

THE LAST YEARS OF CRUSADER ACRE ('AKKO) AND RESETTLEMENT IN THE OTTOMAN PERIOD: ARCHAEOLOGICAL EVIDENCE FROM THE *BOVEREL* QUARTER

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INTRODUCTION

In April 2008, a trial excavation was conducted in a two-story Ottoman-period building in the Old City of 'Akko, prior to the construction of a wine cellar and the renovation of the building as a Boutique Hotel (map ref. 2076/7586; Stern 2010; Figs. 1, 2).¹ The building (No. 18012/43, WIZO House; see Alef, this volume) is located in the northwestern part of the Old City, in the Crusader-period civilian residential *Boverel* quarter. The excavation was carried out in a ground-floor room (c. 5 × 9 m) in the northwestern part of the building. Excavation within an existing building posed logistical difficulties, as part of the room had previously been dug out: a balk had to be retained in the room, and the depth of the excavation was constrained, limiting the exposure of the early remains (Plan 1).

Upon removal of the modern tile floor, a flagstone floor set on a soil fill was discovered; this was probably the original floor of the late Ottoman building, dating to the later half of the eighteenth, or the early nineteenth, century CE (Stratum I). The archaeological remains found below the original floor of the Ottoman building included some evidence for an early Ottoman, seventeenth-century CE occupation (Stratum II), below which part of a Crusader, thirteenth-century CE building, which was destroyed by a fierce fire, was found (Stratum III). Two small probes dug below the Crusader building yielded sporadic sherds dating to the Crusader and earlier periods (Stratum IV).

¹ The excavation (Permit No. A-5408) was directed by the author on behalf of the Israel Antiquities Authority, and was underwritten by Mr. Uri Jeremias. The excavation was carried out with the assistance of Yossi Ya'akobi (administration), Rivka Mishayev (surveying and drafting), Howard Smithline (field photography), Danny Syon, Eliezer Stern, Hanaa Abu-'Uqsa (consultation) and laborers from the Old City of 'Akko. Post-excavation assistance was provided by Bracha Zilber (final plans), Elena Delerzon (location map), Leea Porat (pottery restoration), Danny Syon (numismatics), Hagit Tahan-Rosen (pottery drawing and figures), Inbar Ktalav (malacological finds), Clara Amit and Yael YOLOVITCH (finds photography), and Lena Kupersmidt (metal laboratory). Sincere thanks are due to Nili Liphshitz, for the study of the archaeobotanical finds; she passed away on August 1, 2019. Thanks are due to Yoav Arbel, for reading the article and commenting on it, and to Yardenna Alexandre, for editing it.

THE EXCAVATION

STRATUM IV: PRE-CRUSADER PERIOD

Two small probes dug beneath the Stratum III floors comprised accumulations of an unclear nature (L15, L18; Plan 1: Sections 1–1, 2–2). These accumulations contained some thirteenth-century Crusader-period pottery (Figs. 9:1; 10:4; see below), as well as some Hellenistic- and Roman-period sherds (not illustrated). The limited exposure did not reveal any architectural remains, nor any additional information concerning strata that predated the Crusader building. The pottery retrieved here indicates that the Stratum III structure was built in the thirteenth century CE, and also that the Hellenistic and Roman city of ‘Akko-Ptolemais may have extended to this area.

Malacological Finds

Within the Stratum IV accumulations, 25 shells were retrieved, reflecting the natural surroundings in the ‘Akko bay; they were collected in antiquity as empty shells from the shore (Table 1).² Only one shell of the species *Luria lurida* bears traces of a manmade hole, and it was probably used as an ornament or amulet (Safer and Gill 1982:140).

Table 1. The Mollusc Species according to Stratum

Species	Stratum IV	Stratum III	Stratum II
<i>Patella caerulea</i> (Linnaeus, 1758)		3	1
<i>Phorcus turbinatus</i> (Born, 1778)		2	
<i>Cerithium vulgatum</i> (Bruguière, 1792)	3		
<i>Luria lurida</i> (Linnaeus, 1758)	1		
<i>Bolinus brandaris</i> (Linnaeus, 1758)	4	1	2
<i>Hexaplex trunculus</i> (Linnaeus, 1758)	1	3	2
<i>Stramonita haemastoma</i> (Linnaeus, 1767)		1	
<i>Conus ventricosus</i> (Gmelin, 1791)	4		
<i>Glycymeris bimaculata</i> (Poli, 1795)		1	
<i>Glycymeris nummaria</i> (Linnaeus, 1758)	2	3	1
<i>Ostrea</i> sp.	2		
<i>Loripes</i> (Poli, 1791)		1	
<i>Acanthocardia tuberculata</i> (Linnaeus, 1758)	2	2	1
<i>Cerastoderma glaucum</i> (Bruguière, 1789)	2	1	
<i>Donax trunculus</i> (Linnaeus, 1758)	1	1	
<i>Ruditapes decussatus</i> (Linnaeus, 1758)	3	10	
Total	25	29	7

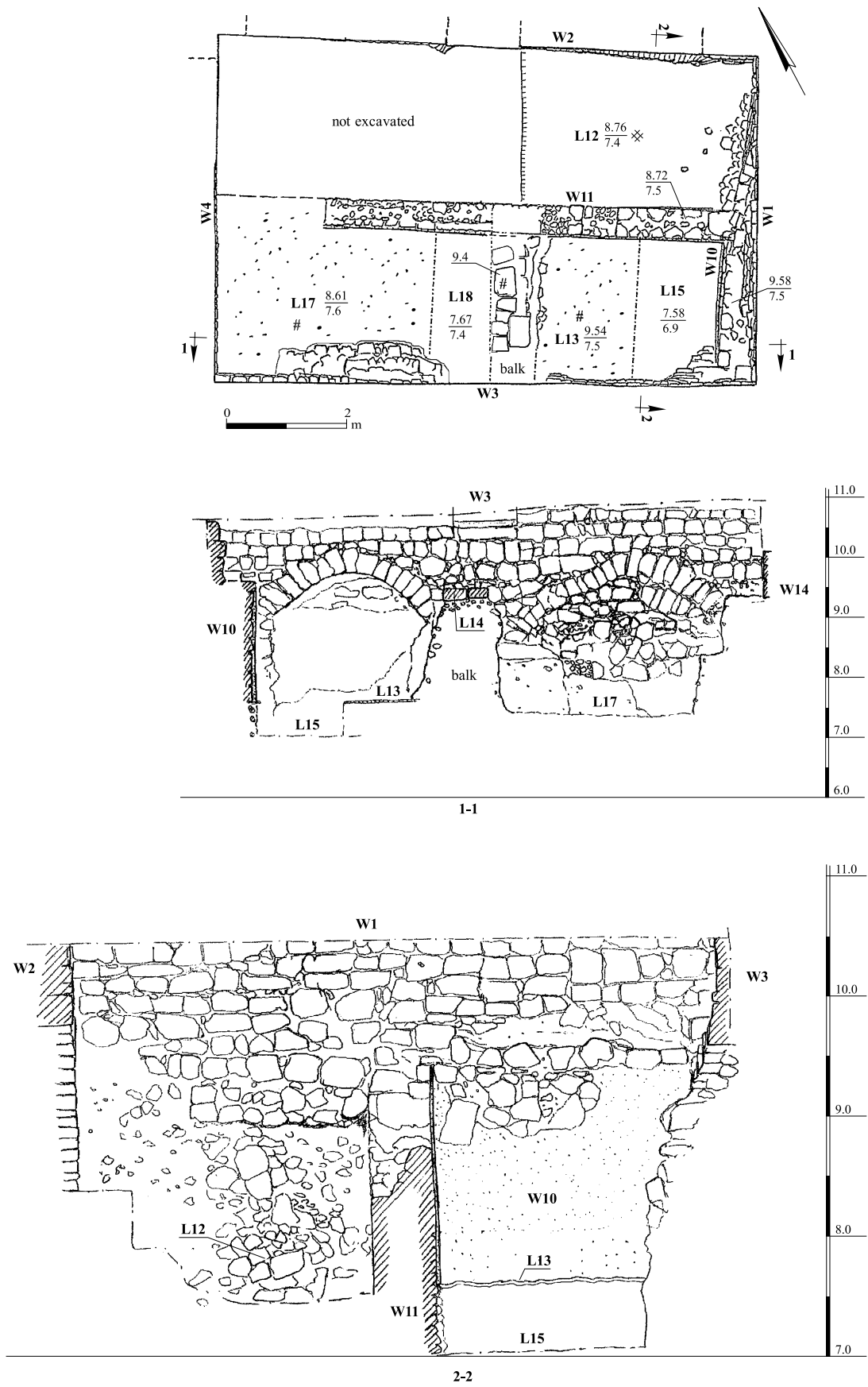
² The malacological finds were studied by Inbar Ktalav, who also prepared the accompanying table.

STRATUM III: THE CRUSADER PERIOD

In Stratum III, a small part of a building was excavated, consisting of two adjoining walls (W11, W10; Plan 1). Wall 11, extending the length of the room (c. 9 m) in an east–west direction, was built of medium-sized fieldstones and was coated on both sides with what seems to be three coats of white plaster (Figs. 3, 4). A shorter segment of contemporary W10, perpendicular to W11 and similarly plastered, was exposed directly beneath W1 of the Stratum I Ottoman building (Fig. 5). The foundation courses of Walls 11 and 10 were exposed to a depth of 0.5 m in Probe 15; these courses were not plastered, revealing that they were made of a fieldstone rubble construction set in mortar (Fig. 6).

The floors of the building were exposed in several places: north of W11, a firmly tamped-earth floor (L12) was found, probably of a courtyard; south of W11, two floors were detected—a pale white, tamped-earth floor on the east side (L13), and a yellowish tamped-earth floor on the west side (L17; Plan 1: Sections 1–1, 2–2). The eastern parts of Floors 13 and 17 were cut by Probes 15 and 18, revealing that the thick (4–7 cm) floors were compressed and uneven, probably due to the building material that collapsed upon them. All the floors were covered by distinct destruction layers.³ North of W11, the destruction layer (L12) consisted of a 1.5 m soil fill, mixed with a large amount of stone collapse and potsherds dating to the thirteenth century CE. South of W11, the destruction layer (L13) was slightly different, comprising many fieldstones and ashlar, probably the collapse of a vaulted ceiling. The intensely burned layer contained charred wooden beams (Fig. 7), numerous fragments of thirteenth-century pottery vessels, glass vessels and windowpanes, a belt buckle and several nails (see below). In L17, the destruction layer was yet again different, comprising a layer of collapse containing fewer stones than L13. The fill between the stones contained dark soil with lumps of gray clayish silt, probably burned organic material. This seems to indicate that a fierce conflagration also occurred here. The finds included many nails, stone pounding implements, glass vessel fragments, and numerous pottery vessels broken *in situ*, including a pithos, as well as a unique Port St. Symeon Ware glazed ceramic tile (Fig. 13; see below). It is quite likely that there originally stood a wooden partition in the area of the unexcavated balk, separating the eastern (L13) and western (L17) parts, thus explaining the different nature of the floors and debris layers in the two rooms, as well as the presence of many nails and charred wood. In any case, the differences in the floors and the composition of the destruction levels indicate that L12, L13 and L17 were probably distinct units within the same building complex. The artifacts, and specifically the thirteenth-century ceramic finds, suggest that the destruction dates to the 1291 CE destruction of ‘Akko (see below).

³ The floors and their overlying destruction layers were allocated the same locus numbers (L12, L13, L17).



Plan 1. Strata IV and III, Crusader-period building, plan and sections.



Fig. 3. Stratum III Crusader building,
looking northeast.



Fig. 4. Stratum III Crusader building, plaster
on W11, looking north.



Fig. 5. Stratum III Crusader building, W10 (below) and W1 (above), looking east.



Fig. 6. Stratum III Crusader building, W11 and its foundations, looking north.



Fig. 7. Stratum III Crusader building, burned layer, looking north.

The Pottery

The Stratum III pottery mainly originates from clear stratigraphic contexts on Floors 13 and 17 and just below the destruction layers, comprising a homogenous assemblage (Figs. 8–12; also including some pottery from Stratum IV Probe 18). The assemblage consists of both local and imported wares, known from previous excavations at ‘Akko, with only few

exceptions. All the pottery types are attributed to the thirteenth century CE, some types had already appeared in the twelfth century. Since most of the ceramic wares found here are of well-known types that have been extensively studied (Stern 2012), their significance lies not in the discovery of new types, but rather in the presence of these vessels in a well-defined domestic context. Consequently, only a selection of the vessel types is illustrated. The pottery descriptions are short, with references mainly to Stern 2012 for further discussion. A comprehensive list of all the rim sherds from Strata IV and III ($n = 100$), including the thirteenth-century CE pottery sherds retrieved from Stratum II ($n = 25$), provides a full record of all the pottery types found in this excavation. This list also presents the relative quantities of the types in the assemblage (Table 2).

Local Wares

Acre Ware, abundant in most excavations in 'Akko, is the most common unglazed ware in this excavation. The fabric of most of the vessels is coarse, red to dark brown, with a light-colored exterior. The forms vary and include simple, uniform hemispherical bowls with a short ledge rim (not illustrated; Stern 2012:34–38, Type AC.PL.1, Pl. 4.1); plates and basins (not illustrated; Stern 2012:34–38, Type AC.PL.2, Pls. 4.2, 4.4); a jug with a wide flaring neck, a cut internally-beveled rim, a pear-shaped body and a handle extending from mid-neck to the shoulder of the vessel (Fig. 8:1; Stern 2012:34–38, Type AC.PL.3, Pl. 4.6:10, 11); kraters with a wide, slightly concave neck and rounded rim, and two handles extending from under the rim (Fig. 8:2; Stern 2012:34–38, Type AC.PL.4, Pl. 4.8); and jars with a high, wide ribbed neck, or holemouth jars (not illustrated; Stern 2012:34–38, Type AC.PL.5, Pls. 4.9:5–9, 4.10:7–9). As attested by chemical and petrographic analysis, Acre Ware was apparently locally produced at 'Akko (Waksman et al. 2008:159–161, 176–180; Shapiro 2012:104, 105, 114, 115; Stern, Waksman and Shapiro 2020:135–138, Figs. 12, 13).

One common, plain handmade basin with a thick and flattened rim, inward slanting walls, a flat base and a combed decoration on the flattened rim was made of a very coarse fabric (not illustrated; Stern 2012:49–50, Type VL.PL.1, Pl. 4.24). These handmade basins are associated with twelfth- to thirteenth-century CE sites in northern Israel, and they have been recovered mainly at 'Akko and in western Galilee. The petrographic analysis of some of the basins found in 'Akko indicates that they were produced in western Galilee (Shapiro 2012:106–107, 115).

Cooking vessels, lamps and glazed bowls that share a similar reddish fabric were apparently produced in Beirut and/or in its close vicinity. Pottery production in Beirut is attested both by archaeological finds, and by scientific analysis of some of the vessels found there and at 'Akko (Waksman 2002; François et al. 2003; Stern and Waksman 2003:173–178; Waksman et al. 2008:178–183; Stern 2012:40–47, Type BE; Stern, Waksman and Shapiro 2020:139–135, Figs. 7–11). The cooking ware includes one example of a twelfth- to early thirteenth-century CE globular cooking pot with a short, everted rim and thin walls (not illustrated; Stern 2012:41–44, Type BE.CW.1, Pl. 4.14:1–6), and numerous open cooking or baking dishes and closed cooking pots with thick walls, dated to the thirteenth century.

Table 2. Count of Rim Sherds by Type and Stratum

Type (following Stern 2012)	Strata IV and III	Stratum II	Total	% of total
AC.PL.1	2		2	1.6
AC.PL.2	3	3	6	4.8
AC.PL.3	1		1	0.8
AC.PL.4	4		4	3.2
AC.PL.5	8		8	6.4
AC.PL.6	2	3	5	4.0
BE.CW.1 (closed)	1		1	0.8
BE.CW.2 (open)	9	1	10	8.0
BE.CW.2 (closed)	18	8	26	20.8
BE.GL.1 beehive lamp	1		1	0.8
BE.GL.2	1		1	0.8
VL.PL.1		1	1	0.8
NSY.GL.4	12	4	16	12.8
CY.PL	1		1	0.8
CY.CW	3		3	2.4
CY.GL.1	2	1	3	2.4
CY.GL.2	2		2	1.6
TUR/GR.PL.1	1	1	2	1.6
TUR/GR.PL.2	1		1	0.8
TUR/GR.PL.4	1		1	0.8
TUR/GR.GL.2	2		2	1.6
TUR/GR.GL.3	7	1	8	6.4
SIT.GL.1	1		1	0.8
SIT.GL.2	9	2	11	8.8
NIT.GL.3	1		1	0.8
VI.CW.1	1		1	0.8
VI.GL.4	1		1	0.8
Unknown Large SJ	1		1	0.8
Unknown VI.GL	3		3	2.4
Unknown VI.CW	1		1	0.8
<i>Total</i>	<i>100</i>	<i>25</i>	<i>125</i>	<i>100.0</i>

The open vessels are shallow with straight, sloping walls and a thickened or flattened rim, protruding in or out; the closed pots have elongated, deep bodies, a relatively wide opening, no neck and a molded or guttered-rim (not illustrated; Stern 2012:41–44, Type BE.CW.2, Pls. 4.16:3–11; 4.17). Glazed wares include a monochrome green-glazed bowl with a small ledge rim (not illustrated; Stern 2012:44–47, Type BE.GL.2, Pl. 4.19:17) and a ‘saucer’ oil lamp, constructed from two separate parts with a transparent glaze applied directly on the body (not illustrated; Stern 2012:44–47, Type BE.GL.1, Pl. 4.19:6–10).

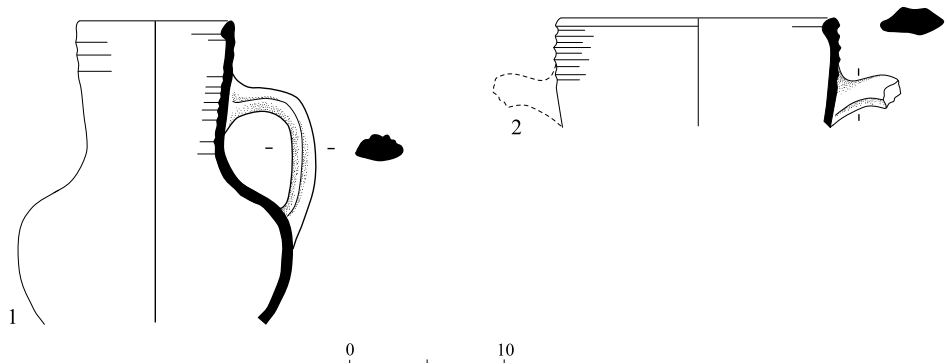


Fig. 8. Crusader-period local wares.

No.	Vessel	Locus	Reg. No.	Fabric Description
1	Jug	13	114/1	Brown 7.5 YR 5/4 fabric; very pale brown 10 YR 8/2 ext.; white grits
2	Krater	12	108	Light reddish brown 5 YR 6/4 fabric; white 10 YR 8/1 ext.; sand; many white spots due to vitrification and hollows

Imported Wares

A large number of fragments and restorable glazed bowls of Port St. Symeon Ware were found (Fig. 9; Stern 2012:55–58, Type NSY.GL.4, Pls. 4.32–4.38). Most of the bowls are hemispherical with a wide ledge rim and a slight ridge at the join between the body and the ledge rim (Fig. 9:1–5, 7), and the outer edge of some of the rims is decorated with piecrust impressions (Fig. 9:3, 5, 7). The base is a low ring base (Fig. 9:1, 2, 8). One deep bowl has a different outward-folded rim and a carinated shoulder (Fig. 9:6). The fabric of the bowls is light-colored and coarse. Decoration consists basically of different repeating, incised geometric or floral motifs on the interior of the yellow- or pale green-glazed bowls, with dabs, splashes, or painted lines of green, and yellow/brown glaze enhancing the incised designs. A noteworthy, unusual design is an animal depiction, perhaps a boar (Fig. 9:6).

Some Cypriot unglazed and glazed vessels were also unearthed. These include a small rim fragment of a handmade jug (not illustrated). Similar jugs were found in Paphos, Cyprus (Gabrieli, McCall and Green 2001:347, Type 4.11, Fig. 3:3–5, 7), and to date have been found in Israel only in ‘Akko and Yafo (Stern 2012:58–59, Type CY.PL, Pl. 4.40:1, 2; 2020:484–485, Fig. 17:4; Burke and Stern, in press). The jug was probably imported to ‘Akko as a food container. These jugs were made in the same tradition as the handmade globular, wide-necked Cypriot cooking pots that were also found in this excavation (Fig. 10:1). These cooking pots are characterized by an everted rim and two broad strap handles extending from the rim to the sloping shoulder; occasionally, finger indents appear on the rim. Unlike the jugs, these cooking pots are common in ‘Akko (Stern 2012:59–60, Type CY.CW, Pl. 4.40:5–10), and at other Frankish sites, including Ḥorbat ‘Uza (Stern and Tatcher 2009:140, Fig. 3.23:10), ‘Atlit (Johns 1934b:144, Pl. LVII:3) and Yafo (Burke and Stern, in press). Among the Cypriot glazed bowls that were abundantly exported to the Latin

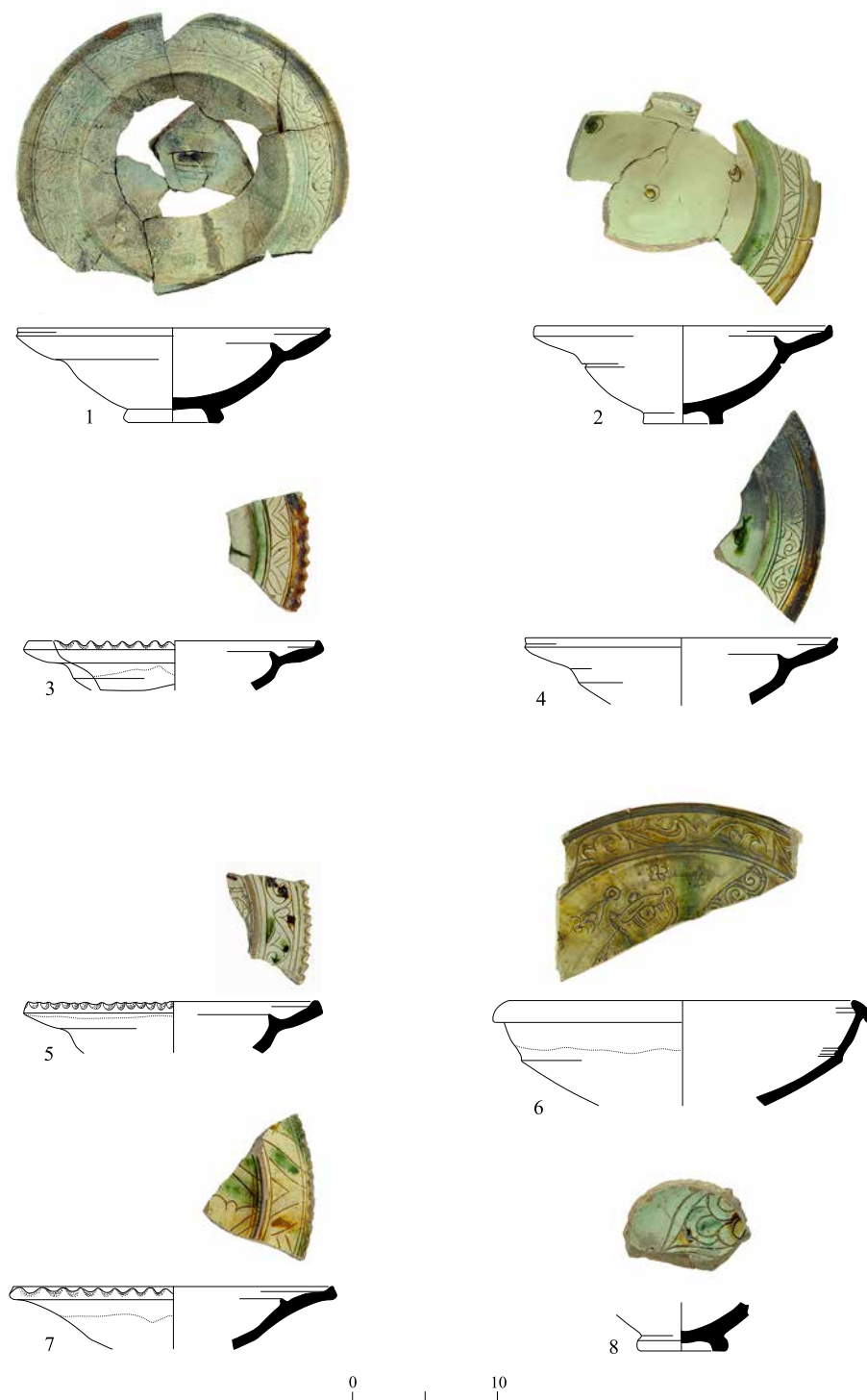


Fig. 9. Crusader-period imported wares: Port St. Symeon Ware bowls.

◀ Fig. 9

No.	Locus	Reg. No.	Fabric description
1	18	132	Very pale brown 10 YR 7/3 fabric; white inclusions; white slip under transparent glaze on int. with incised designs, enhanced with green and brownish yellow glaze; slip and transparent glaze extending over rim ext.; bowl severely burned, causing secondary boiling of the glaze and many small bubbles
2	17	126/4	Pink 5 YR 7/4 fabric; white grits and inclusions; white slip under transparent glaze on int. with incised designs, enhanced with green and brownish yellow glaze; slip and transparent glaze extending over rim ext.
3	17	126/3	Light brown 7.5 YR 6/3 fabric; white grits; white slip under transparent glaze on int. with incised designs, enhanced with green and brownish yellow glaze; slip and yellow glaze extending over rim ext.
4		134/2	Pink 5 YR 7/3 fabric; white slip under transparent glaze on int. with incised designs, enhanced with green and brownish yellow glaze; slip and transparent glaze extending over rim ext.
5	17	126/2	Reddish yellow 5 YR 6/6 fabric; white slip under transparent glaze on int. with incised designs, enhanced with green and brownish yellow glaze
6	17	126/1	Light red 2.5 YR 6/6 fabric; many white grits; white slip under yellowish glaze on int. with incised designs, enhanced with green and brownish yellow glaze; slip and green glaze extending over rim ext.
7		134/1	Very pale brown 10 YR 7/4 fabric; white grits and inclusions; white slip under yellowish glaze on int. with incised designs, enhanced with green and brownish yellow glaze; slip and yellow glaze extending over rim ext.
8	17	125/1	Pink 5 YR 7/4 fabric; white grits; white slip under transparent glaze on int. with incised designs, enhanced with green and brownish yellow glaze

Kingdom (Stern E.J. 2014c), two decorated types were found here: slip-painted bowls (not illustrated; Stern 2012:60–65, Type CY.GL.2, Pl. 4.42) and monochrome sgraffito bowls (Fig. 10:2; Stern 2012:60–65, Type CY.GL.3, Pls. 4.43:9–15; 4.44; 4.45:1–13).

Different types of imported amphorae found here were probably imported for their contents, reflecting the thriving maritime trade of 'Akko. They seem to have originated from the Byzantine Empire. The first type has an ovoid body with a crude, combed pattern on the upper part, a rounded base and crude pitted handles that rise high above the rim (not illustrated; Stern 2012:70–71, Type TUR/GR.PL.1, Fig. 4.24, Pl. 4.50). The second type has a large conical body, a very low neck, a narrow opening and heavy oval-sectioned handles that rise above the rim; the fabric is fine and hard (not illustrated; Stern 2012:71, Type TUR/GR.PL.2, Pl. 4.51:1, 2). The third type is a small, elongated amphora, of which only fragments of the rim and handle, and some body sherds were found (not illustrated). The amphora has a simple rim, a high, narrow cylindrical neck and handles attached from under the rim to the shoulders of the vessel. Many fragments of this type were found in excavations at 'Akko (Stern 2012:71, Type TUR/GR.PL.4, Pl. 4.52), and a complete vessel

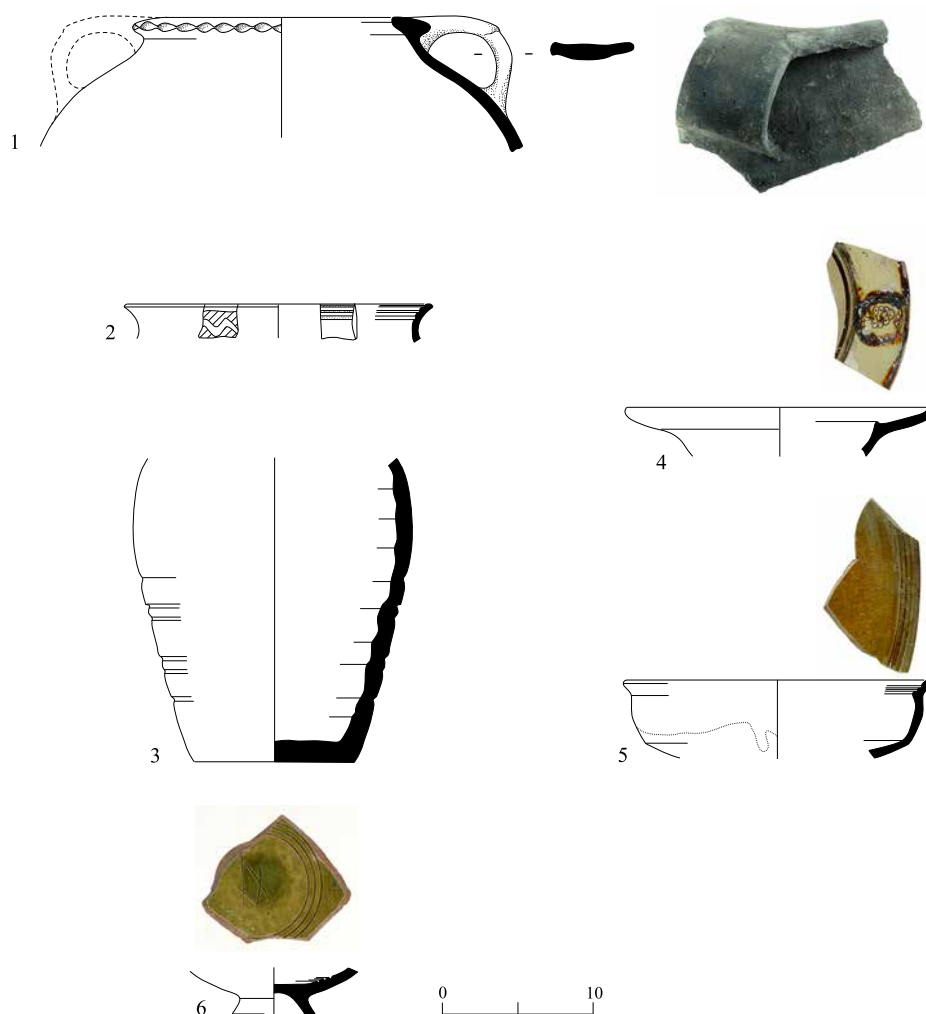


Fig. 10. Crusader-period imported wares: Cypriot cooking pot and glazed bowl, amphora and Zeuxippus ware.

No.	Vessel	Locus	Reg. No.	Fabric description
1	Cooking pot	13	113	Reddish brown 5 YR 4/3 fabric; very dark gray 5 YR 3/1 ext.; many white grits and some white inclusions
2	Bowl	17	128	Reddish yellow 5 YR 6/6 fabric; white grits; white slip under yellowish glaze on int. with incised designs; slip-painted zigzag design on ext.
3	Amphora base	13	114/2	Light red 2.5 YR 4/2 to pink 8/3 2.5 YR fabric; many white grits; some white inclusions and mica; severely burned
4	Bowl	15	117	Reddish brown 2.5 YR 5/4 fabric; reddish gray 2.5 YR core; white slip under yellow glaze on int. with incised designs on rim, enhanced with brown glaze; vertical slip-painted streaks on ext. under yellow glaze extending over rim ext.
5	Bowl	17	131/1	Reddish yellow 5 YR 6/6 to gray 5 YR 6/1 fabric; white grits and some mica; pinkish slip under brownish yellow glaze on int. with incised designs; slip and glaze extending over rim ext.
6	Bowl	13	114/2	Red 2.5 YR 5/8 fabric; white grits and inclusions; white slip under dull green glaze on int. with incised designs

was found at Ḥorbat 'Uza (Stern and Thatcher 2009:138, Fig. 3.22:9). In addition, a flat base made of a very micaceous fabric, similar to the fabric of an amphora with an omphalos base from 'Akko, was found (Fig. 10:3; Stern 2012:71–72, Type TUR/GR.PL.3, Fig. 4.25, Pl. 4.51:3, 6); its full shape is unknown as the upper part is missing.

Glazed bowls of the Zeuxippus family, imported from the Byzantine Empire, were quite common (Megaw 1968; 1989). Two examples of the genuine Zeuxippus Ware Class II, as defined by Megaw (Stern 2012:72–76, Type TUR/GR.GL.2, Pl. 4.53:3–8) are characterized by a fine fabric and thin walls, and decoration consisting of thin and wide incisions on the interior with brown glaze enhancing some of the incised designs. The illustrated example has a wide ledged rim (Fig. 10:4). Zeuxippus-influenced wares (Stern 2012:72–76, Type TUR/GR.GL.3, Pl. 4.54–4.56) were more common at the site. The bowls of this ware have a slightly coarser fabric, thicker walls and a simpler decoration of parallel-line incisions near the rim (Fig. 10:5), and concentric circles on the base enclosing an incised monogram (Fig. 10:6).

Italian wares are represented here by three different glazed-bowl types. The first is a fragment of a rather rare southern Italian import, known as Spiral Ware (Fig. 11:1), previously reported only from 'Akko (Stern 2012:76–77, Type SIT.GL.1, Pl. 4.57:1–3) and Khirbat Din'ila, a Galilean rural site (Stern E.J. 2014a:72, Fig. 1:5). The second is Apulian Proto-maiolica, a very common southern Italian import (Fig. 11:2–5). This ware has a light colored fabric, tin glaze and painted designs over a white background, executed in dark brown, blue and yellow (Stern 2012:77–80, Type SIT.GL.2, Pls. 4.57:4–9; 4.58; 4.59; 4.60:1–10). An almost complete small bowl contains one of the most common motifs of the Apulian Proto-maiolica named 'grid-iron': a central medallion filled with a yellow cross-hatched design, defined by a thick brown line (Fig. 11:2; Stern 2012: Pl. 4.59:3–7). Other fragments of shallow plates with wide ledge rims bear depictions of knights and ships; complete bowls of this type were found elsewhere in 'Akko. One preserved a depiction of a hand holding a sword (Fig. 11:3; Stern 2012: Pl. 4.58:1), and another, the sails of a ship (Fig. 11:4; Stern 2012: Pl. 4.58:11). Only one very small fragment of a third Italian imported Roulette Ware was found (not illustrated). Originating from north Italy, probably Venice, this ware is characterized by a roulette decoration applied either on the exterior of carinated bowls or on the rim of ledge-rimmed bowls. It has been previously reported only at 'Akko (Stern 2012:80–82, Type NIT.GL.3, Pl. 4.63:10–13) and at Ḥorbat 'Uza (Stern and Thatcher 2009:152, Fig. 3.28:3).

A body sherd of a large glazed molded relief jar imported from Spain or North Africa was also found (Fig. 11:6). Its fabric is red, and it bears a geometric design stamped on the exterior surface, over which are the remains of a turquoise glaze. Jars of this type are rarely found in the Levant, and they are more common in the western Mediterranean, apparently in the vicinity of its production sites. Mainly fragments, but also some almost-whole jars have been found in thirteenth-century contexts in Tripoli, 'Akko, 'Atlit (Stern 2012:89–91, Type SP/NA.GL, Pl. 4.72:2, 3), and more recently at Yafo (Burke and Stern, in press).

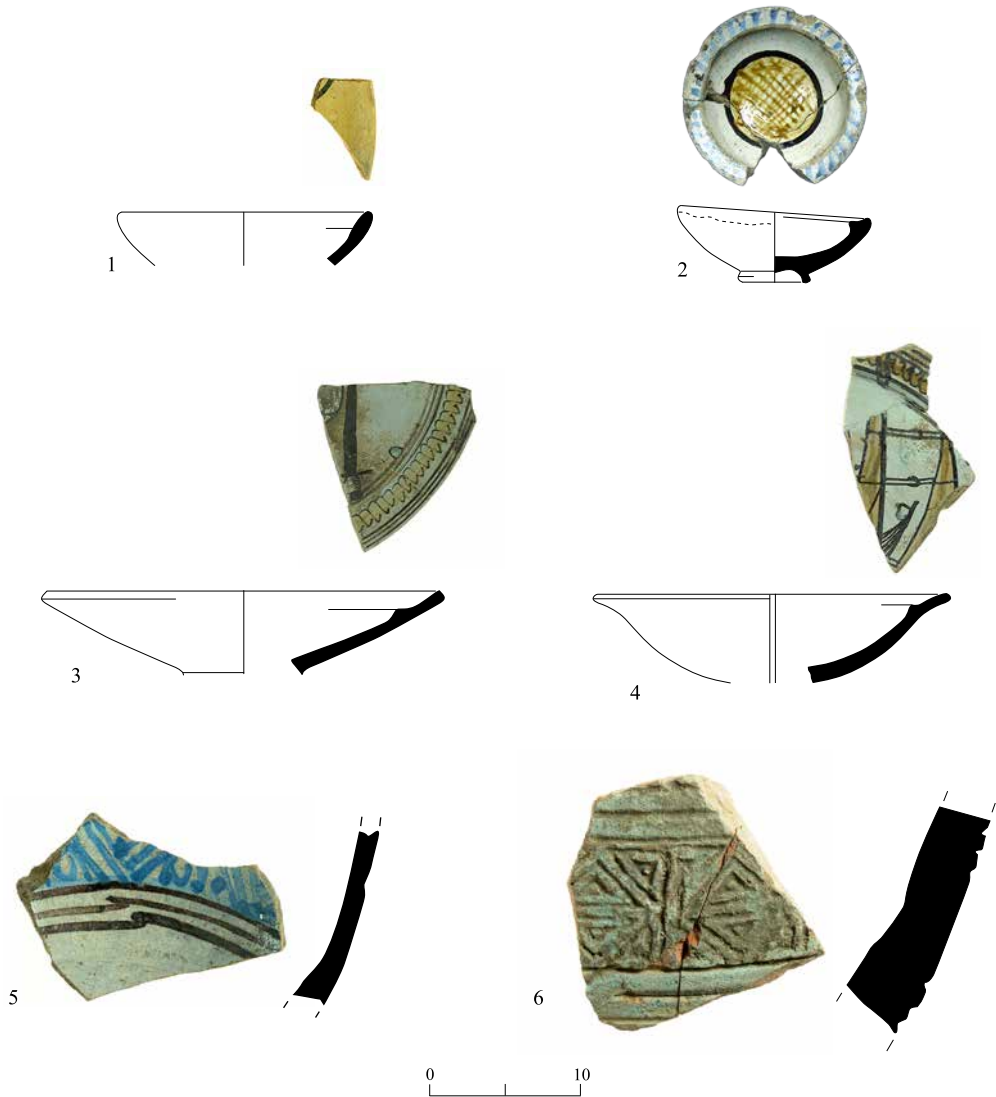


Fig. 11. Crusader-period imported wares: Italian and Spain/North Africa glazed wares.

No.	Vessel	Locus	Reg. No.	Fabric description
1	Bowl	17	128	Light reddish brown 5 YR 6/4 fabric; white grits; brown painted design under yellowish glaze on int.
2	Bowl	13	114/2	Light gray 10 YR 7/4 fabric; white slip with blue, yellowish brown and dark brown painted design under transparent glaze on int. and rim ext.
3	Bowl	17	131/2	Very pale brown 10 YR 8/3 fabric; white slip with blue, yellowish brown and dark brown painted design under transparent glaze on int. and rim ext.
4	Bowl	17	125/3	Very pale brown 10 YR 8/4 fabric; white slip with yellowish brown and dark brown painted design under transparent glaze on int. and rim ext.
5	Bowl	13	114/1	Pink 5 YR 7/4 fabric; many white grits; white slip with blue and dark brown painted design under transparent glaze on int.
6	Jar	17	125/2	Red 2.5 YR 5/8 fabric; many white grits; turquoise glaze on ext.; stamped design

A completely restorable pithos was found in L17 (Fig. 12). This is a unique find, since only fragments of such pithoi have been unearthed until now in other excavations at ‘Akko. The pithos has a wide mouth and an out-turned, rounded rim with a scalloped band achieved

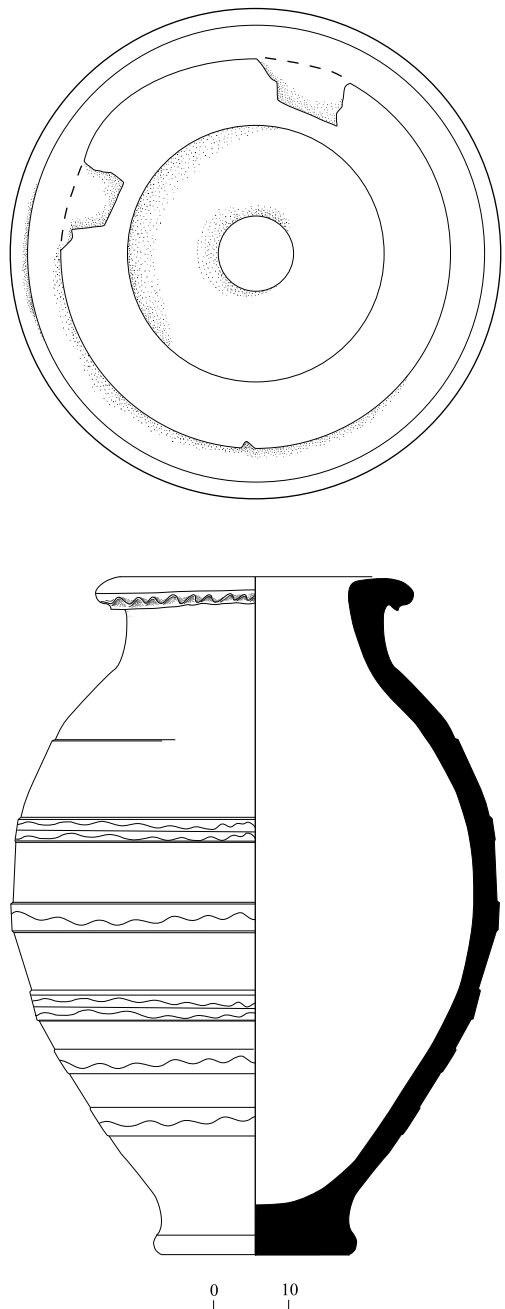


Fig. 12. Crusader-period imported pithos.

No.	Vessel	Locus	Reg. No.	Fabric description
1	Pithos	17	125	Reddish yellow 7/6 7.5 YR fabric; many black grits

by regular punctuation with a stick or some other instrument. The neck is short and wide, the body ovoid, and the base is thick and solid. On the body there are five raised bands that have one or two incised wavy lines. The fabric of the pithos is reddish yellow with many black, and some white and brown inclusions; uneven firing resulted in reddish and black areas on the body. Pithoi of this type, as well as the large, glazed jar described above (see Fig. 11:6), were used in a domestic setting for storing liquids, such as oil or wine, and/or grain or legumes.

No similar pithoi were reported from Israel. Wide-mouthed large jars found at Yoqne'am were made of a fabric similar to the handmade local wares of the period (Avisar 1996b:155, Type 19, Fig. XIII.126). A somewhat similar pithos, although not identical in form and fabric, was found in southeastern Turkey at Gritille (Redford 1998:91–96, Figs. 3.3:A, B, J; 3.4:F). It should be noted that it is not clear whether the pithos found at 'Akko was locally produced or imported; the appearance of the fabric, however, seems to suggest that it was imported.

Other imported types, cooking ware and glazed bowls, from provenances thus far unknown, were also found. Some of the vessels were of types that could not be recognized, but two are known from other thirteenth-century assemblages excavated at 'Akko. These two were made of a fabric containing mica, indicating that they were not locally produced. One is a glazed cooking vessel with a grooved rim (not illustrated; Stern 2012:95, Type VI.CW.1, Pl. 4.77), and the other is a simple, quite uniformly glazed bowl with an olive-green or dark yellow-mustard monochrome lead glaze over a thin beige slip or white wash (not illustrated). While the cooking ware remains unparalleled, the glazed bowl was identified at quite a few coastal Levantine sites: Tripoli, 'Akko, Caesarea (Stern 2012:98, 99, Type VI.GL.4, Pl. 4.81:1–3), Ḥorbat 'Uza (Stern and Tatcher 2009:150–152, Fig. 3.28:1, 2) and Yafo (Burke and Stern, in press).

Glazed Tile

Fragments of a glazed ceramic tile, almost completely restored, were found in L17 (Fig. 13). The tile is of standard size (c. 20 × 20 cm, thickness 1.2 cm). It bears a sgraffito depiction of a cross-legged seated person wearing an oriental caftan and drinking from a conical beaker held in his left hand. It is covered with yellowish glaze, and the background has some additional yellow and green painted areas. On the reverse side, near one of the borders of the tile, there is a long depression made by the tile maker, who dragged his finger across the tile. This was probably done to facilitate the attachment of the tile with mortar to the wall or to the floor.

The fabric from which this tile was made, as well as the design and glaze, is almost identical to those of the Port St. Symeon Ware. Petrographic analysis has shown that similar tiles unearthed at other excavations in 'Akko were made of a fabric that has the same matrix as the Port St. Symeon Ware, the only difference being the addition of temper materials. This was apparently done to achieve a fabric that was more durable and suitable for tiles (Shapiro 2012:110).

Similar tiles have been found in several excavations in 'Akko: in the Compound of the Hospitaller Military Order, in domestic dwellings in the Knights' Hotel excavation (Stern 2012:56, Pl. 4.39:5–9), in a thirteenth-century bathhouse (Smithline, Stern and Stern 2013:100, Fig. 28:27, 28) and in the Church of St. John (Stern E. 1999:11*–12*; Stern et al., in prep.). Most of these tiles are covered with monochrome brown, yellow or green glaze, and some, similar to this example, are decorated with sgraffito designs and enhanced with green and brownish yellow glaze.

Port St. Symeon Ware tiles have rarely been published from other sites. Some fragments have been found sporadically in the production regions of this ceramic ware, in Cilicia, Armenia and Antioch (northeastern Turkey), at al-Mina (Vorderstrasse 2005a:119–122; CD-ROM–Frankish/Pottery?Port St. Symeon Ware/Tiles), and at Kinet (Blackman and Redford 2005:104, Figs. 51:IV-ZZ; 52:IV-BBB, IV-CCC, IV-DDD). One of the fragmentary tiles from Kinet depicts a standing warrior with a shield and a horse. The Kinet tiles were analyzed by NAA, and the results showed that they were produced locally. In addition,



0 5

Fig. 13. Crusader-period glazed ceramic tile.

some monochrome green- and yellow-glazed tiles were found in the Mopsos survey, at a small rural hillside settlement very close to Kinet (Asa Eger, pers. comm.).

The representation of a cross-legged figure, wearing a caftan and drinking from a beaker, known also as the oriental 'cup-bearer' (*al-saqi*), is popular on ceramic bowls of the Port St. Symeon type. It was extensively discussed by Redford (2004) and Vorderstrasse (2005b). The beaker (often referred to as a goblet), is in fact similar to glass beakers found in archaeological excavations, as the ones found here (see below, Fig. 14:1, 2, and additional references therein). The scene of a banqueting seated figure, apparently representing courtly life, is popular both in Islamic and Armenian art. The figure on the tile resembles those found on the bowls, apart from two details. Whilst most of the figures depicted on the bowls face right and hold the beaker in their right hand, in the 'Akko tile, as well as in two other examples found in Turkey (Vorderstrasse 2005b:63–65, Figs. 7; 11), the figures face left and hold the beaker in their left hand. The second detail relates to the head covering. Most of the examples depict figures wearing either an eastern-style turban, or a western style three-lobed crown, whilst the person depicted on the 'Akko tile is bare-headed. The different head coverings, or the absence thereof, reflect the variety of the artistic depictions on the Port St. Symeon wares representing different ethnics, and underline the multi-cultural environment in which the ware was produced. The ethnicity of these potters, whether Muslims, Oriental or Latin Christians, remains unknown, as the region in which the Port St. Symeon Ware was produced includes sites in the principality of Antioch and the Kingdom of Armenia Cilicia. Consumed by Frankish, Armenian and Muslim populations, these bowls represent the shared visual ideas that were created in the Mediterranean during the thirteenth century CE (Redford 2004; Hoffman and Redford 2017:421–422).

Glazed tiles made of a different frit fabric have been found in the nearby Islamic realm, for example at the Kubad Abad Palaces in Anatolia. These are painted, either with underglaze painting or in the luster technique with depictions of seated figures, similar to the figures on the Port St. Symeon Ware. In these tiles, some of the figures are holding what was defined as 'goblets' (identical to what we define here as a beaker), and others hold symbolic plants like a pomegranate or poppy, a handkerchief or a fish. They are depicted in frontal position, like the figure in the Port St. Symeon tile, but the head mostly faces right. They wear kaftans and have various eastern-style head covers (Arik 2008:314–315, 328, 374–377, Figs. 303–306; 330; 399–401).

Port St. Symeon Ware glazed tiles appear in the Crusader city of 'Akko in public establishments, including bathhouses, and in religious edifices, such as the Compound and the Church of the Hospitallers, as well as in private houses. It is unclear, however, whether the tiles were laid on the floors or on the walls of these edifices. The only tiles that have been found *in situ* are those embedded in the floor of the Crusader Church of St. John in 'Akko; however, these are mostly simple monochrome tiles, with only a few fragments of decorated ones. Since only one tile with a figural depiction was found in this excavation, it may be suggested that it was highly valued, and as such, possibly used as a wall decoration. Nonetheless, contemporary floor tiles with human depictions, decorated in a different

technique, are known from Britain (Cherry 2002:200, Fig. 90; see below), demonstrating the usage of highly decorated tiles on floors, including those depicting human figures.

It is possible that the practice of using tiles in buildings was transmitted from east to west by the Crusaders. Architectural polychrome glazed wall tiles were in use in Constantinople and its close vicinity from the late ninth to the late eleventh century CE, and in Seljuk Anatolia, from the late twelfth century onward, the latter apparently influenced by the tiles that were produced at Kashan in central Iran and in Raqqa, Syria. Glazed floor tiles were embedded in Gothic buildings in Europe, namely in France and Germany, from the late twelfth century, and in Britain and Ireland from the mid-thirteenth century (Gerstel 2012:47–54).

It is suggested that the glazed tiles of the Port St. Symeon style, manufactured in the regions of Cilicia Armenia and Antioch, were apparently produced under the influence of the Anatolian tiles, and it may be assumed that they were the link to European tile production. Tiles that were observed in the churches, houses and bathhouses in eastern Mediterranean cities such as ‘Akko could have inspired the production of tiles in the European Gothic buildings. In Britain, contemporary glazed tiles were found only in royal or monastic buildings and in churches, and it has been suggested that they were produced by foreign craftsmen (Cherry 2002:197). Although decorated in a different technique, floor tiles found at the Abbey of St. Peter in Chertsey, Surrey, in England, produced in the late thirteenth century CE, include a scene of a cup bearer, similar to that found in the excavation at ‘Akko. However, the figure there is depicted in a western way, seated on a stool and not on the floor, and dressed in a western garment (Redford 2004:306, n. 17; for a photograph of the tile, see https://chertseymuseum.org/Chertsey_Abbey). This scene, in addition to the more famous scene of Saladin and Richard Lionheart jousting, from the same abbey (Gerstel 2012:49, Fig. 3), demonstrates links to the Crusader realm.

The tile depicting the cup bearer from ‘Akko is significant in that it attests to the cultural ethnic melting pot that characterized the northeastern Mediterranean in the thirteenth century. In this sense, it is a very good example of transculturation—the ability of objects to share or accumulate meanings across different cultural spheres—as discussed by Hoffman and Redford (2017).⁴

Other Finds

Glass Vessels

Some fragments of glass vessels dating to the Crusader period were found in L12, L13 and L17. The fragments from L13 were better preserved, and therefore drawn, and are described

⁴ Numerous discussions with Scott Redford on the Port St. Symeon tiles and the depiction of the ‘cup bearer’ assisted in developing the ideas expressed here. I would like to thank him sincerely for this, and for referring me to published and unpublished materials.

here (Fig. 14). Beakers, a goblet and a bottle base were identified. The fabric of all the fragments is of poor quality, probably indicating local production.⁵

Most of the vessel fragments retrieved from L13 were beakers. A simple beaker-rim fragment, with a flaring rounded rim and very thin walls, is made of colorless glass, exhibiting black and silver weathering, iridescence and severe pitting (Fig. 14:1). Similar beaker rims were found in twelfth- and thirteenth-century CE contexts in other excavations at 'Akko (Gorin-Rosen 2010: Fig. 12:1, 2; forthcoming [a]; forthcoming [b]), Yafo (Gorin-Rosen, in press), Safed and Emmaus (Gorin-Rosen 2015:86*, Fig. 1:2, and see references therein). A gilded and enameled beaker of the same size and shape was found at Arsur, in a context dated to the second half of the thirteenth century (Jackson-Tal and Tal 2013:91, Fig. 6). Another beaker fragment has an infolded rim and is made of colorless glass, also with black and silver weathering, iridescence and severe pitting (Fig. 14:2). A small fragment of a pruned beaker of colorless glass with a yellowish tinge, black and silver weathering and iridescence, has straight thin walls, with a single prunt of the same color of the vessel (Fig. 14:3). The prunt was made in a careless way, with a trail of glass, similar to a pruned beaker from the courthouse site in 'Akko (Gorin-Rosen 1997: Fig. 2:20b). Pruned beakers are commonly found in Crusader-period contexts in excavations within the borders of the Crusader Kingdom of Jerusalem, and were found in other excavations in 'Akko (Gorin-Rosen 1997:82–84, Fig. 2:20–26; 2013:109–110, Fig. 1:3; forthcoming [a]; forthcoming [b]), Ḥorbat 'Uza (Gorin-Rosen 2009:180–181, Fig. 3.39:5), Montfort (Whitehouse et al. 2016:180, Pl. 17.5), Safed (Gorin-Rosen 2015:87*, Fig. 1:7), Tel Yoqne'am (Gorin-Rosen 2005: Fig. 7.2:14), a production site near Somelaria, Bet She'an (for references, see Gorin-Rosen 1997:83) and Yafo (Ouahnouna 2013: Fig. 24:1–3; Ouahnouna 2020:136–137, Fig. 2:1; Gorin-Rosen, in press). A complete base of a beaker had a pushed-in, high kick base with a low, flat tubular foot and a crude pontil scar (Fig. 14:4). It was made of colorless glass with a greenish tinge, silvery-black weathering, many small round bubbles and black impurities. Similar bases were found at another excavation at 'Akko (Gorin-Rosen 1997:81–82, Fig. 2:16), the production site of Somelaria, 'Atlit, Emmaus, Yafo and Safed (Gorin-Rosen 2015:87*, Fig. 1:4–6; 2017:144, Fig. 2:2, and see references therein). At Arsur, a similar base was found in a context dated to the second half of the thirteenth century (Jackson-Tal and Tal 2013:95, Fig. 9:7).

A unique vessel fragment is a mold-blown goblet on a high trumpet base (Fig. 14:5). It comprises the fragment of a high base and the beginning of the mold-blown bowl. The vessel was composed of two glass blobs that form the base and the bowl. It was made of colorless glass and has black and silver weathering, iridescence, some pitting and some small round bubbles. Goblets of this type were found at various sites in Europe dating to the thirteenth and fourteenth centuries (Baumgartner and Krueger 1988:239–240, Nos.

⁵ I would like to thank Yael Gorin-Rosen for sorting the glass vessels, and for kindly sharing with me her insights regarding the study of these vessels.

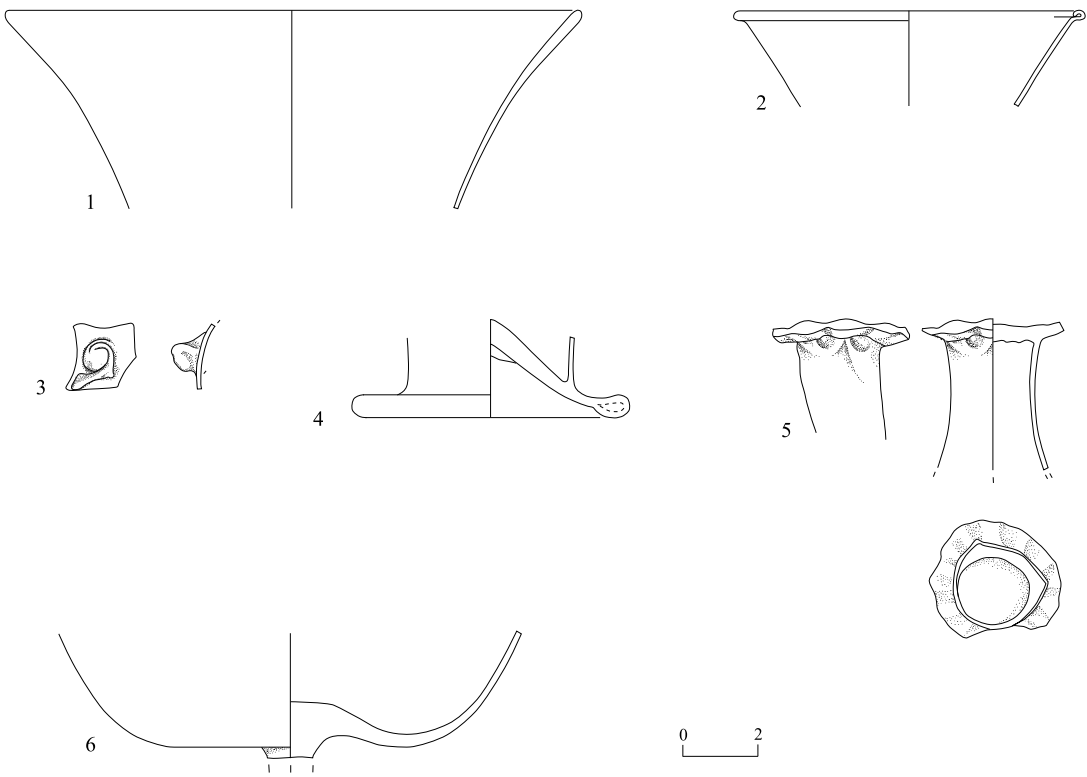


Fig. 14. Crusader-period glass.

No.	Vessel	Locus	Reg. No.
1	Beaker	13	114/2
2	Beaker	13	114/6
3	Prunted beaker	13	114/5
4	Beaker	13	114/3
5	Goblet	13	114/4
6	Bottle	13	114/1

231–233). It is a rare find in Israel, found to date only in the Knights’ Hotel excavation in ‘Akko (Gorin-Rosen, forthcoming [b]).⁶

The last fragment illustrated here is of an almost complete concave base of a bottle (Fig. 14:6). It was made of colorless glass, with black and silver crust, and iridescence, and is extremely pitted to a degree that the original face of the vessel was hardly preserved. It has

⁶ Yael Gorin-Rosen kindly provided this information and the references to the European material and to the finds from the Knights’ Hotel excavation.

a crude pontil scar, with the pontil button. A similar fragment was found at Arsur (Jackson-Tal and Tal 2013:95, Fig. 13:5).

The glass finds from L17 were found in a very fragmented condition, broken to small pieces, severely burned and consequently some were warped. Other glass finds include three small body fragments found in L12. The vessel shapes of some of the fragments could be identified, but they were too small to be illustrated. These include three simple beaker rims, similar to that found in L13 (see Fig. 14:1), a body fragment of a bottle with a horizontal tooled-in tube, similar to a fragment found at the courthouse site in 'Akko (Gorin-Rosen 1997:80–81, Fig. 2:9), and a fragment of a tubular base-ring of a bowl or a juglet, similar also to a fragment found at the courthouse site in 'Akko (Gorin-Rosen 1997:76–77, Fig. 1:1b). All these types also date to the thirteenth century.

Metal Artifacts

Buckle (Fig. 15:1).— A complete circular bronze buckle with an attached tongue was found in L13 (diam. 3.5 cm). The tongue is folded at one end and tapered at the other. A similar circular buckle was found in Crusader-period contexts such as 'Atlit (Johns 1936:50, Fig. 16:4) and Ḥorbat 'Uza (Tatcher 2009:187, Fig. 3.42:19). The 'horseshoe-shaped buckle', however, was more typical of the Crusader period, found for example in the Hospitaller Compound in 'Akko (Khamis, forthcoming, Fig. 1:7–9), at the Crusader castles of 'Atlit (Johns 1934a:147–149, Pl. LX, Fig. 1; 1936:50, Fig. 16:3) and Montfort (Dean 1927: Fig. 53:g), and at Caesarea (Brosh 1999:268–269, Figs. 3, 4). The buckle probably belonged to a leather belt or strap that was not preserved, either used for clothing, or for a bag or a satchel.

Nails (Fig. 15:2, 3).— Many nails were found in L13 and L17, in the debris of the collapsed building, some were found close to the charred beams. The nails were not cleaned but they all seem to be made of iron that is very corroded. It seems that they had rounded heads; some are c. 10 cm long, while others are thicker and c. 5 cm long. Similar nails were found at other Crusader sites, such as 'Atlit (Johns 1936:50, Fig. 15:14) and Ḥorbat 'Uza (Tatcher 2009:184–186, Fig. 3.42:3–5). It is not possible to determine the use of the nails, but they may have been used to join wooden beams of a partition that may have separated the eastern and western parts of the excavated building. This is similar to a find at 'Atlit, where nails were also found in conjunction with charred beams (Johns 1936:32, Pl. XXII).

Stone Mortar

Three fragments of a *kurkar* stone mortar were found in L17 (Fig. 15:4), and although they do not connect, it was possible to reconstruct the contour of the mortar (diam. 25 cm, c. 3.75 cm wall thickness, preserved to a depth of 12.5 cm). One knob handle was preserved, and based on similar whole mortars, another two handles were reconstructed in the drawing. A spout is carved in the rim. The exterior and interior surfaces are well-smoothed, and the workmanship seems to be of a high quality. The choice of *kurkar* stone is interesting, as this stone is not very durable. A mortar made of *kurkar* was found in the Knights' Hotel

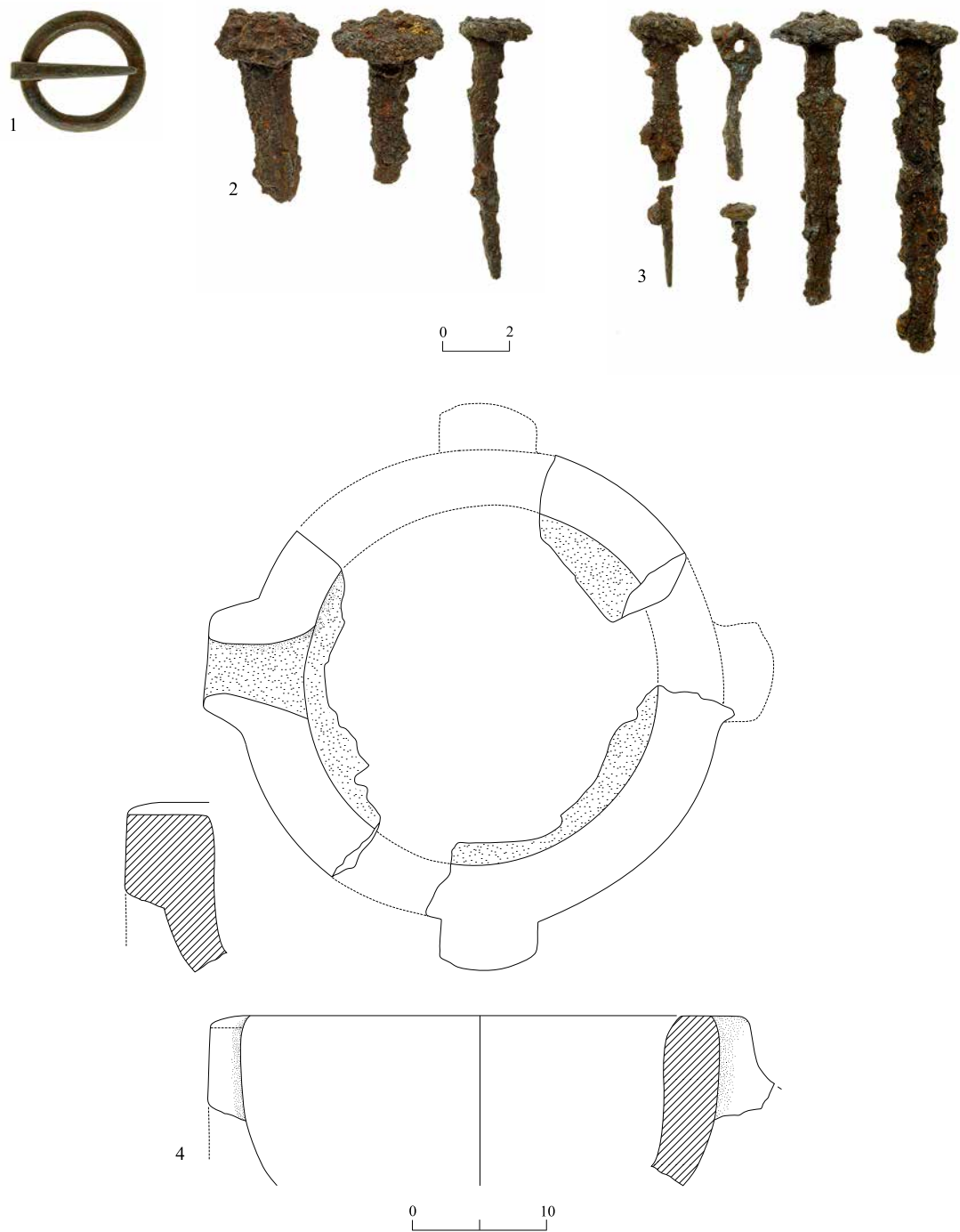


Fig. 15. Crusader-period buckle, nails and stone mortar.

No.	Object	Locus	Reg. No.
1	Buckle	13	114
2	Nails	13	112, 113, 114
3	Nails	17	126, 128, 131
4	Stone mortar	17	140

excavation (Shotten-Hallel and Rosen, forthcoming), but most similar mortars, with a variety of handles and spouts, were usually made of marble or limestone. This simple, household utensil, commonly found in Crusader-period castles and in household assemblages, was probably mainly used for food preparation. Mortars of this type were found at various other excavations at 'Akko, in household assemblages or in a bathhouse (Stern and Shalvi-Abbas 1999:12*, Fig. 17:4; Smithline, Stern and Stern 2013:101–102, Fig. 29:4, 5; Shotten-Hallel and Rosen, forthcoming), Ḥorbat 'Uẓa (Tatcher 2009:187–188, Fig. 3.43:5), Monfort (Dean 1927:34, Fig. 44), Ḥorbat Bet Zanita (Getzov 2000:98*, Fig. 28), 'Atlit (Johns 1934a:160, Fig. 10), Tiberias (Stern E.J. 2013:196, Fig. 14:4) and Belvoir (Kokhav Ha-Yarden; Ben-Dov 1975:106, bottom left). Some stone pounding implements of natural stones were also found. These were possibly used with this type of mortar as a pestle (not illustrated).

Coins⁷

Two coins were found while using a metal detector in the western part of L12, in an area that was previously disturbed. Although the coins were not found *in situ*, it can be assumed that they were found not far from their original deposited place. One of the coins (L12, B133) is a civic bronze issue of 'Akko dated to the Hellenistic period, probably struck under Antiochus IV (175–164 BCE; IAA 106516). The other coin (L12, B129) is a billon denier, struck by Hugh I in Cyprus (1205–1281 CE; IAA 106517), dated to the thirteenth century CE, the period of the Crusader occupation of the building.

Zooarchaeological Finds

A total of 67 faunal specimens were identified in Stratum III, most of them of sheep, goat and cattle. Some bones of an equid and cat, as well as pig, domestic fowl and fish were also found (see Bar-Oz, this volume). The sheep, goat and cattle bones indicate both domestic use and butchery; the animals were slaughtered only after they had reached maturity. The pig remains, however, belong to young individuals, indicating that they were butchered at their optimal age for meat consumption. This clearly suggests that the inhabitants of this building were Christian, as they consumed pork.

Archaeobotanical Finds

Five of the six analyzed charred wooden beams were conifers (Cedar of Lebanon and Aleppo pine), brought from a distance to 'Akko, apparently from Lebanon (see Lipshitz, this volume). The shortage of trees with long trunks for roofing purposes necessitated their import from Lebanon. One sample of a local *Pistacia* sp. was probably not from the roofing timbers.

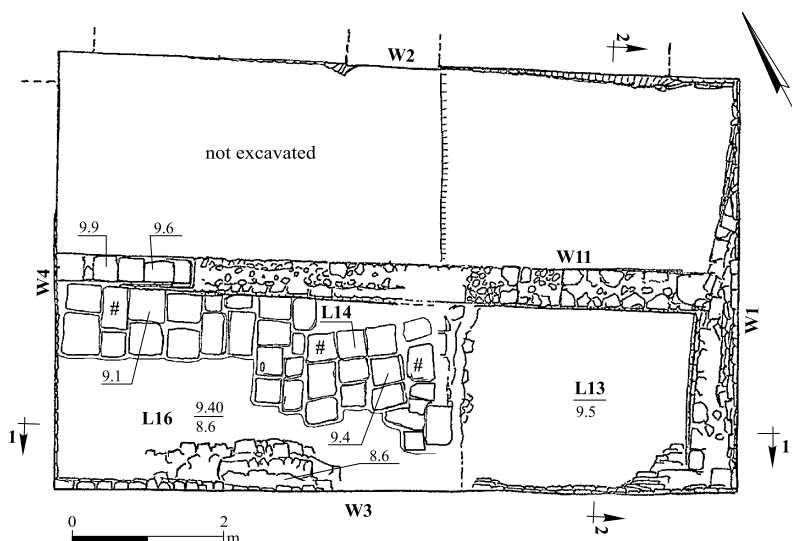
⁷ I would like to thank Danny Syon for identifying the coins.

Malacological finds

A total of 29 specimens were found in Stratum III, reflecting the natural surroundings in the 'Akko bay; they were collected as empty shells from the shore (see Table 1). Only one shell of the species *Stramonita haemastoma* bears traces of a manmade hole in the body whorl, and it was probably used as an ornament. The other shells might have been used as part of the building material, as seen in medieval phases in Yafo and Caesarea (Inbar Ktalav, pers. comm.); alternatively, they arrived with sand that was brought in for different purposes.

STRATUM II: THE EARLY OTTOMAN PERIOD

Part of the destroyed Crusader-period building was reused in the early Ottoman period (Plan 2; see also Plan 1: Sections 1–1, 2–2). The western part of W11 was apparently still visible at this time, and an addition was erected directly on top of it (Fig. 16). A flagstone floor (L14), placed on a 1.5 m soil fill (L16) over the remains of the Crusader-period building, is associated with this wall (Figs. 17, 18). Only part of this floor was found in the excavation, due to subsequent disturbances. The possible continuation of the floor toward W10 remains unclear. The floor was dated to the seventeenth, or the beginning of the eighteenth, century based on the ceramic finds found above, and just beneath it. The building, attributed to the beginning of the Ottoman resettlement of 'Akko, seems to have existed for only a few decades, as the remains were covered over in the mid-eighteenth, or early nineteenth century, when the later Ottoman building was constructed.



Plan 2. Strata II and I, Ottoman-period building (for sections, see Plan 1).



Fig. 16. Stratum II Ottoman addition to W11, looking south.



Fig. 17. Stratum II Ottoman flagstone floor, looking east.



Fig. 18. Stratum II Ottoman flagstone floor, and later Stratum I Ottoman foundation arch of W4, looking west.

The Pottery

Few pottery sherds, including two tobacco pipes, were found in this stratum (Fig. 19).

Local Wares

These include a jar rim (Fig. 19:1) made of a light-colored fabric and a reddish core, apparently of local production. The fabric and form are somewhat similar to jars found in a well in the courthouse site in 'Akko, in a context securely dated to the end of the eighteenth and beginning of the nineteenth century. Petrographic analyses of the vessels have shown that they were manufactured from a local fabric (Stern 1997:65–68, n. 5).

This ware seems to belong to a White Pottery tradition that was practiced in Haifa, 'Akko and Lebanon in the nineteenth and twentieth centuries (Salem 1999:72, 76–77), but perhaps also earlier. The light surface that distinguished this ware may have been the result of dipping the vessel in salt water, indicating a local, coastal tradition (see Shapiro 2012:104–105, n. 3).⁸ Similar vessels discovered in 'Akko (Benente et al. 2009–2010:182, Figs. 26:10; 27:2; Porat 2013: Fig. 3:8, 9; Stern E. 2013: Fig. 7:2, 3; Stern 2016a:86, Fig. 2:1, 2), 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.

Fig. 19 ▶

No.	Vessel	Locus	Reg. No.	Fabric description
1	Jar	16	119	Red 2.5YR 5/8 fabric; light reddish brown 2.5 YR 7/4 ext.; white grits and inclusions
2	Bowl	16	123	Reddish brown 2.5YR 5/4 fabric; black grits; white slip under yellowish glaze on int. with incised bands near rim; slip extending over rim ext.; glaze also on ext.
3	Bowl	12	105	Very pale brown 10YR 8/3 fabric; white opaque tin glaze on ext. and int.; black, green and blue painted design on int.
4	Bowl	14	118	Very pale brown 10YR 8/4 fabric; white opaque tin glaze on ext. and int.; green, orange-yellow and brown painted design on int.
5	Bowl	16	121/1	Reddish yellow 5YR 7/6 fabric; light green glaze on int. and ext. with dark green marbled decoration on int.
6	Tobacco pipe	16	121/2	Light gray 10YR 7/1; red slip
7	Tobacco pipe	16	119	Light gray 10YR 7/1
8	Tobacco pipe	-	103	Gray 10YR 5/1; red slip

⁸ Although Shapiro refers to pottery produced in 'Akko in the Crusader period, the similar white surface of the Ottoman-period pottery was apparently also achieved by dipping in salt water.

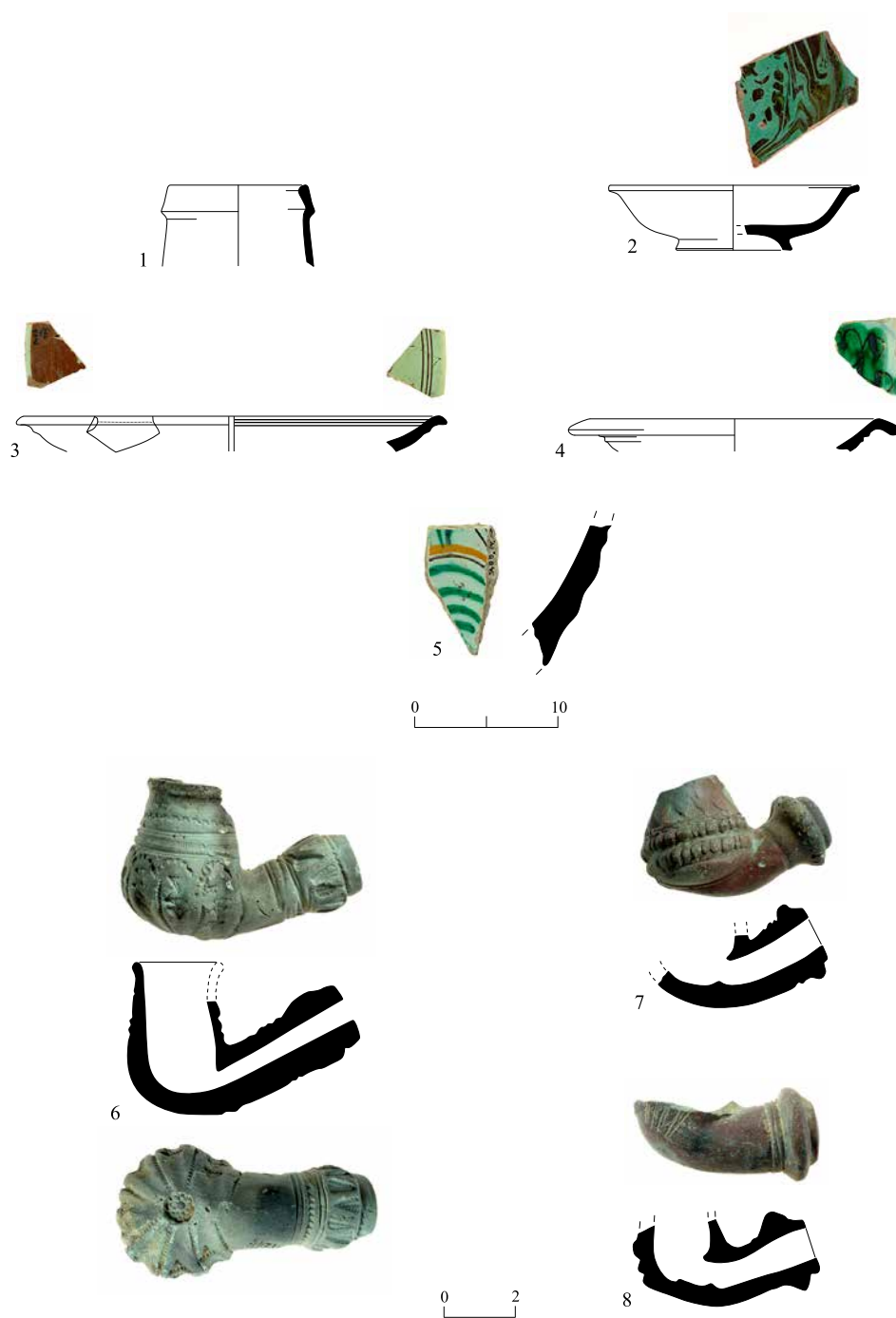


Fig. 19. Ottoman-period pottery and tobacco pipes.

Imported Wares

A bowl with a complete profile is made of a light pink fabric and has a marbled design on the interior and a monochrome light green glaze on the exterior (Fig. 19:2). Commonly found in late Ottoman ceramic assemblages, this bowl type was manufactured at various workshops including Didymoteichon, Athens and Ganos during the eighteenth and nineteenth centuries (Kontogiannis 2015:176–178). These bowls are common in other excavations in ‘Akko (Edelstein and Avissar 1997:132, Fig. 1:8; Stern et al. in prep.; unpublished material), and they were also reported from Yoqne‘am (Avissar 2005:75–76, Fig. 2.25:10, Pl. 2:15).

Other glazed bowl sherds include imports from Italy.⁹ The bowl in Fig. 19:3 is of a type known as Pisan Sgraffito Ware (*Graffita policroma tarda*). It has a fine, hard, brownish red fabric, a thick white slip on the interior and dripping on the rim exterior, and a very shiny, high-quality transparent glaze. The standardized central design usually comprises a border of incised concentric circles and a ladder-type filling, around a flower with a stem in the central medallion. The design is enhanced by green and yellow glaze. In this example, only the upper part with incised concentric circles was preserved. This type was widely distributed in the seventeenth century (Blake 1981:103–108, Fig. 8.7; Amouric, Richez and Vallauri 1999:82–85, Figs. 175, 184, 185; Gutiérrez 2000:82, Fig. 2.57; Wartburg 2001:376–378; Beltrán de Heredia Bercero and Miró I Alaix 2007:17, Pl. 8:1–4). It was reported at Nazareth (Bagatti 2002:187–192, Fig. 69:5, 6; Pls. 79:6, 7; 80:1), Safed (Stern E.J. 2014b:145–146, Figs. 1:3; 2:3), Jerusalem (Avner and Avissar 2017:4, Fig. 2:2, 3) and Damascus, Syria (François 2009: Fig. 3:16).

Small fragments of glazed bowls from Montelupo in Tuscany, a flourishing ceramic production center during the fifteenth to eighteenth centuries, were found here (Fig. 19:4, 5). The two sherds represent two different types, both sharing the typical light fabric. The first type is a bowl (Fig. 19:4) with an everted rim and flaring walls. The tin glaze is flaky, and a floral design was painted in black and greenish glaze. Examples of whole bowls show that the design was composed of four large oak leaves growing from a central floral design. This type, named *Foglia Verde*, is dated to the seventeenth century (Berti 2008:351–352, Fig. 61). Although this type was not as widespread as the Pisan wares described above, similar bowls were reported from our region, e.g., from ‘Akko (Edelstein and Avissar 1997:132, Fig. 1:1, here not specifically designated as this type; Stern E.J. 2015: Fig. 9:1), Nazareth (Bagatti 2002:187–192, Pl. 81:16), Jerusalem (Johns 1950:189, Pl. 63:4), Safed (Stern E.J. 2014b:147, Fig. 1:9, 10), Damascus (François 2009: Figs. 2:8; 3:17) and Kouklia, Cyprus (Wartburg 2001:378–379, Figs. 7:60–62; 10:26, 27), and in additional countries further west, such as in England (Gutiérrez 2000:86–90, Fig. 2.59), Barcelona

⁹ Unfortunately, there is a lack of literature on Italian pottery in the libraries in Israel. The identification of these wares was consequently not an easy task, and the citation of the Italian literature was acquired secondhand, with the comprehensive publication of Ottoman wares from Kouklia, Cyprus (Wartburg 2001). I would also like to thank Véronique François for her kind assistance identifying the Montelupo fragments (Fig. 19:4, 5) and providing further information on this ware.

(Beltrán de Heredia Bercero and Miró I Alaix 2007:19–23) and in the cargo of a shipwreck south of France (Amouric, Richez and Vallauri 1999:93–94, Figs. 202; 203). Only a body sherd of the second Montelupo bowl was preserved. It has a white tin glaze over the exterior and interior, and a painted design in orange, green and brown on the interior (Fig. 19:5). This belongs to a well-known type named *Spirali Verdi*, with a uniform design consisting of green concentric semicircles surrounded by orange strokes, while the empty space was filled with very thin brown parallel lines. The base interior medallion is surrounded by yellow and orange concentric circles, with a main design, either painted in light blue or in green and orange. This type dates from the eighteenth century, and circulated in the eastern Mediterranean (Blake 1981:103, Phase 4; Amouric, Richez and Vallauri 1999:123, 126–127, Figs. 247; 255; Berti 2008:357–358, Fig. 66). Some fragments of this type were found at ‘Akko (unpublished), Nazareth (Bagatti 2002:187–192, Pl. 81:15, 16) and eṭ-Taiyiba (Stern 2016b: Fig. 4:9), and also at Khania, Crete (Hahn 1997:174, n. 40, esp. Pls. 71d:12; 76a:1, 2; 81d:1) and at Corinth (Morgan 1942:171–172, Fig. 152, bottom).

Tobacco Pipes

Two clay tobacco pipes were found in the soil fill below the flagstone floor (L16). These pipes date to the late seventeenth and eighteenth centuries, contemporary with the ceramic finds and the construction date of the early Ottoman building. The pipes are of the common type widespread in the Ottoman Empire (Robinson 1985; Hayes 1992:391–395). Tobacco pipes were locally produced throughout the empire and in Palestine, imitating the shapes and styles of those produced at the major production centers (Simpson 2000:170).

One pipe (Fig. 19:6) was fully preserved and was made of gray fabric. The bowl is decorated with stamped arrowheads, placed between roulette arches, above which are registers of incised bands and various rouletted bands. The shank is decorated with incised lines on one side of the wreath, and rouletted bands on the other side, and its wreath exhibits stamped triangular leaves. There is a stamped rosette on the center of the bowl base, perhaps a production mark, and roulette bands extend from the bowl. It is a well-known type, common in ‘Akko (Shapiro 2010:78*, Fig. 105; forthcoming). Similar, but not identical pipes were found at Banias, dated to the end of the seventeenth and beginning of the eighteenth century (Dekkel 2008:136, Fig. 4.6:24) and at Zuba (Belmont) castle, dated to the eighteenth century (Simpson 2000:150, Fig. 13.2:23–25). A similar wreath decoration of stamped leaves was found at Yoqne‘am, also dated to the late seventeenth and early eighteenth centuries (Avissar 1996a:198, Photo XVI.1–3; 2005:81, Fig. 4.1:1), and at Ramla, dated from the seventeenth to the eighteenth century (Vincenz 2011:47*, Fig. 1:9–11). The long shank and small shank-opening of this example may indicate that this is an early version of the type, apparently from the seventeenth century.

The other pipe was made of gray fabric and coated with a dark red slip that appears reddish plum after firing (Fig. 19:7). It has a shorter, curved shank, indicating a later date. The bowl, only partially preserved, has incised vertical lines and a simple wreath, with incised bands on the shank. Smoking pipes with a reddish plum slip have a long chronological range,

from the late seventeenth to the early twentieth century, and they can be dated according to changes in the shape (from smaller to larger bowl, and from longer to shorter shank). They form the majority of the smoking pipes found in 'Akko (Edelstein and Avissar 1997:133–135, Fig. 2:3a–c; Stern 1997:68, Fig. 19:136; 2010:78*, Fig. 107; Smithline, Stern and Stern 2013:77–78, Fig. 6; Shapiro, forthcoming). Reddish plum pipes with a similar shape were found at 'Akko (Shapiro 2010:78*, Fig. 107, top row, right), Banias, dated to the eighteenth century (Dekkel 2008:142, Fig. 4.9:46, 47), Yoqne'am, dated to the second half of the eighteenth century (Avissar 2005:85, Fig. 4.2:11) and at Zuba (Belmont) castle, dated from the eighteenth to the early nineteenth century (Simpson 2000:153, Fig. 13.3:51).

Zooarchaeological Finds

Eighteen animal bones, the majority belonging to cattle, were identified in L16. Sheep/goat and domestic fowl were found in almost equal quantities. In addition, one bone of a fish and one of a cat, were also identified (see Bar-Oz, this volume). The absence of pig bones in this phase indicates that the inhabitants were most probably Muslims.

Malacological Finds

Seven specimens were found, reflecting the natural surroundings in the 'Akko bay. They were collected as empty shells from the shore (see Table 1).

STRATUM I: THE LATE OTTOMAN PERIOD

A soil fill layer (c. 1 m thick) overlay the remains of Stratum II, probably deliberately laid prior to the construction of the late Ottoman building (Plan 2).¹⁰ The northern, southern and western walls (W2, W3 and W4) of the new Stratum I building were constructed with foundations that incorporated stone arches (Figs. 20–24). This building technique, incorporating relief arches arranged at set intervals, is well-known in the Ottoman period (Canaan 1933:25–26). It was employed, for instance, in other contemporary buildings in 'Akko (Stern E. 2014: Figs. 2, 3), Nazareth (Tepper 2009: Fig. 1) and Yafo (Re'em 2010: Fig. 15; Jakoel and Marcus 2017:47*, Plan 2). Relief arches do not appear in W1 on the eastern side of the building, as it was built directly over the ruins of the Crusader-period building on the remains of W10 in the south, and atop the collapse layer in the north (see Fig. 5). This room is part of a complex building; the ground floor was built with a vaulted ceiling, and had many niches and openings in the walls (Figs. 21, 24, 25). It is characteristic of the well-known type of Palestinian town houses constructed until the end of the eighteenth century (Fuchs 1998:166–168). This factor, and the architectural analysis of the building (see Alef, this volume), assist in dating Stratum I to sometime in the mid-eighteenth to early

¹⁰ Most of this fill was removed with a mechanical device (bobcat) before the archaeological excavation began, and therefore, finds were not collected from it.



Fig. 20. Stratum I Ottoman W3, eastern stone arch foundation, looking southwest.



Fig. 21. Stratum I Ottoman W3, eastern stone arch foundation and upper part of Ottoman building, looking south.

nineteenth centuries. The floor of this building was made of well-cut flagstones. In a later period, most likely during the nineteenth century, when the upper story of the building was added, a colorful tile floor was laid c. 30 cm above the flagstones; a concrete floor from the twentieth century overlay it.



Fig. 22. Stratum I Ottoman W3, western stone arch foundation, looking south.



Fig. 23. Stratum I Ottoman W2, eastern stone arch foundation, looking north.



Fig. 24. Stratum I Ottoman W2, eastern and western stone arch foundations, and upper part of wall, looking north.



Fig. 25. Stratum I Ottoman W2, looking northwest.

The Pottery

Tobacco Pipes

One tobacco pipe was found by the workers restoring the building while peeling off plaster between stones of the wall in an adjacent private *ḥammam* (Fig. 19:8). It is the only ceramic find that can be associated with this stratum. The tobacco pipe was made of a gray fabric and coated with a dark red slip that appears reddish-plum after firing. It was mold-made, and the bowl is decorated with a beaded decoration in two rows and a decoration of vertical-lined triangular designs. The wreath on the shank is decorated with horizontal notches. It is of the same well-known type as the tobacco pipe described above (see Fig. 19:7), and according to its shape, it should be dated to the eighteenth century.

DISCUSSION AND CONCLUSIONS

The Crusader Period

Remains of a Crusader-period building, demolished by an intense fire and collapse, were exposed in the excavation. The artifacts on the floors clearly date to the thirteenth century CE. As there was no attempt to rebuild the building, it can be assumed that it was destroyed in the summer of 1291, when Crusader Acre was entirely destroyed following the Mamluk conquest.

Beneath the floor of the Crusader building, some thirteenth-century pottery, as well as some Hellenistic and Roman sherds, and a Hellenistic coin, hint to the history of the area before the construction of the thirteenth-century building.

The excavation was located in the Crusader-period civilian residential quarter named *Boverel*. Jacoby (2005:77–78) suggested that the name *Boverel*, meaning a farm, a cattle market or a stable for cattle or horses, indicates that in the twelfth century CE, this area apparently housed a stable of warhorses that belonged to the Templars. Later, the *Boverel* was relocated at the newly established Montmusard quarter to the north of the walled city. It seems that the new neighborhood was built in the former *Boverel* area after 1191 CE, when Acre returned to Frankish rule, and the population pressure led to the change of land use within the city walls, although the original name was preserved. This quarter was identified in the present old city of ‘Akko by Kesten (1993:576–578, Map 14); however, it should be noted that he mistakenly identified part of it as the *burgus novus*. The features of this newly established quarter, as attested in a later Ottoman-period city plan, clearly imply a well-planned quarter constructed with fairly straight streets, contrasting with the winding streets and small alleys in other parts of the city.

In this quarter, two residential houses attributed to the Crusader period were surveyed. These houses were apparently not destroyed after the Mamluk conquest of the city, and they were reused during the Ottoman re-habitation of the city. They are of the *burgage-plot* type, built on long narrow plots with a courtyard and two groin-vaulted rooms (Boas 2010:256, 263–265).

As only part of the Crusader-period building was revealed in the excavation, it is difficult to reconstruct its plan. However, according to the finds and the construction techniques, and in the light of the two houses surveyed in this quarter, it is reasonable to assume that the building was a private urban house of the *burgage-plot* type.

Domestic urban buildings at 'Akko are known mainly from surveyed buildings extant from the Crusader period that were incorporated in the Ottoman city (Kesten 1993; Boas 2010:262–290). A notable contribution of this excavation, therefore, is that it is one of the few Crusader-period domestic houses to be excavated in 'Akko, and the first house of this type to be excavated in the *Boverel* quarter. Other urban houses have been excavated in other parts of the city: in the northwestern part, a house of the courthouse type in the Knights' Hotel excavation (Syon and Tatcher 2000; forthcoming [b]), and in the Hospitaller Quarter, two fragmentary buildings, apparently domestic houses, at the Messika Plot (Syon and Tatcher, forthcoming [a]).

This excavation has shown that there are probably pre-existing Crusader-period buildings under most of the Ottoman buildings, that were eventually integrated in the newly established Ottoman urban fabric.

The charred wood beams and the collapsed ceiling that sealed the room with its original contents, are all silent witness to the last days of the capital of the Second Crusader Kingdom. This destruction was preceded by a 40-day siege led by the Mamluk Sultan al-Ashraf Khalīl, described in great detail in both the Islamic and Christian written sources. After capturing 'Akko, the Mamluk Sultan ordered to destroy the city buildings to avoid another Crusader attempt to recapture the city, as the Crusaders did in 1191 (Pringle 2009:11–15, 24). The archaeological evidence of the city's violent destruction exposed in this excavation, joins the finds from other excavations in the city, and clearly illustrates the violent destruction that took place in different parts of the city. These finds consist mainly of burned levels and collapsed ceilings found in the tower in the Courthouse Site (Hartal 1997), the Halls of the Hospitaller Compound (Stern E., forthcoming), in the Knights' Hotel (Syon and Tatcher 2000; forthcoming [b]), and in the Messika Plot (Syon and Tatcher, forthcoming [a]), as well as in other smaller excavations in the Genoese quarter (Stern et al. 2011; Benente et al. 2009–2010; Stern, Benente and Stern 2017), and near the Church of St. Andreas (Stern E. 2015). Additional evidence for the last days of Crusader 'Akko came from a small salvage excavation to the north of the city, north of the Montmusard (on Dov Gruner Street), where 70 stone balls were found (Porat 2005). This archaeological evidence correlates well with contemporary written evidence of Abu'l-Fidā', who described the battle on the northern part of the city. Apparently, a Mamluk mangonel (trebuchet) was situated at this point, bombarding the gate of St. Lazarus (Pringle 2009:13; Tepper, forthcoming).

This excavation allows a rare glimpse into daily life in Crusader Acre. One of the main issues revealed here concerns food preparation and dining, as ceramic and glass vessels, a stone mortar, as well as sheep and goat, cattle, domestic fowl and fish bones, were found. In the dining scene depicted in a contemporary Bible illustration, attributed to the Acre scriptorium (Frontispiece to the Book of Ruth, Arsenal Bible, Paris, Bibliothèque de

l'Arsenal MS.5211, fol. 364v; see Ziffer 2011:94), one can see a glass beaker and bottle similar to the fragments found in the excavation and a domestic fowl is being served as well. Also noteworthy are the three unusual finds unearthed in the excavation: the restored pithos, the almost complete glazed tile and a fragment of a glass mold-blown goblet on a high trumpet base.

When considering the consumer patterns of the ceramic wares, the rim count may make a contribution. Local and imported wares were present in almost equal proportions in this domestic dwelling (Table 3). The imported glazed bowls outnumber the local glazed ones here, as in all other excavations in 'Akko.

The Ottoman Period

Following a gap of about four centuries, the city was rebuilt in the seventeenth century CE and a new building was erected on the ruins of the Crusader building, reutilizing the eastern part of W11. The inhabitants of the city in this period were mainly merchants and seamen, who were involved in the export of cotton. From the description of the Muslim traveler Evliya Çelebi, it can be deduced that the city mainly featured the ruins of the Crusader-period buildings, with a few newly-constructed ones (Pringle 2009:27–28).

Later, as the city continued to develop under Dahir al-'Umar (from 1749) and Aḥmad al-Jazzār (from 1775), many new structures were built. This was due to the development of 'Akko's maritime trade, whereby these rulers encouraged the export of raw cotton to Europe, organized through government monopolies. The population grew, and the city was fortified with new walls (Philipp 2001). The later building, the ground floor of the building in which the excavation was carried out, was built above the earlier remains. The southern section of the eastern Crusader-period building wall (W10) was apparently still visible at this time, and a new wall (W1) was erected directly upon it. In the northern part, the wall was erected

Table 3. Crusader-Period Pottery Comparison between Excavations in 'Akko

Ceramic Ware Group	'Akko Boverel Quarter		'Akko 1991–1998 (Stern 2012)	
	N	%	N	%
<i>Local Wares</i>				
Plain wares	27	21.6	247	31.39
Cooking wares	37	29.6	233	29.61
Table wares	2	1.6	26	3.30
<i>Subtotal</i>	<i>66</i>	<i>52.8</i>	<i>506</i>	<i>64.30</i>
<i>Imported wares</i>				
Plain wares	6	4.8	23	2.92
Cooking wares	5	4.0	12	1.52
Table wares	48	38.4	246	31.26
<i>Subtotal</i>	<i>59</i>	<i>47.2</i>	<i>281</i>	<i>35.70</i>
<i>Total</i>	<i>125</i>	<i>100.0</i>	<i>787</i>	<i>100.00</i>

above a stone collapse. These new structures, built during the eighteenth-century expansion of Ottoman 'Akko, stood above the medieval buildings, partly reusing the stones from the demolished Crusader-period buildings and filling in the spaces with earth and sand (Pringle 2009:28–31), as in the case of the excavated building presented here.

Occupation levels from the short period dated to the seventeenth and early eighteenth centuries, prior to the construction of the buildings that stand today in the Old City of 'Akko (mostly built in the second half of the eighteenth and in the nineteenth centuries), have scarcely been exposed in archaeological excavations. Some occupation levels from this period were found in the ruins of the Hospitaller Compound (Stern E., forthcoming) and within the Genoese quarter, close to the Zeituni Square (Stern et al. 2011; Benente et al. 2009–2010; Stern, Benente and Stern 2017). There, an Ottoman wall was founded on the massive Crusader walls, and a thick plaster pavement that abutted this wall was found with *in situ* pottery dating to the eighteenth century (Stern et al. 2011: Phase 2, Fig. 3).

The phenomenon of Ottoman rebuilding directly over the remains of Crusader-period buildings, and reusing the Crusader walls as foundations, was detected also in the excavation of the Messika Plot (Syon and Thatcher, forthcoming [a]) and near the Church of St. Andreas (Stern E. 2015). In these cases, the alignment of the Ottoman buildings is almost identical to that of the Crusader ones, demonstrating that in this part of the Old City, the Ottoman city indeed preserved the outline of the Crusader city.

Moving from the buildings to the material culture, some Ottoman-period ceramic finds found in 'Akko have been published from a number of excavations, including finds from the seventeenth and eighteenth centuries (Stern 1997; Benente et al. 2009–2010; Stern E. 2014; Stern E.J. 2015), in addition to the better-known nineteenth-century finds (Edelstein and Avissar 1997:132–135; Stern 1997:65–68; 2016a; Porat 2013: Fig. 3:3–10; Stern E. 2013). The contribution of the finds from 'Akko is important, as the systematical study of the Ottoman pottery from the Levant, a peripheral region in the Ottoman Empire, is still in its infancy. The repertoire joins other recent publications of Ottoman pottery from IAA excavations in Israel, in which the Ottoman layers are studied in a similar way to the earlier ones, such as at Jerusalem, Tel Yoqne'am, Ha-Bonim-Kefar Lam, Qula and al-Qubab (Avissar 2009; Avner and Avissar 2017), Safed (Stern E.J. 2014b) and Yafu (Vincenz 2015; 2020a; 2020b; 2020c).

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