

THE CERAMIC FINDS FROM THE OTTOMAN FLOUR MILLS IN THE RIDWAN GARDENS, 'AKKO

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A small amount of pottery dating to the late Ottoman period was found in the flour mills excavated in the Ridwan Gardens in 'Akko (see Lerer, this volume; Freundlich, this volume). The date of the pottery is in accordance with the dating of the mills, i.e., the end of the eighteenth century until the 1920s.¹ The Ottoman-period pottery was mainly retrieved from fills in various parts of the mills, such as the channels, the underground vaulted rooms and the milling rooms. It comprises plain wares, cooking vessels and imported glazed bowls. The best-preserved vessels were chosen for publication. As the vessels were scattered throughout the mill compound, it is very likely that they were used by the workers for food preparation and dining. The assemblage, dated mainly to the eighteenth and nineteenth centuries CE, should be considered together with the tobacco pipes found at the site (see Shapiro, this volume). In addition, two sherds dating to the Crusader and Mamluk periods were identified, representing previous activities at the site.

CRUSADER AND MAMLUK POTTERY

A base of a Crusader-period glazed bowl (Fig. 1:1)² was uncovered under an Ottoman floor to the north of M7. It is a thirteenth-century Cypriot import of a well-known type produced in the region of Paphos, commonly found in 'Akko (Stern 2012, 1:60–65, Type CY.GL.2, Fig. 4.21:a; Pl. 4.42:1–8; 2014b).

A Mamluk-period rim sherd of a bowl (Fig. 1:2) was discovered on the floor level of Building E. This type of bowl is rarely found in Israel. It was made of a coarse, reddish brown fabric with an incised decoration, and was

covered with glaze on both the interior and the exterior. The exterior is decorated with Arabic letters, of which only the upper part survived. The bowl, apparently produced in Egypt, belongs to a well-known group of Egyptian Mamluk Sgraffito bowls. Examples of this type, produced in Fustat and dated from the mid-thirteenth to about the end of the fourteenth centuries, were found mainly in Cairo—the Mamluk capital (Mason and Keall 1990:180–181, Fig. 13; Scanlon 2003; Walker 2004:1–32, Figs. 4, 5, 8, 9, 11; Watson 2004:408–414).

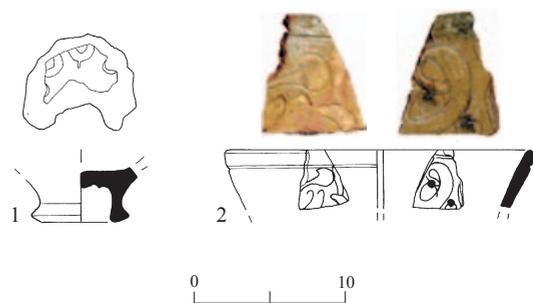


Fig. 1. Crusader and Mamluk bowls.

No.	Locus	Basket	Description
1	212; soil mixed with sand under Ottoman floor, north of M7	2034	Light red 2.5YR 6/6 fabric, some white grits and inclusions; white slip-painted lines under green glaze on int.
2	109; floor level in Building E	1004	Red 2.5YR 4/6 fabric, some white grits; pinkish slip under a yellow glaze on ext. and int., with incised designs and some green glaze enhancements

The Egyptian Mamluk Sgraffito bowls appear in two main forms: one has a rounded body (Walker 2004:14, Fig. 5, top), and the other has a conical body with a low carination (Walker 2004:14, Fig. 5, bottom). The bowls are decorated with motifs unique to the Mamluk rulers, for example Naskhi inscriptions, heraldic devices and a large range of anthropomorphic and zoomorphic representations. The decoration recalls metal works of the same period (Scanlon 2003). The fragment from 'Akko is of the second type, similar to the one discovered in the el-Waṭa quarter in Safed (Dalali-Amos and Getzov, forthcoming). In Israel, these bowls were found in important administrative centers, such as Jerusalem and Safed (Avisar 2003:436, Pl. 19.2:7, Photo 19.1; Avisar and Stern 2005:38, Type I.3.5.1, Fig. 14:7; Barbé 2014:121, Fig. 13:1, 2;³ Dalali-Amos and Getzov, forthcoming) and in sites situated on the Cairo–Damascus postal route, for example Ramla (Toueg 2011: Fig. 11:7; Stern, Toueg and Shapiro, forthcoming), al-Lajjun (Meggido; Tepper and Stern, forthcoming) and Yafo (Stern E.J. 2013: Fig. 11:7). Fragments of Egyptian Mamluk Sgraffito bowls were unearthed in Syria, in Hama and in the Damascus Citadel (François 2008a:20–620), as well as at Hisbān, Jordan (Bethany; Walker, pers. comm.).

OTTOMAN POTTERY

A growing number of publications relate to Ottoman-period pottery from archeological contexts at eastern Mediterranean sites, in the heart of the former Ottoman Empire. The main published assemblages are from Saraḥane, Istanbul (Hayes 1992:233–390), Greece (Vroom 2003:170–180; 2005:134–187), Khania, Crete (Hahn 1997) and Kouklia, Cyprus (von Wartburg 2001). In addition, reports mentioning Ottoman pottery from other sites in these regions will be cited below.

The Levant was peripheral in the Ottoman Empire, and for this reason, a systematic study of the Ottoman pottery from this region is still in its infancy. The first attempt to establish a preliminary typology was made by Ziadeh (1995), based on the pottery from Ti'innik.⁴

Boas (2000) methodologically published the finds from Ḥorbat 'Eleq, both from the village and the el-Khouri manor, which were inhabited between 1840–1922. Milwright (2000; 2008; 2009) assembled all the published ceramic material of the late Mamluk and Ottoman Greater Syria (Bilad al-Sham) according to sites, pottery types and the written sources regarding them. An extensive study relating to the production, chronology and distribution of Gaza ware was conducted by Israel (2006). The publication of the ceramic finds from the Damascus Citadel (François 2008a; 2008b; 2009) also includes a discussion concerning the Ottoman pottery. In 2009, following the ASOR annual meeting regarding Ottoman pottery from the Levant and Cyprus, a volume edited by Walker (2009b) was published. Another extensive publication of Ottoman pottery was recently published from a shipwreck found in the Dor lagoon, which contained mainly cooking pots, jars and roof tiles from Marseille (Kahanov, Cvikel and Wielinsky 2012). This is an important contribution to the study of Ottoman pottery from the Levant, as it demonstrates the maritime circulation of ceramics in the Mediterranean during this period. Eighteenth- and nineteenth-century pottery, porcelain and smoking pipes from the Kishle compound in Yafo (Jaffa) were also studied in detail (de Vincenz, forthcoming). Publications of small Ottoman pottery assemblages from the 1990s onward will also be mentioned in the following discussion.

The Ottoman pottery includes Unglazed Local Wares, Rashaya el-Fukhar Painted Wares, imported cooking vessels and imported glazed bowls and a basin.

Unglazed Wares (Fig. 2)

The wheel-made unglazed vessels consist of three different groups of local Palestinian wares, reflecting a diversity of fabrics (Ziadeh 1995:218–219): local pottery made in 'Akko, which has a light-colored fabric and a reddish core; Rashaya el-Fukhar Ware, produced at the foot of Mt. Hermon, with a light-colored, fine

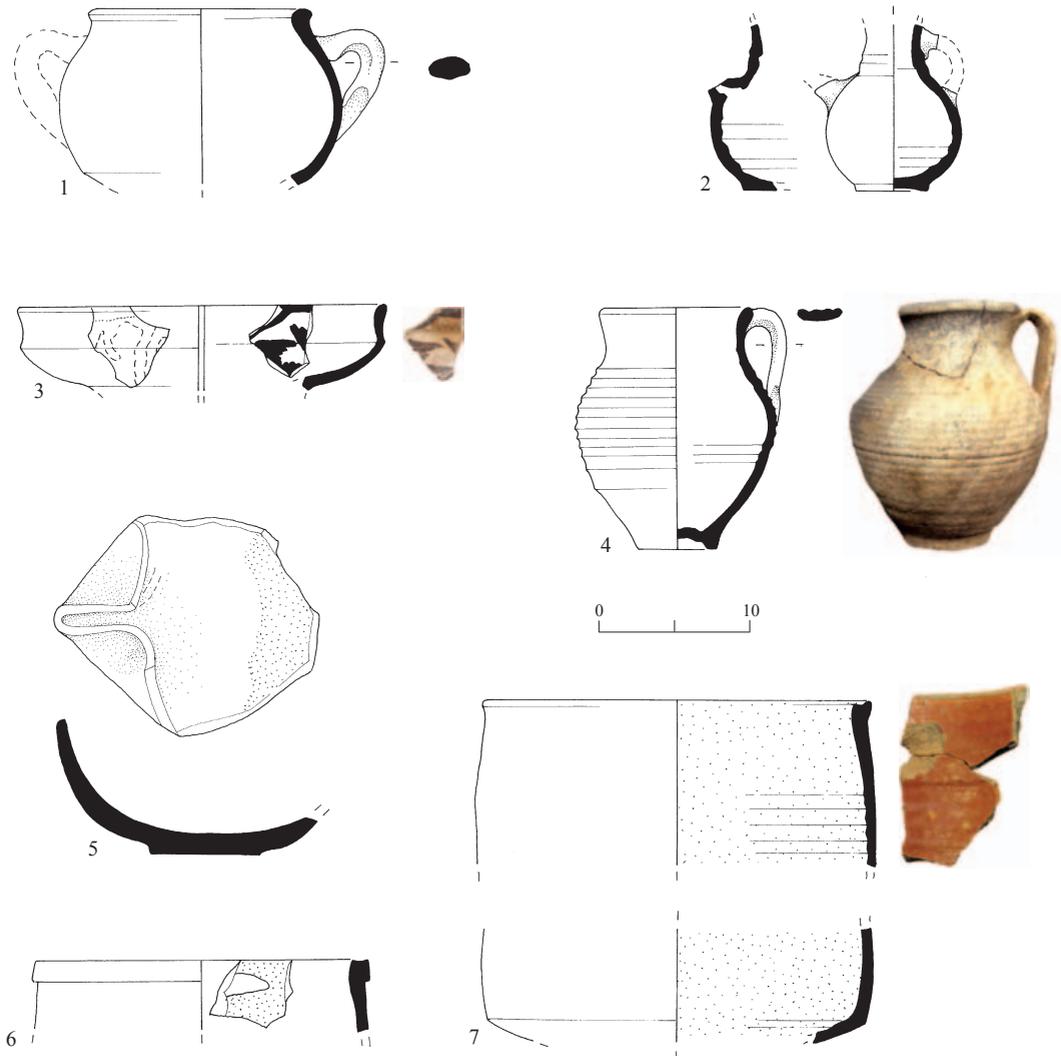


Fig. 2. Ottoman pottery: unglazed wares, lamp and cooking pots.

No.	Vessel	Locus	Basket	Description
1	Krater	110; fill in channel of M13	1032	Red 2.5YR 4/8 fabric; gray 5YR 5/1 core; pinkish white 7.5YR 8/2 ext.; many white grits and inclusions
2	Juglet	105; fill above plaster floor near wall separating Buildings D and E	1003	Pinkish gray 7.5YR 7/2 fabric; many white and black grits and inclusions; severely burnt on int.
3	Bowl	110; fill in channel of M13	1024	Light reddish brown 2.5YR 7/4 fabric; light red 2.5 YR 7/6 core; some white grits and brown inclusions (grog?); white slip on int., extending on ext. with dark brown painting
4	Juglet	201; Building C fill in channel of M7	2003	Dark gray 5YR 4/1 fabric; some white inclusions
5	Lamp	103; Building E fill above wheel box of M13	1016	Brown 7.5YR 4/3 fabric; some white grits and inclusions
6	Cooking pot	204; fill above floor in northern entrance to channel of M7	2024	2.5YR 5/8 fabric; many grits and some inclusions; transparent glaze on int.
7	Cooking pot	101; Building A fill in wheel-box of M1	1001	Very pale brown 10YR 7/3 fabric; light brownish gray 10YR 6/2 ext.; some white and reddish inclusions; pale yellow glaze on int.

fabric and a brownish paint design; and Gaza Wares, made of a dark gray fabric.

'Akko Production.— A krater and a juglet with a spout (Fig. 2:1, 2) belong to this group. The fabric is red or pinkish gray, occasionally with a gray core, many white and black grits and inclusions and a pinkish-white exterior surface. The light surface may be a result of dipping the vessel in salt water, indicating a local, coastal tradition (see Shapiro 2012:104–105, n. 3).⁵ Vessels made of similar fabric were uncovered in a well at the Courthouse Site in 'Akko, within a secure context dated to the end of the eighteenth and the beginning of the nineteenth centuries (Stern 1997:65–68). The petrographic analysis has confirmed that these vessels were indeed manufactured from local fabric (Stern 1997:65, n. 5). In addition, there are oral testimonies to the existence of pottery workshops at the foot of Tel 'Akko early in the twentieth century. It seems very likely that the Arabic name of the mound (Tell el-Fukhar, meaning “tell of the pottery”) is named after these workshops.⁶ These vessels belong to a larger group of ‘White Pottery’, tagged by Salem (1999:72, 76–77) as a traditional pottery production practiced during the nineteenth and twentieth centuries in Haifa, 'Akko and Lebanon. The combination of the archaeological and ethnographic evidence indicates the date range of this ware, from the late eighteenth until the twentieth centuries. Similar vessels discovered in 'Akko (Benente et al. 2012:182, Figs. 26:10; 27:2; Porat 2013: Fig. 3:8, 9; Stern E. 2013: Fig. 7:2, 3), Yoqne'am (Avissar 2005: Fig. 2.26:8, 10) Nazareth (Alexandre 2012:88, Fig. 3.20:2) and Yafo (Kletter 2004:198, Fig. 10:6), probably belong to this local, coastal tradition. Jars and jugs made of a similar red fabric with a white surface were uncovered in small numbers in the Damascus Citadel, and seem to belong to this local, coastal tradition (François 2008a:40 900).

Rashaya el-Fukhar Ware.— A bowl (Fig. 2:3) of the well-distinguished Rashaya el-Fukhar Ware

was found, dating to the nineteenth–twentieth centuries. It is wheel-made with a light, reddish brown, well-levigated and well-fired fabric. A decoration of geometric designs in brown to reddish-brown paint appears over a light slip. Occasionally, there is an addition of green glaze splashes or bands. The pottery workshop at the village named Rashaya el-Fukhar (“head of the pottery” in Arabic) is situated on the southwestern slopes of Mount Hermon (Jabal Ḥaramun), just above the Ḥazbani River. Its name reflects its multi-generation connection to pottery production. Western travelers who visited the region during the nineteenth century mentioned that the village was an important production center for decorated pottery, and that there were numerous pottery workshops (almost one per household). The potters marketed their products, which included a variety of household wares, throughout the Levant (Syria, Lebanon and Palestine—Zevulun 1978; Olenik 1983; Walker 2009a:54, 55). Apart from the ethnographic record, these wares were also unearthed in archeological excavations and surveys of Ottoman towns and villages, mainly in northern Palestine (Edelstein and Avissar 1997:133, Fig. 1:14; Boas 2001:127, Fig. 197:23–29; Frankel et al. 2001:71; Avissar 2005:78, Fig. 2.26:4–6; 2008:98–100, Figs. 6.5:10; 6.6:1–6; 2009:11, Fig. 2.6:8; Alexandre 2012:88, Fig. 3.20:8, 9; Barbé 2014:129; Cohen 2014:82*, Fig. 12:5–7) and in northern Jordan (Walker 2009a:54–55, Fig. 5.14:1). The southernmost distribution is at the el-Khourī manor in Ḥorbat 'Eleq and in Caesarea (Boas 2000:567–568, Fig. 1:2, 3). A similar ware, found in the excavations of the Damascus Citadel and commonly present in the city and its surroundings, is dated by François from the eighteenth to the early twentieth centuries (François 2008a:40 000–40 800). This ‘red-slipped’ ware from Damascus has forms and fabric similar to the Rashaya el-Fukhar Ware, although François does not cite that production center. Of special note is a bowl, similar in form to the one found at the 'Akko mills (François 2008a:40 300, No. 2).

Gaza Ware.— A small, one-handed juglet (Fig. 2:4) is of a well-known group of pottery produced in and around the city of Gaza, as well as in Fallujah and Khan Yunis, from the eighteenth to the early twentieth centuries. Its dark gray to black fabric is characteristic of this group. It was achieved by a firing technique that utilizes a special kiln with a small opening, which fires the vessels in a reduction atmosphere. The common vessels produced from this fabric are jars, jugs and bowls (Salem 1999:77; 2009; Milwright 2000:196; 2009:40; Israel 2006). Avissar (2009:9) and Salem (2009:39) suggested that there is an indication that Gaza Ware appeared as early as the late fifteenth–sixteenth centuries, although clear stratigraphic excavations are still needed to prove this. The form of the dipper juglet (in Arabic *murtas*) from the 'Akko mills is relatively rare within the Gaza Ware assemblage. These small, one-handle vessels were used for extracting liquids (for example, water or olive oil) from a larger jar, such as a *Zir*, and were occasionally hung by rope from the jar handle (Israel 2006:126–127).

In central and southern Palestine, Gaza Ware was widespread and comprised the majority of the Ottoman pottery assemblages (Israel 2006; Be'er Sheva'—Ustinova and Nahshoni 1994:173, Fig. 14; Giv'at Dani—Lazar 1999:134*–135*, Fig. 8:1–8; Yavne—Fischer and Taxel 2007:268–270, Fig. 22:8–10; Kafr 'Ana—Gophna and Taxel 2007:56, 60, Figs. 3.13:1; 3.15:9–11; Yafo—Kletter 2004:198, Fig. 10:1–4; Barkan and Buchennino 2011: Fig. 3:13; Arbel 2012: Fig. 22:3–5; Haddad 2013: Fig. 21:1; de Vincenz, forthcoming:87–96, Fig. 8.5A.1–4). The same phenomenon appears in southern Transjordan (Sinibaldi 2013:193–194, Fig. 3:15–21). In northern Palestine, Gaza Ware appears only occasionally in Ottoman ceramic assemblages, for instance in 'Akko (Benente et al. 2012:182, Fig. 26:10), Yoqne'am (Avissar 2005:76–78, Fig. 2.26:2, 9), Nazareth (Alexandre 2012:85–88, Figs. 3.19:3, 7, 10; 3.20:3, 4), Shallale (Avissar, Ben-Ephraim and Vincenz 2009:259, Fig. 21:13), Ḥorbat

'Eleq (the village and the el-Khouri manor; Boas 2000:547–551, 568, Pls. 1; 2:1–10, Fig. 1) and Ti'innik (Ziadeh 1995:218; for an extensive list of sites, see Walker 2009a:55; Salem 2009:27–29). Literary evidence reveals that Gaza Ware was brought to 'Akko by boats and ships, sailing northward along the coast. Gatt, who visited Palestine in the second half of the nineteenth century, described ships that transported merchandise to Gaza and brought back Gaza Ware pottery (Israel 2006:328). Gaza Ware was uncovered in the Damascus Citadel in eighteenth- to early twentieth-century levels (François 2008a:50–200).

Oil Lamp

This lamp (Fig. 2:5) has a simple bowl and a pinched rim; random splashes of glaze are visible on the interior. This type of oil lamp, common from the Mamluk to the Ottoman periods, became the most popular type in the Ottoman period (Kletter 2004:98, Fig. 10:6; Avissar and Stern 2005:128, Fig. 53:5; Barkan and Buchennino 2011: Fig. 3:15; de Vincenz, forthcoming:96, Fig. 8.5A.5:2, 3).

Cooking Wares

Only two fragments of wheel-made, glazed cooking pots were found (Fig. 2:6, 7). Both are imported and, as they differ in fabric and glaze, they probably originated in different places. Notwithstanding, both have the same general form of wide opening and straight walls, and seem to be deep pots.

From the eighteenth century, and even more so during the nineteenth century, cooking vessels were manufactured on a large, almost industrial scale in various places in the Mediterranean. Due to their good quality, they were widely distributed. Two of these production centers made similar cooking pots of a reddish orange fabric with a transparent glaze on the interior. Each type occasionally bears manufacturers' stamps. The first production center was on the island of Siphnos in the Cyclades (Vroom 2003:185, Fig. 6/39:W43.1–2; 2005:193), and the second, in Vallauris, situated on the

southeastern coast of France. Cooking pots from Vallauris have been found in shipwrecks in the western Mediterranean (Amouric, Richez and Vallauri 1999:131–135, Figs. 259–262), as well as on the Carmel coast in the eastern Mediterranean (Kahanov, Cvikel and Wielenski 2012:178–182, Figs. 5–9). They even reached the French Caribbean Islands (Martinique and Guadeloupe), where they were used by African slaves to cook their traditional liquid-based foods (Kelly and Wallman 2014:35). In our region, open and closed cooking vessels from Vallauris were unearthed in Yafo (de Vincenz, forthcoming:58–61, Fig. 8.2E:3–7). A glazed cooking pot with a stamp of an unreadable inscription and a cross, discovered in the el-Khouri manor at Ḥorbat ‘Eleq (Boas 2000:567, Fig. 11:5), may also be from Vallauris, as such stamps were most common on the Vallauris vessels (Kahanov, Cvikel and Wielenski 2012:181, Fig. 10:f). The Siphnos cooking pots were apparently distributed in a more restricted area, mainly the Aegean and other parts of the eastern Mediterranean, for example Cyprus (Gabrieli 2009:71, Fig. 6.7:6, 7) and Crete, where they might have been imitated (Hahn 1997:189, Pl. 57:80-P 0354/0358). Other imported, glazed cooking vessels were found also at Ḥorbat ‘Eleq, both in the village and in the el-Khouri manor (Boas 2000:551, 567, Figs. 1:4, 6; 2; 11). Interestingly, common local, handmade cooking ware (Avissar 2009:8, 10, 12, Figs. 2.2:1–5; 2.6:1–3; 2.11:1–4, 10–12) were not found.

Light Clay, Yellow Glazed Cooking Pot.— The cooking pot in Fig. 2:6 is made of light colored clay, with a pale yellow glaze. It is similar in form, fabric and glaze to cooking pots found in other excavations in ‘Akko (Benente et al. 2012:191, Figs. 33:4; 35), Yoqne‘am (Avissar 2005:76, Fig. 2.26:1) and Shallale (Avissar, Ben-Ephraim and de Vincenz 2009:257, Fig. 19:4). These cooking pots were probably imported from the regions of Provence and Languedoc in southern France.⁷

Red Fabric, Transparent-Glazed Cooking Pot.— This type of cooking pot (Fig. 2:7) is made from a red fabric, with a transparent reddish orange glaze and a large quantity of mica, in addition to white grits. It seems to be very similar to the cooking pots produced in the island of Siphnos from the eighteenth to the twentieth centuries (see above). Siphnos pots were identified in other excavations in ‘Akko (Stern E. 2013: Fig. 7:6) and in Jerusalem (Avissar 2009:12, Fig. 2.11:15).

Glazed Wares (Fig. 3)

The glazed wares consist of four main types, all of which seem to be imported. These include three of the more common types— Monochrome Ware, Slip-Painted Ware and Çanakkale Ware—as well as a slip-painted bowl and basin.

Monochrome Ware.— This type includes shallow bowls (Fig. 3:1, 2) with a ledge rim and a low ring base that are covered with a monochrome, yellow or green glaze on the interior. The fabrics slightly vary, indicating several production sites (for possible Ottoman production sites, see below, Slip-Painted Wares). This form is very common in the Ottoman period, for example in some of the Slip-Painted Ware bowls, as well as in the Çanakkale Ware bowls. Similar monochrome bowls, probably dated to the nineteenth century, were reported from Yoqne‘am (Avissar 2005:75, Fig. 2.25:1), Ha-Bonim–Kefar Lam (Avissar 2009:11, Fig. 2.7:5), Yavne (Fisher and Taxel 2007:268, Fig. 33:6) and Kouklia, Cyprus (von Wartburg 2001:372–374, Fig. 6:40, 41). Monochrome bowls with simple, pointed rims were found at Ḥorbat ‘Eleq, both in the village and the el-Khouri manor (Boas 2000:555–556, 570, Pls. III:10; 11; X:10–12).

Slip-Painted Wares.— Two types of Slip-Painted Wares (Fig. 3:3–5) were found, dating from the nineteenth to the early twentieth centuries. They originated in pottery



Fig. 3. Ottoman pottery: glazed wares.

◀ Fig. 3

No.	Vessel	Locus	Basket	Description
1	Bowl	203; Building D fill in northwestern entrance	2005	Reddish yellow 5YR 6/8 fine fabric; white slip under monochrome yellow glaze on int. and extending over rim
2	Bowl	105; fill above plaster floor, near wall separating Buildings D and E	1003	Reddish yellow 5YR 6/8 fine fabric; white slip under monochrome green glaze on int. and extending over rim
3	Bowl	101; Building E fill above wheel-box in M14	1010	Light red 2.5YR 6/8 fine fabric; some white and gray grits and inclusions; white slip-painted lines under green glaze on int. and extending over rim
4	Bowl	300; Building B fill in paddle wheel of M5	3000	Two shades of fabric: reddish yellow 5YR 7/6 fabric on ext. and light red 2.5YR 6/8 on int.; few white grits and rare mica; pink 10R 8/3 slip-painted random painting under yellow glaze on int. and extending over rim
5	Bowl	110; fill in channel of M13	1032	Red 2.5YR 5/8 fabric; white grits, some white inclusions and rare mica; white slip-painted lines under green glaze on int. and extending over rim
6	Bowl	113; fill in channel of M13, near floor	1019/1	Light red 2.5YR 6/8 soft fabric; pink 2.5YR 8/4 ext., rare white grits; white slip-painted lines on rim and base under yellow glaze on int. and extending over rim
7	Basin	113; fill in channel of M13, near floor	1019/2	Light red 2.5YR 7/8 soft fabric; pink 2.5YR 8/4 ext., few white grits and inclusions; white slip-painted line under yellow glaze on int. and extending over rim
8	Bowl	105; fill above plaster floor, near wall separating Buildings D and E	1003	Light red 2.5YR 7/8 fabric; some white grits; white slip and manganese painted designs under transparent glaze on int. and extending over rim
9	Bowl	101; Building E fill above wheel-box of M14	1010	Light red 2.5YR 6/8 fabric; some white grits; white slip and manganese painted designs under transparent glaze on int. and extending over rim
10	Bowl	204; fill above floor in northern entrance to channel of M7	2019	Light red 2.5YR 6/8 fabric; some white grits; white slip and manganese painted designs under transparent glaze on int.

workshops situated in the heart of the Ottoman Empire. Both types are covered with yellow or green glaze over a slip-painted design that appears in a lighter shade; however, they differ in shape and design. The first type (Fig. 3:3), known as Didymoteichon Ware, has a down-turned, folded rim, a low ring base and vertically slanted slip-painted stripes from the rim to the base. It was produced at Didymoteichon in Thrace, northern Greece, in the nineteenth and early twentieth centuries (Bakirtzis 1980; Hayes 1992:276–277, Ware P). These bowls were widely distributed throughout the eastern Mediterranean basin (Hayes 1992:276, Fig. 144:17; François 1995; 1999:134–135, Fig. 31:336–339; Pl. 14:337; von Wartburg 2001:375, n. 57; Greece—Vroom 2003:184, Fig. 6.38:W41.1, and see

further references therein; Crete—Hahn 1997:176; and Cyprus—François and Vallauri 2001:544, Fig. 8:6, 7; von Wartburg 2001:375–376, Fig. 7:48–51). They were also present in shipwrecks in the western Mediterranean (Amouric, Richez and Vallauri 1999:155–156, Figs. 281, 282). They were very popular in the Levant, for example, in ‘Akko (Muqari 1996:125, Fig. 134:3; Edelstein and Avissar 1997:131–132, Fig. 1:9; Porat 2013: Fig. 3:4; Stern E. 2013: Fig. 7:7), Nazareth (Alexandre 2012:86, Fig. 3.19:2), Shallale (Avissar, Ben-Ephraim and de Vincenz 2009:257–258, Figs. 19:1–3; 20:10; 21:10), Ḥorbat ‘Eleq, the village and the el-Khouri manor (Boas 2000:554–555, 570, Pls. III:1–4; X:2, 3), Ha-Bonim–Kefar Lam (Avissar 2009:11, Fig. 2.7:1, 2), Yafo (Barkan and Buchennino 2011:

Fig. 3:4; Arbel 2012: Fig. 22:2; Haddad 2013: Fig. 21:2; de Vincenz, forthcoming:54–56, Fig. 8.2C:5, 6), Kafr 'Ana (Gophna and Taxel 2007:56, Fig. 3.13:7) and Yavne (Fisher and Taxel 2007:268, Fig. 33:4). They were also unearthed in the Damascus Citadel (François 2008a:80 800, Nos. 1–4).

The second type (Fig. 3:4, 5) has a ledge rim and a low ring base. This form, as noted above, is similar to the monochrome bowls. The slip-painted design consists of a band painted around the rim, as well as random strokes over the entire body. Similar bowls were reported from various Ottoman sites in Palestine (Boas 2000:554–555, Pl. III:6; Avissar 2005:75–76, Fig. 2.25:5, 6; 2009:11, Fig. 2.7:3; Stern 2014a:148, Figs. 1:15, 16; 2:15, 16), Jordan (Walker 2009a:51–52, 60, Fig. 5.19:2) and Cyprus (von Wartburg 2001:375–376, Fig. 7:52, 53). They are less common and seem to be an imitation of the Didymoteichon Ware, produced at various ceramic workshops in Northern Greece and Northeastern Turkey (Hayes 1992:276; Vroom 2003:184). One of these nineteenth-century workshops was identified in Ganos, on the northwestern shore of the Sea of Marmara (Armstrong and Günşenin 1995). Further typological studies of this type, as well as petrographic or chemical analyses, are required in order to distinguish between the different production centers.

Slip-Painted Bowl and Basin.— Two vessels with identical features were uncovered: thick walls, a hard, fine red fabric, a slip-painted design and a glossy glaze. Their forms, however, are different: the bowl (Fig. 3:6) has a ledge rim and a flat disc base, and the basin (Fig. 3:7) has a thick ledge rim, upturned at its edge. These vessels are less common and therefore, their origin is unclear. Four somewhat similar basins were found in another excavation in 'Akko (Benente et al. 2012:185, Fig. 27:3, 5), in Nazareth (Bagatti 2002:189–190, Fig. 69:1, Pl. 79:3) and in a survey in Yavne (Fischer and Taxel 2007:268, Fig. 33:6). The last example

has the same profile as the basin described above.

The slip-painted vessels from the 'Akko mills share some similar features with vessels discovered in eastern Mediterranean sites. For example, the bowls and basins from Kouklia, Cyprus are similar in shape and fabric, while the slip and the glaze are different. Those from Cyprus date to the late eighteenth and nineteenth centuries and their origin is unknown (von Wartburg 2001:382, Figs. 8:68–69, 10:31). Other bowls with a similar form and fabric were found in a survey at Boeotia, Greece, but with a different surface treatment (Vroom 2003:188, Fig. 6.39:W48.1–2). Vessels with a similar surface treatment, i.e., decorated in the slip-painted technique, were produced in Chalkis, Crete, or in Thasos, Greece, in the nineteenth and twentieth centuries (Hahn 1997:189; Vroom 2003:184–185, Figs. 6.16; 6.39; 6.47:W42.1–3). The execution of the slip-painted bands on the Greek vessels is similar to that on the basin from 'Akko, suggesting a Greek origin. Interestingly, similar bowls were also present in shipwrecks in the western Mediterranean (Amouric, Richez and Vallauri 1999:129, Fig. 258).

Çanakkale Ware.— These bowls (Fig. 3:8–10) belong to a well-known, glazed painted ware produced in the town of Çanakkale in the Dardanelles during the eighteenth–twentieth centuries. Hayes divided the bowls into two groups according to the finds from Saraçhane and their decoration: Çanakkale I, dated to the eighteenth century, which has floral motifs painted in blue and manganese; and Çanakkale II, dated to the nineteenth and twentieth centuries, which has simpler stylized floral motifs or other patterns painted in manganese, and strips of cross hatching on the rim (Hayes 1992:268–270, Fig. 101:3). Our examples belong to the second group. They have a light red fabric, a white slip and manganese painted designs under a transparent glaze on the interior.

The geographical location of Çanakkale on the maritime passage between the Mediterranean, the Aegean and the Black Seas, and the close proximity to Istanbul, facilitated the seaborne distribution of this ware to most of the Ottoman Empire. Çanakkale Ware II and Didymoteichon Ware are the two most common Ottoman glazed wares imported to Palestine during the nineteenth century. Examples have been found in Istanbul (Hayes 1992:268–270), within the walled city of ‘Akko (Muqari 1996:124–125, Fig. 134:1, 2; Edelstein and Avissar 1997:132–133, Fig. 1:13; Benente et al. 2012:181–182, Fig. 26:2; Porat 2013: Fig. 3:3; Stern E. 2013: Fig. 7:8), Baniyas (Avissar 2008:95, Fig. 6.2:21), Nazareth (Bagatti 2002:189–190, Fig. 69:3; Pl. 79:5; Alexandre 2012:86, Fig. 3.19:1), Ḥorbat ‘Eleq, the village and the el-Khouri manor (Boas 2000:555, 570, Pls. III:7–9; X:4–9), Ha-Bonim–Kefar Lam (Avissar 2009:11, Fig. 2.7:4), Yafo (Kletter 2004:200, Fig. 10:11; Barkan and Buchennino 2011: Fig. 3:2, 3; de Vincenz, forthcoming:41–44, Fig. 8.2A:4, 5), Kafr ‘Ana (Gophna and Taxel 2007:56, Fig. 3.13:9), Damascus (François 2008a:70–900, Nos. 1–3), Alexandria, Egypt (François 1999:133–134, Fig. 31:331–334; Pl. 14:335), Greece (Vroom 2003:180–182, Fig. 6.38:W39.1–2), Crete (Hahn 1997:175–176) and Cyprus (François and Vallauri 2001:544, Fig. 8:4, 5; von Wartburg 2001:367–369, Fig. 4:19, 20).

Based on differences in fabrics and the finds from excavations in Khania, Crete, and in Kouklia, Cyprus, Hahn and von Wartburg suggested that pottery of the same style and with similar decoration was also produced in other workshops (Hahn 1997:176; von Wartburg 2001:369). The examples from ‘Akko are too few to support their observation; in order to better understand the typology, production centers and distribution of the Ottoman-period pottery, it is necessary to carry out petrographic and chemical analyses.⁸

DISCUSSION

The pottery assemblage from the excavation of the ‘Akko Mills includes mainly Late Ottoman wares, as well as two earlier sherds. The Cypriot sherd, dating to the thirteenth century, the heyday of ‘Akko, is not an unusual find in ‘Akko or its hinterland. However, its presence about 7 km from the Crusader city walls, in a natural spot for water-powered mills, may suggest that flour mills operated here in the Crusader period. Mills are mentioned in various contemporary written sources. Although one sherd is not enough to build a hypothesis regarding the exact position of the Crusader-period mills, the early remains from Building C (Lerer, this volume; Freundlich, this volume) may indicate that the Crusader-period mills were situated here.

The Egyptian Mamluk Sgraffito bowl is uncommon in Israel. Its finding on the outskirts of ‘Akko, which were not inhabited in the Mamluk period, is puzzling. It can be suggested that this sherd may be dated to al-Ashraf Khalīl’s siege of ‘Akko, when his army camped outside the city, possibly in the immediate vicinity of the mills.⁹ Interestingly, another sherd of an Egyptian Mamluk Sgraffito bowl was found in Yafo, outside the Crusader city, which may also be linked to the Mamluk conquest there.

As noted, the majority of the ceramic finds at the ‘Akko mills date to the Late Ottoman period, mostly to the nineteenth century; the chronological range of some ceramic types begins already in the eighteenth century. The date of the pottery accords well with the period in which the mills were built and used, and the vessels seem to have been used by the mill operators. Interestingly, most of the vessels were imported, for example, the glazed bowls, which are common types found throughout the Ottoman Empire, particularly in the eastern Mediterranean and in Palestine. The use of

imported glazed vessels in the 'Akko mills indicates that they were not considered luxury ware and were used for daily consumption.

The imported cooking wares from the 'Akko mills are largely found at coastal sites, but not only, as we have shown above. The locally produced handmade cooking vessels are absent from the excavation, although they are typical of rural sites (see also Salem 1999:70, 74–75). The lack of handmade wares in our assemblage accords well with Milwright's observation that from the eighteenth to twentieth centuries, handmade pottery was gradually replaced by wheel-thrown unglazed wares produced in urban pottery workshops (Milwright 2000:195).

As opposed to the imported glazed bowls and cooking ware, the unglazed wheel-thrown wares reflect three local Palestinian types: coastal, light colored wares; Rashaya el-Fukhar Ware; and Gaza Ware (for a discussion of these types within the framework of traditional Arab Pottery, see Ziffer 2013: esp. Figs. 1, 2). In addition to its local production, 'Akko is also a meeting point between the northern Rashaya el-Fukhar Ware and the southern Gaza Ware, which are usually not found at the same sites. The region where both wares can be present extends roughly from 'Akko and the Carmel

Mountains in the west to Nazareth in the east. Since Gaza Ware was almost certainly transported by sea, 'Akko was a natural overlapping point for both types. It follows that the pottery used by the workers in the mills was probably brought to 'Akko by sea, and reflects the local and international maritime trade that took place at the port of 'Akko during the late Ottoman period. Interestingly, the pottery types found in this excavation represent three levels of pottery trade and distribution that occurred during the nineteenth century: short-distance trade, characterized by local unglazed wares, within Ottoman Palestine; mid-distance trade, represented by the glazed wares and the Siphnos cooking ware, which was distributed from production sites within the Ottoman Empire; and long-distance trade, represented by cooking ware from the western Mediterranean (southern France).

This study has shown that the imported pottery was not only used by the wealthy inhabitants of the cities and ports as previously suggested, but also by the working class in the mills, most likely due to their lower cost and extensive maritime distribution from the late eighteenth century onward (Milwright 2000:202; 2009:49).

NOTES

¹ It should be noted that this article was originally written in 2008, and was slightly updated in 2012 and 2015. Pottery dated to the British Mandate period was also recovered, but since it was not acceptable to publish recent pottery, it is not presented here. I would like to thank the anonymous reader for his remarks on the manuscript.

² The description of the pottery includes the color of the fabric, described according to the Munsell Soil Chart (2000). The presence of grits and inclusions is also mentioned, along with the color of the slip, the glaze and the decoration. The color of the glaze is not always indicated in the drawings, but its presence and color are mentioned in the text. A stain in the glaze of a different color from the background is indicated by shading in the drawing. In all drawings

of glazed vessels, the area of the glaze on the exterior of the vessel is indicated by a dotted line, while a broken line marks the area of the slip. Only in the drawings of cooking pots and cooking bowls is the glaze on the interior shown by dots.

³ The identification of these sherds as Egyptian Mamluk Sgraffito glazed bowls was based on fabric description and decoration. Unfortunately, I did not have the chance to handle these sherds and identify them as such. Therefore, this identification should be taken with caution.

⁴ Ziadeh (1995:210) studied pottery from a stratified excavation and created "a tentative typology." The date of the pottery was established by several types of evidence: historical data and the presence of tobacco smoking pipes, green glazed and slipped

bowls. Although her work is a pioneer study on Ottoman pottery, a few weaknesses prevent its further utilization: (1) The article does not include all the data that was utilized in the research, and therefore, it is difficult to evaluate the conclusions; (2) Four samples were analyzed by thermoluminescence dating (Ziadeh 1995:210–211) and a petrographic analysis identified eight different fabrics (Ziadeh 1995:220–221), yet only a verbal description of the fabrics was given, making it difficult to compare it with other petrographic analyses; (3) There may be a methodological problem with her dates, since the green glazed and slipped bowls are actually earlier than the sixteenth century. Milwright (2000:192) has shown that due to the weakness of Ziadeh's dating criteria, one should take her conclusions with caution.⁵ Although Shapiro relates to pottery dated from the Crusader period that was produced in 'Akko, the similar white surface of the Ottoman-period pottery apparently also indicates dipping in salt water.

⁶ I would like to thank Rafah Abu-Raya who enriched me with this information, which he heard from elderly men from 'Akko and the neighboring villages.

⁷ Open cooking vessels manufactured made of the same fabric and coming from the same location were uncovered at other excavations in 'Akko (Porat 2013: Fig. 3:6; Stern E. 2013: Fig. 7:5).

⁸ Written documents can reveal interesting information regarding the production, distribution and consumption of pottery during the Ottoman period (see François 2008b; Milwright 2008).

⁹ On May 18, 1291, the new Mamluk sultan, al-Ashraf Khalil, captured 'Akko after a 44-day siege. The Mamluk conquest was very violent: the city was burnt and the fortifications and some of the buildings were destroyed, in accordance with the Mamluk strategy of leaving all the captured coastal cities in ruin, to deter attempts by new crusades to re-conquer the Holy Land (Sharon 1997:26, 31–34).

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