

OTTOMAN-PERIOD CERAMIC ARTIFACTS FROM THE MAGEN AVRAHAM COMPOUND, YAFO (JAFFA)

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INTRODUCTION

This report presents the ceramics from the excavation in the Magen Avraham Compound, Yafo (see Arbel and Rauchberger, this volume).¹ The material was found in stratified contexts of the Ottoman period (Strata III–II) in Areas X, XW, A, B and Ca, as well as in topsoil and mixed contexts in Areas Cb, D, F and G. These Ottoman-period finds include imported earthenware glazed vessels from production centers in different parts of the Ottoman Empire, hard-paste and porcelain vessels from Europe and locally produced vessels such as Black Gaza Ware, all of which have commonly been found in excavations in Yafo. The assemblage also includes other types of imported and locally-made ceramic artifacts: clay smoking pipes, Marseille roof and floor tiles, wall tiles and bricks. The typology employed in this report follows the extensive publication of the Ottoman-period ceramic material from the excavations of the Ottoman military compound (the Qishle) in Yafo (Vincenz, in press).

THE FINDS

HARD-PASTE TABLE WARE (Figs. 1–3)

The production of porcelain imitation tableware was widespread across Europe in the eighteenth century CE, occurring mainly in countries such as Germany, England, France, Holland and Italy. These vessels were exported from Europe to the Ottoman Empire, which at that time had not yet developed its own local industries for the production of either hard-paste or true porcelain wares. Although the production technique of porcelain had already been known in Europe during that century, this process remained costly and many manufacturers preferred the mass production of hard-paste wares as more affordable imitations. The description of the excavated material below is organized according to the different decorative styles and techniques of hard-paste vessels.

¹ I wish to thank Yoav Arbel and Lior Rauchberger for inviting me to study this material.

Transfer-Printed Wares (Fig. 1)

This decorative technique, invented by the Irish engraver John Brooks between 1747 and 1753, imitated the Chinese Blue-on-White porcelain that was much in vogue at that time in Europe. It reduced the time and cost of manufacturing hard-paste vessels, compared to the more costly technique of hand-painting. In this technique the decoration was transferred from an ink-filled copper plate onto the vessel by a sheet of paper (Savage and Newman 2000:296). Transfer-printed wares were initially mainly decorated in monochrome, sometimes with hand-painted additions of colors and gilding, while polychrome decorations also became common in the nineteenth century (Savage and Newman 2000:296); between 1829 and 1830, new colors, such as green, red, brown and pink, were introduced (Neale 2005:17). The decorations of these vessels included a wide range of floral, vegetal, geometric and landscape motifs, frequently inspired by those seen on Chinese porcelain wares.

Transfer-Printed Ware in Blue-on-White with Willow Pattern

Fragments of a dish and two plates are decorated with the Willow Pattern.

J-TW-DISH-1 (Fig. 1:1).— The flat base of a hash dish—a deep, lidded vessel for serving stews or meat with sauce—displays two pagodas and several different kinds of trees (Fig. 1:1).

J-TW-PL-1 (Fig. 1:2, 3).— The plate fragments comprise a ledge rim (Fig. 1:2), decorated with a floral and geometric pattern, and a low ring base (Fig. 1:3), decorated with a tree and columns representing the entrance to a pagoda. These Willow Pattern vessels were probably produced by the Spode factory of Stoke-on-Trent in England throughout the nineteenth century (Rogers 2004:262–264).

Transfer-Printed Ware in Blue-on-White with Floral Pattern

J-TW-BW-PL-1A (Fig. 1:4).— This fragment is part of the ledge rim of a plate. Floral patterns were a common decorative motif on European Blue-on-White hard-paste vessels, used as a frame for the central scene, which could be a landscape, a mythological scene, an animal scene or a wide range of other motifs. Unfortunately, not enough of the rim was preserved to identify the pattern. Based on its preserved part, the plate should be dated to the mid–late nineteenth century.

Transfer-Printed Ware in Blue-on-White with Wild Rose Pattern

J-TW-BW-PL-1 (Fig. 1:5).— This fragment is part of the ledge rim of a plate. Although very little of the rim decoration is preserved, it could be identified as the Wild Rose pattern. This pattern, in which the main scene is the so-called Nuneham House in Oxfordshire, commonly occurs on the rim of hard-paste vessels (see Neale 2005:45, 57, 58). It was very common from around 1830 to 1850, and was produced by many British factories (for a

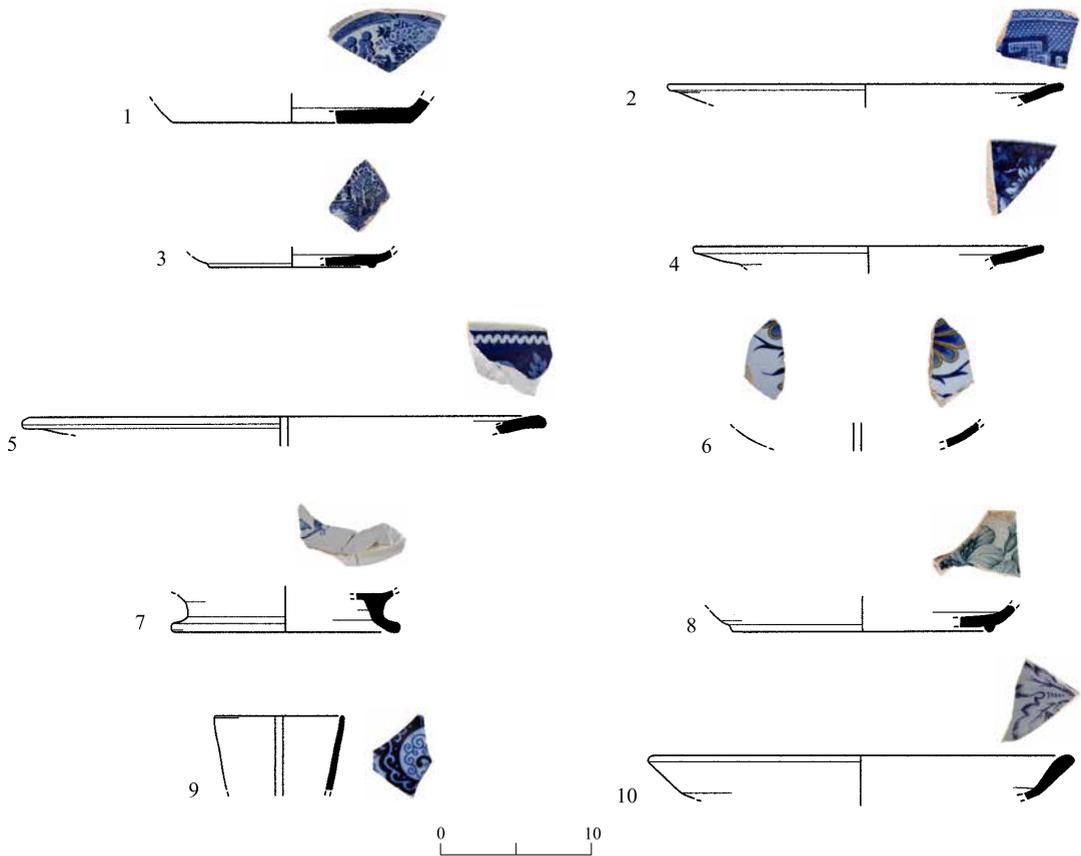


Fig. 1. Hard-paste tableware: transfer-printed wares.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ⁱ	Description
1	Hash dish (J-TW-PL-1)	200	2502	n/a	White hard-paste with underglaze blue transfer Willow Pattern
2	Plate (J-TW-PL-1)	86	568	Diam. 20 Rim 5%	White hard-paste with underglaze blue transfer Willow Pattern
3	Plate (J-TW-PL-1)	376	3577	Base diam. 12	White hard-paste with underglaze blue transfer Willow Pattern
4	Plate (J-TW-BW-PL-1A)	50	506/1	Diam. 20 Rim 5%	White hard-paste with underglaze blue transfer floral pattern
5	Plate (J-TW-BW-PL-1)	350	3506	Diam. 24 Rim <5%	White hard-paste with underglaze blue transfer Wild Rose Pattern
6	Bowl (J-TW-BW-BL-1B)	50	506/2	n/a	White hard-paste with underglaze blue transfer floral pattern with yellow enhancements
7	Bowl (J-TW-BW-BL-1A)	24	68	Base diam. 16	White hard-paste with underglaze blue transfer bird
8	Plate (J-TW-PL-3A)	200	2045	Base diam. 12	White hard-paste with underglaze green transfer floral pattern
9	Cup (J-TW-FB-CUP-1A)	200	2010	Diam. n/a Rim <5%	White hard-paste with underglaze flow blue geometric pattern with gold enhancement
10	Plate (J-TW-PL-6B)	107	1054	Diam. 20 Rim 5%	White hard-paste with underglaze lilac transfer acanthus pattern and molding

ⁱ n/a = not available.

list of such factories, see Kowalsky and Kowalsky 1999:519), as well as French factories, such as the *faïencerie* Creil-Montereau, examples from which were found in Damascus (see François 2009: Fig. 5:38). Other prominent production centers for vessels with such decoration included one in Maastricht, the Netherlands, which was owned by Petrus Regout and operated from 1859 until 1909, and the Boch Frères/Keramis factory which operated in Belgium from 1885 to 1955 (Cosyns and Bragard 2008:20–21).

Transfer-Printed Ware in Blue-on-White with Yellow-Highlighted Floral Pattern

J-TW-BW-BL-1B (Fig. 1:6).— This fragment probably belongs to a bowl, and is decorated on both sides with a blue floral pattern highlighted in yellow. In the nineteenth century, vessels with monochrome Blue-on-White decoration were still common, often displaying touches of gold bronze. In the present example, yellow highlighting may have been used as a substitute for gold. It should be dated to the mid–nineteenth century.

Transfer-Printed Ware in Blue-on-White with Bird

J-TW-BW-BL-1A (Fig. 1:7).— This fragment belongs to a large bowl, probably a serving bowl, with a high ring base. The inside of the vessel is decorated with a bird, possibly sitting on a branch. Birds were a common decorative pattern on vessels of the eighteenth and nineteenth centuries. In the present example, the decoration is set against a white background and originally probably consisted of several birds in a tree or perching on branches. The rather poor workmanship and coarse ware of this vessel indicate a date in the first half of the nineteenth century.

Transfer-Printed Ware in Green-on-White with Floral Pattern

J-TW-PL-3A (Fig. 1:8).— The base shown here probably belongs to a plate decorated with a delicate floral pattern. It should be dated later than 1829–1830, when polychrome transfer-printed vessels began to be produced (see above).

Transfer-Printed Ware in the Flow Blue Technique with Gold-Highlighted Garland Pattern

J-TW-FB-CUP-1A (Fig. 1:9).— This fragment belongs to a deep cup, possibly a custard or a chocolate cup (Neale 2005:151). It is decorated with garlands enhanced with gold highlights in the Flow Blue technique, a transfer-printed decoration with a blurred effect, which was achieved by adding a cup of lime or ammonia to the kiln during the firing process (Neale 2005:135). Vessels decorated in the Flow Blue technique were first produced in British factories in 1830–1840 (Neale 2005:17). Later, Flow Blue was also produced by other European manufacturers and was especially popular in North America (Neale 2005:174–175). The present example can be dated to the mid–late nineteenth century.

Transfer-Printed Ware in Lilac-on-White with Molded Acanthus Leaves

J-TW-PL-6B (Fig. 1:10).— The plate to which this fragment belongs is decorated with a molded rim, featuring acanthus leaves over which the lilac transfer pattern was applied (for

a variety of such molded patterns, see Cosyns and Bragard 2008:211). Molded decorations, either plain white or combined with a transfer pattern that was applied on top of it, were used around the mid–nineteenth century. A date in the mid–late nineteenth century seems appropriate for the present example.

Feather/Shell Edge Ware (Fig. 2:1, 2)

This group of vessels, with a molded border decoration comprising “repeated feathery forms with barbs disposed diagonally to the edge” (Savage and Newman 2000:116, 262), was mainly produced in the Staffordshire and Leeds regions of England. One of the factories, Wedgwood, produced hard-paste, soft-paste, cream ware and porcelain vessels with this type of decoration. The edge of the vessel was colored mainly in blue, although green and red were also common. The cheaper varieties of these plates display a painted feathery decoration on the rim (see Fig 2:1).

Flow Blue Feather Edge

J-TW-FW-PL-1 (Fig. 2:1).— This rim belongs to a white-glazed plate with a blue-painted Feather Edge; the remainder of the plate is undecorated. Many factories produced plates with this simple decoration, among them Davenport and C Adams. This type of decoration was common after 1830 and thus, the present example should date to that time or around the mid-nineteenth century (Stelle 2001: Shell Edge).

Molded Blue Feather Edge

J-FW-PL-2 (Fig. 2:2).— Plates with molded Feather or Shell Edge decoration were produced at the end of the eighteenth and throughout the nineteenth centuries. They were found, for example, among the cargo of the “Blue China” shipwreck off the coast of Florida (Tolson, Gerth and Dobson 2008: Figs. 13, 14).

Sponge Technique (Fig. 2:3–5)

In this technique, color-soaked sponges of various shapes were used to apply the decoration to the vessel (Savage and Newman 2000:270). The decorations were rather simple, mainly geometric or floral patterns (Gauvin and Becker 2007:28–29). Many European factories produced sponge-decorated vessels, the most prominent of which operated in Scotland between 1840 and 1920 (Miles 2013). They were also produced at the Utzschneider factory in Sarreguemines, France.

J-SPONGE-PL-1 (Fig. 2:3).— The ledge rim of this plate is decorated with a simple blue pattern of dotted rosettes and “eyes” and a blue line close to the rim’s edge. The pattern of the present example could not be attributed to a specific manufacturer, but may have comprised the simple design typical of vessels for daily use, which were produced by many

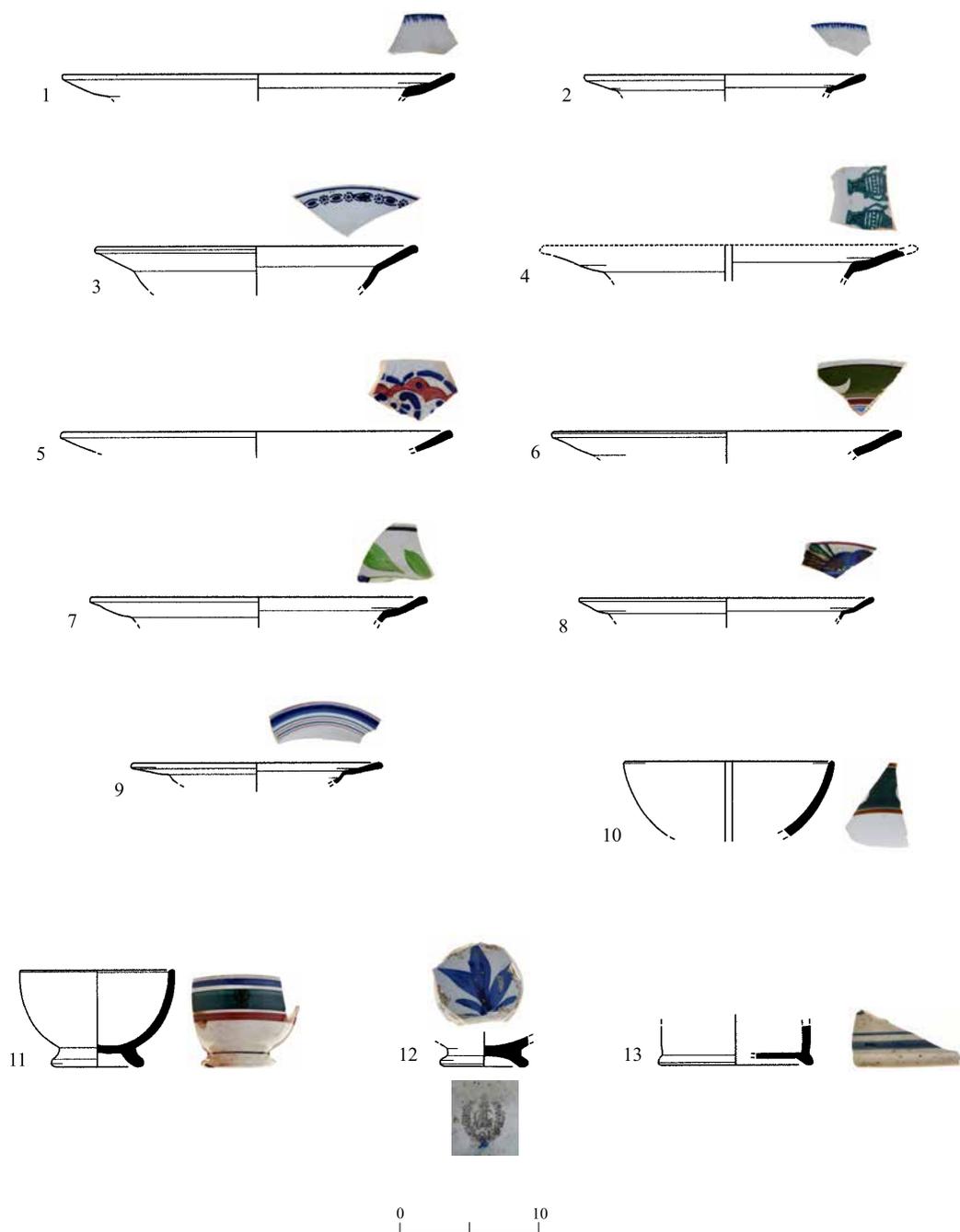


Fig. 2. Hard-paste tableware: Feather Edge Ware, Sponge Ware, Sarreguemines vessels and hand-painted bowl and cup with colored bands.

◀ Fig. 2

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ⁱ	Description
1	Plate (J-TW-FB-PL-1)	652	6521	Diam. 22 Rim 5%	White hard-paste with Flow Blue spilling line on rim edge
2	Plate (J-FW-PL-2)	200	2045	Diam. 18 Rim 8.5%	White hard-paste with nicks painted blue
3	Plate (J-SPONGE-PL-1)	427	4081	Diam. 23 Rim 16%	White hard-paste with underglaze blue decoration
4	Plate (J-SPONGE-PL-1)	200	2502	n/a	White hard-paste with green underglaze decoration
5	Plate (J-SPONGE-PL-2)	824	8045	Diam. 20 Rim 4.5%	White hard-paste with blue and red underglaze decoration
6	Plate (J-SARRE-PL-3A)	821	8069	Diam. 21 Rim 8%	White hard-paste with green, brown, red and light blue underglaze decoration; Sarreguemines décor bande étoilé
7	Plate (J-SARRE-PL-6A)	208	2030/1	Diam. 22 Rim 5%	White hard-paste with black, green, blue and red underglaze decoration; Sarreguemines Décor 59
8	Plate (J-SARRE-PL-6B)	200	2030/2	Diam. 20 Rim 8%	White hard-paste with red, blue and green underglaze decoration
9	Plate (J-SARRE-PL-8)	252	2510	Diam. 17 Rim 20%	White hard-paste with blue, red and green underglaze decoration; Sarreguemines Décor 661
10	Bowl (J-SARRE-GD-BL-3)	200	2096	Diam. n/a Rim <5%	White hard-paste with brown and green underglaze decoration; Sarreguemines décor bande étoilé No. 5
11	Bowl (J-SARRE-GD-BL-4)	426	4087	Diam. 11 Rim 22.5%	White hard-paste with blue, green, red and black underglaze decoration; Sarreguemines Décor Hanging No. 2
12	Bowl (J-GD-BL-12)	818	8051	Base diam. 6	White hard-paste with blue underglaze decoration and black underglaze mark
13	Cup (J-WCB-CUP-1)	200	2078	Base diam. 11	White hard-paste with light blue underglaze decoration

ⁱ n/a = not available.

factories. A plate fragment with a similar pattern was found in Dublin, on Ardee Street (Myles 2013: a sherd on the left side of the photograph captioned “Spongeware sherds from Ardee Street, Dublin 8”). The fragment from the Magen Avraham Compound can probably be dated to the mid–late nineteenth century.

J-SPONGE-PL-1 (Fig. 2:4).— This fragment of a ledge rim probably belongs to a large plate. The rim is decorated with stamped green jars. The missing, main part of the plate may have been decorated with a central motif, for example, a large green jar, relating to the jars decorating the rim. This plate can probably be dated to the mid–late nineteenth century.

J-SPONGE-PL-2 (Fig. 2:5).— This plate fragment of a ledge rim is decorated with a geometric blue and red pattern. It is apparent that the red-colored part of the pattern was applied first and then the blue-colored part was applied over it. Although the pattern could not be securely attributed to a specific manufacturer, it is noteworthy that a similar pattern in blue-on-red was found in the pattern book of Georges Herrmann, father and son, from Sarreguemines, dated to 1900–1923 (Herrmann and Herrmann 1900–1923:15, Décor 3011).

Sarreguemines Vessels (Fig. 2:6–11)

The town of Sarreguemines, situated in the Lorraine region of France on the border with Germany, was one of the major European producers of hard-paste tableware. The so-called *Opaque de Sarreguemines* vessels were produced at the Utzschneider factory, beginning in the late eighteenth century. That factory also produced a variety of other vessels decorated in various techniques, among which the sponge technique, freehand painting and stencil technique were the most common. Vessels with the stamps of this factory have often been found in large quantities in excavations in Yafo.

J-SARRE-PL-3A (Fig. 2:6).— The ledge rim of this plate is decorated with a wide green band, framed by two thin brown bands, half-moons and stars. This popular pattern called *décor bande étoilé No. 5* was mainly produced for export to the Ottoman Empire and other Muslim countries, and was made in different colors such as green, red and blue (Herrmann and Herrmann 1895:59). It is dated to the late nineteenth century, and was produced until c. 1920.

J-SARRE-PL-6A (Fig. 2:7).— This fragment of a ledge-rim plate is decorated with red flowers and green leaves in freehand painting, and with a black filet line at the edge of the rim. This pattern was mentioned as *Sarreguemines Décor H59* in Herrmann's pattern book from 1895 (Herrmann and Herrmann 1895:77).

J-SARRE-PL-6B (Fig. 2:8).— This fragment of a ledge-rim plate is decorated with a large blue flower(?) with green leaves in freehand painting, and with a red filet line on the edge of the rim. The decorative style is very similar to that of the plate in Fig. 2:7 and thus, it may have been produced by the same manufacturer. This type of décor was not found in the pattern books of the Utzschneider factory, and may have been among the many pages of the books that were lost. The bowl probably dates to the end of the nineteenth century.

J-SARRE-PL-8 (Fig. 2:9).— This ledge rim belongs to a plate, and is made of a rather fine, thin ware. It is decorated with a wide blue band and thin lines in red and green. This type of decoration, called *décor à filet*, was found in the 1905 factory pattern book as *Sarreguemines Décor 661* (Herrmann and Herrmann 1905:22).

J-SARRE-GD-BL-3 (Fig. 2:10).— This bowl belonged to a breakfast set, consisting of a bowl and saucer, and sometimes a tray. These sets were very popular between the eighteenth and the early twentieth century. The decoration on the present fragment consists of a wide green band, framed by two thin brown bands, and what appear to be half-moons and stars, identical to the decoration on the plate in Fig. 2:6.

J-SARRE-GD-BL-4 (Fig. 2:11).— This breakfast bowl with a ring base is decorated with a wide green band with sponge-stamped decoration in black, framed by two narrow bands in blue and red. Although no factory stamp was found on this bowl, it was identified in Herrmann's pattern book as *Décor Hanging No. 2* (Herrmann and Herrmann 1895:62).

Hand-Painted Ware (Fig. 2:12)

Hand-painting by skilled artisans was one of the many techniques for decorating hard-paste vessels. Many factories used this technique and employed skilled workers for this task. In some of the many factories that employed this technique, the most accomplished artists were afforded a signature, usually consisting of a number that can be found on the bottom of the vessel, or in a few cases the artist's initials.

Floral Decoration

J-GD-BL-12 (Fig. 2:12).— This breakfast bowl with a ring base is decorated with a large blue leaf/flower. The base of the bowl bears a stamp, consisting of a monogram, probably AC, topped with a crown and a star and framed by a wreath of laurel. This mark has been previously found on vessels from several sites in Yafo.² Such vessels may have been produced in Italy for export to markets in the Middle East. Vessels of this type with the barely legible addition of MADE IN ITALY have been encountered in antiquities markets in the Middle East.³ The time range of the Italian-made vessels, the late nineteenth–early twentieth centuries, may apply to the bowls from Yafo.

Banded Cream Ware (Fig. 2:13)

This type of ware, decorated with bands of different colors, was first produced at the workshops of Staffordshire and later in other parts of Europe, mainly in France (Savage and Newman 2000:194).

² Fragments bearing this stamp were found at Yafo, in excavations in the postal compound (Permit No. A-5818/2010) and on Ben Gamli'el Street (Permit No. A-7071), directed by Lior Rauchberger; the porcelain vessels from these excavations were studied by the author.

³ I wish to thank my colleague Jaap Otte for directing my attention to a sponge-decorated bowl with this stamp and the addition MADE IN ITALY. This bowl, and another with a stamp, but without the addition of MADE IN, were bought by him in Saudi Arabia and Qatar. The presence of such bowls in different parts of the Middle East indicates that they were produced for the Muslim market of the Ottoman period (see Floor and Otte 2013).

Blue Bands

J-WCB-CUP-1 (Fig. 2:13).— This base of a mug or cup is decorated with light blue bands of different widths. It should probably be dated to the mid-nineteenth century.

White-Glazed Ware (Fig. 3)

Vessels glazed entirely white, lacking painted decoration, constitute a very common group of the Ottoman period. They were produced by many European factories and used mainly in institutional canteens, such as those of hospitals and schools, some bearing the name of the institution. Some of these vessels bore a molded decoration on the body, or had molded decorative handles (Fig. 3:4) or appliqués in the shape of an animal (Fig. 3:3) or leaves (Fig. 3:5).

J-WW-BL-2A (Fig. 3:1).— This bowl has a rounded body and a shiny, well-adhering white glaze of excellent quality, which indicates a date at the beginning of the twentieth century.

J-WW-PL-3 (Fig. 3:2).— This rilled base belongs to a large white-glazed dinner plate. It bears a green overglaze backstamp featuring a seated lion. Although backstamps of many of the Ottoman-period factories depicted a lion, the one in the present example was applied to vessels designated for export to African countries by the Dmitrovsky porcelain factory in Werbilki, near Moscow (Golsky 2019;⁴ Nasonova 2009: No. 174⁵). It has been found on vessels dated to 1927–1937 and bearing the addition “made in Soviet Union.”⁶ The present stamp is probably of a slightly earlier date, c. 1920. The same seated lion backstamp was also found on a cup from the present excavation (see below, Fig. 4:1) and a base of a cup with the same backstamp was found in the excavations in the Greek Market.⁷

J-WW-TUR-2B (Fig. 3:3).— This fragment of a box, or square tureen, is decorated with appliqués of molded lion heads. Molded decorations commonly occurred on white-glazed vessels as handles, knobs (see below, Fig. 3:5) or appliqués. Tureens were produced by many factories, among them Utzschneider, although the surviving catalogues of this factory do not include an example with applied lion heads. This vessel is likely of a European provenance, dating to the late nineteenth century.

⁴ My utmost thanks to Igor Krasowski, who manages the website of Russian porcelain, www.aucland.ru, for kindly providing this information and the reference from which it was obtained. His website, unfortunately, is no longer active.

⁵ I wish to thank Gustav M. Blofeld for recommending the article discussing this backstamp.

⁶ I wish to thank Thomas Schröder for finding this information.

⁷ The excavation was directed by Yoav Arbel (Permit No. A-7100) and the pottery was studied by the author.

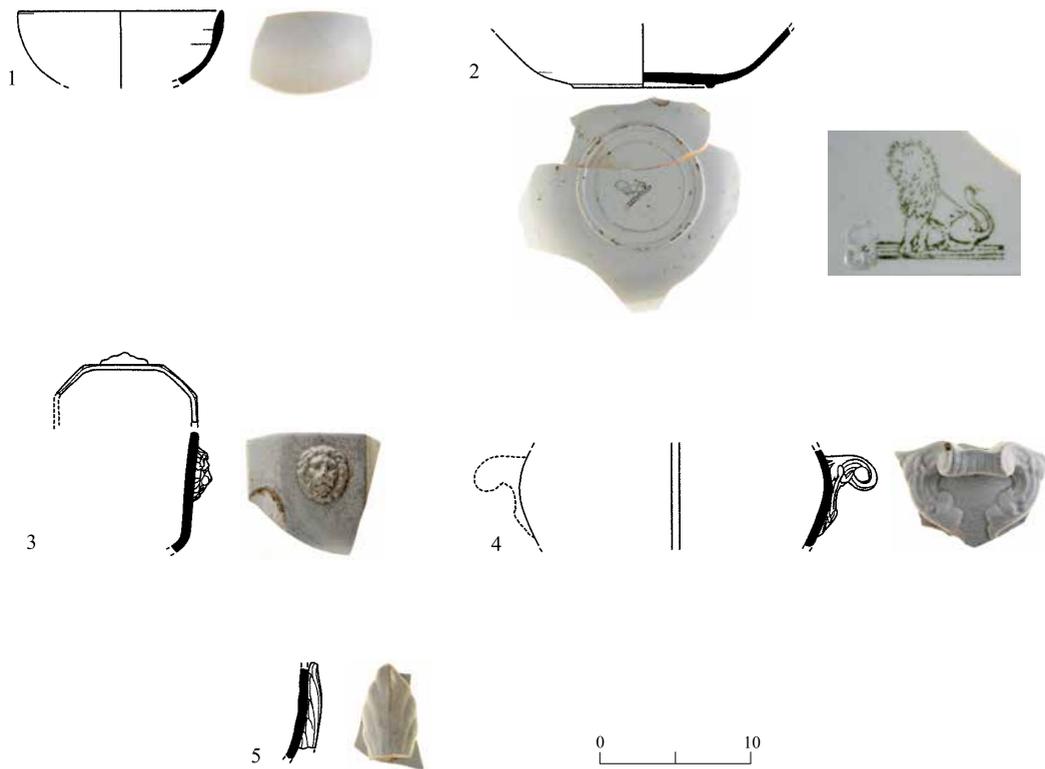


Fig. 3. Hard-paste tableware: White-Glazed Ware.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ⁱ	Description
1	Bowl (J-WW-BL-2A)	427	4081	Diam. 13 Rim 16%	White hard-paste with thick white glaze
2	Large plate (J-WW-PL-3)	301	3003	n/a	White hard-paste with thick white glaze; green underglaze seated lion stamp
3	Square tureen (J-WW-TUR-2B)	212	2056	Width: 9	White hard-paste with thick white glaze; lion head appliqués
4	Tureen (J-WW-HANDLE-2)	200	2502	n/a	White hard-paste with thick white glaze; molded handle
5	Leaf shaped appliqué (J-WW-KNOB-2B)	200	2045	n/a	White hard-paste with thick white glaze

ⁱ n/a = not available.

J-WW-HANDLE-2 (Fig. 3:4).— This large molded handle belongs to a tureen, of which examples with similar handles were produced at the Sarreguemines factory (*Faïencité 2001: Planche 28*) during the nineteenth and early twentieth centuries.

J-WW-KNOB-2B (Fig. 3:5).— This molded leaf seems to have formed the lower part of a handle, probably attached to a tureen (see Fig. 3:4).

PORCELAIN VESSELS (Fig. 4)

A small amount of porcelain vessels was found in the excavation. Porcelain is made of a mixture of *kaolin*, a refractory white clay, and a feldspathic rock (Savage and Newman 2000: 227), and could appear translucent when the vessel was thin enough. Porcelain vessels were decorated in a variety of techniques, such as transfer-printing, hand-painting, glazing and sprigging.

J-P-CUP-1 (Fig. 4:1).— This concave base probably belongs to a fluted cup. It bears a green overglaze backstamp of a seated lion (see Fig. 3:2). Such stamps were added to porcelain vessels produced by the Dmitrov factory in the 1920s for export to the African market (Golsky 2019).

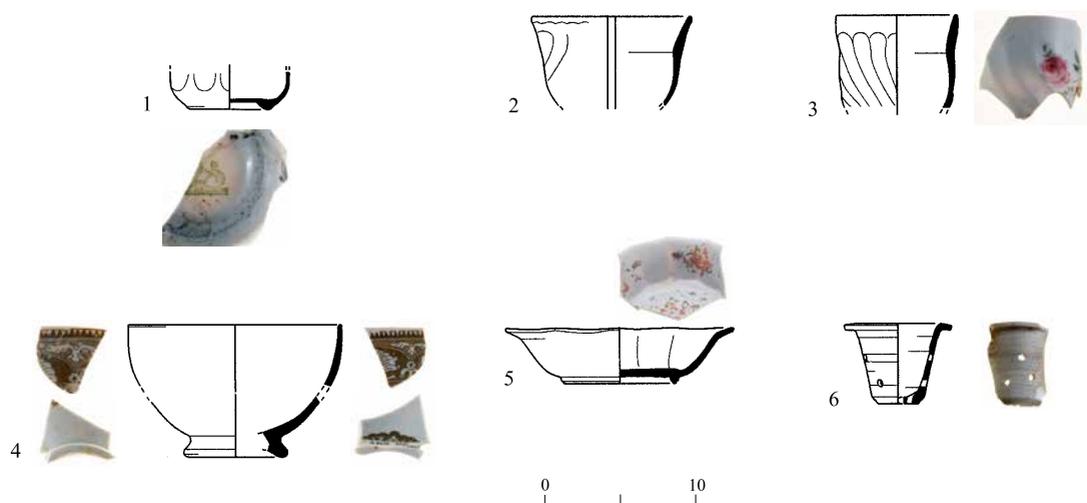


Fig. 4. Porcelain vessels: cups, bowl, saucer and strainer.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ⁱ	Description
1	Fluted cup (J-P-CUP-1)	353	3504	n/a	White porcelain with possible black underglaze paint; green underglaze seated lion stamp
2	Fluted deep cup (J-P-CUP-3D)	605	6029	Diam. 8 Rim 11%	White porcelain with gold decoration and blue overglaze paint
3	Fluted deep cup (J-P-CUP-3F)	607	6014	Diam. 7 Rim 22%	White porcelain with decal decoration
4	Bowl (J-P-TW-BL-4)	379	3553	Diam. 13 Rim 9%	White porcelain with brown underglaze transfer pattern A
5	Facetted saucer (J-P-SAU-12)	408	4039	Diam. 14 Rim 23%	White porcelain with polychrome overglaze decoration
6	Cup-shaped strainer (J-P-STRAIN)	304	3005	Diam. 7 Rim 17%	White bisqué

ⁱ n/a = not available.

J-P-CUP-3D (Fig. 4:2).— This fragment belongs to a porcelain cup with a fluted flaring body and gold and blue overglaze decoration. It may have been a so-called chocolate cup (*Limoges: Chocolate Cup*), which began to be produced in the seventeenth century when the first “chocolate houses” opened in London. The fragment shown here appears to be of a more recent date, i.e., the early twentieth century, based on the fine texture of the porcelain and the adherence of the surface glaze.

J-P-CUP-3F (Fig. 4:3).— This is another fragment of a fluted cup, in this case decorated with a decal rose pattern. This type of technique is the most common modern way of decorating porcelain vessels, indicating that the cup can be dated to the early twentieth century (Savage and Newman 2000:180).

J-P-TW-BL-4 (Fig. 4:4).— The bowl shown here is made of grayish porcelain, and is decorated with a brown transfer pattern. The center of the bowl is decorated with a round, probably floral pattern, while its upper part is decorated with a floral and geometric pattern, on both the inside and outside of the vessel. Vessels with similar decoration have been previously found in Yafo in the excavations of the postal compound.⁸ It is identified as the *Tancrede* pattern, which was used by the Société Céramique, Maastricht. A complete plate with this pattern and the factory mark is stored in the Qatar Museum (Carter 2011: QNM.664 CE.19). The mark on the Qatar piece provides a date range of 1870–1895. A similar dating is proposed for the present example (Polling 2001:91–92, Mark 531B).

J-P-SAU-12 (Fig. 4:5).— This saucer has a faceted body and a low ring base. It is decorated with a polychrome floral pattern that was applied overglaze and is now flaking off. The saucer could have been produced as a plain vessel in one of the European factories, and the painted decoration might have been applied later. A date at the beginning of the twentieth century seems reasonable for this vessel.

J-P-STRAIN (Fig. 4:6).— This vessel appears to be a strainer, perhaps meant to be used in a teapot. It is made of biscuit, i.e., porcelain fired only once before glazing, sometimes without further treatment (Savage and Newman 2000:44). The strainer is tentatively dated to the nineteenth century.

COFFEE CUPS (Figs. 5, 6)

The Turks of the Ottoman Empire were renowned for their indulgence in coffee drinking and pipe smoking, and Turkish coffee cups have often been found together with smoking pipes

⁸ These excavations were directed by Lior Rauchberger on behalf of the IAA (Permit No. A-5818/2010), and the porcelain material was studied by the author.

in Ottoman-period sites, including in Yafo. These include porcelain coffee cups imported from Europe, mainly from Germany, and soft-paste ones produced in Kütahya and Iznik in Turkey.

Porcelain Coffee Cups (Fig. 5:1–10)

The porcelain coffee cups are decorated with various designs, mostly floral patterns, all in blue and white, imitating Chinese teacups. Most do not include a factory mark, making their identification difficult. It is known from historic sources and archival material that various German factories produced large amounts of porcelain coffee cups, *Türkenbecher*, for export to the Ottoman Empire. Factories such as Wallendorf and Limbach in Thuringia and Ansbach in Bavaria exported unstamped coffee cups (Krieger 1966: Abb. 8, upper row, right side). Such trade was part of the thriving relations between Germany and the Ottoman Empire during the eighteenth and nineteenth centuries.

J-P-CC-1A (Fig. 5:1–8).— This is the most common type of porcelain coffee cup in the excavation, comprising a small bowl (diam. 6–8 cm) with a low ring base. Three variants of this cup type are described here, all decorated in Chinese fashion, with a blue line around the base, another below the rim and a third line in the cup interior, below the rim, outlining the decoration in this part of the cup. In one variant (Fig. 5:1–4), the exterior is decorated with medallions filled with stylized flowers, and the center of the bowl displays a single stylized flower, while in another variant (Fig. 5:6, 7), the exterior is decorated with a more complicated motif of a stylized floral pattern. A third variant (Fig. 5:8) displays a band filled with a pattern of scales and tufts of grass on the cup interior below the rim, a type of decoration used by the Meissen factory (*Meissen: Koppchen PK 073*). The exterior and the center of Fig. 5:8 are decorated with flowers and buds, similar to the so-called *Strohblumen Motif*, which was widespread in Germany during the eighteenth and nineteenth centuries. This date range, but mainly the nineteenth century, applies to the present examples.

J-P-CC-2D (Fig. 5:9).— This rather thick-walled coffee cup is decorated with overglaze painting in red and blue, representing a blue lily(?), red lines and stars and silver enhancements. The group of coffee cups to which this example belongs is also unmarked and thus, its provenance can only be conjectured. Possibly, these cups were produced in Europe as plain white coffee cups, and then coarsely decorated in Turkey. If indeed the decoration on Fig. 5:9 is a lily, one could suggest that it was decorated in Iznik, where the lily was a popular decorative pattern (Carswell 1998: Fig. 44). Alternatively, such cups may have been produced in Turkey, where the first porcelain factory was founded by Sultan Abdulhamid II in 1876 (*Yildiz Factory: History*). The present example can be dated to the late nineteenth–early twentieth centuries.

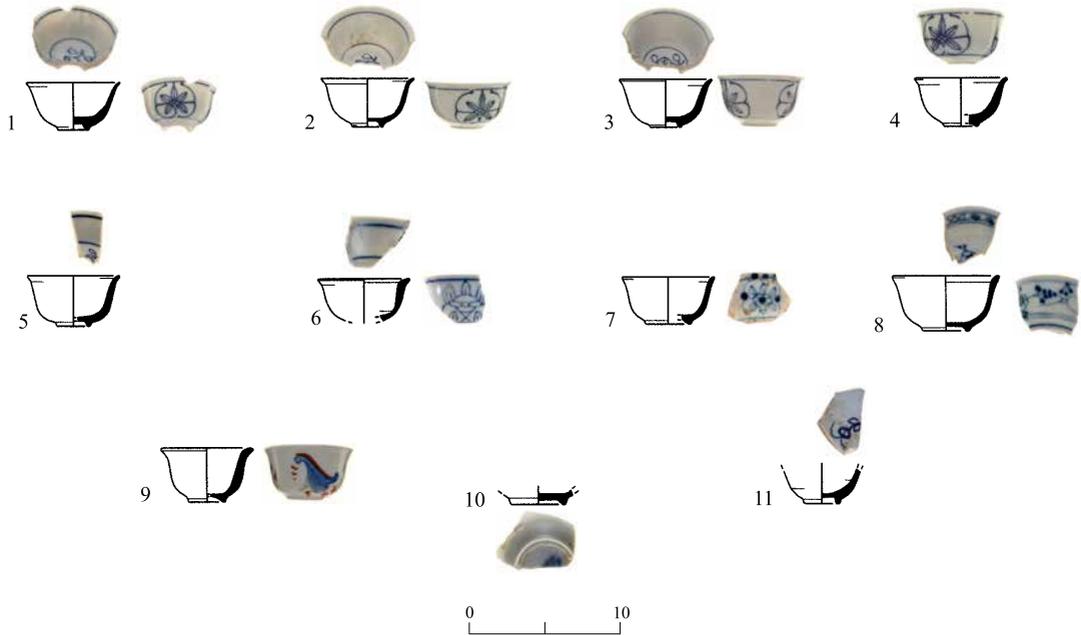


Fig. 5. Porcelain and soft-paste coffee cups.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Coffee cup (J-P-CC-1A)	650	6508	Diam. 6 Rim 42.5%	White porcelain with cobalt blue underglaze floral decoration
2	Coffee cup (J-P-CC-1A)	607	6014/1	Diam. 6 Rim 50%	White porcelain with cobalt blue underglaze floral decoration
3	Coffee cup (J-P-CC-1A)	650	6500/2	Diam. 6 Rim 50%	White porcelain with cobalt blue underglaze floral decoration
4	Coffee cup (J-P-CC-1A)	650	6500/1	Diam. 6 Rim 45%	White porcelain with cobalt blue underglaze floral decoration
5	Coffee cup (J-P-CC-1A)	350	3517	Diam. 6 Rim 15%	White porcelain with cobalt blue underglaze floral decoration
6	Coffee cup (J-P-CC-1A)	379	3553	Diam. 6 Rim 20%	White porcelain with cobalt blue underglaze floral decoration
7	Coffee cup (J-P-CC-1A)	540	5190	Diam. 8 Rim 10%	White porcelain with cobalt blue underglaze floral decoration
8	Coffee cup (J-P-CC-1A)	607	6014/2	Diam. 7 Rim 25%	White porcelain with cobalt blue underglaze floral decoration
9	Coffee cup (J-P-CC-2D)	503	5009	Diam. 6 Rim 50%	White porcelain with blue underglaze floral and red and silver overglaze decoration
10	Coffee cup (J-P-CC-7)	200	2045/2	Base diam. 2.5	White porcelain; underglaze blue mark; a Meissen imitation(?)
11	Coffee cup (J-CC-2A)	200	2045	Base diam. 3.3	White soft-paste with cobalt blue underglaze floral decoration

J-P-CC-7 (Fig. 5:10).— A small, low ring base belonging to a coffee cup features a blue underglaze backstamp, resembling the mark of crossed swords used by the German Meissen factory, except that it presents a blurred version of that mark. It is quite possible that the mark on Fig. 5:10 is an imitation of the Meissen mark, which was used by many factories, such as Wallendorf and Limbach (Röntgen 1996:287–307). A date in the nineteenth century is suggested for this cup.

Soft-Paste Coffee Cup (Fig. 5:11)

J-CC-2A (Fig. 5:11).— This base belongs to a coffee cup made of soft-paste. It is decorated with a blue stylized flower in the center of the cup, in Chinese fashion. Possibly, this cup was manufactured in Turkey, in Iznik or Kütahya (see below, Figs. 6, 7). A date in the nineteenth century is suggested for this cup, although it may date to as early as the eighteenth century.

Kütahya Coffee Cups (Fig. 6)

Kütahya coffee cups are known from the seventeenth century onward. They are made of thin frit ware/soft-paste and are decorated with floral or vegetal patterns under a transparent glaze. Usually, the painted patterns are in blue, imitating Chinese vessels, black, red or green. Occasionally, the colors yellow and purple were also used, the former from the beginning of the eighteenth century and the latter, from the second half of that century (Carswell 1972:19). Parallels for these coffee cups were found at the Qishle excavations in Yafó (Vincenz, in press: Fig. 8.3A). The three vessel fragments presented here may have been made at Kütahya, or at a different Turkish workshop, such as at Iznik (for a discussion on the provenance of these cups, see Hayes 1992:266–267); analysis of the clay of these cups to identify their production area has not yet been conducted.

J-KÜT-CC-1 (Fig. 6:1).— This high ring base of a coffee cup is adorned with a blue flower/rosette. It can be dated to the seventeenth or eighteenth century.

J-KÜT-CC-2 (Fig. 6:2).— This rim fragment is decorated with a band of a green net pattern, outlined in black with small red dots (buds?); the exterior seems to be undecorated. It is dated to the seventeenth or eighteenth century.

J-KÜT-CC-6A (Fig. 6:3).— The fragment of this coffee cup consists of a low ring base. The body is decorated in relief with a pattern called *gebrochener Stab*, slipped in straw color and glazed. The cup is made of soft-paste, and while it is unmarked, it may have been produced at Kütahya. However, coffee cups with such decoration, made of either porcelain or hard-paste, were also produced by the Meissen factory from c. 1750 (*Meissen: gebrochener Stab*). The Kütahya cup shown here can be dated to the eighteenth century.

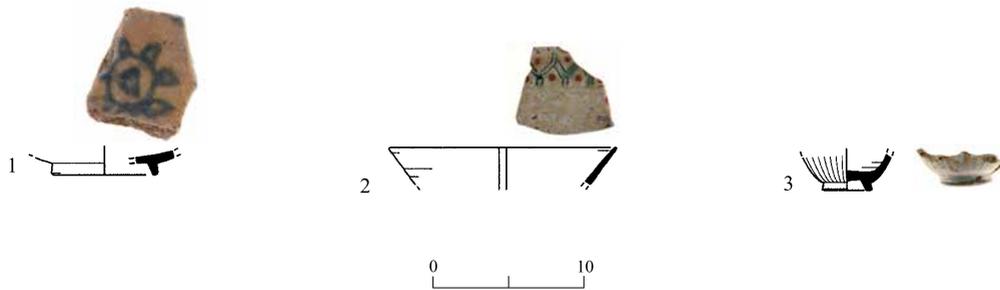


Fig. 6. Kütahya coffee cups.

No.	Vessel (type)	Locus	Basket	Dimensions (cm)	Description
1	Coffee cup (J-KÜT-CC-1)	386	3641	Base diam. 7	White soft-paste with blue underglaze floral decoration
2	Coffee cup (J-KÜT-CC-2)	200	2024	Rim <5%	White soft-paste with black, green and red geometric decoration
3	Fluted coffee cup (J-KÜT-CC-6A)	816	8021	Base diam. 3	White soft-paste, undecorated

BACKSTAMPS (Fig. 7)

A backstamp is an identifying mark of factory-produced vessels that usually carried the factory name. It is situated on the base of the vessel, not immediately visible. Backstamps may be stamped, painted or incised. Some vessels carry more than one such mark, one identifying the factory and another, identifying the artist by name or number. In some cases, a third mark is found, stating the name of the decorative pattern or its identifying number in the factory catalogue.

A large amount of stamped vessel fragments was retrieved from the Qishle excavations in Yafo, providing useful information on the commercial and cultural ties of the region with the Ottoman Empire and Europe during the late eighteenth–early twentieth centuries (Arbel, in press).

The Utzschneider Factory, Sarreguemines (Fig. 7:1, 2)

The most common stamp found on vessels of the Ottoman period in Yafo is that of the Utzschneider factory at Sarreguemines. It consists of the shield of Lorraine surmounted by a crown, with the words OPAQUE DE SARREGUEMINES written around the shield; it is frequently stamped in black underglaze. The Utzschneider stamp occurs in varying dimensions, although this does not seem to have had a chronological significance. This stamp was in use from c. 1855 to 1920 (Gauvin and Becker 2007:49). The plate fragment in Fig. 7:1 has a circular blue line on the interior of the base, while the one in Fig. 7:2 is decorated with a red floral(?) transfer pattern.

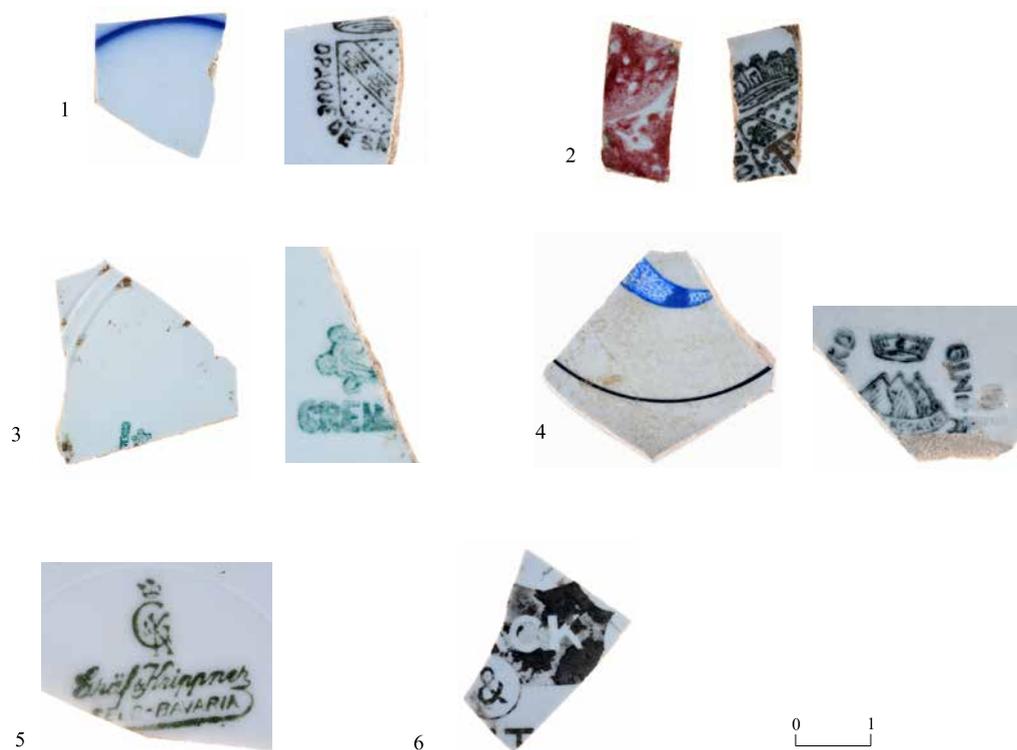


Fig. 7. Backstamps.

No.	Vessel (Type)	Locus	Basket	Description
1	Plate (J-PL-STAMP-1)	356	3518	White hard-paste with black underglaze backstamp: OPAQUE DE SA[RREGUEMINES]
2	Plate (J-PL-STAMP-1)	681	6600	White hard-paste with black underglaze backstamp: [O]PAQ[UE DE SARREGUEMINES]
3	Plate (J-PL-STAMP-2)	200	2048	White hard-paste with green underglaze backstamp: CREIL
4	Plate (J-PL-STAMP-1A)	602	6300	White hard-paste with black underglaze backstamp: [RICHARD GINOR[I]
5	Plate (J-PL-STAMP-2B)	501	5065	White porcelain with green underglaze backstamp: G&K Gräf & Krippner SELB-BAVARIA
6	Plate (J-PL-STAMP-1C)	808	8013	White porcelain with black underglaze backstamp: CK &

The Creil et Montereau Factory (Fig. 7:3)

This mark combines the names of two villages in northern France, in which two factories operating as *Société Anonyme* were located. It is stamped in green underglaze and consists of a chalice with a high foot and the words CREIL ET MONTEREAU appearing below it. This stamp was in use between 1884 and 1920 (*Creil et Montereau: Faïence marques et dates*). The stamped plate fragment shown here is not decorated on the inside.

The Richard Ginori Factory (Fig. 7:4)

This Italian mark combines two factories—the Ginori factory from Doccia and the Società Ceramica Richard from Milan—which merged in 1896 to the Società Ceramica Richard Ginori (*Richard-Ginori: History*). This mark is stamped in black underglaze and displays a crowned mountain below the words MONS REGALIS—the Latin name of the city of Mondovì, for which the symbol was the three mountain peaks. The image is straddled by the words RICHARD GINORI, and the words MONDOVI ITALIA appear below it. The stamp was in use in 1920–1930 (*Richard-Ginori: Marks*). The stamped plate fragment in Fig. 7:4 is decorated with a black line and a blue pattern on its interior.

The Gräf & Krippner Factory (Fig. 7:5)

This factory, situated in Selb, Bavaria, was founded in 1906, initially only decorating porcelain vessels made by other factories, and after 1910 producing its own porcelain. This mark is stamped in green underglaze and contains the crowned monogram G&K above the words SELB-BAVARIA. It was in use until 1929 (Röntgen 2007:248). The interior of the plate fragment in Fig. 7:5 is undecorated.

Unidentified Factory (Fig. 7:6)

This unidentified stamp on a porcelain fragment bears the letters CK & T.

STONEWARE (Fig. 8)

Stoneware was first introduced to England in the late seventeenth century by John Dwight. It was made by firing a mixture of clay and silica to around 1200°C so that it partially vitrified and became impermeable to liquids. Unlike porcelain it is usually opaque and does not require a glaze (Savage and Newman 2000:275–276). Stoneware was mainly used to produce bottles for whiskey, mineral water and soda, and rarely, for seltzer, vinegar and even ink. It was also used to produce jars and other types of containers. Some of the stoneware bottles have stamps mentioning the manufacturer's name, and sometimes also the content of the bottle.

J-STONE-BTL-3B (Fig. 8:1).— This bottle is made of light gray stoneware, salt-glazed in light brown. The rim is ribbed, and a single loop handle is positioned on the shoulder. Such bottles were used mainly for mineral water (Heege 2009: Abb. 73). Their ribbed neck was used for screwing the cap onto the bottle. They usually feature a stamp naming the well where the mineral water was drawn from, such as Selters (see Heege 2009: Abb. 72). These bottles were generally in use during the late nineteenth century, the stamp providing a more precise dating within that century.

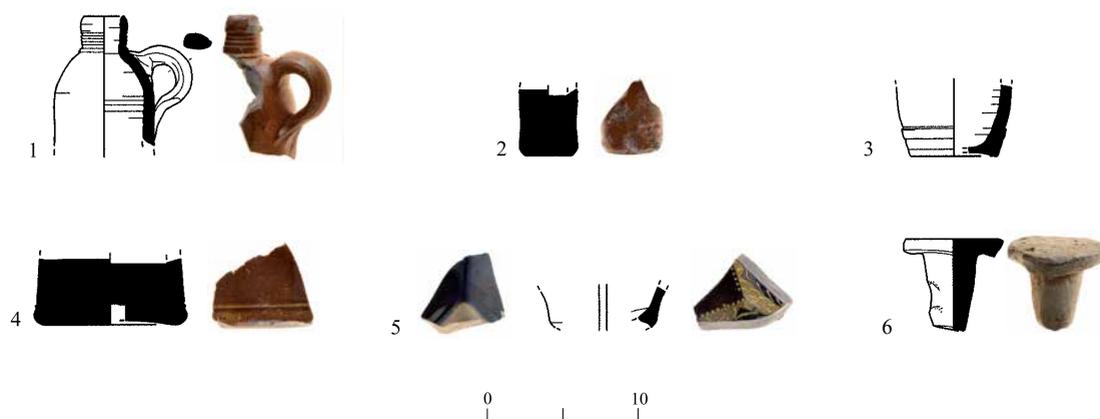


Fig. 8. Stoneware bottles, box and lid.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ⁱ	Description
1	Bottle (J-STONE-BTL-3B)	200	2045	Diam. 3 Rim 20%	Light gray stoneware; slipped and glazed brown
2	Small bottle (J-STONE-BTL-3C)	381	3564	Base diam. 3.2	Light gray stoneware; slipped and glazed brown
3	Bottle (J-STONE-BTL-1E)	501	5069	Base diam. 8	Light gray stoneware; glazed
4	Jar (J-STONE-JAR-2A)	652	6521	Base diam. 9	Light beige stoneware; slipped and glazed brown; base unglazed
5	Box(?) (J-STONE-COB)	200	2503	n/a	Light gray stoneware; cobalt blue glaze; interior gold bands and yellow overglaze strokes
6	Lid (J-STONE-LID)	25	77	Base diam. 6.4	Gray stoneware; unglazed

ⁱ n/a = not available.

J-STONE-BTL-3C (Fig. 8:2).— This rather small base (diam. 3.2 cm) is made of gray stoneware, and is salt-glazed in brown. It belongs to a small bottle (original height c. 15 cm), which probably contained spirits. Similar bottles were produced in Germany as containers for juniper spirit (*Steinhäger: Flasche*), and date to the late nineteenth and early twentieth centuries.

J-STONE-BTL-1E (Fig. 8:3).— This low ring base belongs to a bottle made of light gray salt-glazed stoneware. A protruding band appears above the base. The bottle to which this base belonged was also for mineral water, as the one in Fig. 8:2, although given its different shape and color it was probably made by a different manufacturer. Bottles of similar color and base shape, found in the fill of a cellar dated to c. 1900 in Switzerland, were described by Heege (2009: Abb. 88). The present example can be dated to the end of the nineteenth century.

J-STONE-BTL-2A (Fig. 8:4).— This fragment of a stoneware bottle is slipped dark brown and glazed. Although only the base of this bottle was found, it is securely identified as an ink bottle. A complete ink bottle with an identical base was found in Burgdorf, Switzerland (Heege 2009:93). The Burgdorf bottle has a stamp with the name of August Leonhardi from Dresden, Germany. Leonhardi (1805–1865) produced the famous Leonhardi inks patented in 1856 (see Heege 2009:77), although it is not absolutely certain that the fragment from the Magen Avraham Compound belongs to a Leonhardi bottle. It can be dated to the late nineteenth century.

J-STONE-COB (Fig. 8:5).— This fragment possibly belongs to a box made of light gray stoneware and glazed cobalt blue enhanced with gold and yellow on its interior and exterior. Although cobalt blue vessels were generally quite common during the nineteenth and early twentieth centuries, ones made of stoneware were rare. The fragment in Fig. 8:5 may have belonged to an incense burner made of Japanese Satsuma ware. Such incense burners are decorated with overglaze gilded designs (*Satsuma: Incense Burner*) dated to the Meiji period (1868–1912; for a history and chronology of Satsuma ware, see *Satsuma: History*). A similar date is proposed for the present example.

J-STONE-LID (Fig. 8:6).— This heavy stoneware lid/stopper was used for a bottle. Similar lids/stoppers of various sizes were reported from Bern, Switzerland (Heege 2009: Abb. 96). They seem to have been used in pharmacies, perhaps for acid or ammonia bottles (see Heege 2009:78), and are dated to the nineteenth century.

GLAZED EARTHENWARE VESSELS (Figs. 9–12)

Glazed earthenware vessels, of which many different types are known, are an additional group of glazed wares that has been commonly found at Ottoman-period sites. Their provenance can be traced to Turkey, Greece and Italy. The present excavation yielded tableware and cooking vessels of this ware group.

Çanakkale Ware (Fig. 9)

The town of Çanakkale, situated on the Asian side of the Dardanelles/Hellespont, at their narrowest point, is well-known for its pottery production. The main producers of Çanakkale pottery, between the eighteenth century and 1922/1923, were Greek-speaking potters (Hayes 1992:268–270). This group of ware was found in large amounts at the Qishle in Yafo (Vincenz, in press: Fig. 8.2A). Large quantities of these vessels were also found in the excavations on Ha-Zorfim Street, Yafo (Vincenz, forthcoming: Fig. 7).

J-ÇAN-BL-3A (Fig. 9:1, 2).— The most common glazed earthenware bowl is rather large and deep and has an upturned, hooked ledge rim. It is decorated with a floral pattern in

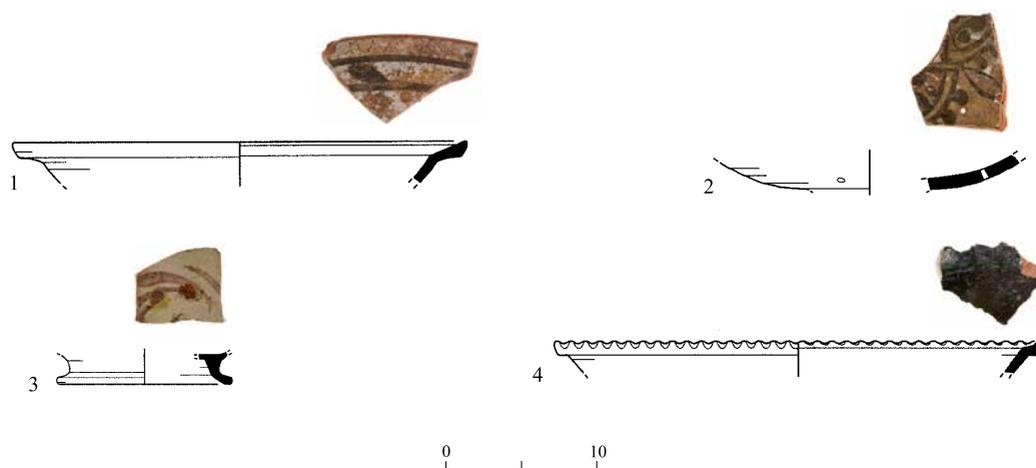


Fig. 9. Glazed earthenware vessels: Çanakkale Ware.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ¹	Description
1	Bowl (J-ÇAN-BL-3A)	32	885	Diam. 24 Rim 8.5%	Light red ware (2.5YR 6/8) with few small angular white inclusions; manganese painted over white slip under transparent glaze
2	Bowl (J-ÇAN-BL-3A)	401	4001	n/a	Light red ware (2.5YR 6/8) with few small angular white inclusions; black painted over white slip under transparent glaze
3	Bowl (J-ÇAN-BL-3B)	24	68	Base diam. 5	Reddish yellow ware (5YR 6/6) with few small angular white and round black inclusions; manganese painted over white slip under transparent pale yellow glaze
4	Bowl (J-ÇAN-BL-9A)	547	5204/2	Diam. 14 Rim 5%	Light red ware (2.5YR 6/6) with few small round black inclusions; deep green glaze over white slip; thumb impressed border

¹ n/a = not available.

black or manganese, applied over a white slip, and covered with a transparent colorless glaze. Close parallels for these bowls can be found on the website of the Suna-Inan Kıraç Collection (*Suna Kıraç Museum: Çanakkale Wares, page 33*), providing a description of each of the illustrated vessels, including their dimensions and dating. The bowls in Fig. 9:1, 2 are dated to the first half of the nineteenth century.

J-ÇAN-BL-3B (Fig. 9:3).— This base belongs to the same type of bowl as in Fig. 9:1, 2, the only difference being its transparent yellow glaze (*Suna Kıraç Museum: Çanakkale Wares, page 2*). It is dated to the first half of the nineteenth century.

J-ÇAN-BL-9A (Fig. 9:4).— The fragment shown here probably belongs to a bowl with a short ledge rim, decorated with thumb impressions on its edge. The interior of the vessel

is glazed deep green over a white slip, while the exterior is unglazed. This bowl seems to correspond to crenellated-rim Çanakkale bowls (*Suna Kıraç Museum: Çanakkale Wares, page 11*), dated to the late nineteenth or early twentieth century. A more secure identification of this bowl as a Çanakkale vessel would require petrographic analysis.

Drip-Painted Wares (Fig. 10)

Another common and widespread group of vessels of the Ottoman period are the Drip-Painted Wares that are glazed either green or ochre-yellow. One of the production centers of such ware was Didymoteicho in Thrace (Megaw and Jones 1983:244–245, Pls. 29.3, 29.4), which had a long tradition of pottery production, from the thirteenth/fourteenth to the seventeenth century and again from the nineteenth to the twentieth century (see François 1995:213; Vroom 2003:184). Several pottery kilns from the early nineteenth century were exposed in excavations near the main gate outside the city walls (Bakirtzis 1980:148–149). It has, however, been shown that vessels with the same type of drip-painted decoration as those produced at Didymoteicho were also produced at the nearby town of Ganos (Armstrong and Günsenin 1995). A group of large bowls and basins with similar decoration is also known from Çanakkale (*Suna Kıraç Museum: Çanakkale Wares, pages, 2, 18, 32–34*). Such vessels may have been manufactured at other locations within the Ottoman Empire as well. This group of ceramics has been found in large amounts at the Qishle in Yafo (Vincenz, in press: Fig. 8.2C), in which case it has been shown by petrological analysis of the clay that those examples could not have been produced in Didymoteicho, and more likely originated at a center in which salt or brackish water were mixed into the clay, such as Çanakkale.⁹

J-DRIP-PL-1A (Fig. 10:1).— This plate with flaring walls and a folded rim with a small flange was the most common type of Drip-Painted Ware of the Ottoman period. Its decoration consists of white slip-painted patterns, covered with a bright green transparent glaze. Similar bowls were published by François (1995: Pls. I–V; VI:1, 3 lower sherd, 4, 5). They are dated to the end of the nineteenth century.

J-DRIP-PL-1 or 2 (Fig. 10:2).— This fragment belongs to a plate with a folded rim. The glaze, either green or yellow, was mostly worn and the white, drip-painted strokes are clearly visible.

J-DRIP-PL-1B (Fig. 10:3, 4).— Another type of green-glazed plate features a hooked ledge rim. As with the plates in Fig. 10:1, 2, these plates are drip-painted in white and covered by

⁹ Petrological analysis was carried out by Anastasia Shapiro of the IAA, and the results were presented by the author at the twelfth congress of AIECM3 on Medieval- and Modern-Period Mediterranean Ceramics held in Athens, 21st–27th of October 2018. They will be published in the congress proceedings.

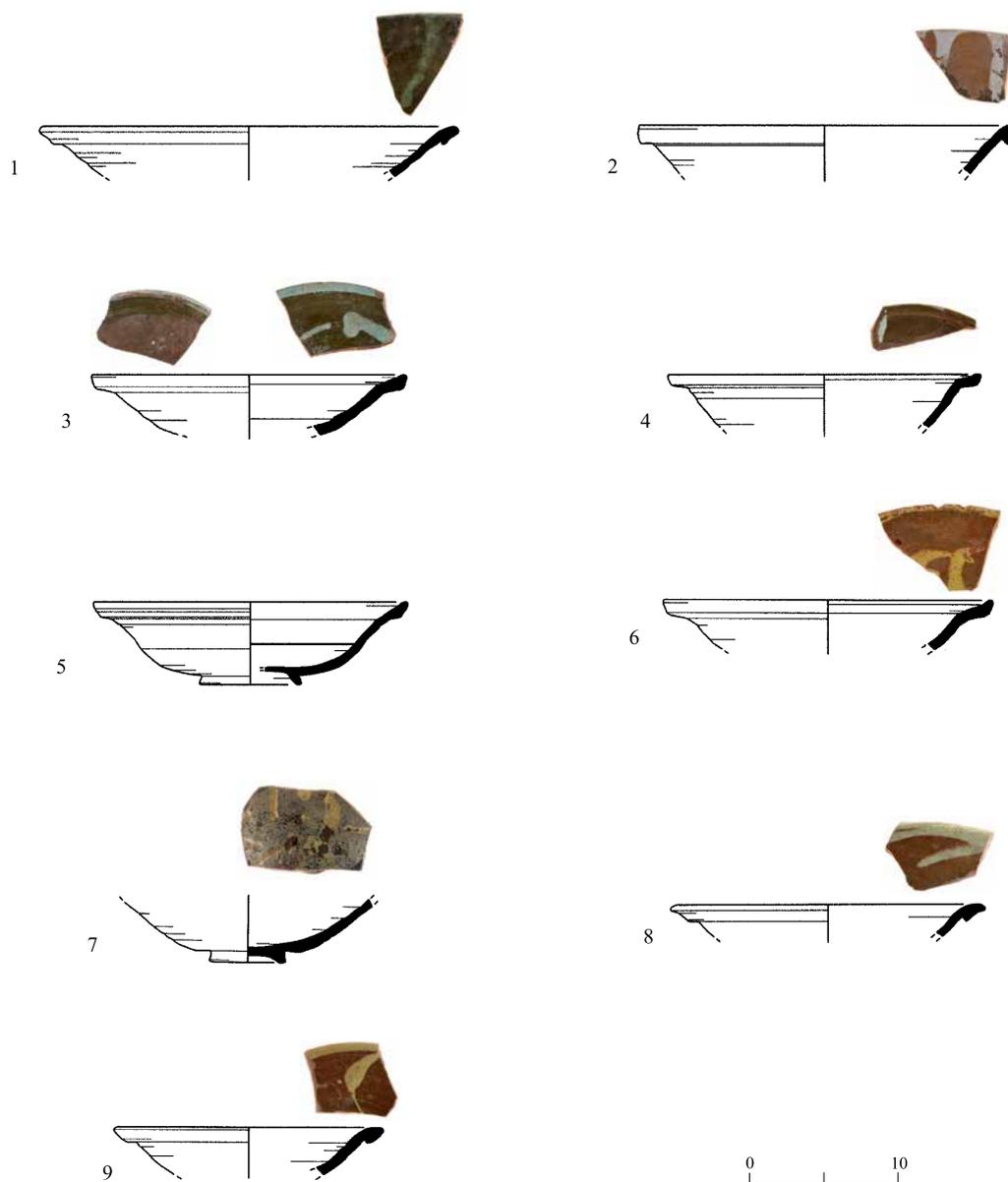


Fig. 10. Glazed Earthenware vessels: Drip-Painted Wares.

a bright green transparent glaze. A visual inspection of the ware of these plates suggests that they may have been produced in the same Çanakkale workshops described above (see Fig. 9:1–4). They can be dated to the end of the nineteenth century.

J-DRIP-PL-2B (Fig. 10:5, 6).— These plates have the same shape as those in Fig. 10:3, 4, but exhibit a yellow instead of a green glaze. They are dated to the end of the nineteenth century.

◀ Fig. 10

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Plate (J-DRIP-PL-1A)	83	541	Diam. 26 Rim 5%	Red ware (2.5YR 5/6) with few small angular white inclusions; white drip-painted decoration under green transparent glaze
2	Plate (J-DRIP-PL-1 or 2)	111	1038	Diam. 22 Rim 7.5%	Light red ware (2.5YR 6/6) with lighter core and few small round white and black inclusions; white drip-painted decoration; glaze worn away
3	Plate (J-DRIP-PL-1B)	50	524	Diam. 21 Rim 15%	Light red ware (2.5YR 6/6) with many small round white inclusions; white drip-painted decoration under green transparent glaze
4	Plate (J-DRIP-PL-1B)	204	2025	Diam. 22 Rim 15%	Light red ware (2.5YR 6/6) with few small angular white inclusions; white drip-painted decoration under green transparent glaze
5	Plate (J-DRIP-PL-2B)	72	530	Diam. 22 Rim 47.5%	Light red ware (2.5YR 6/8) with few small angular white inclusions; white drip-painted decoration under yellow transparent glaze
6	Plate (J-DRIP-PL-2B)	605	6039	Diam. 22 Rim 10%	Light red ware (2.5YR 6/6) with few small angular black and round white inclusions; white drip-painted decoration under yellow transparent glaze
7	Plate (J-DRIP-PL-2)	50	523	Base diam. 5	Light red ware (2.5YR 6/6) with few small angular black and round white inclusions; white drip-painted decoration under yellow transparent glaze
8	Plate (J-DRIP-PL-1C)	538	5139/1	Diam. 20 Rim 7.5%	Light red ware (2.5YR 6/6) with few very small angular white inclusions; white drip-painted decoration under pale green transparent glaze
9	Plate (J-DRIP-PL-2C)	96	572	Diam. 20 cm Rim 7.5	Reddish yellow ware (5YR 6/6) with few small angular white and round black inclusions; white drip-painted decoration under pale yellow transparent glaze

J-DRIP-PL-2 (Fig. 10:7).— This plate is characterized by a ring base, glazed yellow. It is noteworthy that this plate bears remnants of the tripods that were used in the firing process to prevent the vessels from sticking to each other. It is unclear whether these low-quality plates were produced locally or were low-cost imports. They are dated to the end of the nineteenth century.

J-DRIP-PL-1C (Fig. 10:8).— This plate has a rounded folded rim, and appears to be another variant of the plates with a green or yellow glaze described above; it is glazed pale green. A date at the end of the nineteenth century is suggested for this variant.

J-DRIP-PL-2C (Fig. 10:9).— This plate also has a rounded folded rim, but is glazed yellow. A date at the end of the nineteenth century is suggested for this variant.

Imported Glazed Basins (Fig. 11:1, 2)

The inventory of Ottoman-period household vessels included large basins that were used for multiple purposes, such as preparing dough, washing vegetables and dishes, laundry and even bathing infants. They were imported from Cyprus, southern France, Spain and Italy.

Type J-GL-BAS-1 (Fig. 11:1).— This fragment belongs to a deep basin with a heavy triangular rim. This basin's ware is well-levigated; the vessel is covered with a transparent lead glaze through which the brown tone of the clay can be seen. This type of versatile kitchen vessel, called *conque* in Provence, France, was found in the excavations at the Qishle in Yafo (Vincenz, in press: Fig. 8.2F:3). The present example closely resembles the one from the Qishle, and may have likewise been imported from France, possibly from Vallauris, from which cooking vessels were also exported to the Middle East (see Fig. 13). This basin is dated to the nineteenth and early twentieth centuries.

J-GL-BAS-2A (Fig. 11:2).— This fragment belongs to a deep basin with a rolled rim. It is made of well-levigated clay, covered with a thick white slip and glazed yellow and green, creating a mottled appearance. This type of vessel, which was called *catino maculato verde* in Italian, was produced in San Giovanni alla Vena in Tuscany, and was the main ceramic product of that village between the second half of the nineteenth and the mid-twentieth century. These basins were traded both regionally and internationally (Milanese, Tampone and Trombetta 2004:74),¹⁰ the present example revealing that their export also reached the eastern Mediterranean. Its dating should be between the mid-nineteenth and the beginning of the twentieth century.

Monochrome Glazed Bowls, Basin and Jug (Fig. 11:3–6)

Monochrome glazed wares, mainly in green or yellow, comprise a widespread group in Ottoman-period sites. The tradition of producing monochrome glazed wares can be traced back to the Mamluk period, when green glazed vessels were among the most common (see Avisar and Stern 2005:12–15). Monochrome Glazed Ware of the Ottoman period includes bowls, basins and jugs. The glazed bowls of the Ottoman period differ from their Mamluk predecessors mainly in their shape. Although these bowls occur with several rim types, one of the most characteristic is the upturned ledge rim, which is often hooked at the end (Fig. 11:3). This ware may have been locally made, although this possibility has not been hitherto evaluated by petrography.

¹⁰ I wish to thank Marcella Giorgio and Marco Milanese for their assistance in identifying this basin and pointing out valuable bibliographical references.

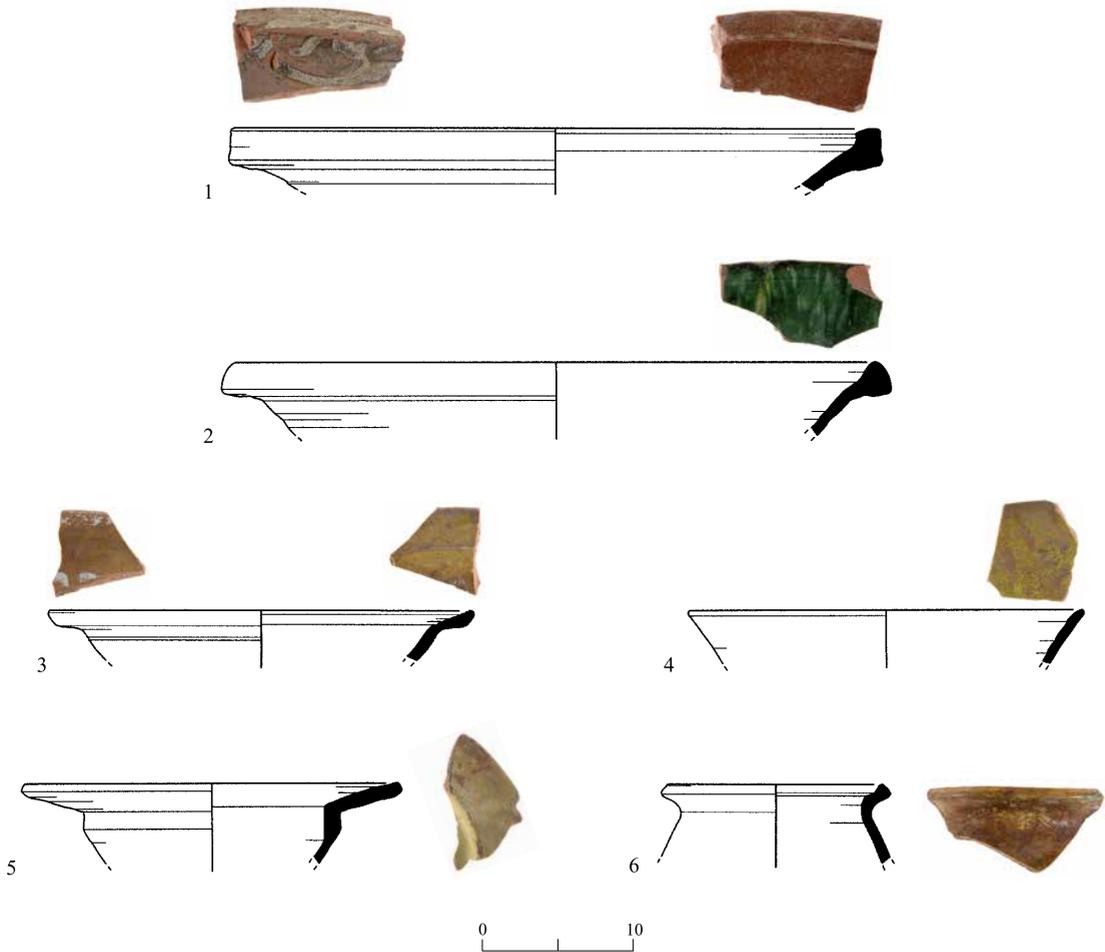


Fig. 11. Glazed earthenware vessels: basins, bowls and jug.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Deep basin (J-GL-BAS-1)	210	2062	Diam. c. 38 Rim 7.5%	Light red ware (2.5YR 7/8) with few large angular white inclusions; transparent glaze
2	Deep basin (J-GL-BAS-2A)	200	2503	Diam. c. 38 Rim 7.5%	Light red ware (2.5YR 6/6) with many large angular, round white and small micaceous inclusions; green and yellow mottled glaze over white slip
3	Bowl (J-MONO-BL-2A)	256	2520	Diam. 22 Rim <5%	Light red ware (2.5YR 6/6) with few small angular white inclusions; yellow glaze over white slip
4	Bowl (J-MONO-BL-2E)	809	8009	Diam. 12 Rim 6%	Light red ware (2.5YR 7/6) with few small angular white inclusions; yellow glaze over white slip
5	Carinated basin (J-MONO-BAS-2A)	546	5199	Diam. 26 Rim 10%	Light red ware (2.5YR 6/6) with few small round black inclusions; yellow glaze over white slip
6	Jug (J-MONO-JUG-2B)	200	2004	Diam. 14 Rim 27%	Reddish yellow ware (5YR 6/6) with few small round black inclusions; yellow glaze over white slip

J-MONO-BL-2A (Fig. 11:3).— This bowl has a hooked ledge rim, and is glazed yellow over a thick white slip on both sides. It should probably be dated to the eighteenth or nineteenth century.

J-MONO-BL-2E (Fig. 11:4).— This fragment belongs to a bowl with a round rim. It is glazed yellow over a thick white slip on both sides. Bowls with this simple rim were reported from the Saraçhane excavations in Istanbul, among pottery assemblages of the seventeenth and eighteenth centuries (Hayes 1992: Fig. 111). They probably continued to be produced into the nineteenth century.

J-MONO-BAS-2A (Fig. 11:5).— This fragment belongs to a carinated basin with a wide ledge rim. It is glazed yellow over a white slip, covering the interior of the vessel and the rim while leaving the exterior unglazed. A possible parallel for this basin is the characteristic Turkish-type bowl, which is known from the Saraçhane excavations (Hayes 1992: Fig. 108: a11.1, a12.2, a12.3), although these bowls are not identical to the example in Fig. 11:5. It is also possible that the present example was produced locally as an imitation of the Turkish bowls. It may be dated to the nineteenth–early twentieth centuries.

J-MONO-JUG-2B (Fig. 11:6).— This fragment belongs to a globular jug with an everted, up-turned grooved rim, the groove probably used for holding a lid. This vessel is glazed yellow over a white slip on its exterior and the upper part of the interior. A jug with a similar rim profile was found at Saraçhane (Hayes 1992: Fig. 114:g11.1); its date is uncertain. A date in the late nineteenth century is proposed for the present example.

Marmorizzata Wares (Fig. 12:1–3)

Marmorizzata Ware was first identified in Yafo in the harbor excavation.¹¹ This find enabled the author to distinguish the late Ottoman-period Marmorizzata Ware from an earlier group of vessels of the same name that was produced during the sixteenth century in the Val d'Arno region in Tuscany, and was exported all over the Mediterranean region. This distinction made clear that most of the Marmorizzata wares found in Yafo belonged to the later Ottoman type. They were produced in various workshops within the Ottoman Empire, such as at Athens, Didymoteicho and Ganos (Kontogiannis 2015:172). The main differences between the earlier Tuscan vessels and those from the Ottoman period are the types of clay and surface treatment. The Ottoman-period vessels bear a thick white slip over which the colored slips were poured. This white slip can easily be distinguished in the vessel section.

¹¹ This excavation was directed by Alexander Glick on behalf of the IAA (Permit No. A-5888/2010), and the ceramics were studied by the author.

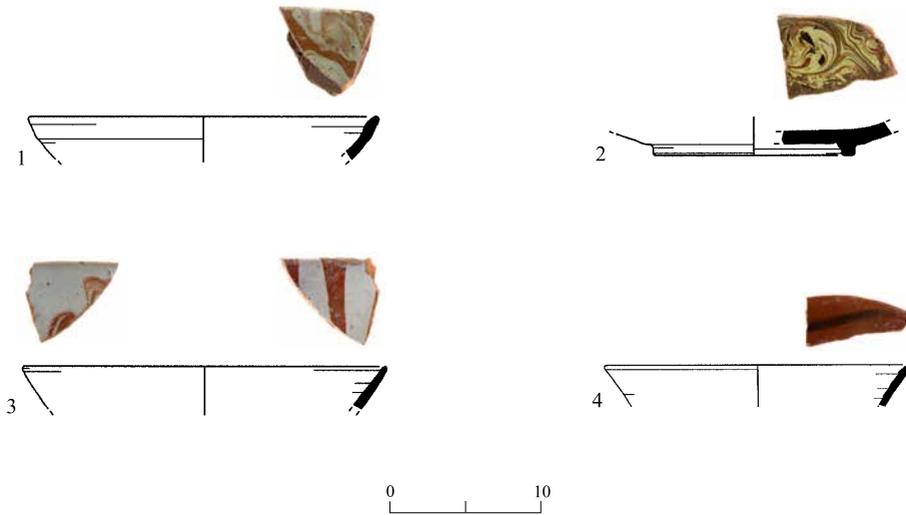


Fig. 12. Glazed earthenware vessels: Marmorizzata Wares and Albisola brown-glazed bowl.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Bowl (J-MARM-BL-1A)	507	5023	Diam. 20 Rim 5%	Light red ware (2.5YR 7/6) with few small angular white inclusions; two colors mottled under transparent glaze
2	Basin (J-MARM-BAS-2C)	511	5035	Base diam. 12	Light red ware (2.5YR 6/8) with few small round black inclusions; three colors under transparent glaze on int.; yellow glaze on ext.
3	Bowl (J-MARM?-BL)	541	5168	Diam. 10 Rim 5.5%	Light red ware (2.5YR 6/6) with few very small round white inclusions; white slip and brown mottled paint under transparent glaze
4	Bowl (J-ALB-BL-1)	809	8009	Diam. 20 Rim 10%	Red ware (2.5YR 5/8) with few small round white inclusions; black streaks under transparent glaze

The fragments recovered from the present excavation comprise bowls with a rounded rim and a low ring base. They should be dated to the nineteenth century.

J-MARM-BL-1A (Fig. 12:1).— This bowl was slipped with a mixture of two colors, creating a marbled effect. This simple decoration technique dates the vessel to the late nineteenth century, when more elaborate techniques for producing the marbled effect went out of use.¹²

¹² I wish to thank Marcella Giorgio for this information.

J-MARM-BAS-2C (Fig. 12:2).— This ring base probably belongs to a large basin with a ledge rim (see Moore Valeri 2012: Fig. 23:3). The marbling in this example is well-executed; it covers only the interior of the basin, while its exterior is covered with a transparent yellow glaze. This marbling technique indicates that the basin is an Italian product, and should be dated to the first half of the seventeenth century.¹³ Its precise provenance may have been one of the Tuscan workshops, although this suggestion can only be confirmed by petrographic analysis.

J-MARM?-BL (Fig. 12:3).— This fragment belongs to a bowl with a simple rounded rim, covered with a white slip and red pencil strokes on the interior and a mottled decoration on the exterior. It is possibly a fragment of an Ottoman-period Marmorizzata vessel in which the glaze has worn off.

Albisola Brown-Glazed Ware

J-ALB-BL-1 (Fig. 12:4).— This bowl with a round body and an everted ledge rim belongs to a group of earthenware vessels, known as “céramiques à tâches noires” (François 2008:97). They are covered with a dark brown slip and strokes of black paint under a transparent glaze. These bowls were produced in the city of Albisola in northwestern Italy, near Genoa, which in 1798 housed 48 pottery workshops for producing this ware (François 2008:97). Although this type of pottery was exported throughout the Mediterranean region, it has been found only in small quantities in areas of the Ottoman Empire. A few fragments of these vessels were found in Yafo so far, in the present excavation and in another on Ha-Zorfim Street (Vincenz, forthcoming: Fig. 9:3). A rim fragment was also reported from ‘Akko (Edelstein and Avissar 1997: Fig. 1:11). These vessels are dated to the end of the eighteenth and the nineteenth centuries.

Vallauris Glazed Cooking Pots (Fig. 13)

Several cooking pots of the type made in Vallauris, France, were identified in the present excavation. These cooking pots were previously found at the Qishle in Yafo (Vincenz, in press: Fig. 8.2E:1–4, and see therein for an extensive discussion of this type).

J-VAL-CP-1 (Fig. 13:1).— This fragment belongs to a cooking pot with an everted grooved rim, the groove probably used for holding the lid. It is made of rather thick ware and covered with a thin dark brown glaze on the interior and the rim, while the exterior remains unglazed. The glaze of the vessel is flaking off. This type of cooking pot has straight walls, a flat base

¹³ I wish to thank Marcella Giorgio, Marco Milanese, Raffaella Carta and Antonio Narice for their help in identifying this vessel and pointing out valuable bibliography.

and in some cases, two band handles that are attached below the rim. In Vallauris, this type of cooking vessel is called *terrine*. The present example appears in the Vallauris factory catalogue as No. 16, with a diameter of 18 cm and a capacity of 2 liters (Petrucci 1999:91).¹⁴ Such pots were used for oven or stove cooking, and are dated to the late nineteenth and early twentieth centuries.

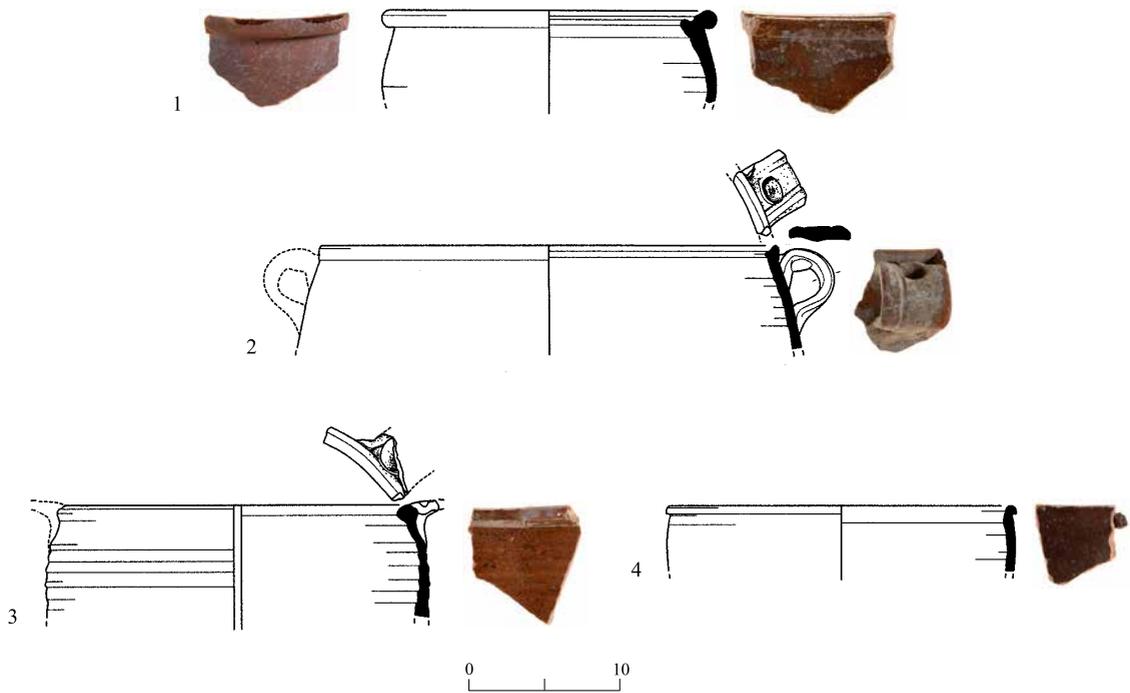


Fig. 13. Glazed cooking pots from Vallauris.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Cooking pot (J-VAL-CP-1)	806	8006	Diam. 18 Rim 12.5%	Red ware (2.5YR 5/8) with few large angular and round white inclusions; brown glaze
2	Cooking pot (J-VAL-CP-4)	426	4097	Diam. 20 Rim 5.5%	Red ware (2.5YR 5/8) with few small round white, black and micaceous inclusions; transparent brown glaze
3	Cooking pot (J-VAL-CP-4A)	412	4033	Diam. 14 Rim 14.5%	Light red ware (2.5YR 7/6) with few small round black inclusions; transparent light brown glaze
4	Cooking pot (J-VAL-CP-4B)	200	2010	Diam. 14 Rim 10%	Light red ware (2.5YR 7/6) with few small round black inclusions; dark brown opaque glaze

¹⁴ I thank François Carrazé, director of the Musée de la poterie Méditerranéenne in Saint-Quentin-la-Poterie in the Gard region, France, who assisted in the identification of material from the Qishle excavations. His identifications of the Qishle material, based on photographs and drawings of the vessels, also assisted me in identifying the material from the Magen Avraham Compound.

J-VAL-CP-4 (Fig. 13:2).— This fragment belongs to a tall cooking pot with wide handles and a thumb impression on top. The interior and the rim are slipped ochre-yellow and covered with a transparent lead glaze. At the Vallauris factory, such cooking pots, which were called *marmites hautes*, were catalogued as No. 10, with a diameter of 21 cm and a capacity of 8.1 liters (Petrucci 1999:17). These vessels date to the end of the nineteenth and the beginning of the twentieth centuries.

J-VAL-CP-4A (Fig. 13:3).— The body of this cooking pot, which belongs to the same group as the one in Fig. 13:2, is slightly rounded. It was designated No. 16 in the Vallauris factory catalogue, with a diameter of 14 cm and a capacity of 1.7 liters (see Petrucci 1999:17). This vessel dates to the end of the nineteenth and the beginning of the twentieth centuries.

J-VAL-CP-4B (Fig. 13:4).— This deep cooking pot has a rolled rim with a ridge below it. The interior is covered with a deep brown slip and a transparent glaze, which is worn off. As with the pot in Fig. 13:3, this example corresponds to No. 16 of the Vallauris factory catalogue. This cooking pot was produced in Vallauris at the end of the nineteenth and the beginning of the twentieth centuries (Petrucci 1999:17).

GAZA WARE (Fig. 14)

The most common ceramic group found at Ottoman-period sites is the coarse, black or dark gray Gaza Ware. It remains unclear as to when this group began to be produced. While Gibson, Ibbs and Klöner (1991) ascribed the Gaza Ware from their excavation at Saṭaf to the seventeenth century (see also Israel 2006), Rosen and Goodfriend (1993) suggested the sixteenth century as its date of initial appearance. The Yafo Gaza Ware was produced between the seventeenth and early twentieth centuries, its frequency increasing in the eighteenth century and peaking in the nineteenth century (Vincenz, in press: Part 8.5A).

Medium-Sized Bowl (Zebdiye)

J-GAZA-BL-ID (Fig. 14:1).— This bowl corresponds to Israel's *zebdiye* Subtype 3 (Israel 2006:207, Fig. 207). It is dated from 1700 to 1950.

Medium-Sized Basin/Kneading and Mixing Bowl (Leken)

J-GAZA-BAS-1A (Fig. 14:2).— This mixing bowl with a round arched rim is possibly a medium-sized variant of Israel's large mixing bowl (Israel 2006: Figs. 178, 179). It can probably be dated to the nineteenth century.

Jar for Carrying Water (Jarra)

J-GAZA-JR-5B (Fig. 14:3).— This is a common type of jar for carrying water from the well that has remained in use until the present day. It has a bag-shaped body, a bulging neck with

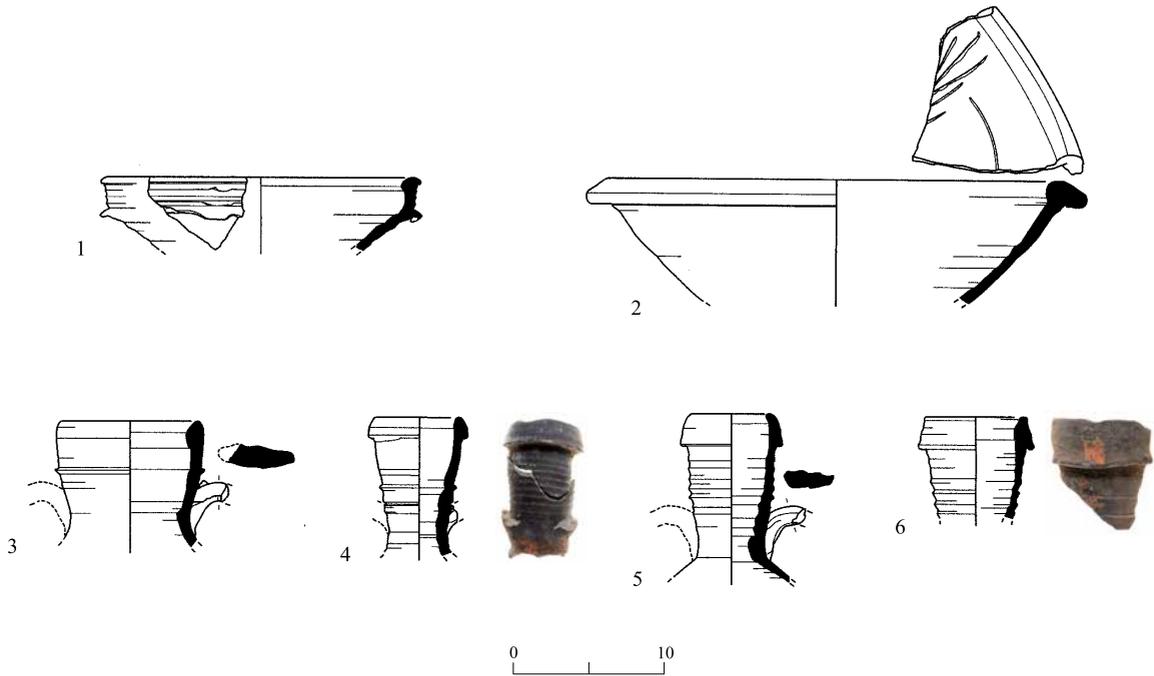


Fig. 14. Gaza Ware vessels.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Bowl (J-GAZA-BL-1D)	508	5024	Diam. 14 Rim 15%	Dark gray ware (10YR 4/1) with few medium-sized round white inclusions; gray surface (10YR 5/1)
2	Basin (J-GAZA-BAS-1A)	226	2145	Diam. 28 Rim 12.5%	Gray ware (7.5YR 5/1) with few small round white inclusions; dark gray surface (10YR 4/1)
3	Jar (J-GAZA-JR-5B)	253	2511	Diam. 8 Rim 30%	Gray ware (7.5YR 5/1) with few small angular white inclusions; gray surface (2.5Y 5/1)
4	Jug (J-GAZA-JUG-4A)	509	5019	Diam. 5 Rim 100%	Gray ware (7.5YR 5/1) with few small round white inclusions; dark gray surface (2.5Y 4/1)
5	Jug (J-GAZA-JUG-5A)	501	5009	Diam. 5.5 Rim 100%	Dark gray ware (10YR 4/1) with few large round white inclusions; dark gray surface (2.5Y 4/1)
6	Jug (J-GAZA-JUG-5B)	383	3564	Diam. 6 Rim 30%	Very dark gray ware (2.5Y 3/1) with few large round white inclusions; very dark gray surface (2.5Y 3/1)

a protruding edge, a rounded rim and two band handles drawn from the bottom of the neck to the upper shoulder. It corresponds to Israel's *jarra* Subtype 2 (Israel 2006: Fig. 53) and is dated from 1700 to 1970.

Small Jug/Jar for Carrying Water (Asliyah)

J-GAZA-JUG-4A (Fig. 14:4).— These small-sized jugs/jars, carried by women on their heads, were used for transporting water from the well (Israel 2006:114). The example in Fig. 14:4 corresponds to Israel's *asliyah* Subtype 1 (Israel 2006:116, Fig. 82), dated from 1700 to 1970.

Pouring Jugs (Ibrik) (Fig. 14:5, 6)

The *brik* is a two-handled jug with a flaring neck used for pouring liquids. These jugs have an ovoid body and a ring or a flat base. The handles are drawn from the base of the neck, and a long spout is attached at that position next to one of the handles. These jugs often have a filter within the neck to keep insects out of the liquid. In some cases, they exhibit painted decoration.

J-GAZA-JUG-5A (Fig. 14:5).— This jug corresponds to Israel's *ibrik* Subtype 3 (Israel 2006:153, Fig. 133), dated from 1700 to 1900.

J-GAZA-JUG-5B (Fig. 14:6).— This jug variant displays orange painted decoration. It corresponds to Israel's *ibrik* Subtype 2 (Israel 2006:152, Fig. 132), and should be dated to the late nineteenth and early twentieth centuries.

COARSE WARE (Fig. 15)

Coarse Ware vessels other than Gaza Ware are known from the Ottoman period, comprising a similar inventory of shapes. The typology of these other coarse wares is not as well-defined as that of Gaza Ware.

Jugs (Fig. 15:1, 2)

J-JUG-7 (Fig. 15:1).— This jug has a narrow neck with a wide bulge and a band of piecrust decoration. Its rim is everted and rounded, and two handles are drawn from the base of the neck. A somewhat similar jug made of Black Gaza Ware was published by Israel (2006: Fig. 131). The present example probably dates to the nineteenth century.

J-JUG-ID (Fig. 15:2).— This jug has a very narrow neck and no handles, and can thus be identified as a *sherbe* (Israel 2006:136–140). The present example displays geometric pinprick decoration. A similar jug was found at the Qishle (Vincenz, in press: Fig. 8.5B.2:3). The jug in Fig. 15:2 should probably be dated to the end of the nineteenth century.

Lid

Clay lids and stoppers were commonly used in the Ottoman period to cover and/or seal jugs and jars. The wide part of the lid was placed over the rim when used as a cover, while when used as a seal, the narrow base was inserted into the vessel's opening, sometimes wrapped



Fig. 15. Coarse Ware vessels.

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ¹	Description
1	Jug (J-JUG-7)	209	2042	Diam. 5 Rim 85%	Light red to red ware (2.5YR 6/8–5/8) with few small round white inclusions; light red surface (2.5YR 6/6)
2	Jug (J-JUG-1D)	200	2078	n/a	Pale brown ware (10YR 6/3) with few small round white inclusions; reddish yellow surface (5YR 6/6)
3	Small handmade saucer (J-LID-1A)	421	4067	Diam. 11 Rim 37%	Brown ware (7.5YR 4/4) with few small round white inclusions; light brown surface (7.5YR 6/3)
4	Saucer lamp (J-LMP)	680	6376	n/a	Light red ware (2.5YR 6/6) with few angular white inclusions; light reddish brown surface (5YR 6/4), burnt
5	Kizan (KIZ-1)	652	6521	Diam. 6 Rim 100%	Light red ware (2.5YR 7/6) with few small round white inclusions; pale yellow surface slip (2.5Y 8/2)
6	Dshame (DSHAME)	350	3503	Diam. c. 8.5 Rim 100%	Light red ware (2.5YR 6/6) and pink (7.5YR 8/3) surface

¹ n/a = not available.

in a cloth to ensure tighter sealing, or inserted with plaster for permanent sealing (see Israel 2006: Fig. 262λ).

J-LID-1A (Fig. 15:3).— This lid is shaped as a small bowl with a thickened flat base. This type of lid was probably in use throughout the Ottoman period.

Clay Lamp

Clay lamps of the Ottoman period were mainly found in tombs of saints (see Israel 2006:246), although they may have occasionally been used for illuminating homes, as a less costly alternative to petroleum or electrical lamps.

J-LMP (Fig. 15:4).— This fragment of a saucer lamp is made of coarse reddish brown ware. Lamps of this type, which were first known in the Bronze and Iron Ages, reappeared in the Mamluk period and continued to be produced into the late Ottoman period (see Avissar and Stern 2005:128).

ARCHITECTURAL ELEMENTS AND DECORATIVE VESSELS (Figs. 15:5, 6; 16)

Other than kitchen and household vessels, the excavation yielded fragments of water pipes and architectural elements, which were used in the construction of balconies or vaults. Decorative vessels used as flowerpots in balconies and gardens were also found.

Kizan

J-KIZ-1 (Fig. 15:5).— A *kuzan* is a clay vessel used in the construction of domes and vaults. It is shaped like a jug with a small opening at one end and a round or a footed base, as in the present example. They can still be found in some old Palestinian houses (Israel 2006:275–285, and see illustrations therein), as well as in public structures, such as mosques in Yafo and in Ramla.

Terracotta Tube (Dshame)

J-DSHAME (Fig. 15:6).— Tubes of the type shown in Fig. 15:6 were commonly used in the construction of parapets (Israel 2006:294–302 with photographs). The two examples shown here are small and narrow, corresponding to Israel's *dshame* Subtype 4, with a rolled rim at one end of the tube and an everted round rim on the other (see Israel 2006: Fig. 336). These tubes were mainly used in the eighteenth–nineteenth centuries, and can still be found in some old Palestinian houses.

Flower Pots

J-FLPOT-1 (Fig. 16:1).— This is a small flowerpot with a central hole at the base and a folded rim. A similar flowerpot was published by Israel (2006: Fig. 295), and several such flowerpots of different sizes were found at Ramat Ha-Nadiv (Boas 2000:567).

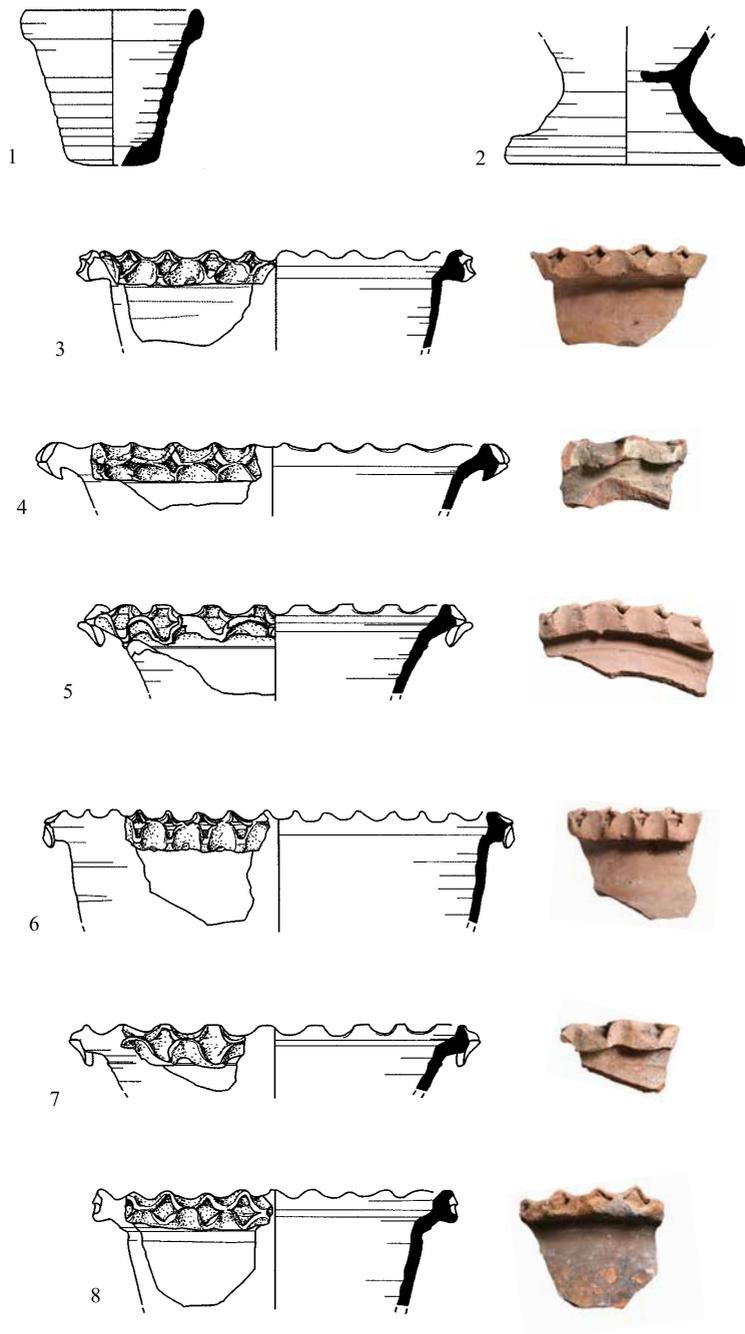


Fig. 16. Coarse Ware flowerpots.

◀ Fig. 16

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Small flower pot (J-FLPOT-1)	408	4079	Diam. 11 Rim 35	Light red ware (2.5YR 7/8) with thick darker core and few small angular white inclusions; light red surface (2.5YR 6/6)
2	Flower pot (J-FLPOT-2)	352	3525	Base diam. 18	Grayish brown ware (10YR 5/2) with few large limestone inclusions; reddish yellow surface (5YR 6/6)
3	Flower pot (J-FLPOT-3)	408	4039	Diam. 22 Rim 17%	Grayish brown ware (10YR 5/2) with few small round white inclusions; reddish yellow surface (5YR 6/6)
4	Flower pot (J-FLPOT-3)	86	575/1	Diam. 22 Rim 12.5%	Yellowish red ware (5YR 5/6); light reddish brown surface (5YR 6/4)
5	Flower pot (J-FLPOT-3)	360	3531	Diam. 22 Rim 12.5%	Red ware (2.5YR 5/8) with lighter core; pink surface (7.5YR 7/3)
6	Flower pot (J-FLPOT-3)	86	575	Diam. 22 Rim 16%	Yellowish red ware (5YR 5/6) with lighter core and few small angular white inclusions; light reddish brown surface (5YR 6/4)
7	Flower pot (J-FLPOT-3)	350	3506/1	Diam. 22 Rim 10%	Yellowish red ware (5YR 5/6) with lighter core and few small angular white inclusions; pink surface (5YR 7/4)
8	Flower pot (J-FLPOT-3)	350	3506/2	Diam. 22 Rim 12%	Strong brown ware (7.5YR 5/8) with few small round white inclusions; brown surface (7.5YR 5/4)

J-FLPOT-2 (Fig. 16:2).— This is a large-sized flowerpot with a trumpet base and a central hole. Only the lower part of the pot is preserved. No parallel was found for this vessel.

J-FLPOT-3 (Fig. 16:3–8).— Only the rim of these flowerpots is preserved. These rims are everted and made of two parts pinched together to form a decorative piecrust design. A similar type of flowerpot was published by Israel (2006: Fig. 293).

SMOKING PIPES (Fig. 17)

By the mid-seventeenth century, pipe smoking was a fashion for men and women of all ages and social classes. Clay smoking pipes, the so-called *chibouks*, have commonly been found at Ottoman-period sites, e.g., Athens (Robinson 1983; 1985) and Saraçhane (Hayes 1980; 1992:391–395). In Israel, clay tobacco pipes were reported from sites such as Baniyas, which may have been a production center for pipes in the north of the country (Dekkel 2008:117–118); Yoqne‘am (Avisar 1996); Tel Jezreel (Simpson 2002); ‘Akko, at the flour mills of the Ridwan Gardens (Shapiro 2016) and the Hospitaller Compound (Shapiro, forthcoming);

Jerusalem (Simpson 2008); and Belmont Castle (Simpson 2000). A detailed study of clay pipes was also conducted by Baram (1996). The typology of the pipes used here follows that of the Qishle excavations (Vincenz, in press: Part 8.6B, and see additional parallels and references therein). No imported pipes were identified in the present assemblage, although pipes imported from Istanbul were common throughout the region in the nineteenth century (Bakla 2007).

J-PIPE-17C (Fig. 17:1).— This shank fragment made of gray ware is undecorated, and the shank end is thickened and stepped. An example of such a pipe from the Qishle bears a thin red slip (Vincenz, in press: Fig. 8.6B:3). Such undecorated pipes from Belmont Castle were designated Group 1A (see Simpson 2000:147, Fig. 13.1:1–4). The present example dates to the seventeenth century and it is the only pipe from as early as this century in the excavation.

J-PIPE-18B-1A (Fig. 17:2).— This shank fragment has a thickened stepped end with a rouletted net pattern, characteristic of eighteenth-century pipes; the rouletted net pattern frequently appears on the bowls of such pipes.

J-PIPE-18J-A and *J-PIPE-18J-C* (Fig. 17:3–6).— This is a group of commonly occurring pipes of the eighteenth century. They have a round bowl, and display splashes of yellow or green glaze. The shank is usually thickened and stepped (Fig. 17:3). One variant of this type of pipe has a simple round bowl (*J-PIPE-18J-A*; Fig. 17:4, 5) and a swollen shank end (Fig. 17:5), both decorated with rouletted lines. One of the examples shown here (Fig. 17:5) also has an added small lug handle below the shank, probably to allow carrying the pipe on a string or a chain. Another variant of this pipe has a gadrooned bowl with incised lines and rouletting (*J-PIPE-18J-C*; Fig. 17:6). This group of pipes has been commonly found in Yafo, for example at the Qishle, where the main variant was *J-PIPE-18J-A* (Vincenz, in press: Fig. 8.6B:30–33).

In Simpson's study of the material from Belmont Castle, this type of pipe was designated "Splash-Glazed" (Simpson 2000:152, Fig. 13.2:33–41). It was suggested that these pipes were a secondary product of pottery workshops that specialized in glazed wares (see Simpson 2000:152). Two observations seemingly reinforce this suggestion: (1) although such pipes were found at sites throughout the Ottoman Empire, for example, Jerusalem (Simpson 2008: Fig. 269:29), Tel Jezreel (Simpson 2002: Fig. 1:5) and Ramla (Vincenz 2011: Fig. 3:29) in Israel, and as far as Belgrade, Serbia (Bikić 2012: Fig. 2:9), they typically appear in small numbers; (2) other types of eighteenth-century pipes, slipped red or purplish red, are more richly decorated than the splash-glazed pipes. However, in the author's opinion, this was not the case, as the production of pipes was a specialized process that required highly trained craftsmen. In Istanbul, pipe makers were organized into guilds and occupied entire neighborhoods, such as Tophane, where pipes were produced in specialized *ateliers* (Bakla 2007:102–128).

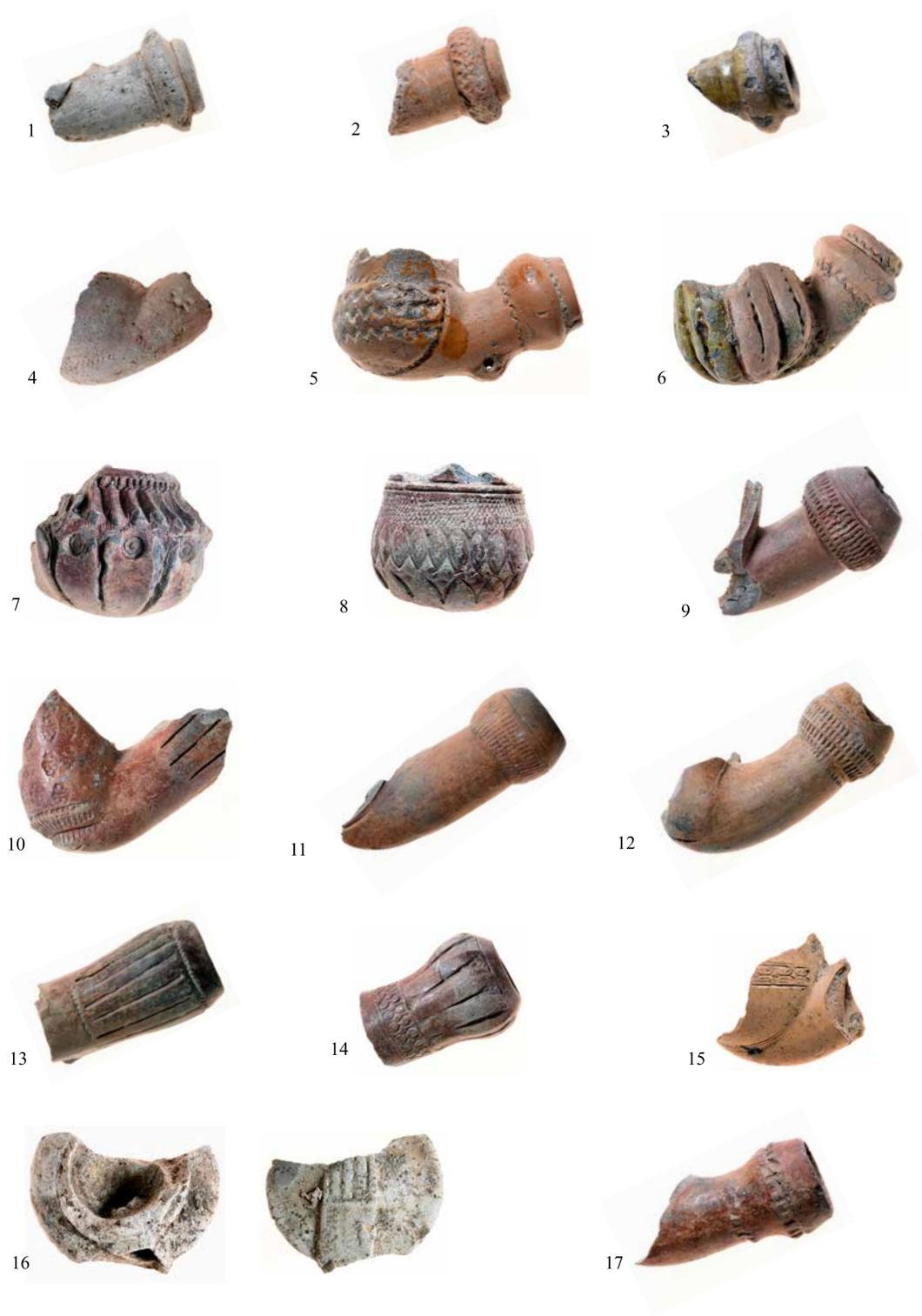


Fig. 17. Smoking pipes.

◀ Fig. 17

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ⁱ	Description
1	Pipe, only shank preserved, thickened and stepped end (J-PIPE-17C)	510	5028	Shank length: 3.3 Shank opening: 0.8	Light gray ware (10YR 7/2); light gray surface (10YR 7/1); undecorated
2	Pipe, only shank preserved, thickened and stepped end (J-PIPE-18B-1)	613	6034	Shank length: 3.5 Shank opening: 1	Pink ware (5YR 7/4); surface burnished; rouletted net pattern
3	Pipe, only small fragment of shank preserved, thickened and stepped end (J-PIPE-18J)	611	6032	Shank opening: 0.8	Dark gray (burnt) ware; splashes of greenish yellow glaze; undecorated
4	Pipe, round bowl with rouletted line (J-PIPE-18J)	505	5011	n/a	Pale brown ware (10YR 6/3); tiny spots of red slip; keel outlined with rouletted net band; faint rosette stamp on shank
5	Fragmentary: round bowl with straight upper part, short shank with swollen stepped end, small loop handle under shank (J-PIPE-18J-A)	807	8007	Shank length: 4 Shank opening: 1 Bowl diam.: 2.1	Light red ware (2.5YR 7/6); splashes of yellow glaze; bowl decorated with three rouletted lines; keel outlined with rouletted line; shank with rouletted lines
6	Pipe, round gadrooned bowl, short shank with thickened stepped end (J-PIPE-18J-C)	384	3599	Shank length: 4.2 Shank opening: 0.9	Light reddish brown ware (5YR 6/4); splashes of greenish glaze; bowl with deeply incised lines with rouletting; shank with rouletted lines
7	Pipe, only large round bowl preserved (J-PIPE-18M)	506	5016	n/a	Dark gray (burnt) ware; dark reddish brown surface slip (2.5YR 3/4); deeply carved leaf decoration, stamped circles and rouletted lines
8	Pipe, only large round bowl preserved (J-PIPE-18P)	421	4067	Bowl diam. 2.8	Gray (burnt) ware; dark reddish brown surface slip (2.5YR 3/4); carved tear drops and a wide rouletted band
9	Pipe (probably tulip shaped), only swollen shank preserved (J-PIPE-19K)	383	3598	Shank length: 5.8 Shank opening: 1.5	Light red ware (2.5YR 6/6); reddish brown surface slip (2.5YR 4/4); burnished; shank with four rouletted and incised lines
10	Pipe with tulip shaped bowl with long shank (J-PIPE-19L)	430	4461	Shank length: c. 5.5	Gray (burnt) ware; reddish brown surface slip (2.5YR 5/4); burnished; bowl with stamped pattern and rouletted lines on its lower part; shank with deeply incised lines
11	Pipe, only shank with swollen end preserved (J-PIPE-19L)	202	2014	Shank length: 7.4 Shank opening: 1.8	Pink ware (5YR 7/4); remains of red slip; burnished; shank decorated with triple rouletted and incised lines

ⁱ n/a = not available.

Fig. 17. (cont.).

No.	Vessel (Type)	Locus	Basket	Dimensions (cm) ⁱ	Description
12	Pipe (probably tulip shaped) with long undecorated shank with swollen end (J-PIPE-19L)	679	6575	Shank length: 6 Shank opening: 1.8	Light brown ware (7.5YR 6/4); remains of red slip; burnished; shank with four rouletted lines
13	Pipe, only shank preserved (J-PIPE-19)	652	6521	Shank length: 5.5 Shank opening: 1.7	Light gray (burnt) ware; reddish brown surface (2.5YR 4/3); shank decorated with incised lines framed by rouletted lines
14	Pipe, only shank with swollen end preserved (J-PIPE-19)	652	6521/2	Shank length: 3.7 Shank opening: 1.4	Light gray (burnt) ware; reddish brown surface slip (2.5YR 4/3); burnished; shank end decorated with carved lines forming petals with dotted leaves between them; band of incised drops framed by incised lines on shank
15	Pipe with small round bowl (J-PIPE-19U)	388	3605	n/a	Light red ware (2.5YR 6/6); reddish brown surface slip (2.5YR 4/3); burnished; bowl with band of stamped decoration; keel outlined by rouletted line
16	Pipe with small cone shaped bowl standing on small disc with raised keel (J-PIPE-19Y)	307	3016	n/a	Pink ware (7.5YR 7/4); pale yellow surface (2.5YR 8/2); keel with incised line
17	Pipe, only shank preserved, coarsely fashioned shank with thickened end (J-PIPE-19AC)	382	3615	Shank length: 5.6 Shank opening: 1.6	Light gray (burnt) ware; red surface slip (2.5YR 4/6); burnished; shank end with crude rouletted lines

J-PIPE-18M (Fig. 17:7, 8).— Figure 17:7 comprises a large round bowl bearing carved petals with stamped dotted circles on the bottom; its middle part is carved as well, and ends in a straight upper part, most of which has broken away. The different sections of this pipe are separated by rouletted lines. Another pipe of this type (Fig. 17:8) has carved leaves at the bottom of the bowl, above which is a band of carved teardrops topped by a wide band of rouletting. Its broken upper part is also straight. Both pipes were slipped purplish red and burnished, features which are characteristic of all the pipes of this group. Also characteristic of this group is the presence of carved decorations both on the bowl and the shank. These pipes show a large variety of decorative patterns, including petals, leaves, rosettes, triangles and squares. At the Qishle, this group was as frequent as Type J-PIPE-18J (see above, Fig. 17:3–6; Vincenz, in press: Fig. 8.6B:40–43). A pipe with similar carved decoration was found at Banias (Dekkel 2008: Fig. 4.11:60).

J-PIPE-19K and *J-PIPE-19L* (Fig. 17:9–14).— These fragments seem to belong to tulip-shaped pipes of the nineteenth century. This identification is suggested mainly by the shank fragments in Fig. 17:9–11, while hardly any remains of the bowls were found. These pipes are usually slipped red and burnished. Their shank is rather long with a swollen or thickened end, decorated with rouletted lines (Fig. 17:9, 11, 12), or with incised lines framed by a rouletted line (Fig. 17:13). One shank fragment (Fig. 17:14) has a swollen end with carved petals, dotted leaves in-between the petals near the shank's end and a band of incised drops framed by incised lines on mid-shank.

J-PIPE-19U (Fig. 17:15).— This pipe fragment is made of pinkish clay and has burnished surfaces imitating ivory. It comprises a small bowl decorated with a band of stamped geometric designs; the keel is outlined by a rouletted line. Such ivory colored pipes, as well as vessels, were fashionable in Istanbul of the Ottoman period (Bakla 2007:192–193). The ivory or buff color was obtained by mixing white clay into the clay of the pipe or its slip. The present example was additionally burnished, resulting in a lustrous surface.

J-PIPE-19Y (Fig. 17:16).— This pipe fragment comprises a cone-shaped body standing on a small disc. The keel is raised and bears incised lines. Similar pipes, made of a variety of wares, were found at the Qishle (Vincenz, in press: Fig. 8.6B:121–124).

J-PIPE-19AC (Fig. 17:17).— This shank belongs to a coarsely made, red-slipped and burnished pipe. A coarse rouletted line appears on the thickened shank end, and another appears on the shank itself. The exact same type of shank was found at the Qishle (Vincenz, in press: Fig. 8.6B:129). The coarse workmanship and rouletting indicate that this pipe was of local production.

NARGHILE HEADS (Fig. 18)

The narghile was introduced to Istanbul in the early seventeenth century, during the reign of Sultan Murat IV. This was a different kind of pipe that filtered the tobacco smoke through a water-filled glass or brass bottle (Bakla 2007:362). It allowed the smoking of a special kind of tobacco called *shisha*, *tombac* or *tumbak*, and was as popular as the *chibouk*.

Narghile heads occurred in the Qishle assemblage, although they were not as common as the *chibouk* pipes (Vincenz, in press: Part 8.6D). In the present excavation, a rather large amount of narghile pipe heads was found.

Gaza Ware Narghile Heads

Two narghile heads made of Black Gaza Ware (Fig. 18:1, 2) differ in the type of decoration. They can be dated between the mid-nineteenth and the beginning of the twentieth century (see Israel 2006:259).



Fig. 18. Narghile heads.

Type J-NAR-1A (Fig. 18:1).— This narghile head has incised lines on the flange and a ridged stem for improved grip. The body is undecorated. This common type of narghile was found at the Qishle (Vincenz, in press: Fig. 8.6D:139).

Type J-NAR-1C (Fig. 18:2).— This narghile head has a short horizontal flange with deeply incised lines. The edge is decorated with a rouletted line, and another rouletted line separates the flange from the body. An identical narghile head was found at the Qishle (Vincenz, in press: Fig. 8.6D:141).

◀ Fig. 18

No.	Vessel (Type)	Locus	Basket	Dimensions (cm)	Description
1	Narghile, broken bowl (J-NAR-1A)	609	6028	Preserved height: 6	Dark gray ware; burnished; bowl undecorated; flange with incised lines forming petals
2	Narghile, broken bowl (J-NAR-1C)	609	6016	Preserved height: 4.5	Light gray ware with many small round white inclusions; black surface; flange with incised lines forming petals and rouletted line at edge
3	Narghile, broken bowl (J-NAR-2D)	650	6500	Preserved height: 9	Reddish yellow ware (5YR 6/6) with many small and large round and angular white inclusions; flange with impressed palmettes; body with two rouletted lines and impressed palmettes
4	Narghile, bowl chipped (J-NAR-2D)	811	8011	Preserved height: 8.4	Reddish yellow ware (5YR 6/6) with many small round white inclusions; flange with impressed palmettes; body with two rouletted lines and impressed palmettes
5	Narghile, bowl chipped (J-NAR-2D)	389	3602	Preserved height: 8.2	Reddish yellow ware (5YR 6/6) with many small round white inclusions; flange with impressed palmettes; body with two rouletted lines and impressed palmettes
6	Narghile, bowl chipped (J-NAR-2K)	806	8006	Preserved height: 8	Reddish yellow ware (5YR 7/6) with many large black, white and grog inclusions; flange with shallow incised lines; body with rouletted line; thickened bowl rim with incised nicks
7	Narghile, undecorated broken bowl (J-NAR-3B)	602	6021	Preserved height: 7	Reddish yellow ware (5YR 7/6); heavily burnt; flange with incised lines forming petals; rouletted line at base of bowl
8	Narghile, broken bowl (J-NAR-5)	74	537	Preserved height: 5.7	Red ware (2.5YR 5/8); light reddish brown surface slip (2.5YR 6/4); burnished; flange with incised lines forming petals

Reddish Yellow Ware Narghile Heads

Type J-NAR-2D (Fig. 18:3–5).— Three narghile heads are decorated with incised palmettes on the flange and body, and two rouletted lines at mid-body. The stem is ridged, as in Fig. 18:1. A narghile with similar decoration was found at the Ridwan Gardens in ‘Akko, where it was dated to the early twentieth century (Shapiro 2016: Fig. 1:23).

Type J-NAR-2C (Fig. 18:6).— In this narghile head the body is undecorated, and incised nicks occur on the thickened rim of the bowl. The base of the body bears a wide rouletted band, the short flange bears shallow incised lines and the stem is ridged. As with the previous type, this example should probably be dated to the early twentieth century.

Type J-NAR-3B (Fig. 18:7).— In this narghile head, which is heavily burned, the bowl is undecorated. The flange bears incised lines forming petals, and the base of the bowl bears a rouletted line. This example is similar in shape to a narghile made of brown clay that was found at the Qishle (Vincenz, in press: Fig. 8.6D:151).

Red-Slipped and Burnished Narghile Head

Type J-NAR-5 (Fig. 18:8).— This narghile head is made of red ware, slipped light reddish brown and highly burnished. The body and flange are carved—the carving on the flange forming petals, and the stem is ridged. This type of narghile is similar in ware and surface treatment to narghiles produced at Tophane (Bakla 2007:176, O3-3–O3-9). Similar narghiles were found at the Qishle (Vincenz, in press: Fig. 8.6D:155–156), where they are dated to the end of the nineteenth and beginning of the twentieth century.

TILES AND BRICKS (Figs. 19, 20)

Marseille Roof Tiles (Fig. 19:1–7)

These roof tiles, the so-called “heart tiles,” were invented by the Gilardoni Brothers in 1841 and quickly became popular due to their light weight and ease of use. They were used abundantly in late nineteenth- and early twentieth-century Palestine, and are often found in excavations of Ottoman-period sites. These tiles continued to be produced into the twentieth century, and a few factories still produce them today. Marseille tiles are stamped with the factory name and symbol, often an object or animal.

The excavation yielded tiles of a number of factories located in the Marseille suburbs: the Frères Roux tiles (Fig. 19:1–3), produced from around the mid-nineteenth century in St. Henri, bear the heart symbol and the patent name—BREVETES SGDG (= *sans garantie du gouvernement*); the Frères Martin tiles, produced from 1844 at Seon-St. André, exhibit the butterfly (Fig. 19:4); the Guichard Carvin tiles, produced from 1858 to 1914, also in Seon-St. André, exhibit the bee (Fig. 19:5); and tiles of the La Plata factory of the Frères Sacoman in St. Henri, depict an anchor and arabesque (Fig. 19:6, 7). An Italian-produced tile (Fig. 19:8) bears an inscription with the factory name: [E]DILE LITTOR[IA], [STABIL]IMENTO DI. This construction/building company was most probably the Cooperativa edile Littoria, located in Benghazi, Libya, that was active during Italy’s fascist period.

Marseille Bricks (Fig. 19:9–11)

Many of the Marseille manufacturers that produced roof tiles also produced bricks, stamping the same symbol on the bricks as on the roof tiles. Two bricks from the excavation bear the name of the Guichard Frères from Seon-St. André (Fig. 19:9, 10), and another is stamped with the name Société Générale des Tuileries de Marseille (Fig. 19:11), a corporation founded in 1901 to unite various factories of the Séon Basin and facilitate trade.



Fig. 19. Marseille roof tiles and bricks, and an Italian roof tile (not to scale).

◀ Fig. 19

No.	Artifact	Locus	Basket	Description
1	Roux roof tile	35	86	Reddish yellow ware (5YR 6/6) with few small white inclusions; heart symbol
2	Roux roof tile	806	8006	Reddish yellow ware (5YR 6/6) with few small white inclusions; heart symbol
3	Roux roof tile	Topsoil	3506	Reddish yellow ware (5YR 6/6) with few small white inclusions; [ROC]AILLE POUR TOITURE [BREVETE]ES S.G.D.G MARSEILLE
4	Martin roof tile	69	510	Reddish yellow ware (5YR 6/6) with few small white inclusions; butterfly symbol; M [ARTIN]
5	Guichard roof tile	546	5188	Reddish yellow ware (5YR 6/6) with few small white inclusions; bee symbol
6	Sacoman roof tile	86	568	Reddish yellow ware (5YR 6/6) with few small white inclusions; loops/arabesque
7	Sacoman roof tile	545	5187	Reddish yellow ware (5YR 6/6) with few small white inclusions; [USI]NE anchor and S[ACOMAN]
8	Italian tile/brick	695	6023	Reddish yellow ware (5YR 6/6) with few small white inclusions; [E]DILE LITTOR[IA] [STABIL] IMENTO DI
9	Guichard brick	100	1078	Reddish yellow ware (5YR 6/6) with few small white inclusions; GUICHARD, ST HENRY MARSEILLE
10	Guichard brick	403	4150	Reddish yellow ware (5YR 6/6) with few small white inclusions; GUICHARD, ST HENRY MARSEILLE
11	Société Général brick	408	4034	Reddish yellow ware (5YR 6/6) with few small white inclusions; [SOCIETES] DES TUILERIES DE MARSEILLE

Floor Tiles (Fig. 20:1–6)

The excavation yielded both imported and locally produced floor tiles, including plain and colored ones. Two of the tiles shown here (Fig. 20:1, 2) were produced in the Carvin fils factory. They bear the word Marseille, the factory name and symbol—a spiked star, and an inscription encircling the factory name and symbol stating that it dealt in lime, cement, plaster, bricks and tiles. A tile of an unidentified manufacturer, which has not been previously found in the Yafo excavations, bears a cow or bull symbol and the inscription SIEGE SOCIAL (Fig. 20:3).

Colored or carpet floor tiles made of colored cement (Fig. 20:4–6) were used in the late nineteenth and early twentieth centuries in most Mediterranean countries. They were either imported, from countries such as Italy, Germany or Spain, or locally made (for the types of patterns displayed on these tiles, see *Floor Tiles: Carpet Floor Tiles*). Several local factories, such as the Wieland Family in the German Colony near Yafo, which opened in 1905, and the Chelouche Frères in Newe Zedek, Tel Aviv, which operated between the early 1880s and the late 1920s, produced architectural elements for home decoration (Glenk, Blaich and Haering 2005; Büssow 2011:249; Harpaz 2013:189).



Fig. 20. Floor and wall tiles (not to scale).

◀ Fig. 20

No.	Vessel (type)	Locus	Basket	Description
1	Carvin fils floor tile	50	522	Reddish yellow ware (5YR 6/6) with few small white inclusions; star symbol; [CI]MENTS PLATRES BRIQUES TUIL[ES]
2	Carvin fils floor tile	50	522	Reddish yellow ware (5YR 6/6) with few small white inclusions; star symbol; MARSEILLE CHAUX CIMENTS PLATRES BRIQUES
3	French floor tile	300	3001	Reddish yellow ware (5YR 6/6) with few small white inclusions; cow symbol; SIEGE SOCIAL
4	Carpet floor tile	377	3570	Cement and colored cement
5	Carpet floor tile	383	3564	Cement and colored cement
6	Carpet floor tile	811	8011	Cement and colored cement
7	Wall tile	200	2503	Very pale brown ware (10YR 8/3); blue and white glaze

Wall Tile (Fig. 20:7)

This small ceramic fragment is glazed blue and white, and seems to be part of a wall tile, probably a bathroom tile.

CONCLUSIONS

The material from the excavation in the Magen Avraham Compound can be divided into three chronological groups: Period 1, dated to the seventeenth–early eighteenth centuries (Table 1); Period 2, dated to the mid–late nineteenth century, to which the majority of the ceramic material from the excavation belongs, including some types that were common mainly in that period, but continued to be used in the early twentieth century; and Period 3, dated to the beginning of the twentieth century, up to 1925/1930.

Period 3 is strongly indicated in the assemblage by the backstamps appearing on fragments of imported hard-paste and porcelain vessels (Fig. 7:1–5), and an Italian-made roof tile dated to 1920–1930 (Fig. 19:8). The ceramic flower pots (Fig. 16) should tentatively be included in this late chronological group as they have not been found in earlier sites with mainly nineteenth-century material. It is also noteworthy that unlike in other excavations in Yafo, the Magen Avraham Compound yielded fewer smoking pipes than narghile pipes, probably reflecting the increasing popularity of smoking narghile pipes and cigarettes at the expense of *chibouk* pipe smoking toward the end of the nineteenth and the beginning of the twentieth centuries.

The prevalence of imported hard-paste and porcelain tableware and smoking paraphernalia, as seen in the present excavation, is generally characteristic of Ottoman-period contexts in Yafo (e.g., Vincenz, in press). In part this reflects the use of such imported ware by Yafo's growing communities of European pilgrims, settlers and Jewish immigrants between the seventeenth and early twentieth century.

Table 1. Ceramic Chronological Groups: Periods 1–3

Vessel	Type	Fig. No.	Dating
Period 1			
Coffee cup	J-CC-2A	5:11	18th c.(?)
Coffee cup	J-KÜT-CC-1	6:1	17th–18th c.
Coffee cup	J-KÜT-CC-2	6:2	17th–18th c.
Coffee cup	J-KÜT-CC-6A	6:3	18th c.
Bowl	J-MARM-BAS-2C	12:2	c. 1650
Smoking pipe	J-PIPE-17C	17:1	17th c.
Period 2			
<i>Hard-Paste, Porcelain and Stoneware Vessels</i>			
Plates	J-TW-PL-1	1:1–3	19th c.
Plate	J-TW-BW-PL-1A	1:4	1850–1900
Plate	J-TW-BW-PL-1	1:5	1830–1955
Bowl	J-TW-BW-BL-1B	1:6	1850
Bowl	J-TW-BW-BL-1A	1:7	1800–1850
Plate	J-TW-PL-3A	1:8	1829–1890
Cup	J-TW-FB-1A	1:9	1850–1890
Plate	J-TW-PL-6B	1:10	1850–1890
Plate	J-TW-FW-PL-1	2:1	c. 1830–1850
Plate	J-FW-PL-2	2:2	1790–1890
Plates	J-SPONGE-PL-1	2:3, 4	1850–1890
Plate	J-SARRE-PL-6A	2:7	c. 1895
Plate	J-SARRE-PL-6B	2:8	c. 1890
Bowl	J-SARRE-GD-BL-4	2:11	c. 1895
Cup	J-WCB-CUP-1	2:13	c. 1850
Tureen	J-WW-TUR-2B	3:3	c. 1880
Tureen	J-WW-HANDLE-2	3:4	1890+
Tureen	J-WW-KNOB-2B	3:5	1890+
Bowl	J-P-TW-BL-4	4:4	1870–1895
Strainer	J-P-STRAIN	4:6	1800–1890
Coffee cup	J-P-CC-1A	5:1–8	18th–19th c.
Coffee cup	J-P-CC-7	5:10	19th c.
Bottle	J-STONE-BTL-3B	8:1	1880–1890
Bottle	J-STONE-BTL-1E	8:3	1880–1890
Bottle	J-STONE-BTL-2A	8:4	1890
Box(?)	J-STONE-COB	8:5	1868–1912
Lid	J-STONE-LID	8:6	19th c.
<i>Glazed Earthenware Vessels</i>			
Bowls	J-ÇAN-BL-3A, 3B	9:1–3	1800–1850
Bowl	J-ÇAN-BL-9A	9:4	1890–1920
Plate	J-DRIP-PL	10	c. 1890
Vessel	Type	Fig. No.	Dating
Basin	J-GL-BAS-1	11:1	1890–(1920)
Basin	J-GL-BAS-2A	11:2	1850–(1920)
Bowls	J-MONO-BL-2A, 2E	11:3, 4	18th–19th c.
Basin	J-MONO-BAS-2A	11:5	19th c.+
Jug	J-MONO-JUG-2B	11:6	1880+
Bowl	J-MARM-BL-1A	12:1	1850+
Bowl	J-MARM?-BL	12:3	1850+
Bowl	J-ALB-BL-1	12:4	1790–1890
Cooking pot	J-VAL-CP-1	13:1	1880–(1920)
Cooking Pot	J-VAL-CP-4, 4A, 4B	13:2–4	1880–(1920)
<i>Gaza Ware and Coarse Ware Vessels</i>			
Zebdiye	J-GAZA-BL-1D	14:1	1700–1950
Leken	J-GAZA-BAS-1A	14:2	19th c.
Jarra	J-GAZA-JR-5B	14:3	1700–1970
Asliyah	J-GAZA-JUG-4A	14:4	1700–1970
Brick	J-GAZA-JUG-5A	14:5	1700–1900
Jug	J-JUG-7	15:1	19th c.
Jug	J-JUG-1D	15:2	1890
Period 3			
<i>Hard-Paste, Porcelain and Stoneware Vessels</i>			
Plate	J-SPONGE-PL-2	2:5	1900–1923
Plate	J-SARRE-PL-3A	2:6	1890–1920
Bowl	J-SARRE-GD-BL-3	2:10	1900–1923
Bowl	J-GD-BL-12	2:12	1880–1930+
Bowl	J-WW-BL-2A	3:1	c. 1910
Plate	J-WW-PL-3	3:2	c. 1920
Cup	J-P-CUP-1	4:1	c.1920
Cup	J-P-CUP-3D	4:2	c. 1920
Cup	J-P-CUP-3F	4:3	c. 1920
Saucer	J-P-SAU-12	4:5	c. 1920
Coffee cup	J-P-CC-2D	5:9	1880–1920
Backstamps		7:1–5	1855–1930
Bottle	J-STONE-BTL-3C	8:2	1880–1920
<i>Glazed Earthenware and Gaza Ware Vessels</i>			
Bowl	J-ÇAN-BL-9A	9:4	1890–1920
Basin	J-GL-BAS-1	11:1	1890–1920
Basin	J-GL-BAS-2A	11:2	1850–1920
Brick	J-GAZA-JUG-5B	14:6	1890–1930

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