



THE LEVANTINE CERAMICS PROJECT 2019 WORKSHOP 3: WARES OF THE ISLAMIC, FRANKISH, AND OTTOMAN PERIODS AIAR, JERUSALEM JUNE 20TH, 2019

WORKSHOP SUMMARY

Session 1: Amphoras & Store Jars

Itamar Taxel: Palestinian globular amphoras

Itamar presented a newly identified Palestinian amphora: the [Palestinian Globular amphora](https://www.levantineceramics.org/wares/620-palestinian-globular-amphora) (<https://www.levantineceramics.org/wares/620-palestinian-globular-amphora>). The type was identified as one of the products of the recently discovered workshop at Tel Yavneh (<https://www.levantineceramics.org/kilns/43-yavneh-railway-line-kilns>), excavated in the line of the railroad expansion. The site contained two clusters of kilns, with each cluster containing three kilns surrounded by workshop buildings. The workshop came to an abrupt end in 659/660 CE because of a severe earthquake (the date is derived from pollen retrieved from beneath the kilns). The new type of Globular amphora is one of three types of jar produced at this workshop; the others are the well-known LRA 4 (Gaza jars) and LRA 5/6.

The Yavneh globular amphora is different from the other jar forms produced here. The shape is very uniform, with a hooked rim, short constricted neck with slight ridge, globular ribbed body, and two short ear-like handles from neck to shoulder. The form is not local but is known from elsewhere in the Mediterranean. Joanita Vroom recently published a study of globular amphora that show the widespread distribution of this general type. In the Black Sea region, a well-known version called the Ganos-type amphora, dated to the 10th c. CE, has been studied by Nergis Günsenin.

Itamar has been able to find only a very few parallels for this new type: a few examples from Yavneh-Yam, Yavneh Dunefield Site 17, Ostrakine (north Sinai; this was published as an Aegean amphora but petrography by Yuval Goren has shown that it is the same as the Yavneh examples), and Dayr al-Baramus, a monastery in Lower Egypt, about 100 km south of Alexandria.

Petrographic study by Anat Cohen-Weinberger shows that the fabric of the vessels found in the Yavneh kilns is identical to that of the Gaza jars: <https://www.levantineceramics.org/petrofabrics/108-southern-israeli-loess-calcareous-clay-calcareous-sand>, while the fabric of the vessels found at Yavneh Yam is <https://www.levantineceramics.org/petrofabrics/30-southern-israeli-coast-alluvial-clay-rounded-sand-and-angular-silt-quartz>. It thus appears that there were two workshops in this region, one closer to Yavneh-Yam using alluvial soils and this workshop near Tel Yavneh using loess.

On account of the very limited distribution so far known, primarily to nearby monasteries, Itamar suggests that production was experimental and short-lived, perhaps only for about 10 years or so in the mid-7th c. CE.

In support of his presentation Itamar submitted this amphora type as a ware/ware family to the LCP, along with a single example. It would be excellent to include more vessel images, along with break photos and petrographic thin-sections. This would make it easier for other researchers to recognize this form, and also to identify which variant they have.

Michelle Creisher: Early Islamic amphoras from the Ma'agan Mikhael B Shipwreck

Michelle presented a summary of her work on the amphora cargo of the Ma'agan Mikhael B shipwreck: <https://www.levantineceramics.org/sites/1609-ma-agan-mikhael-b>. The wreck was discovered in 2005 by two recreational divers. Excavations began in 2016; there have been 5 seasons so far. The wreck held over 100 amphoras, of eight different types. The ship and its cargo are dated to the 7th-8th c. CE via C14 and ceramic typology.

The great majority of the amphoras are classified as **LRA 5**: <https://www.levantineceramics.org/wares/630-late-roman-amphora-5>. Very interestingly, this broad family comes in three distinct variants, made of two different petro-fabrics. Remains of the contents showed that each size group held a different commodity

The three variants are:

- ◆ Large: H 41 cm, capacity ~ 16.5 L. Body covered with a salt wash. Made of [Egyptian Nile Clay with calcareous inclusions](#). One example had a mouth stoppered with a piece of leather and lime plaster: https://www.levantineceramics.org/vessels/20493-ma-agan-mikhael-b_336, seen below left. Solid mass of resin on bottom. Dipinti regularly found, often showing a cross suggesting connection with a Christian center.
- ◆ Medium: H. 36.8, capacity ~ 8.5 L. Greyish brown in color. Also made of [Egyptian Nile Clay with calcareous inclusions](#) but harder fired. Almost every example has an Arabic inscription that is religious in nature. Many of these contained olives. See https://www.levantineceramics.org/vessels/20492-ma-agan-mikhael-b_m003, below middle.
- ◆ Small: H. 32.5 cm, capacity ~ 7 L, so less than half the size than the large version. Made of [Egyptian Nile Clay with plant remains](#). One found with a carved stone stopper in its mouth. Many of these also carried Arabic inscriptions. One was filled with walnuts. See https://www.levantineceramics.org/vessels/20494-ma-agan-mikhael-b_3008, below right.



Michelle submitted these and other examples under a single ware family of LRA 5 amphoras. Technically, these vessels do not really belong to a single ware, as that category is commonly understood, but rather to a single type. This opens a question suggested by other presentations at this workshop: should we create a new submission category specifically for types? On this issue, see below, under “*An idea to ponder.*”

Session 2: Mamluk-Ottoman

Giulia Roccabella: Mamluk-early Ottoman Plain ware

Giulia gave an overview of Mamluk-early Ottoman Plain ware, a widely attested but poorly studied category. Study of these periods has lagged for several reasons. First, the Israeli Antiquities Law does not regard sites dating after 1700 as an archaeological category, which leads to finds of these years being discarded as “overburden.” Further, there is a general lack of stratigraphic contexts, which hinders serious research.

Giulia defined Mamluk-early Ottoman plain ware as a “single recognizable group with multiple production centers, e.g., Ramla, Jerusalem, and Safed, dating from 13th-17th c.” She presented a case study from Yardena Alexandre’s 2012-2013 excavations in the Franciscan compound at Kafr Kanna. Yardena discovered two strata:

- ◆ Stratum III: dating to the 14th c. and identified as Mamluk;
- ◆ Stratum II, with two sub-phases: Phase a, dating to the mid-15th to mid-17th c., and identified as Mamluk-early Ottoman; and Phase B, dating to the later 17th c., and identified as Ottoman. The absence from this later phase of smoking pipes and Chinese imports suggests that it ended before the 18th c.

The pottery found here was domestic in the range of functions. It included storage ware, cooking ware, table ware, and lamps. The assemblage over all, and most of the specific shapes, are widely paralleled throughout the region: Khirbat Yamma (Stern 2017), Bet She'an (Avisar 2014), Safed (Barbé 2014), Nazareth (Alexandre 2012), Kafr Kanna (Barbé and Shapiro 2012), Tel Yoqne'am (Avisar 2005), and Khirbat Din'ila (Stern 2014). The vessels include both local productions and Imports.

The Mamluk-early Ottoman plain ware vessels were all of a clean, compact fabric, with some fine to medium white and/or black inclusions. The fabric ranges in color from light red to reddish brown (2.5YR 6/6 – 2.5YR 4/4). Occasionally there is a grey or black core.

In both strata there are many bowls of various sizes, usually with a sharply articulated rim and carinated body. In Stratum II there is a wide range of jars, jugs, and juglets. The shapes share similar typological features to Gaza production. The many small variations in forms suggests these were produced in multiple small workshops.

Giulia closed with a list of next steps: 1) upload data to the LCP; 2) check what you have; and 3) share knowledge!

Anastasia Shapiro: Ottoman smoking pipes

Anastasia presented a summary of her research on Ottoman smoking pipes, objects whose typological development and varied centers of production allow for close dating and a view into patterns of economic exchange and cultural influence. The Ottoman smoking pipe is actually a set comprised of three parts: a mouthpiece, a long wooden stem, and a ceramic bowl with a short shank. It is generally only this last component that is found in excavation; this piece is usually called a clay pipe even though it is just one part of the set. Thanks to changes in the inner diameter of the shank opening, this part is datable: in the 17th c. it ranged from c. 5-7 cm, and widened to c. 16-18 cm by the end of the 19th c.

The ceramic bowl was formed in a two-part vertical mold, varied widely in shape, was often personalized by maker’s marks, and was decorated with a great deal of artistry. Key features by period are summarized below.

17th c. This period is represented by a group of 88 pipes from ‘Akko, which constitute the earliest examples found in the city. There is a great variety of both shapes and fabrics, many with unique decorations, but few with maker’s marks. These features suggest many small manufacturers, at various locations; the pipes themselves were likely brought to ‘Akko by their individual owners.



End of 17th – beginning of 18th c. A group of 210 examples dating to these years share a common fabric that contains transparent quartz, limestone inclusions, and laths of muscovite. The surface has a smooth, almost silky or oily feel. Some examples are very light brown but most are light grey, indicating firing in a reducing atmosphere. There are common shapes and decorations, and about half have various makers' stamps on the bottom of the bowl. Thanks to information provided by Veronique François, the provenance may be identified as Damascus, which had a large number of pipe manufactories.



Early 18th – early 20th c. The single largest group found at Akko – 1169 of the 2000 specimens – belong to a single fabric group with inclusions of charred organic matter (perhaps crushed olive seeds), limestone, and occasional quartz, which seems to be local to the 'Akko region (although no actual workshops have yet been found). Examples are always covered in slip which fired to a range of attractive deep hues of burgundy, plum, and dark violet. They are variously decorated. Some have makers' stamps, although these are rare.

By the mid-18th c., two specific types of 'Akko-made pipes are found in the excavations, each with many examples. The first, shown below left and center, is represented by more than 200 pipes composing about 20% of the corpus. The second, shown on the right, is represented by about 170 samples. All are very consistent in size, shape, and decoration. About 90% have stylized horseshoe makers' stamps on the right side of the shank (seen below, middle). Both types may be seen as mass-production by a well-organized local workshop.



Towards the end of the 18th and the beginning of the 19th century, these 'Akko-made pipes lose their uniformity, and appear in a wider array of shapes and decorations, only seldom with makers' stamps. There are also some smaller technological changes. Mineral inclusions are fine, organic matter less, and the slip palette is in shades of red. This could be a result of better levigation of the raw material, and a higher firing temperature.

By the mid-19th c., the forms again change and the size increases. These pipes are the largest among the examples found in 'Akko, with some more than 10 cm long. They represent the peak of pipe-smoking. As the examples below show, some are plain and others are of unique designs. Some have disc-like bottoms. Makers' stamps, which are rare, consist of stylized flowers and horseshoes, continuing the 18th century tradition.



The locally manufactured disc-based pipes are accompanied by versions of the same form from a new location – a famous pipe-makers' quarter of Istanbul, named Tophane. These imports, which probably arrived by sea, are represented by more than 250 samples, all characterized by very fine fabric with tiny laths of golden mica and rare lime grits. Usually, the fabric color is brownish orange, but may also be yellowish-brown to dark red. Whether decorated or not, these pipes always have surfaces finished with burnished orange red slip. Because the firing conditions were carefully managed, all are of high quality and very attractive. About 50% of the Tophane pipes have makers' stamps with inscriptions in Turkish, placed on the side of the bowl or on the side of the shank.



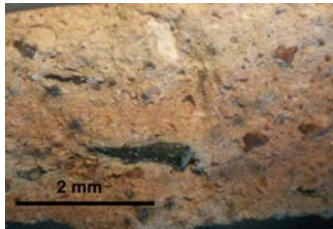
At the same time as Tophane pipes appear in 'Akko, we also see locally produced versions. A comparison of the quantities suggest that the imported ones dominated the market, and the local artists tried to compete with these imports. In order to distinguish between them, one must see the clay color, as the forms are almost identical.



'Akko manufacture

Tophane (Istanbul) manufacture

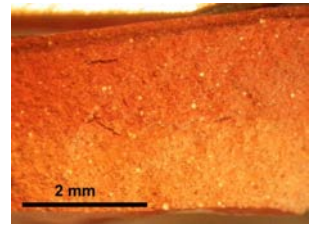
By the second half of the 19th c. the form of the locally made pipes changes to the so-called lily-shape, which continued until the beginning of the 20th century. The clay is brownish-gray; the inclusions are coarse and numerous. Lily-shape Tophane imports appear alongside the local production, in almost equal quantities. Some reflect stages of transformation from the disc-base, in various and sometimes curious designs; others are quite simple in form. And, as before, we see pipes that are quite similar in style, some local and some imported.



'Akko manufacture



Tophane (Istanbul) manufacture



These discoveries show that in Akko, a significant port of the Ottoman Empire, the pipes represent all stages of their development from early to late, local as well as imported versions, from close and distant locations, brought by land and by sea. In the 17th century, pipes were brought to the city as personal belongings. Damascus imports arrived at the beginning of the 18th century, probably transported by land, and these inspired the foundation of local manufacturing centers. These continued operating in the 19th and into the early the 20th century, successfully competing with the sea-borne Istanbul *Tophane* products.

The picture is quite different at Khan et Tujjar, an inland site, located c. 40 km from the seashore, on one of the main imperial roads that connected Damascus and Cairo. Here, from two small salvage excavations conducted in an area of the market between the Khan and the Fortress, about 100 pipes were found. These include a few outstanding examples, such as an opium-smoking device, frit-ware glazed pipes, and pipes made of marble and chalk. These last certainly could not have been used for smoking. The information gleaned from the 'Akko pipes helps situate the date and larger context of the Khan et Tujjar collection. 90% of the pipes can be securely dated to the 17th century, while the fabric and some of the decorative patterns evoke the 18th century Damascus pipes. It is interesting that already in the 17th c., residents of this inland site enjoyed pipes imported from Damascus – undoubtedly acquired thanks to their situation along a well-traveled land route.



Anastasia has submitted 48 beautifully illustrated examples of pipes found at 'Akko to the LCP: a fantastic selection from the over 2000 vessels recovered from nine years of excavation in the Old City. To see them, go to the [Vessel browse page](#), and type "Pipe" into the Shape filter box – or "Smoking" into the Functional category box at the top. She promises also to upload more examples from the group of 100 pipes found in the excavations at Khan et Tujjar. These pipes comprise the single most well represented shape category on the LCP. Yay Anastasia!

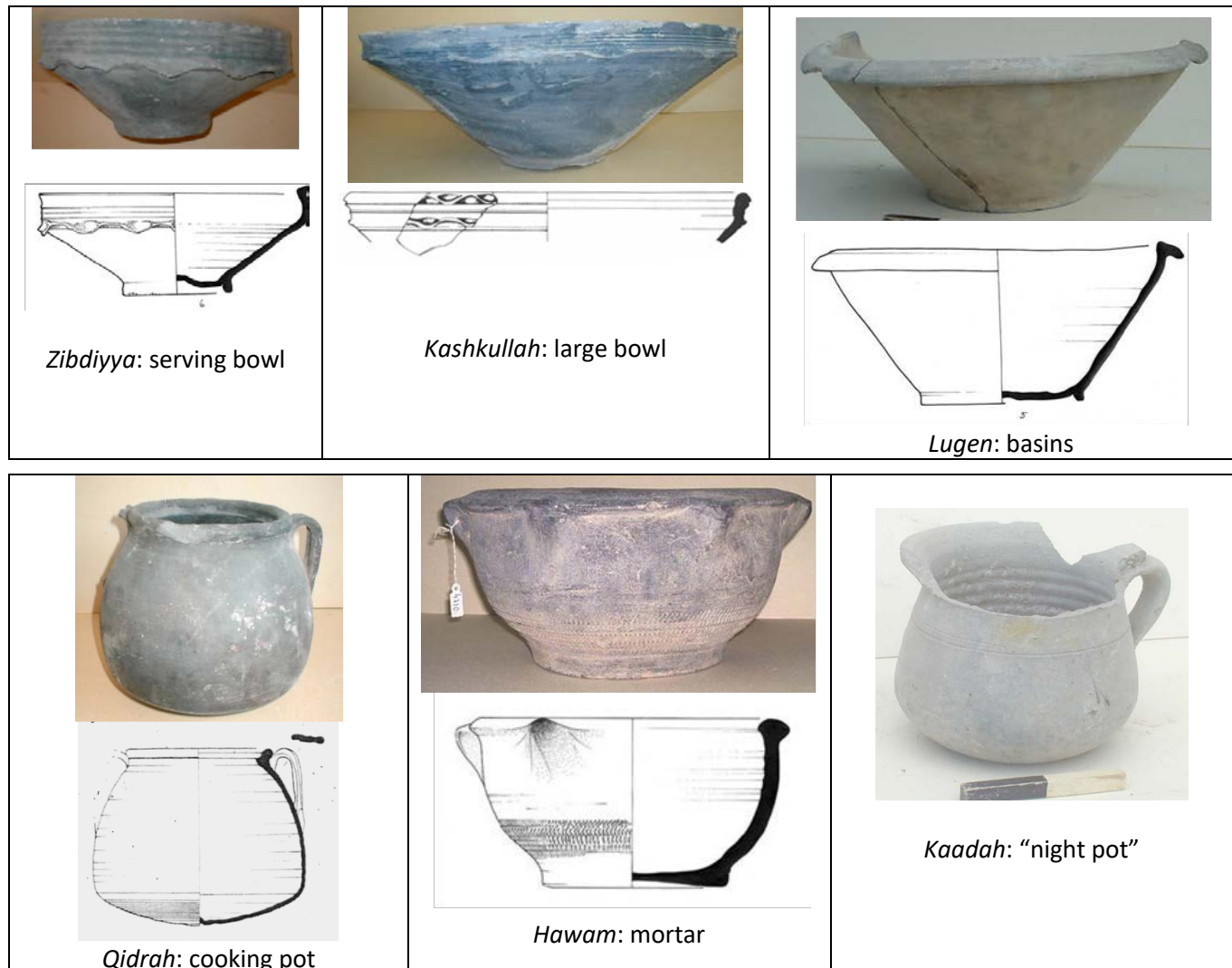
Tali Erickson-Gini: (Very Dark) Grey Gaza Ware

Tali reported on the most common ware type of late Ottoman times: [Grey/Black Gaza Ware](https://www.levantineceramics.org/wares/55-grey-black-gaza-ware) <https://www.levantineceramics.org/wares/55-grey-black-gaza-ware>. The distinctive dark color has actually ranged in hue over time: the earliest vessels were pale grey in color. By the 18th c. they had become darker grey; and in the 19th c. these vessels were almost black through and through.

Grey/Black Gaza ware was first identified in 1875 by Conder & Kitchener; they called it the “modern black pottery of Gaza;” in 1890 Petrie noted that “pottery of common use is black and is made at Gaza.” Researchers have identified the rise and fall in number of workshops: from 16 workshops in 1884, to 5 in 1905, to a high of 69 in 1943, then down to 20 in the 1970s and just 3 by 2000.

In all cases the most distinctive aspect of this ware is the purposeful reduction firing that gives it its dark hue. This is achieved by loading the kiln, heating it up, then adding even more combustible material and closing things up so that the material gets as black as possible. Why the desire for an ever darker color? Tali wondered if there is some connection with the influx of Egyptian *fellahin* into Gaza, which perhaps inspired a desire to emulate the dark surfaces of contemporary Egyptian pottery.

Gaza ware was a utilitarian production *par excellence*; potters made a wide range of shapes for daily use.





Ibriq: water jug



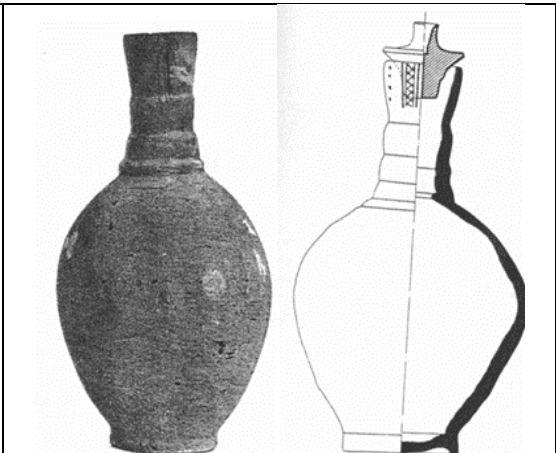
Dalu: bucket



Kuraz: flask



Kuz: jug



Sharbah: covered bottle



Churning Butter in a Goat Skin, Beerth, Palestine (Judges v :25).
Copyright 1900 by Underwood & Underwood.



Mahlabe: milk jar



Zir: handmade storage jar



Jarrah: water jar

As can be seen from the above images, vessels are mostly undecorated. On occasion some carry rather gaudy painted designs.

There is a small amount of a light colored ware with a reddish core. Where is it from? Umm Shaqef, in the Hebron hills, has a lot of pottery of this ware. There is similar production known from the north, near Haifa.

A great accomplishment of this workshop was to begin to fill in some information on the LCP for this extremely widespread, important ware. Everybody joined in to help compose the text for the General Information box:

Grey/Black Gaza ware is a long-lived ware family with multiple production centers in and around the southern Levantine cities of Gaza and Faluja. The consensus belief is that the beginning date of production is around c. 1800, on the basis of 19th c. travelers accounts and archaeological evidence from Ramot Nof, Be'er Shema, and Nahal Be'erotayim. A few scholars believe that production began much earlier, in the 16th c. CE, on the evidence of (as yet-unpublished) finds from Aphek-Antipatris and Tel Beth Shemesh.

This ware family is represented by a wide range of utilitarian/household shapes, all fired in a reducing atmosphere so that they are fully fired grey all over. On the basis of historical and ethnographic records, we know of well over 100 workshops, with peak production in the 1940s.

Next steps for better documentation on the LCP:

- ◆ [Add references](https://www.levantineceramics.org/references/new/v2) to general studies, site reports, etc.: <https://www.levantineceramics.org/references/new/v2>
- ◆ [Add sites](https://www.levantineceramics.org/sites/new/v2) where published (and as-yet unpublished) vessels occur, so that examples can be entered: <https://www.levantineceramics.org/sites/new/v2>
- ◆ Add at least a few [kiln/workshop locations](https://www.levantineceramics.org/kilns/new/v2): <https://www.levantineceramics.org/kilns/new/v2>
- ◆ Add a range of nicely illustrated [examples](#), including both photos and drawings, via [Add a Vessel](#) and [Add a Vessel Illustration](#). Include break photos when possible.
- ◆ Do some petrography, and [add thin-section images and descriptions](https://www.levantineceramics.org/petrographics/new/v2): <https://www.levantineceramics.org/petrographics/new/v2>

In other words, start treating this material like the important archaeological evidence that it is!

Session 3: Glazed Buff Wares

Hagit Torgè: Early Islamic glazed buff wares from Ramla

Hagit reported on Ramla Common Glazed Buff ware, which she also submitted to the LCP:

<https://www.levantineceramics.org/wares/634-ramla-common-glazed-buff-ware-pottery>. She summarized some of the results of her PhD dissertation, in which she examined material from over 200 excavations in and around Ramla. Vessels of Glazed Buff Ware are among the most common finds. They carry different glaze colors (brown, yellow, green, and occasionally blue), are decorated with stripes, spots, bands, and combinations of all of these, and come in a variety of shapes & sizes. The fabric is typically granular, and yellowish buff in color. Both glazed and plain vessels occur in this same fabric, and were made in the same workshops. Production began soon after the city's founding in the 8th c. CE, and lasted through the Fatimid era (1068), when a large earthquake caused great destruction throughout the city.

In the area around the White Mosque, which was surrounded by expensive two-story mansions, no evidence of production was found. Instead evidence for workshops was found around the outer edges of town, where more modest houses and remains connected with various industrial activities occur. That evidence consists of deformed vessels, unfinished vessels, including bowls that were covered in glaze but not yet fired, and kiln bars – although as yet no actual kilns themselves, with the exception of one very small kiln found in the north part of the city, which was used to make zoomorphic vessels. Anastasia Shapiro did petrographic analysis on some of the kiln bars, and confirmed that they were made of a local petro-fabric. Question: is this petro-fabric already on the LCP? Can an association of one or more specific petro-fabrics be made with this ware?

It would be wonderful to see some examples of vessels of this ware on the LCP, including photos, drawings, and break photos.

Edna Stern: Levantine Alkaline Glazed ware

Edna presented the important production of [Levantine Alkaline Glazed ware](#). She noted that this is a true ware, as opposed to a ware family, meaning that vessels share petro-fabric, manufacturing processes, approach to finishing and decoration, and a specific suite of shapes. The alkaline glaze was applied directly on the body of the vessel; slip was apparently considered unnecessary because of the light buff colored fabric. Petrographic analyses have shown that vessels were made of clays from the Lower Cretaceous formations in the surroundings of Beirut.

Vessels were made for table use, in only a few shapes: hemispheric bowls with everted rim or ledge rims and a ring base, and cups with vertical fluted walls (for such a cup: <https://www.levantineceramics.org/vessels/20568-5202-15-110-10>). Edna submitted this ware to the LCP, along with a full overview and description: <https://www.levantineceramics.org/wares/629-levantine-alkaline-glazed-ware>. Her entry reads:

'Levantine Alkaline Glazed Ware' often remains unidentified in the southern Levant. Vessels of this ware have a limited distribution and were produced for only a short time. The name indicates the production and consumption area and the type of glaze used. Its manufacture began during the Fatimid rule in the southern Levant (modern-day northern Israel and southern Lebanon) and continued during the first decades of the Crusader period. Typological and archaeometric studies of pottery from various excavations in Beirut, and in Acre ('Akko) and villages in its rural hinterland presented the opportunity to define the Levantine Alkaline Glazed Ware

Levantine Alkaline Glazed Ware vessels were found in excavations of the [BEY 002 kiln/workshop](#) site conducted in the 1990's in Beirut. The study of these remains and the associated ceramic wares enabled to establish chemical reference groups for the Beirut production. Analyses also showed that the buff calcareous fabric of this

ware is different from a contemporary red fabric of which unglazed and glazed cooking vessels were produced and widely distributed.

Chemical and petrographic analysis of Levantine Alkaline Glazed Ware that was found in various excavated sites in Israel showed that the chemical composition of the vessels from Israel matched the previous analyses from Beirut. In addition, petrographic analysis showed that the lithology of the ware suggests Lower Cretaceous formations that can be found in the Beirut surroundings.

Levantine Alkaline Glazed Ware has a somewhat limited distribution. The pattern includes coastal towns such as Beirut, Acre, and Caesarea, inland towns like Yoqne'am and Lajjun, and villages situated in the agricultural hinterland of Acre (Horbat 'Uza, Dar el-Gharbiya, Mi'ilya, and el-Kabri).

Levantine Alkaline Glazed Ware was produced during a short period of political, social, and cultural transitions. Nonetheless, it is a true part of a long-living Islamic ceramic tradition of Alkaline glazed wares. It demonstrates that different pottery workshops in distant regions produced similar wares through imitation, inspiration, or diffusion of styles and ideas. For another, related ware production, see [Damascus Alkaline Glazed Ware](#).

Edna also discussed the “prehistory” of this ware. It is part of a long-lived Islamic ceramic tradition that began in Basra, Iraq in the Abbasid period (early 9th c.), and was continued by the potters of Fustat, in Egypt, in Fatimid times. Some of these many workshops are known, and others are yet to be discovered and defined. They did not operate simultaneously, and they did not produce identical shapes. Edna concluded by noting that the final mapping of this widespread, long-lived family of alkaline glazed wares awaits further research. For this step, the LCP can help! Please submit more examples to the site – including drawings, break photos, and linked petrographic thin-sections and descriptions. More data will enable us to begin clarifying production and distribution zones.



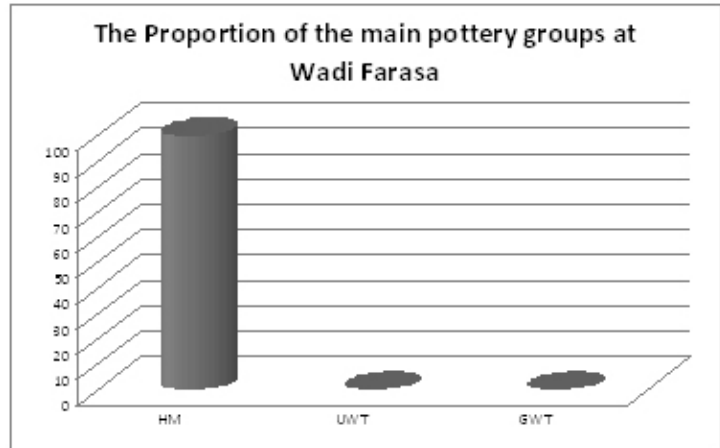
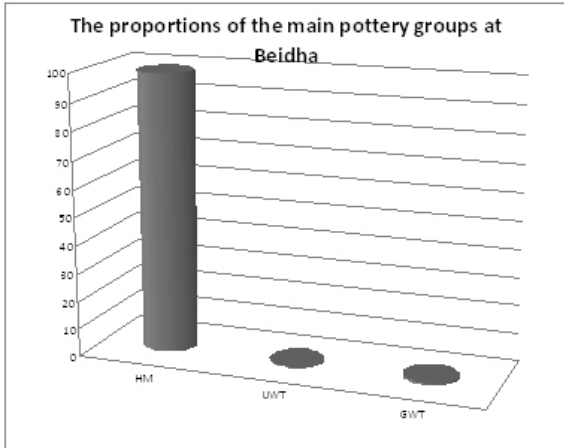
Session 4: Handmade Wares

Micaela Sinibaldi: HMGP & handmade cooking ware from Jordan

Micaela gave an update on three very long-lived and widespread wares that she submitted to the LCP last year: Medieval/Modern Levantine Handmade Painted, Unpainted and Cooking wares:

- ◆ <https://www.levantineceramics.org/wares/491-medieval-modern-levantine-handmade-painted-ware>
- ◆ <https://www.levantineceramics.org/wares/497-medieval-modern-levantine-handmade-unpainted-ware>
- ◆ <https://www.levantineceramics.org/wares/493-medieval-modern-levantine-handmade-cooking-ware>

Handmade wares comprise the vast majority of pottery found in medieval levels. From Petra alone about 90% was hand-made, as illustrated by the two bar charts below.



Stratified assemblages from Petra indicate that these wares were produced for the entirety of the second millennium, from as early as the 10th c. to mid-20th c. Handmade is not a single technological category. Potters used various techniques, e.g., slab-made, coil-made, etc. (note that it is possible to select these when you enter vessels onto the LCP, in Step 6 of [Vessel submission: https://www.levantineceramics.org/vessels/new/v2](https://www.levantineceramics.org/vessels/new/v2)

Vessel information: handmade

Go Back 1 Step Save and Continue

1 Step 1: Vessel Registration Number

2 Step 2: Site Name, Type and Date BCE/CE

3 Step 3: Associations

4 Step 4: Shape Details

5 Step 5: Dimensions

6 Step 6: Vessel Details

7 Step 7: Bibliography, Contributors, Acknowledgements and Privacy

8 Summary

Color

Surface treatment

Firing

Manufacturing technique

Wheel-made

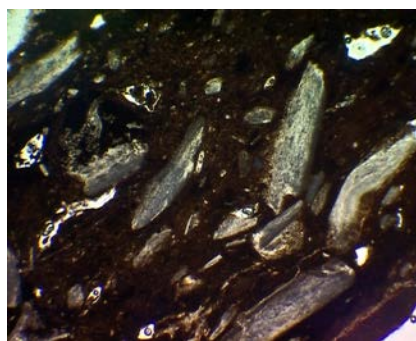
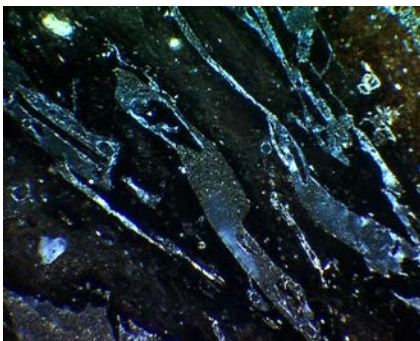
Mold-made

Hand-made, coil

Hand-made, slab

Other (separate multiple entries with a comma)

Petrographic samples show a wide range of clays, which is unsurprising: these wares were manufactured in almost every medieval-early modern settlement, from locally available clays. They were low-fired; there is almost always a black core. Chaff is almost always present, in high amounts. This is a distinguishing characteristic of these wares; the amount separates them from pottery of the prehistoric era. The chaff is easily seen in the break and in thin-sections:



One important way to distinguish handmade wares is via surface treatment, as vessels may be painted, plain, brushed with a textile or fibers, etc. Dimensions of forms may also be indicative of date and production locale – but Micaela noted that individual features such as handles are generally not too informative. A key way to distinguish the dates of various sites is by the ratio of painted to unpainted pottery – so it is critical that it all be accounted for. Don't throw it away as undiagnostic!

Both the unpainted and painted wares were made in a wide array of practical utilitarian shapes: small and large bowls, basins, jugs, jars, lids, and lamps. To illustrate the range, Micaela has also uploaded a number of vessels and illustrations for each of these wares, and also provided detailed descriptions. This is exactly what is needed to help other researchers begin to recognize this material, and to treat it with the scrutiny it deserves.

Smadar Gabrieli: HMGP & handmade cooking ware from Israel

Smadar continued the discussion begun by Micaela about the three long-lived handmade wares: [painted](#), [unpainted](#), and [cooking](#). She noted the traditional notions regarding these wares: they were local, rural, non-specialized, not datable, and therefore not significant for research. In the late 1990s two key articles helped turn the tide and led to a shift in attitude: Jeremy Johns. "The Rise of Middle Islamic Hand-Made Geometrically-Painted Ware in Bilad al-Sham " in *Colloque international d'archéologie islamique, IFAO, Le Caire, 3-7 février 1993*, ed. Roland-Pierre Gayraud. Textes Arabes et Études Islamiques 36. Institut Français d'Archéologie Orientale, 1998, 65-93; and Eveline J. van der Steen, "What Happened to Arabic Geometric Pottery in Beirut?" *Aram* 9-10 (1997-1998), 121-127 (both of these are now part of the LCP's Master Bibliography). These helped lead to a shift to viewing HMGP as evidence for economic and social processes, settlement patterns, and cultural interactions.

For all three of these wares, we now know that:

- ◆ Sequences seem applicable over a wide area although the pace may vary.
- ◆ More than one mode of production is known.
- ◆ There were some professional workshops with wide distribution over regional & inter-regional zones, and other workshops whose spheres were strictly local.
- ◆ HMGP, Plain, and cooking are distinct wares, each with their own trajectory. Also, at least in the case of HMGP, there seems to be development over time.

Potential aspects for study include these vessels' style, production & distribution, craft specialization via context (i.e., excavation & survey) and petrography.

Smadar presented evidence for one particular type of cooking pot with horseshoe handles. The form is known from many sites in levels dating from the 12th-16th c.: Afula (12th-13th c.), Gush Halav (13th c.), Wadi Siah (14th-16th c.), and Jerusalem/HaKotel. Petrography shows several base clay groups:

- Alluvial/Jordan Valley: is this <https://www.levantineceramics.org/petrofabrics/4-northern-israel-valleys-rounded-sedimentary-and-volcanic-fluvial-sands>
- Calcareous rendzina soils: <https://www.levantineceramics.org/petrofabrics/24-calcareous-foraminiferous-rendzina-soil>
- Lower Cretaceous: is this <https://www.levantineceramics.org/petrofabrics/6-lower-cretaceous-argillaceous-shales-mature-sandstone-siltstone?> Or <https://www.levantineceramics.org/petrofabrics/64-lower-cretaceous-western-galilee-ferruginous-ooliths-and-silty-ferruginous-matrix?>

The wide distribution and various petro-fabrics indicates that these were produced in multiple locales. According to modern potters, they regard the form and/or application of the handle as a kind of signature.

Smadar uploaded the Jerusalem example to the LCP: <https://www.levantineceramics.org/vessels/20615-hakotel-4604-388-461>. This vessel was analyzed petrographically, and described as follows:

The clay is typical of calcareous soils such as rendzina and grumusols. The matrix is calcareous, optically active, silty, and rather porous. The non-plastic inclusions are predominately calcareous, and include rounded microfossils, chalk, limestone and calcareous concentrations. Most common are the microfossils and chalk in fine to coarse sand size, which together usually accounts for 20-40% of the slide area. Quartz also accounts for 5-20%.

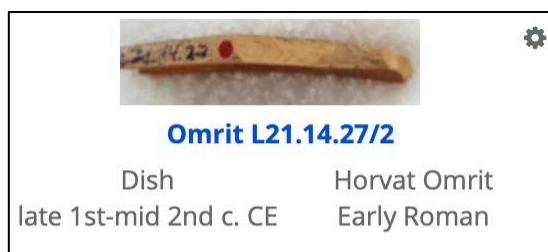
This appears to be <https://www.levantineceramics.org/petrofabrics/24-calcareous-foraminiferous-rendzina-soil>, one of the petro-fabrics submitted to the LCP back in 2016. It would be good to upload the thin-section of this vessel to the LCP, along with its description, so that the association with this petro-fabric can be made.

Fabric photo suggestions, an idea to ponder, a request, and an exhortation!

Fabric photo suggestions

We all appreciate seeing photos of vessel fabrics. As many of the presenters in this workshop demonstrated, fabric color and texture are sometimes the only way to distinguish between different production centers. It is easy and quick to take good fabric photos, and you don't necessarily need any elaborate equipment. In the [summary of the 2019 workshop held this past May in Ankara](#), at Bilkent University, there is a handy tip for how to take excellent break photos using your cell phone.

Below is an example of a break photo taken with a cell phone and submitted to the LCP, from Horvat Omrit:



<https://www.levantineceramics.org/vessels/20584-omrit-l21-14-27-2>

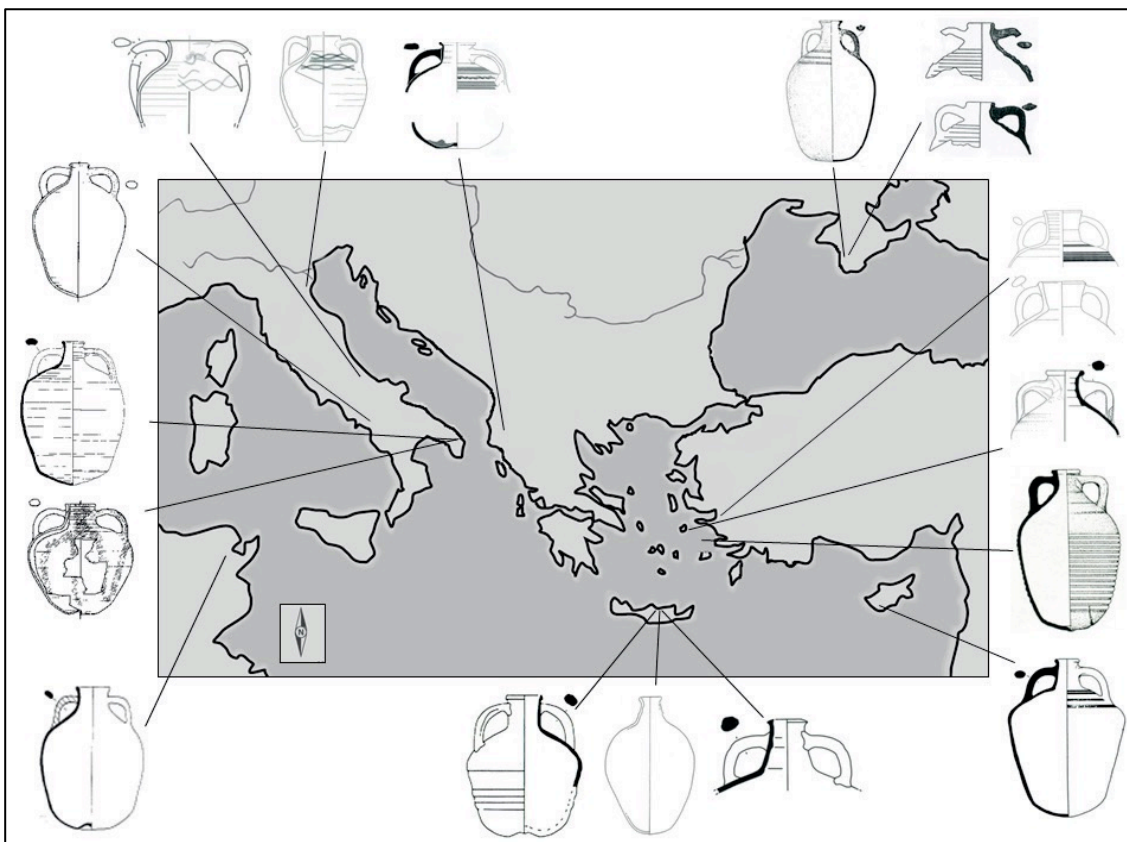
You can also take a magnified view using a small dinolite. Anastasia Shapiro says that 20x magnification is all you need, and suggests focusing on a specific aspect for best results. Here are a couple of inexpensive options:

- ◆ Plugable USB 2.0 Digital Microscope with Flexible Arm Observation Stand for Windows, Mac, Linux - \$34.95 on Amazon: https://www.amazon.com/Plugable-Microscope-Flexible-Observation-Magnification/dp/B00XNYXQHE/ref=pd_cp_328_1?pd_rd_w=k1myV&pf_rd_p=ef4dc990-a9ca-4945-ae0b-f8d549198ed6&pf_rd_r=YX05HN1MVZRHJG2CTC6S&pd_rd_r=97d680cd-976c-11e9-99da-dd5cbc43a5ca&pd_rd_wg=wkD4q&pd_rd_i=B00XNYXQHE&psc=1&refRID=YX05HN1MVZRHJG2CTC6S
- ◆ Jiusion 40 to 1000x Magnification Endoscope, 8 LED USB 2.0 Digital Microscope, Mini Camera with OTG Adapter and Metal Stand, Compatible with Mac Window 7 8 10 Android Linux - \$20.99 on Amazon: https://www.amazon.com/Jiusion-Magnification-Endoscope-Microscope-Compatible/dp/B06WD843ZM/ref=pd_cp_328_2?pd_rd_w=k1myV&pf_rd_p=ef4dc990-a9ca-4945-ae0b-f8d549198ed6&pf_rd_r=YX05HN1MVZRHJG2CTC6S&pd_rd_r=97d680cd-976c-11e9-99da-dd5cbc43a5ca&pd_rd_wg=wkD4q&pd_rd_i=B06WD843ZM&psc=1&refRID=YX05HN1MVZRHJG2CTC6S

An idea to ponder: should we add a new group category for shape/type?

In this workshop, a number of presentations focused on a single shape/type, e.g., Itamar's globular amphoras, Michelle's LRA 5's, and Anastasia's smoking pipes. As noted above, Itamar and Michelle submitted these as

ware/ware families. This was understandable, since currently on the LCP the only available group categories are petro-fabrics (which refers to clay base) and ware/ware families. But shape/type groups are different than wares. Wares refer to a shared production tradition, for example [Levantine Alkaline Glazed Ware](#) or [Grey/Black Gaza Ware](#). Within that shared production tradition, potters could and did produce various shapes, forms, and types. Often these were so useful, popular, and/or functional that they were produced in multiple places, in multiple wares. Globular Amphorae are such a group, as seen in Joanita Vroom's distribution map:



This leads to an idea: **should we add a new category to the LCP for shape/type?** Essentially this would allow contributors to submit a single specific form as a group category, just as it is now possible to submit wares/ware families and petro-fabrics. If we added this, it would mean that an individual vessel could be associated with a specific shape/type *as well as* with a specific ware/ware family (i.e., a single production tradition) and petro-fabric (i.e., clay base). It would also allow these other group categories to be associated with specific shapes/types.

This idea has both advantages and disadvantages. One advantage would be the (potential) increased utility of the LCP for studying collective ceramic groups, and for tracking various relationships between clays, workshops, production approaches, and forms. One disadvantage is that the proliferation of category options could overwhelm or confuse site contributors (and users), or simply take up site real estate that people wouldn't use – which would diffuse the LCP's impact and sense of purpose.

To the latter point, I note that many contributors still do not add information that they already have. In almost every presentation at this workshop, we saw lots of examples, along with photos, drawings, break photos, and thin-sections – but very little of this information has yet been submitted to the LCP. If people are not willing to add information that they have, it may be premature to add a new submission category.

A request

Some of you know [Jen Gates-Foster](#), who has been overseeing excavations and ceramic analysis at the lovely site of Horvat Omrit, up near Kefar Szold in the Hula Valley. She has a specific request to all you late period specialists. She has submitted 14 vessels – with photos! – from the uppermost stratum of the village that grew up behind the Roman temple, and she would very much appreciate your ideas about dating and identification. To see the vessels, go to the [Horvat Omrit site page](#): <https://www.levantineceramics.org/sites/1620-horvat-omrit>, and scroll down to Vessels. The Islamic – Ottoman vessels are at the end. Click on the vessel numbers to open the specific vessel display page; click directly on the photo to see it enlarged. If you have some words of wisdom for her, contact her directly at jgatesfoster@unc.edu.

An exhortation!

A common theme voiced by presenters at this workshop was frustration: other archaeologists often ignore the pottery of these periods; vessels are regarded as modern, non-diagnostic, or unable to be identified; all too often the strata of these periods are excavated hastily or simply removed as “over-burden”; too few scholars study these eras and their remains; too few examples are published.

Certainly these and other issues complicate the study of the archaeology of the “late” periods. **But people: if you are serious about wanting other archaeologists to take the material of these periods seriously, prove it: submit more of it to the LCP**. Submit vessels, drawings, photographs, break photos, thin-sections. Submit sites and workshop locales. Submit references to the bibliography. The LCP is a platform that can accommodate as much information as you are willing to share. I exhort and challenge you to make available the information that you know – and that you would like others to take seriously. Available information is transformative: it elicits interest and creates a base of knowledge.

In the ceramics course that I teach every year at Boston University, I ask students to define “diagnostic.” They offer all the standard definitions you can think of. To all of them, I shake my head. When they get totally frustrated, I give them the real definition: a diagnostic is *something somebody has studied*.

In this workshop, we heard about several wares and types that used to be thought quite *un*-diagnostic: handmade wares, Ottoman smoking pipes, Gaza ware. What has turned these into archaeological diagnostics? Simple: *somebody has studied them* (hooray Micaela, Smadar, Anastasia, and Tali!). Now for the next step: share what you’ve studied, share what you know.





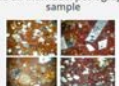
Are you daunted or confused by the LCP submission process? Help is available!

- ◆ We have a companion site with [instructional videos](#) (including an [entire set in Hebrew](#): <https://videos.levantineceramics.org/instructional-videos/hebrew-instructional-videos/>).
- ◆ Ask a long-time contributor. Good choices: [Anastasia Shapiro](#) (anastasia@israntique.org.il), [Deby Sandhaus](#) (deby.reen@gmail.com), or [Paula Waiman-Barak](#) (paula76w@yahoo.com).
- ◆ Ask [Andrea](#)! I am always happy to help explain, untangle, fix, or just walk you through any issues you might have. Write me at aberlin@bu.edu.

Submitting a vessel along with accompanying illustrations to the LCP takes only a few minutes. In the time it takes you to drink a cup of coffee and complain to your colleagues that nobody takes your material or your period seriously, you can begin to change minds by adding a few beautiful items to the site. Start now!

Add Information To The LCP

Note that every entry on the LCP is a digital publication. Click the “Get Citation” button at the top of any display page for a stable URL that names the contributor(s), page name, and date accessed.

<p>Add a ware/ware family</p>  <p>436 wares currently</p>	<p>Add a petro-fabric</p>  <p>91 petro-fabrics currently</p>	<p>Add an individual vessel</p>  <p>9729 vessels currently</p>	<p>Add illustrations of individual vessels</p>  <p>17749 illustrations currently</p>	<p>Add an individual petrographic sample</p>  <p>5299 petrographic sample(s) currently</p>
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