Naukratis: Greeks in Egypt

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http://www.britishmuseum.org/naukratis

Ptolemaic and Roman faience vessels

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1. Introduction

Ptolemaic and Roman faience vessel production emerged from a long Egyptian tradition. However, the introduction of Greek technology as well as new forms, fashions and indeed festivals and rituals, mean that the variety of faience vessel forms is significantly different from what came before. Faience production began in Egypt during the 6th millennium BC and was an important industry within Naukratis during the 6th century BC. Both Egyptian and Archaic Greek/Phoenician mixed style faience vessels, amulets and figures were produced at Naukratis during the Late Period. Production probably continued in Naukratis during the Ptolemaic period, and faience produced at other Egyptian production sites continued to be popular at Naukratis until the 3rd century AD.

1.1 The Naukratis assemblage

The Naukratis assemblage is quite small (98 pieces), consisting of 43 vessel fragments and two plastic figure vases from the original excavations of Petrie, Gardner and Hogarth and 53 pieces from the excavations of Ptolemaic structures by Leonard in the South Mound (36 indicators) and Kom Hadid (27 indicators). The first group comprises fragments without contextual information from Petrie, Gardner and Hogarth’s excavations. The second group is from Leonard’s detailed excavations of Ptolemaic (and in one case early Roman) domestic contexts.

The assemblage can be broadly separated into four productions. Early Ptolemaic vessels of the 3rd and possibly 2nd centuries BC with mould-made relief and incised detail (Fig. 1) with bi- or multi-chrome decoration. The second, diverse group consists of mainly undecorated mono- or bi-chrome decorated (Fig. 2) mid- to late-Ptolemaic pieces (although fragments can be difficult to separate from the earlier and later productions). The third group is of other faience plastic vessels, including an example representing Bes, and another an elephant (Fig. 3). These exceptionally rare polychrome vessels are probably from the early Ptolemaic period. The final group is of early Roman production of the 1st, but particularly the 2nd century AD, with a thick and distinctive, but otherwise plain turquoise glaze (Fig. 4).

The whole assemblage is relatively small and spread across different museum collections. The British Museum collection has a distinct bias of the finer, more complete early Ptolemaic mould-made relief ware examples, whilst the Museum of Fine Arts, Boston collection has mainly

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1 Faience is a problematic term in common usage to mean a glazed non-clay based ceramic. For this reason the British Museum prefers the term glazed composition. The ancient Egyptians called the material tjehenet or khesbed (Nicholson 2013, 16). All images are © Trustees of the British Museum, unless otherwise indicated.

2 See chapters on Egyptian faience vessels, New Year’s flasks, Archaic mixed style faience vessels, Archaic mixed style faience figures, Egyptian scarabs and amulets.

3 Leonard 1997; 2001. Note that 12 pieces from the South Mound cannot have their contextual information reconstructed due to errors in the locus summaries. Leonard also notes a number of additional unidentifiable fragments within the locus summaries, some of which may be the missing pieces illustrated.
monochrome turquoise fragments of the late Ptolemaic and early Roman period.⁴

Whilst distinct from preceding periods, Ptolemaic and early Roman faience vessels show a continuity of techniques and production with, particularly in the early Ptolemaic period, a greater understanding and control of glaze pigments resulting in a greater variety of colours and quality of glaze.⁵ Nevertheless there are two distinct phases, the Ptolemaic and the early Roman, when the fabric, glaze, polychromy, complexity and forms all change noticeably.

1.2 Faience vessel workshops

Faience vessels were produced at a number of specialized centres across Egypt (Fig. 6). Whilst the contemporary products of each workshop are similar, the raw materials used, for example to produce the glaze, differed.⁶ Ptolemaic workshops are known from Athribis, Memphis and Karnak.⁷ At Athribis (Benha), a workshop was discovered that was operating during the 3rd century BC, with a peak in production during the reigns of Ptolemy III (246–222 BC) and IV, but ceased production at some point during the reign of Ptolemy IV (221–204 BC).⁸ Faience workshops and kilns were discovered in Memphis (Kom Helul), which was producing faience vessels from at least the 4th century BC until the early Roman period, at least until the 2nd century AD.⁹ Production at Memphis was near Egyptian blue manufacture, which may have provided the colorant for the applied glaze.¹⁰ Other 1st to 2nd century AD Roman workshops are known from Elephantine (Aswan)¹¹ and Terenouthis (Kom Abu Billo).¹²

Naukratis had a faience industry producing scarabs, amulets, figurines and beads of faience and Egyptian Blue, from at least the 6th century BC.¹³ It is likely that Naukratis was also producing faience vessels in the Ptolemaic period. Some of the moulds (Fig. 5) used to produce plastic vases during the 3rd and 2nd centuries BC were probably used for faience vessels.¹⁴ Also coarseware fragments from the new excavations at Naukratis from an early Ptolemaic, late 4th or 3rd century BC context (Fig. 7) resemble saggars (special vessels used to contain faience vessels in the kiln) used

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⁴ Ptolemaic to Roman faience vessels from Naukratis are currently housed in the British Museum, Museum of Fine Arts (Boston), the Petrie Museum, Redpath Museum (Montreal), Ashmolean Museum (Oxford), Institut für Klassische Archäologie und Antikenmuseum (Leipzig).

⁵ Kaczmarczyk and Hedges 1983, 275–81; Tomber 2006, 44.


⁷ Small scale production is now known from Kamak (Masson 2013, 142, 161, Pl.1a).

⁸ Welc 2011, 244, 253. Faience was found in later levels, but without evidence of local production.

⁹ The kiln is of Roman date (Nicholson 2013, 46, 147; Nenna 2013, 129–30). Note French states: ‘fills… of material dumped after the kiln went out of use contain large quantities of pottery of the Roman period, probably of the 2nd (or less probably the 3rd) Century AD’ (French 2013, 165).

¹⁰ Nenna and Nicholson 2013, 135.


¹² Nenna and Seif el-Din 1999, 79; Dhennin 2011.

¹³ Egyptian Blue is a man-made pigment, made using a similar technology to faience glaze. See chapter on Archaic mixed style faience figures and forthcoming chapter on Egyptian Scarabs and Amulets. For a discussion of Egyptian blue technology see Nenna and Nicholson (2013, 135) and bibliography in Nicholson (ed.) 2013.

¹⁴ Some moulds may have been used to produce mould-made pottery plastic vases of this period, others are most likely from faience production as explained in section 2.2 below.
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15 Although no faience workshop or kiln has yet been positively identified for the Ptolemaic period at Naukratis, the city possessed the materials, technology, techniques, equipment and expertise to do so. All aspects of the process are represented within the industries recorded at Naukratis. We should consider the close similarity with mould-made Ptolemaic pottery production of plastic vases, particularly the similarities in form, function and decoration with the shallow relief vessels of early Ptolemaic date (section 2.1 below), evidence of a close relationship between these related industries. Whilst there is a strong argument for local production during the early Ptolemaic period based upon the presence of moulds discovered at Naukratis, there is no evidence to date for this industry continuing into the Roman period.

1.3 Manufacturing process

The production of Ptolemaic and Roman faience vessels is extensively discussed in Nicholson 2013, but a brief summary follows here. The body of the vessel was made of a paste of silica (quartz powder or fine sand), an alkali (natron or plant ashes), lime and potentially clay. To this a glaze was later added made of silica, natron, lime and a colorant. Balls of Egyptian Blue are the most likely source of colorant for blue glazes. Egyptian Blue manufacture was located close to faience manufacture at both Memphis and Naukratis. However glazes differed during different periods and, especially with the Ptolemaic examples, different glazes were sometimes used on the same vessel, requiring a variety of compound ingredients.

The vessel was shaped by pressing the paste into a plaster mould. The pieces were assembled and sometimes hand-made elements were added. All Ptolemaic and early Roman vessels were mould-made, not wheel-made as previously thought. Sometimes closed vessels were constructed

16 Nile silt basins from Trench 8 of Naukratis 2015 field season (Fig. 6) resemble the saggar type 12 documented in Memphis (Nicholson 2013, 138, 79–106). Identification of this piece as a saggar remains cautious, however, as it is not clear that the ceramic fabric (which is a very organic Nile silt in this case) is suitable for saggars (Nicholson pers. comm.). A Ptolemaic saggar used in small scale production is also published from Karnak (Masson 2013, 142, 161, pl. 1a).

17 The use of clay is thought to have been a Roman feature, but the interpretation that clay was an intended addition remains contested (Nenna and Nicholson 2013, 135).

18 Ibid. 2013, 135; see forthcoming chapter on Egyptian Scarabs and Amulets.

19 Tomber recognised Roman faience vessels found at Mons Claudianus could not be the result of wheel-made production (Tomber 2006, 45). Mould-made production was confirmed by the discovery of numerous plaster moulds at Memphis dating from the 4th century BC to the 2nd or 3rd century AD (ibid. 2013, 136–8).
around a perishable core. It is possible that sometimes details were sharpened through incision at this point.

The resulting object was then first fired within a kiln, within large cylindrical vessels called saggers. Once fired and cooled, these unglazed pots were then dipped or brushed with a glaze slurry. Multiple coatings of the same or different glazes could be added to create different colours, whilst moulded decoration would be darker due to the thicker layer of glaze. These objects were then fired in a separate kiln and stacked within smaller saggers made of a non-ferrous clay (in order not to interfere with the colour of the glaze).\textsuperscript{20}

Roman production is quite distinct in glaze colour, thickness, decoration and form. As with the Ptolemaic production, close similarities can be recognized with contemporary pottery production. The forms copied fashionable Roman red-slip Italian and Eastern Terra Sigillata table wares.\textsuperscript{21} However, there is no evidence for early Roman faience production at Naukratis, with the rare Roman faience fragments found more likely products of the Memphis workshop at Kom Helul. A full and up-to-date survey of the Egyptian faience production during this period can be found in Nicholson’s (2013) study of the material from Memphis. The typology followed in this article for both Ptolemaic and Roman faience vessels is that developed by Nenna and Seif el-Din (2000), refined by Nenna (2013) of forms T.1 through to T.22. This is supplemented where relevant by Tomber’s (2006) typology of Roman faience from Mons Claudianus of forms MC.4 through to MC.15. The abbreviated form codes are used in the text below, with the full reference in footnotes.

2. Early Ptolemaic faience

2.1 Shallow relief

Some fine examples of early Ptolemaic faience vessels are represented at Naukratis. These include mould-made bichrome pieces with incised decoration in a series of drinking beakers and closed table vase forms with ring foot bases. The majority of these are early Ptolemaic in date, largely produced in the 3rd century BC, although production seems to have continued into the 2nd century BC, or later for some variants. The forms\textsuperscript{22} include oinochoai (commonly known as ‘Queen Jugs’) decorated with representations of and inscribed with the names of Ptolemaic queens,\textsuperscript{23} shallow hemispherical bowls with vegetal motifs (T.1.2),\textsuperscript{24} truncated cone beakers (T.6.4),\textsuperscript{25} rhyta (T.6.3)\textsuperscript{25} and ovoid vases with lotus flared necks (T.7.1).\textsuperscript{27}

\textsuperscript{20} See Nenna and Nicholson 2013, 133–46 for the whole process and details.
\textsuperscript{21} Tomber 2006, 47–9.
\textsuperscript{22} Following Nenna 2013, updated from Nenna and Seif el-Din 2000.
\textsuperscript{23} Ashmolean Museum, University of Oxford, AN1896-1908-E.3720 and British Museum, 1888.0601.40; Nenna and Seif el-Din 2000, Pl.76, especially no. 604.
\textsuperscript{24} Ashmolean Museum, University of Oxford, AN1896-1908-E.4558A; Nenna and Seif el-Din 2000, PI. 19, no. 23, Form T.1.2; Nenna 2013, fig. 6.1, T.1.2.
\textsuperscript{25} British Museum 1888.0601.39; Nenna and Seif el-Din, 2000, Form T.6.4; Nenna 2013, fig. 6.4, T.6.4b. Parallels dated to the 3rd to 1st century BC.
\textsuperscript{26} Museum of Fine Arts, Boston, 88.853; Nenna and Seif el-Din 2000, Form T.6.3, Pl. 45, no. 264 and 269; Nenna 2013, fig. 6.5, T.6.3.
\textsuperscript{27} Leipzig, Institut für Klassische Archäologie und Antikenmuseum T.3486.
2.2 Production

Production of Ptolemaic faience vessels, including relief ware, during the late 4th and 3rd centuries BC was undertaken in Memphis and at Athribis (Tell Atrib). Welc recognized a distinct peak in production for relief ware in the mid-3rd century BC, followed by a closing down of the workshop by 204 BC. The production of faience relief ware at Athribis was associated with very fine quality mould-made pottery vessels, in a thin white (marl?) clay, also found within the same contexts dated to the reign of Ptolemy IV.

We should also consider Naukratis as another production place, on the basis of three terracotta moulds that were found at the site, currently in Museum of Fine Arts, Boston. The moulds depict figures from festival scenes, maenads, a dancing Bes and the head of a bearded god, possibly Zeus. These are all subjects also depicted on terracotta vases of the same period produced in Naukratis, Alexandria and evidently Athribis where they were found alongside faience production. The moulds are terracotta and not plaster, as was usually the case for faience production. However, a comparison of the moulds, pottery and faience vessels suggest to the author that the moulds from Naukratis correspond with the higher quality and detailed faience examples known (Figs 2, 12, 13) rather than the simpler, more rounded and less detailed pottery examples that depict the same scenes during this period. Also the Nile silt fabric used to create these vessels in Naukratis may not have retained the detail attempted with the moulds. Certainly no examples made of pottery, either in Naukratis or Alexandria were of the same quality as the moulds found at Naukratis.


Figure 10 Rhyton fragment. Form T.6.3, c. 300–200 BC. Width 10.9cm. Museum of Fine Arts, Boston, 88.853. Photograph © Museum of Fine Arts, Boston.

Figure 11 Ovoid vase with lotus neck. Neck fragment only. Form T.7.1, c. 300–200 BC. Diameter 8.8cm. British Museum, 1886,0401.1593

Figure 12 Mould-relief maenads from 3rd to 2nd century BC plastic vases. Heights 11.4cm, 4.9cm and 5.2cm respectively. From left: Maenad with tambour cast from a terracotta mould (Museum of Fine Arts, Boston, 88.909, photograph © Museum of Fine Arts, Boston); painted maenad from mould-made pottery vessel made in Alexandria, but found at Naukratis (British Museum, 1886,0401.1544); mould relief maenad from a faience plastic vessel (British Museum, 1886,0401.1587).
2.3 The Naukratis assemblage

The finest examples of Ptolemaic faience vessels are two fragments of Ptolemaic queen oinochoai (‘Queen Jugs’). These oinochoai are inscribed with the name and titles of Arsinoe II Philadelphos, and bear likenesses of her (Figs 13 and 14). These are libation vessels used during the festival and cult rituals of the deified Arsinoe Philadelphos (II), a Ptolemaic dynastic ruler cult, which was associated with the cults of (and where the queen acquired the traits of) Demeter, Aphrodite Euploia as the protector of Navigation, and Isis as part of the divine couple Serapis-Isis. The cult of Arsinoe II was established by her husband Ptolemy II prior to 267/266 BC, shortly after her death in 268BC. During her life, Arsinoe was already worshipped as part of the divine royal couple.

A festival, the ‘Arsinoeia’ was installed with the founding of the Arsinoe Philadelphos cult, which took place in Alexandria during the summer, just before the Nile flood inundation and the Egyptian New Year. This festival is discussed in various papyri of the mid-3rd century BC onwards, where participation, through attending and sending animals for sacrifice was a necessary statement of loyalty by the Macedonian elite, the same was also displayed by the building of temples to the dynastic cult. Indeed the close relationship between the dynastic cult and the Greco-Macedonian elite is best represented by their monopolization of priestly, administrative and military offices, with those appointed priests of the dynastic cult being bestowed with economic favours, such as tax reforms and exemptions. This practice explains the success of the Arsinoe of the ‘brother-loving goddess’ cult until the reign of Cleopatra VII.

These oinochoai were libation vessels that show a continuity with Egyptian traditions of making special faience flasks for offerings intended for the Egyptian New Year festival around 19 July. This may have been a direct attempt by the Ptolemaic dynasty to establish itself within the annual rituals of Egypt’s landscape, as was the case with the Ptolemaic practice of moving the date of public festivals to coincide with important dynastic events.

The oinochoai would have been acquired by those who could not afford precious metals, though clearly still represent extensive and time consuming specialist work. The theme of inundation festivals is shared with a second group of Ptolemaic faience vessels, the ovoid vases with lotus flared necks (Figs 11–12), which also had extensive moulded decoration added depicting scenes from festivals.

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35 Caneva 2012, 803. Also associated with the cult of the Dioskouroi in Alexandria, whose sanctuary was adjacent to that, or Arsinoe.
36 When priests of this cult are attested (Thompson 1973, 75).
37 For discussion see Caneva 2012, 80, fn 11.
38 Arsinoe was worshipped in Egypt, Cyrus and the Aegean Islands (Caneva 2012, 80).
39 257BC papyri from the Zenon archive (P.Cair.Zen.1 59096; Caneva 2012, 75–102).
40 Caneva 2012, 81, 85, 87–8.
41 Friedman et al. 1998, 229. See chapter on New Year’s flasks.
42 For example the moving of the Bubasteia festival by Ptolemy III to coincide with a dynastic festival Euergesia and the rising of Sothis, harbinger of the Nile inundation (Montserrat 1996, 170; Delia 1998, 545), thus integrating the Ptolemaic dynasty into the everyday religious experience of Egyptians in the Nile Delta, a form of Ptolemaic dynastic propaganda.
43 See Thompson 1973 and Nenna and Seif el-Din 2010.
The ovoid vases with lotus flared necks (T.7.1–4) are the most complicated faience vessels of this ware produced in Egypt, and also the best represented at Naukratis. They are covered with decoration on the neck and body. The upper flaring neck was separately modelled and attached to the body with a projecting ridge. All parts were mould-made separately and attached to the body of the vessel. Decoration was moulded, but also sharpened by being further delicately incised into the surface. The whole was coloured a dark shade of blue-green with added darker blue. The vessels are distinctive of the 3rd century BC. Some of these vases (T.7.1–4) were decorated with depictions of Egyptian annual New Year and inundation festival scenes associated with Osiris, sometimes compared or equated with Dionysos by the Greeks. This should not be a surprise, considering that faience New Year’s flasks had long been manufactured in Egypt, and in Naukratis since the Late Period, for these festivities. The forms represented are restricted to ovoid vases with a flared papyrus shaped neck and incised vegetal decoration.

Variants of these ovoid vases continued to be manufactured in Egypt until the late Ptolemaic or early Roman period, although examples found in Naukratis appear to be restricted to examples of early or mid-Ptolemaic date. These may have served as festival drinking sets, and parallels can be made with contemporary and slightly later painted mould-made pottery variants of these forms. Whilst some forms can only be dated broadly to the 3rd to 1st centuries BC, most probably date more specifically to the early Ptolemaic period. The parallel ceramic production of painted table amphorae and mould-made goblets has been dated to the 2nd century BC or later. The close similarity between the faience and pottery productions, confirmed by both epigraphic and archaeological evidence, confines the overlapping productions to the early to mid-Ptolemaic period.

Five decorated fragments were found by Leonard during the excavations at Kom Hadid (a mound in the eastern part of Naukratis). These sherds were found within levels of the 1st century BC that included residual material of all Ptolemaic periods, dating back to the late 4th century BC. One piece was found within a late 2nd century BC context, but is also almost certainly residual. Only two can be identified from the form, a truncated cone beaker rim, found within a late 2nd century BC context, and a shallow hemispherical bowl found in a 1st century BC context. These belong to Nenna and Seif el-Din’s types T.6.4 and T.1.2 respectively, are likely residual within these contexts and both probably date to the 3rd or possibly the 2nd century BC. The remainder may fall into the mid- to late- Ptolemaic group outlined below.

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44 Nenna and Seif el-Din 2000, Form T.7.1; Nenna 2013, fig. 6.5, T.7.1a, see also 7.1b-c.
45 See chapter on New Year’s flasks.
46 Nenna 2013, 128. However see discussion below.
47 Bailey 2011; Nenna 2013, 128.
48 Bailey dates these to the 2nd century BC (2011), Nenna dates them to the 2nd century BC through to the 1st century AD (2013). The author published the ceramic finds as dated c. 200BC to 30BC within this catalogue. All parallels dated to the 1st century AD have problematic contexts and should be discounted (Bailey 2011).
49 Leonard 2001, fig. 3.9.4.
50 Leonard 2001, fig. 3.9.5.
3. Mid- to late-Ptolemaic faience

Mid- to late-Ptolemaic faience vessels include a range of mould-made, bichrome and monochrome variants, using a variety of glaze colours. Production during this period continued at Memphis (Kom Helul), although the production at Athribis ceased. The material found within early 2nd to 1st century BC levels at Athribis showed a distinct decline in the variety and quality of moulded decoration from the preceding mid-3rd century BC period, which Welc associated with political decline.\(^\text{52}\)

The Naukratis assemblage is dominated by mid- to late-Ptolemaic faience vessel forms, because of the excavations by Leonard in two areas of Naukratis (the South Mound and Kom Hadid), that revealed 51 faience fragments of this ware within mid- to late-Ptolemaic phases of domestic structures.\(^\text{53}\)

A small group comes from the excavations of Petrie, Gardner and Hogarth, including deep bowls with flaring lips (form T.2.1 Fig. 15) dated from the 3rd to the 1st century BC,\(^\text{54}\) contemporary bichrome (light and dark blue) echinus (incurved rim) bowls (form T.3.1 Fig. 16)\(^\text{55}\) and large plates (form T.6 Fig. 17).\(^\text{56}\) This is a diverse group that spans the period between the 3rd century BC and the 1st century BC. Pieces are rare, yet all centuries are clearly represented. Whilst some of the broadly dated pieces may fit into the services of the earlier group discussed above, the majority are clearly different (and later), showing, despite bi- or multi-chrome glazes, limited other detail, with a distinct reduction in the use of mould-made elements.

Mid- to late-Ptolemaic polychrome moulded decoration bowls presently include just one example from Naukratis (form T.1.4 Fig. 18).\(^\text{57}\) Ptolemaic form of truncated cone beaker, with parallels dated to the 3rd to the 1st centuries BC (form T.6.4b Fig. 19),\(^\text{58}\) which is similar in form to the decorated example discussed in section 2.1 above. To this small assemblage we can add a variety of body sherds in apple-green glaze, ultramarine blue glaze, and lavender-blue glaze (purple or grey-blue, Fig. 20) that are distinctive of the Ptolemaic period.\(^\text{59}\)

The larger sample from Leonard’s excavations in the South Mound and Kom Hadid consist predominantly of monochrome bowls and dishes, a similar range to what was found in earlier seasons. The forms include

\(^{51}\) Welc 2011, 253.
\(^{52}\) Ibid., 253. Faience was found in contexts dating from the mid-3rd century BC to the early 2nd century AD.
\(^{53}\) Leonard 1997: 2001. Note that 12 pieces from the South Mound cannot have their contextual information reconstructed due to errors in the locus summaries. Leonard also notes a number of additional unidentifiable fragments within the locus summaries, some of which may be the missing pieces illustrated.
\(^{54}\) British Museum, 2013,5012.15. Nenna and Seif el-Din, 2000, Form T.2.1; Nenna 2013, fig. 6.1, T.2.1.
\(^{55}\) Nenna and Seif el-Din 2000, nos 200–1.
\(^{56}\) Nenna 2013, 127, see form variants of T.6, fig. 6.1.
\(^{57}\) Nenna and Seif el-Din 2000, no. 104; Form T.1.4; also possibly Nenna 2013, 108, fig. 6.1, T.1.4.
\(^{58}\) Nenna 2013, fig. 6.4, T.6.4b–c; see also Nenna and Seif el-Din 2000, nos 160 and 195.
\(^{59}\) Nenna 2013, 127.
echinus bowls (form T.3.1a, Fig. 16), hemispherical bowls (form T.3.1c), dishes with internal lip (form T.6.1a), bowls with inward turning rim with a flat top (form T.6.1b), dishes with downward turning lip (form T.6.1c) and simple rims from bowls or beakers (form T.3.1d or T.6.4c). These are all forms commonly dated between the 3rd and the 1st century BC. All faience vessel fragments from Leonard’s excavations are Ptolemaic in date, and all but one piece came from a Ptolemaic context. Chronological variation can be seen within the assemblage, with the 3rd to 2nd century BC contexts producing largely echinus bowls (form T.3.1a–b) and dishes with internal lip (form T.6.1a), or downward turning lip (form T.6.1c), whereas the 1st century BC contexts produced largely hemispherical bowls (form T.3.1c), and bowls with inward turning rim with a flat top (form T.6.1b), although earlier forms were clearly common residual finds within the later contexts.

4. Ptolemaic plastic vases in faience

Plastic faience vases of the Ptolemaic period are very rare, and at Naukratis this group includes just two pieces. They come in two groups, representations of animals, often elephants, as with our example (Fig. 3) and representations of deities, often Bes, as in our case (Fig. 21). The workmanship is often very detailed and naturalistic, with detailed rendering of hair and the use of a range of glaze colours to distinguish harnesses in the example of the elephant. Nenna dates both the elephant (form T.10.1) and the Bes (form T.10.2) types to the 3rd century BC and this would certainly seem to be the case for the elephant. However, there are earlier productions of Bes jars, making the dating of such fragments difficult.

5. Roman faience

Roman production of faience vessels is now well understood thanks to a number of exhaustive studies of collections, examples from well stratified sites and from production places. The distinctive thick turquoise glaze of the early Roman period, produced extensively, but not exclusively at Kom Helul, Memphis is particularly diagnostic of the 1st to 2nd centuries and into the beginning of the 3rd century AD. The core is slightly different in texture, accommodating a higher proportion of clay particles than in...
previous periods where products have a higher sand content. Recent excavations have discovered the forms produced at Kom Helul, Memphis, in the settlements of Mons Claudianus, Mons Porphyrites, Quseir al Qadim (Myos Hormos) and Berenike in the eastern desert of Egypt, within contexts dating from AD 50 to AD 235. They were most common in contexts dated between AD 117 and AD 192, although some forms continued to be popular within Severan contexts of AD 196 to AD 235.

The Naukratis assemblage includes a number of Roman faience vessels produced in Egypt during the 1st through to early 3rd centuries AD. The forms include deep ledge rimmed bowl with slightly offset rim (form T.12.5/MC. 4-10 variants, Fig. 25), with close parallels from an early Roman workshop at Elephantine, basing its forms on Italian red-slipped table ware forms. Large ovoid vessels with a flared lip (form T.22.3) of the 1st to 2nd century AD were also found at Naukratis. The most common forms from Naukratis are bowls and dishes, including hemispherical bowls with a flat rim (form T.12.1), dated 1st to early 2nd century AD, and wide, shallow bowls or dishes with everted or ledge rims. Both of these types were also (rarely) produced with a lavender glaze (see Fig. 24), more typical of the Ptolemaic period (but also attested, if rare, at Roman sites).

The most typical Roman dish and bowl forms are carinated, with ledge or flanged rims and a ring-foot base, copying red-slipped table wares of the late 1st and early 2nd centuries AD. The main four forms produced at Egyptian workshops and found Roman period Egyptian sites comprise:

1. Hemispherical bowl with flanged rim and ring foot-base (form T.12.4; MC.12). The faience form copied Eastern Terra Sigillata forms 45–50 manufactured in AD 40–100. The faience copies were used from before c. AD 54/68 until AD 222/235 (not yet found at Naukratis).
2. Shallow carinated dish with rounded lip/flanged rim (form T.13.3; MC.13). The faience form was broadly based on Eastern Terra Sigillata forms 34–36 and 75 produced in AD 40–100. The faience copies were used from before c. AD 54/68 until 222/235 (Fig. 26).
3. Ledge rim bowl with or without ring-food base (form T.12.3; MC.7–9). The faience form was broadly based on Eastern Terra

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73 Nenna and Nicholson 2013, 135.
74 On the basis of papyrological data at Mons Claudianus, see Tomber 2006, 2007; Whitcomb and Johnson 1979, 68–91.
75 Tomber 2006, 44–9, 198–200.
76 Nenna 2013, T.12.5 variant; Tomber 2006, 44–9, types MC.4 to MC.10.
77 Rodziewicz 2005, 28–30, pl. 12, no. 215. This workshop produced only a limited range of forms, and is not the likely source for these pieces.
78 Nenna and Seif el-Din 2000, fig. 15; Nenna 2013, fig. 6.13, T.22.3. However similar forms are known from the Ptolemaic period (Nenna and Seif el-Din 2000, no.592; Nenna 2013, fig. 6.7, T.11.1).
80 Nenna 2013, T.13.2, see T.12.3c. A similar rim form is typical for the late 2nd century AD at Mons Claudianus and Mons Porphyrites (Tomber 2006, 47, types 9, 14 and 19).
81 Yellow, pale green, purple and white were all present at Mons Claudianus, which had no Ptolemaic phase. However, they were exceptionally rare there (Tomber 2006, 44).
82 Tomber 2006, 49.
83 Ibid. 2006, 49.
84 Ibid., nos MC. 7 and MC. 9. MC. 9 is typical of second half of the 2nd century AD at Mons Porphyrites (ibid. 47; Tomber 2007).
Sigillata forms 43, 58, 28 produced in AD 100–150. The faience copies were used from c. AD 96/106 (if not before) until 222/235 (Fig. 27).

4. Ledge rim dish with or without ring foot base (form T.13.2; MC.14–15, 18–19). The faience form was broadly based on Eastern Terra Sigillata forms 57 and 78, produced in AD 100–150. The faience copies were used from c. AD 96/106 (if not before) until AD 164/197 (Fig. 28).

These groups are particularly distinctive of Memphite production of the 1st to 2nd century AD (forms T.12.3c, T.13.2, T.13.3; MC.13). At Kom Helul, the kiln was interpreted as of the 1st century AD, abandoned and filled at some point during the 2nd century AD or possibly the 3rd century AD.

Statistical analysis of finds from Mons Claudianus suggests faience was uncommon in the second half of the 1st century AD, accounting for under 10% of the fine wares from the reign of Nero to Trajan (albeit with an apparent Flavian hiatus in the excavated areas of the site). However, faience became particularly popular from the Trajanic period (47%) onwards, until it accounted for nearly 60% of the fine wares from the Severan period. Thus faience bowls and dishes were very common at Mons Claudianus in levels dated AD 98–192, but clearly continued to be used, if not manufactured, into the early 3rd century AD. Indeed this pattern was also recognized at Myos Hormos, where, although rare in late 1st century BC late Augustan levels and 1st century AD deposits, faience was much more common in late 1st to 2nd century, 2nd century and early 3rd century AD deposits.

This is a general trend noticed across Roman Egypt, where red-slipped wares, so popular in the 1st century AD, were replaced by the brief popularity of the faience vessels in the 2nd and early 3rd century AD.

The group is completed by a small range of more rare contemporary variants and base fragments that could come from a variety of forms (possibly from forms T.13, MC.13 or MC.14), as well as four generic body

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85 Tomber 2006, 49.
86 Nenna and Seif el-Din 2000, no. 470; Nenna 2013, T.13.2.
87 Tomber 2006, 49.
88 Ibid., 2006, 48, fig. 1.16, type 13-174; Petrie 1909b, pl.40, nos 1–4; Nenna 2013, T.13.3.
89 However, it is possible that it could have continued to operate into the 2nd century AD, and certainly these forms continued to be manufactured there during the 2nd century AD, possibly into the beginning of the 3rd century BC. French discusses possibility of 2nd or 3rd century AD material covering the kiln after it was abandoned (French 2013, 165).
90 Albeit a small sample size as just 3% of all pottery indicators from Mons Claudianus were of 1st century AD date. 1st or mid-1st century AD phases at Mons Claudianus are no earlier than the reign of Nero, starting possibly as late as AD 68 until the end of that century. However there is little that can be specifically dated (representing a hiatus?) between AD 86 and AD 98.
91 There appears to be a concentration of material at Mons Claudianus that can be precisely dated from papyri to the periods AD 106–11; AD 114–18 and AD 136–64.
92 However a small sample size of just 10% of all pottery indicators were of Severan date. Severan material can be dated from papyri between AD 197 and AD 222/235 (Tomber 2006, 198–200).
93 Tomber 2006, 48, fig. 1.16, no.13-174. Type MC. 13 was found in contexts dated between the mid-first century AD and the Severan period.
94 Tomber 2006, 46.
96 Nenna and Seif el-Din 2000, no. 470; Nenna 2013, T.13.2; Tomber 2006, forms MC. 7 and MC. 9.
97 Tomber 2006, 48, fig. 1.16, no.13-174, Type MC. 13 see also form MC. 14; Petrie 1909b, pl.40, nos 1–4; Nenna 2013, T.13.
sherds from open dish or bowl forms that could not be identified. A flat base fragment is most likely to have come from another ledge rim bowl or dish (forms T.12.3; T.13.2b; MC.9), but could also have come from an ink well (T.22.1). 98

6. Conclusions

Ptolemaic and Roman faience vessels from Naukratis represent the continued popularity of faience within Egyptian society until the beginning of the 3rd century AD. Whilst finds from Naukratis represent just a small sample, they comprise some fine early Ptolemaic pieces that inform us about ritual practices, the Macedonian elite and the ruler cult of Arsinoe II. The association of faience vessels with the New Year and inundation festivals and ruler cults shows remarkable continuity with the preceding period. 99 There is also some tantalising evidence for production during the 3rd or 2nd century BC in the form of moulds that may have been used to produce figurative decoration for lotus necked ovoid jars or oinochoai. As is also the case elsewhere across Egypt, the mid- to late- Ptolemaic material is both rare and of poorer quality, with decreasing complexity and care taken in its production, compared to early Ptolemaic material. This decline is perhaps particularly severe in Naukratis as the site had lost its unique role as a Mediterranean port by the mid-3rd century BC (certainly before 270BC, when evidently Nelson’s Island was abandoned and Alexandria was fully established).

The early Roman assemblage is distinctly different from that which preceded it. Whilst typical of late 1st through early 3rd century AD production, such as that of Memphis (Kom Helul), it is almost certainly not locally produced and the assemblage is very small. This faience table ware is particularly common in the later 1st century AD until the beginning of the 3rd century AD, and one would expect it to account for a high proportion of fine wares found at Naukratis if there had been a substantial occupation at the city at this time. This appears to be a sampling issue, however as the early excavators concentrated on the earliest levels of the site. Recent work at Naukratis has revealed substantial quantities of early and late Roman ceramics (but not yet faience) at Naukratis and Leonard’s excavations of domestic structures were crucial to this study as they filled what would have been a significant gap in our data set of Ptolemaic faience vessels from Naukratis. 100

98 Nenna 2013, 129, see T.12.3a variant; Tomber 2006, type MC. 9; Petrie 1909b. See also ink well (Nenna 2013, T.22.1b).
99 See chapter on New Year’s flasks.
100 Coulson 1996; Thomas and Villing 2013; Thomas 2014b. Leonard’s excavations included a limited number of 1st century AD contexts, but did not reveal Roman faience wares which were more popular during the late 1st to early 3rd century AD as explained above.