OTTOMAN TOBACCO PIPES FROM KHAN ET-TULIAR

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Introduction

Nine clay pipes and one marble pipe were unearthed southeast of the Ottoman-period citadel, located northwest of Khan et-Tujjar, where the remains of a marketplace of the late Mamluk–late Ottoman periods was exposed (see Dalali-Amos, this volume). The market seems to have first operated when Khan et-Tujjar was constructed, continuing through the early Ottoman period, when the citadel was built, and also during the late Ottoman period when both the citadel and the *khan* were abandoned. It ceased to function at the beginning of the twentieth century.

The specimens described below were catalogued according to their fabric, size, shape and finishing, and were dated based on the typology assembled for the assemblage from the Hospitaller Compound in the Old City of 'Akko (Shapiro, forthcoming). Dating was also based on the measurement of the interior diameter of the shank opening, as it is known to have increased in size from 5–7 mm in the seventeenth century to 16–19 mm at the end of the nineteenth century CE. The fabric was examined under a binocular microscope at magnifications of between ×20 and ×40, with the aid of 5% diluted hydrochloric acid and a steel needle. The firing temperature of the clay pipes was roughly estimated based on the color and hardness of the sherd, and the state of calcareous inclusions when present (Rice 1987:80–110). The pipes are presented below chronologically.

The substance used with such pipes was chemically examined by Simpson (2000:171) in his analysis of the pipe assemblage from Belmont Castle, near Jerusalem. The results showed that cannabis may have occurred on less than one percent of the specimens, calling into question the possibility that they were used mainly for opium smoking. In the present case, the pipe ascribed to the "poppy head" type (Fig. 1:7) may have been used for opium smoking; however, chemical residue analysis is required to affirm this possibility.

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CLAY PIPES

The Seventeenth–Early Eighteenth Centuries CE

Stone-Like Pipes (Fig. 1:1, 2).— Two pipes are characterized by a hard, stone-like gray fabric with fine quartz sand and some chalk, as well as other unidentified inclusions, the latter of a black and dark reddish brown hue. The hardness of the fabric indicates that the pipes were fired at a relatively high temperature (750–800°C). Their surface is lighter than the fabric color, possibly the result of partial vitrification due to dipping the pipe in salty seawater prior to firing (Shapiro 2012:104–105, and see discussion therein). The vitrification and the presence of quartz sand suggests that these pipes were produced in the coastal region rather than near Khan et-Tujjar. The pipes are dated to the mid-seventeenth century CE, attesting to the early stage of use of pipes in the eastern Mediterranean.

Pipe No. 1, of which the lower part of the bowl was preserved, has a cylindrical shank with an undecorated ring termination at the end. The shank and the bowl join at nearly a right angle. The surface is dull light gray and bears signs of the potter's fingers. Traces of seams from the mold used to manufacture this specimen are observed on the sides of the shank and on the lower side of the bowl, just above its bottom. Based on the position of the seams, the pipe was made in a horizontal mold, which is unusual for clay tobacco smoking pipes. Such a mold type afforded limited versatility in the production process, as it could only be used for making right-angled pipes. Pipes of this type were smoked using a stem, as the ring termination made it uncomfortable to place it in the mouth; this manner of use was the common practice despite the small diameter of the shank opening. Pipes of the same fabric and shape were found in Ottoman-period strata at 'Akko, in the Hospitaller Compound (Shapiro, forthcoming: Fig. 13.4:9) and in the Knights' Hotel (Shapiro, forthcoming).

Pipe No. 2 has a semi-conical shank, widening toward the opening; only a very small part of the bowl was preserved. The pipe was formed using a vertical mold, as indicated by traces of the seams on the upper and lower parts of the shank. The close resemblance of this specimen to Pipe No. 1, in fabric and surface treatment, indicates that they were of the same type, although the latter is not as well-preserved as the former.

Early Pipes (Fig. 1:3–6).— These four specimens are made of dense material, displaying a variety of colors: beige (No. 3), very dark grayish brown (No. 4), black (No. 5) or light gray (No. 6). The thick section of one of the specimens (No. 3) reveals a light gray core. The dark color of Nos. 4 and 5 was the result of exposure to fire while in use. The non-plastic inclusions comprise white chalk or limestone and/or brownish red material, apparently ferruginous shale. Also observed were some large clay lumps of the same fabric as that of the surrounding matrix and voids formed when organic matter in the clay was burned in the firing process. The presence of clay lumps and the uneven distribution of the inclusions indicate that the clay was prepared offhandedly. The surface of the pipes is slightly lustrous, although no signs of burnish were observed.



Fig. 1. Clay smoking pipes of the seventeenth–early twentieth centuries (1–9) and a stone pipe of the seventeenth century (10).

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No.	Locus	Basket	Shank Opening (mm)i
1	200	2084	6
2	201	2027	8
3	205	2086	n.a.
4	205	2121	8
5	205	2089	n.a.
6	200	2085	8
7	216	2066	c. 8 (of the stem socket)
8	205	2112	n.a.
9	Surf.	Surf.	15
10	202	2014	8.5–9.5

i n.a. = not available.

Pipe No. 3 has an intact bowl (interior diam. 16.5–17.0 mm) and the beginning of the shank. The lower part of the bowl is of an oblate spheroid shape, decorated with vertical lines alternating between deeply incised single lines and shallow double lines. The bottom of the bowl bears linear rouletted V marks that slightly protrude from the keel and are arranged in a band around the cylindrical upper bowl.

Pipe No. 4 comprises a shank and the beginning of the bowl. The shank is cylindrical, with a semi-conical termination, widening toward the opening. It is decorated in the middle and around the opening with a band of notch-rouletted markings. Vertical deeply incised single lines occur on the termination.

Pipe No. 5 comprises a small fragment of the bowl rim, decorated with two horizontal incised lines and disordered pinpricks in-between.

Pipe No. 6 comprises the shank, its termination decorated in the shape of an onion and a ridge at the opening. The decoration and the ridge are smoothened, almost obliterated, indicating that the pipe may have been formed in a re-used mold, probably an imitation. Imitations of pipes are widely known in the rural areas of Greece from the mid-seventeenth—beginning of the eighteenth century (Robinson 1985:153) and the mass production of such imitations is known from an urban context in Moscow (Volkov and Novikova 1996:135, 139–141). An example of an imitation was also found in 'Akko (Shapiro, forthcoming: Fig. 13.8:10).

Pipes similar to No. 6 were found at various sites in the eastern Mediterranean, such as Mytilene, Island of Lesbos (Humphrey 1990:3, Fig. 1), Island of Kastelloriso, Greece (Wood 1990:8, Fig. 4), Damascus, Syria (François 2008:16–18), and at sites in Israel, such as Yoqne'am (Avissar 1996:198, Photo XVI.3), Banias (Dekkel 2008:135, Fig. 4.5:13, 15, 16) and 'Akko (Shapiro, forthcoming: Fig. 13.4:2, 5, 7). At all these sites, the dating of the pipes is not later than the beginning of the eighteenth century.

"Poppy Head" Pipe (Fig. 1:7).— This is an unusual specimen, which belongs to the group of "poppy head" (hashish) pipes. It comprises the bowl, which is highly burned on its interior and around the rim, the neck and the beginning of the shoulder of the air chamber with the upper part of the stem socket. The fabric is gray with numerous rounded and subrounded grains of transparent and slightly milky quartz and minute voids. The surface of the pipe is partly dark gray and partly light whitish gray. The latter hue also appears as spots within the sherd, sometimes surrounding the minute voids. These spots indicate the use of salt water in the preparation of the clay dough; alternatively, the pipe may have been dipped in salt water, as seems to have been the case with Nos. 1 and 2 (Shapiro 2012:104–105).

Unlike other Ottoman-period ceramic smoking implements, tobacco pipes and nargile heads, this pipe is wheel-made. It also differs from the others in the manner that the bowl is connected to the air chamber (i.e., chimney): while the tobacco pipes and nargile heads typically include a kind of a strainer, usually with three narrow slits, between the bowl and the chimney, the "poppy head" pipe has only one such narrow hole between those two elements. Also, the "poppy head" pipe is distinguished by the bulbous shape of its chimney, resembling the bulb of the poppy flower; its stem socket protrudes through the chimney's shoulder and it is of the same diameter as the shank opening.

This type of pipe is dated to the mid-seventeenth-beginning of the eighteenth century CE. Several such pipes were found in a seventeenth-century context at Mytilene, Island of Lesbos (Humphrey 1990:3, Figs. 9, 10), and in the quarantine port of the Island of Pomègues, France (Gosse 2001:13), where the type was paralleled to the Venetian "al torino" (lathe) pipe, dated to 1670–1750 CE (Boscolo 1980:35; Gosse 2001:7). Such pipes were also identified by Taxel (2008:43) at Tel Afeq and Ḥorbat Zikhrin, where they were dated to the late seventeenth–early eighteenth centuries CE.

The Mid-Eighteenth-Early Twentieth Centuries CE

Late Pipes (Fig. 1:8, 9).— Only the lower part of a plain bowl was preserved from Pipe No. 8. As there are no traces of a seam, the pipe appears to be handmade, although it may have been made in a very simple mold. The fabric is reddish brown, made of ferruginous clay, containing fine quartz sand and inclusions of limestone and shell debris. The pipe is made of red loam (hamra) and coastal sand, indicating that it was produced in the coastal region.

A pipe resembling No. 8 in appearance, although not in fabric, was found in 'Akko (Shapiro, forthcoming: Fig. 11.4:10). The bowl of this specimen is clearly larger than the bowls of the pipes presented above and therefore, it appears to postdate the mid-eighteenth century CE; however, such chronological distinctions are usually based on the shank size, which is absent in this case.

The shank of Pipe No. 9 is short with a spherical termination decorated with three to four notch-rouletted lines. A 'palmetto' manufacturer's mark is stamped on the bottom of the shank. The fabric is light to dark gray; it contains rounded and angular inclusions of limestone and quarts of a dark gray color and black inclusions that appear to be charred

remains of some hard organic material, possibly crushed olive pits. The surface of the pipe is covered by dark reddish brown to reddish purple engobe.

Pipes with the same shank as No. 9 were found in Saraçhane, Istanbul (Hayes 1992:392–393, Fig. 149:XXV) and in various excavations in Israel, such as Damascus Gate, Jerusalem (Wightman 1989:73–74, Fig. 63:11, 12), Ti'innik (Ziadeh 1995:211, Fig. 1:L 296), Belmont Castle (Simpson 2000:157–161, Figs. 13.5; 13.6), Yoqne'am (Avissar 2005:90, Fig. 4.3.79) and 'Akko (Shapiro, forthcoming: Fig. 13.11:3, 9). This group of pipes, distinguished by their fabric and type of finishing (i.e., engobe), and which occurred in various forms and sizes, is dated from the first half of eighteenth until the end of the nineteenth–beginning of the twentieth century CE. Although the manufacturing site of these pipes is yet to be found, it is suggested that they were produced in northern Israel based on the abundance of such items in Ottoman-period strata in this region and the region's lithology which seem to have been the source of the clay used in their production (Shapiro 2018).

STONE PIPE

Pipe No. 10 is thick-walled, carved in white, coarse crystalline marble, with a characteristic right angle between the shank and the bowl. The pipe is almost intact, except for slight damage to the bowl rim, and it lacks traces of use. The shank is sub-rounded in cross-section and has a flat upper side. The shank opening is sub-rounded and conforms in size to that of the early pipes described above (e.g., Nos. 2, 4). It also closely resembles pipe No. 3 in the interior diameter of its bowl (16.0–16.5 mm).

No parallels for this pipe can be offered. It appears to be an imitation of Native American stone-made pipes from the New World, except that those pipes were made of catlinite—a soft argillite rock resistant to heat (Penman and Gundersen 1999:51). The white marble (calcium carbonate) from which this pipe was made is highly susceptible to heat and begins to disintegrate at a temperature of c. 600°C (Rodriguez-Navarro et al. 2009:581), while the temperature inside a burning pipe may reach as much as 620°C (Ermala and Holsti 1956:491). Therefore, it seems that marble pipe No. 10 could not have been used for smoking, and was perhaps intended to serve a decorative function, possibly a marker of an elevated social status.

The marble employed in the production of this pipe occurs within metamorphic lithological complexes that are not found in the Southern Levant. The primary source of such marble could be the quarries of Greece and Turkey (Herz 1988:7–8), e.g., Crete (Durkin and Lister 1983), Thasos (Stefanidou-Tiveriou 2009), Paros (Wilson 2006) or Marmara (Herz 1988:7–8). It is possible that the pipe was carved from a marble architectural element retrieved as spolia among the ruins of a public building of the Hellenistic–Byzantine periods (see Aviam 2004).

CONCLUSIONS

The tradition of pipe smoking was introduced to the Ottoman Empire by the British, sometime between 1599 and 1605 CE (Baram 1996:118–119), reaching the Southern Levant by the mid-seventeenth century CE. Together with coffee, wine and opium, pipe smoking became what the Ottomans referred to as the "cushions on the sofa of pleasures" (Peçevi İbrahim Efendi, *Tarih-i Peçevi*). The pipes unearthed in the marketplace near Khan et-Tujjar include specimens spanning the entire period of their manufacture and use in the Levant, between the very beginning of the seventeenth and the beginning of the twentieth century CE.

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