses will contribute to a better definition of features characterising regional production in eastern Khorasan and Transoxania.²⁵ However, only excavations can provide undisputable evidence for the production of Bamiyan type fritware, and fritware in general, in the region.²⁶

22 Comparisons are quoted in the catalogue.

23 Some other shapes, such as jugs and beakers, are published e.g. by Morgan 1994e, cat. nos. 388; 389; 391; 392 (turquoise-glazed), who, however, attributes the finely crafted objects to 'Bamiyan or Nishapur', and Fehérvári 2000, cat. nos. 215; 217, White Ware, attributed to Afghanistan. His cat. no. 217 is almost identical with cat. no. 391 in the Khalili Collection.

24 Fehérvári 2000, cat. nos. 105 and 111. – Morgan 1994d, 177; from Iran: cat. nos. 172 (blue); 173 (white), with further references to the David Collection, the Iran Bastan Museum, Teheran and the art trade; from Afghanistan or Nishapur, but only for shape: cat. nos. 405 and 406.

25 According to D. Thomas' review the result of the pottery analyses from Jam can be summarised as follows: „Overall, Gascoigne's preliminary conclusion is that the 'Ghūrīd' ceramic repertoire from Džām fits within the existing (but poorly documented) ceramic traditions found across the region. The range of fabrics is fairly limited and the assemblage comparatively homogeneous." However, certain earthenware types might have been produced locally (Thomas 2012, 285). – Gascoigne 2010.

26 Recently taken up at Shahr-e Gholghola by a DAFA team. For Jam see Thomas 2012 and Gascoigne 2010.

Monochrome Fritware. Catalogue

Cat. No. MF1

HNM 01.36.86a, see Fig. 2
Bowl with moulded decoration
Afghanistan/Bamiyan (?), 12th– early 13th CE
Fritware (whitish); moulded
Treatment i/s & o/s: transp. glaze (colourless)
Decoration i/s: moulded; underglaze painted (manganese-coloured)
Size (cm): d. (rim) 12; d. (base) 4.7
Deep bowl with thin, almost straight, flaring walls, round rim, and a shallow footring. Moulded decoration: in the centre a circle



divided into quadrangles by double lines. Wall: inscription band, illegible. Along the rim: regularly placed dots forming manganese-coloured running lines with one dot in the centre. Outside: glaze, manganese-coloured running lines cover just a narrow strip below the rim. Marks of a tripod are visible in the centre. Old restoration. The bowl belongs to a group of four objects comparable in size, shape, the gritty and loose quality of the fabric, and a decoration with relief patterns and underglaze painting in blue and/or manganese (cat. nos. MF1–4, see also Müller-Wiener 2008, 53 Fig. 98).

For close comparisons see Soustiel 1985, 236 cat. no. 271 and Watson 2004, 329 M3–4. Fehérvári (2000, 165; 167) cat. no. 215 has a different shape, while cat. no. 217 is more elaborately decorated; both have a finer and smoother appearance. The same applies to Morgan (1994e, 326) cat. nos. 398–401. Similar bowls are also preserved in the Bumiller Collection, University Museum Bamberg (BC-4768; 5750. I am most grateful to P. Siméon for providing me with his images of the Bumiller Collection and for sharing his knowledge).

Cat. No. MF2

HNM 01.36.86b, see Fig. 2
Bowl with moulded decoration
Afghanistan/Bamiyan (?), 12th– early 13th CE
Fritware (whitish); moulded
Treatment i/s & o/s: transp. glaze (colourless)
Decoration i/s: moulded; underglaze painted (manganese-coloured)



Size (cm): h. 6.4; d. (rim) 12.1
Deep bowl with thin, almost straight, flaring walls, round rim, and a shallow footring. Moulded decoration: the centre is divided into quadrants by double lines. The central circle is surrounded by triangles forming an eight-pointed star. The star is extended by further triangular lines, alternating with roundels. Along the rim: regularly placed manganese-coloured dots, one dot in the centre. Outside: glaze, manganese-coloured dots on just a narrow strip below the rim. Marks of tripod are visible in the centre. Old restoration.

Cat. No. MF3

HNM 01.36.86c, see Fig. 2
Bowl with moulded decoration
Afghanistan/Bamiyan (?), 12th– early 13th CE
Fritware (whitish); moulded
Treatment i/s & o/s: transparent glaze (colourless)
Decoration i/s: moulded; underglaze painted (manganese-coloured)
Size (cm): h. 6.1; d. (rim) 12.3; d. (base) 5.3
Deep bowl with thin, almost straight, flaring walls, round rim, and a shallow footring. Moulded decoration: in the centre a nine-petalled rosette, on the walls a broad band with alternately aligned rosette-flowers and palmettes. Along the rim regularly placed dots and hanging, manganese-coloured loops, strongly running. One black circle in the centre. Outside: glaze, manganese-coloured dots and lines in a broader band with irregular lower border. Some lines run down to the footring. Marks of tripod are visible in the centre. Old restoration.

Cat. No. MF4

HNM 01.36.86e
Bowl with moulded decoration
Afghanistan/Bamiyan (?), 12th– early 13th CE
Fritware (whitish); moulded
Treatment i/s & o/s: transp. glaze (colourless)
Decoration i/s: moulded; underglaze painted (manganese-coloured)
Size (cm): h. 6.3; d. (rim) 12.9; d. (base) 5.1



Deep bowl with thin, almost straight, flaring walls, round rim, and a shallow footring. Moulded decoration, painted in manganese with running colours. In the centre: a 13-petalled rosette, on the wall two intermitting wave-scrolls. Along the rim: painted loops and small dots. Two black dots in the centre. Outside: glaze, manganese-coloured dots on just a narrow strip below the rim. Marks of tripod are visible in the fond. Old restoration.

Cat. No. MF5

HNM 010.03.63
Plate, Khorasan/Afghanistan (?)
12th– early 13th CE
Fritware (pinkish-white); moulded
Treatment i/s: transparent glaze (colourless, but faint turquoise stains); o/s: transparent glaze (colourless, but turquoise tint along the long border)
Decoration i/s: underglaze painted (manganese-coloured)
Size (cm): h. 4; d. (rim) 19
Shallow plate with everted rim, low footring. The painted decoration consists of just four manganese-coloured lines running vertically



from the rim towards the centre. In between: strokes, possibly imitating epigraphy. Outside: no decoration, glaze to below the rim, forming thick drops. Marks of tripod are visible in the centre. Old restoration.

A very similar plate has been published by Wilkinson (1973, 260; 282 cat. nos. 11.36; 37), said to have been produced in large numbers in kilns at Nishapur, and dated to the late 11th/12th century. Fehérvári 2000, cat. no. 215 has a different shape and better quality of glaze. An example in the Bumiller Collection (BC-6028) has a similar decoration, but is a deeper bowl.



Cat. No. MF3

Cat. No. MF6

