Concordia University St. Paul
DigitalCommons@CSP

1-1-2010

# Summary Report for the 2010 Season 

Mark Schuler<br>Concordia University, St. Paul, mark.schuler@csp.edu

Follow this and additional works at: https://digitalcommons.csp.edu/nip-reports
Part of the Ancient History, Greek and Roman through Late Antiquity Commons, Classical Archaeology and Art History Commons, Historic Preservation and Conservation Commons, and the History of Christianity Commons

## Recommended Citation

Copyright®2021 by Mark Schuler This work is licensed under a CC BY-NC-ND 4.0 license. https://creativecommons.org/licenses/by-nc-nd/4.0/

This Report is brought to you for free and open access by the Northeast Insula Project at DigitalCommons@CSP. It has been accepted for inclusion in Excavation Reports by an authorized administrator of DigitalCommons@CSP. For more information, please contact digitalcommons@csp.edu.

## North-East Insula Project (NIP)

## (Supervisor: Mark Schuler, with a report on three glass items by Stephen Chambers)

In 2010, excavation work concentrated on the area east of the domus of the North-East Church between Cardo 3 North and Cardo 4 North. This area may be the remains of a palatial home of a prominent citizen of the city. If our hypothesis holds true, the house would be some $375 \mathrm{~m}^{2}$ plus a garden to the north. ${ }^{1}$ In addition to the architecture revealed in 2010, small finds raise interesting questions about the use of the area and about the religious life of the community in the Byzantine period. This report will detail work done in three areas and the potential implications of the discoveries (Figure 1, Figure 2):

- A southerly room/cubiculum of the residence
- A peristyle court
- A northerly court/garden
- Conservation efforts
- Conclusions


## A Southerly Room (cubiculum) of the Residence

A five-meter square was opened east of previous work following the lines of W1288 and the later W1236. As the north-west corner of W1236 ${ }^{2}$ is slightly offset to the east from the line of W1230, we hypothesized that the south-west corner of W1230 could mark the southerly extent of the building east of the domus of the North-East Church on the east side of Cardo 3 North. Revealed was a small domestic space the structure of which supports but does not yet prove this hypothesis.

This room has an interior dimension of 2.20 m from north to south and 3.30 m from east to west (Plate 1). It is bounded on the north by W1288, on the east by W1904 and on the south by W1915. On the west is W1916, a poorly built wall that spanned the gap between W1288 and W1915. W1236 of a later building was constructed over the line of

[^0]W1915 and destroyed most of the south end of W1916. W1904 has a 77.5 cm doorway closed by a 90 cm door from inside the room. The doorway is 30 cm from W1288. The floor is packed earth with some plaster mixed in. Several nail fragments were discovered near floor level in the room. Stones protruding from the surviving top of the south face of W1288 at the east end of the room (Plate 2) may hint at a low roof or platform, although this ledge is located problematically just inside the doorway.

The north-east corner of the later building is 40 cm west of W1904 and is formed by the intersection of W1903 and W1236. W1221 forms the south-west corner with W1236. 2.5 m west of W1903 is another wall of the later building (W1902). It follows roughly the same line as W1270 and W1916.

W1915 seem to continue to the east of W1904, supporting but not confirming the hypothesis that the wall is the southern extent of the house. East of W1904 another wall (W1917) continues roughly on the line of W1288 but may be slanting slightly to the south. Further excavation will clarify its relationship to W1288 and whether W1288 forms a corner to the north at the line of W1904.

The function of this small room may be hinted at by the small finds discovered in and near the room at floor level. Within the locus directly above the floor (L1906) there were some large pieces of Beisan jars, some cooking ware dating from 350-600 CE, and a partially restorable amphora. A coin and a fibula were also retrieved from the floor. 16 cm east of the entrance to the room and 17 cm south of W1917 we recovered a horde of pottery, glass, bronze, and bone on what appears to be a crudely paved surface (courtyard?). The pieces of this horde were hidden behind a worn but restorable storage jar (Plate 3, see ceramic report). The horde included two bottles, a glass lamp or beaker, a figure carved of bone (dancing maenad), a scarab, a glass ring, and a bronze pitcher with an iron handle (see below for a more detailed discussion). The finds are luxury items of a domestic sort. Vitruvius distinguishes between the richly appointed andronitis and the more modest spaces for domestic activities called the gynaikonitis. ${ }^{3}$ We therefore conjecture that the space was a cubiculum from that private part of the house, either used for sleeping or storage. Osiek and Balch caution that the "eastern ideal of the seclusion of women expressed in Greek architectural

[^1]design" is not always exhibited in eastern houses of the later Roman period, "perhaps indicating that social customs were changing in the East as well. ${ }^{\text {"4 }}$

## Glass Items (section authored by Stephen Chambers)

Conical lamp or beaker
Three fragments from the same straight-sided conical vessel were recovered in close proximity to one another (Figure 3, Plate 4). Their fabric is light aqua ${ }^{5}$ in color, and ranges for the most part between 1.1 and 1.3 mm in thickness. ${ }^{6}$ All three fragments exhibit a uniform-and unusual-degree of slope, ${ }^{7}$ showing that the vessel from which they came was evenly conical in shape all the way from the bottom to the out-flaring rim.

The two rim fragments have the same calculated diameter ( 110 mm ). This, together with the diameter of the base fragment and the slope of all three fragments, produces a calculated height for the complete vessel of approximately 235 mm . Both in height and in rim diameter, this vessel is considerably larger than most other straight-sided conical vessels that have been published to date. ${ }^{8}$

[^2]The base bears a small pontil-mark, approximately 12 mm in diameter. Together with the fire-polishing of the two rim fragments, this shows that the vessel was first formed on a blowpipe, then transferred to a pontil for further working of its upper edge. This relatively refined manufacturing technique resulted in a conical vessel of higher quality than those that have been found in many other excavations. ${ }^{9}$

Studies suggest that pontil-made conical vessels with a fire-polished rim developed from the simpler form with a cracked-off rim that had become popular throughout the Roman Empire in the $4^{\text {th }}$ century. ${ }^{10}$ Thus, this vessel could perhaps be dated to the $5^{\text {th }}$ or $6^{\text {th }}$ century. ${ }^{11}$

Whether this vessel functioned as a lamp or a beaker cannot be easily determined. Conical glass lamps are verbally described by Paulus Silentianus in his account of the dedication of the Hagia Sophia in 563 CE, ${ }^{12}$ and graphically portrayed both on a tombstone in Rome and in a $4^{\text {th }}$ century mosaic in the synagogue at Hammat Tiberias. ${ }^{13}$ On the other hand, an engraving on a large glass plate from the Beth Shearim catacomb, showing a conical vessel together with a jug and a pitcher, suggests use as a drinking-cup. ${ }^{14}$ A wooden tripod found near a conical vessel at Karanis in Egypt could

[^3]support either use. ${ }^{15}$ This vessel's smoothly fire-polished rim, unlike a cracked-off rim, would also be suitable for either purpose.

Mold-blown bottle
This vessel's fabric is aqua in color and relatively thick (approximately 2.5 mm at the neck, Figure 4, Plate 5). Most of its surface is dulled by weathering, although a high gloss remains on two vertical sections of its fairly straight-sided, piriform body. ${ }^{16}$ The vessel stands quite squarely on its slightly concave (approximately 1.5 mm ) bottom, which features a wide, smoothed-off, slightly off-center pontil-mark approx. 33 mm in diameter. The preserved portion of its cylindrical neck is slightly constricted where it joins the body. ${ }^{17}$ A small out-turn at the very top of the neck, right where it is broken off, suggests that it might have had a funnelled mouth.

Its most prominent feature is a set of diagonal shallow ribs on its body. Sixteen parallel lines, each approximately 3 mm wide and approximately 1.5 mm deep, encircle the body. This pattern was probably created in two stages: first by inflating a paraison in a ribbed mold, then rotating (and possibly further expanding) the vessel after removing it from the mold, to create the spiralling effect. ${ }^{18}$ The degree of rotation was about $350^{\circ}$ and carefully performed, resulting in a pleasingly even pattern.

Similar decorations are fairly common on vessels of approximately the same size and shape: that is, bottles with relatively slender necks and bases between $70-90 \mathrm{~mm}$ in diameter. One group of smaller bottles with similar decoration, and another group of substantially bigger ones, have also been reported. ${ }^{19}$ Although the shape of the bodies of such bodies varies considerably, this example appears to be one of a very few piriform bottles to have been mold-decorated. ${ }^{20}$ The necks of comparably decorated

[^4]bottles also vary greatly. Some are either significantly wider than this one or conical in shape. ${ }^{21}$ Some have a pronounced flare toward the top, resulting in a funnel-mouth-a feature which may have been present here too, judging by a slight out-turn of the neck right at the point of its fracture. ${ }^{22}$

Mold-decorated bottles of this general type are often associated with manufacturing dates in the late $3^{\text {rd }}$ and early $4^{\text {th }}$ centuries, although many of these assignments seem to have been made on stylistic grounds rather than archaeological context. ${ }^{23}$ Examples that can be more securely dated include one at El Bassa stemming from the late $4^{\text {th }}$ century and one at Sardis from the $6^{\text {th }}$ or early $7^{\text {th }}$ century. ${ }^{24}$ The latter resembles the present bottle in the size, although not so much the shape, of its body; sadly, its neck is completely missing. A closer morphological parallel apparently came from a tomb in western Galilee but lacks firm dating. ${ }^{25}$

No special function is assigned to this type of vessel, beyond the general observation that most glass bottles of this size in the late Roman and Byzantine eras probably saw use in the kitchen or dining-room, often as wine-flasks. ${ }^{26}$ Its decoration does not seem to be associated with a particular use, but simply suggests that it was a relatively expensive vessel.

## Small bottle

This bottle (Figure 5, Plate 6) is aqua in color but made of fairly thin fabric (approximately 1.2 mm in thickness). Like the spiral-decorated bottle described above, it has a slightly piriform body, although this one is more globular than straight-sided. Its bottom lacks a pontil-mark and is slightly concave (approximately 2.5 mm ).

[^5]The preserved section of its cylindrical neck flares outward more abruptly on one side than the other. Because both flaring sections are broken off just at the point they begin to turn outward, and because the intervening sections are not preserved to this same height, it is hard to say whether this was an intentional feature associated with a particular use. On balance, and especially because this bottle's bottom has no pontilmark, it is probably more likely that this side-to-side variation was an accidental result of the manufacturing process. ${ }^{27}$

Small bottles with globular bodies and more or less tubular necks (flaring or cylindrical) were used throughout the Roman and Byzantine empires from the $1^{\text {st }}$ through $8^{\text {th }}$ centuries. They seem to have been especially popular during the late $3^{\text {rd }}$ and $4^{\text {th }}$ centuries. A number of close morphological parallels have been dated to this period. ${ }^{28}$ On the other hand, two bottles found in $5^{\text {th }} / 6^{\text {th }}$ century tombs at Khirbat alKarnak, which is not far from this site, also closely resemble this bottle. ${ }^{29}$ Accordingly, it could reasonably be dated anywhere between the $3^{\text {rd }}$ and $7^{\text {th }}$ centuries.

## A Carved Bone Maenad

A significant find from the hoard outside the cubiculum is a maenad carved from bone (Plate 7). Maenads are women inspired to ritual frenzy by Dionysus. Maenadism was integrated into city life and involved inseparable social and religious aspects. The piece is $10.05 \times 3.22 \mathrm{~cm}$ with a thickness of $7-7.5 \mathrm{~mm}$. The piece was likely carved from the tibia of a large animal. After removal of the cancellous material, a slightly convex shaped remained, the outside edges of which were smoothed, suggesting that the item decorated a piece of furniture or perhaps a box. ${ }^{30}$

The maenad is carved in medium relief with some vertical tool markings visible and no evident polishing. It is damaged around the edges and quite worn. The maenad

[^6]stood on a block pedestal, three quarters of which is broken away. Tool markings on the surface of the remaining flat section of the pedestal may be defacing what is there, although some of the tool markings seem to follow the flow of the garment. The right arm was raised and is missing. The left arm crossed the body. It is broken above the elbow as it bends up to the figure's right. Both arms could have been holding a vessel. A portion of the hair by the right ear is missing, as is the nose. Both breaks are quite smooth and may be intentional. Nose-cutting was a practice used both by Jews and Christians as a way of desecrating pagan statues, especially in the seventh century. But the practice was also used to punish women for alleged adultery. ${ }^{31}$

The head is oversized ( $1.63 \times 1.58 \mathrm{~cm}$ ). The eyes are large and lack detail. Both are "characteristic features of Oriental art. ${ }^{" 32}$ The hairstyle is difficult to determine as the object is quite worn. But the style seems simple, with the hair parted down the middle and the front sections braided to below the ears.

The maenad is fully dressed. ${ }^{33}$ She wears a Doric chiton in the form of a sleeveless dress. The overfold, called an apotygma, displays heavy folding and the motions of a dance. There are significant wear patterns on the outer edges of the overfold. The chiton is likely belted with a zoster under the breast ("high-girdled"). The garment flows to ankle level with both knees of the maenad flexed slightly inward, again to indicate motion. The feet are missing.

Articles by Rosenthal and by Goldfus and Bowes both question previous identification of such bone carvings as Alexandrian imports. Instead they posit that "the carvings were made locally" ${ }^{34}$ and that "Palestine indeed supported some type of bone-carving industry." ${ }^{35}$ Precise dating of bone carvings is difficult, especially in view of variations in form. "There is no evidence for an evolution from more 'naturalistic' to more 'abstract' pieces. Those pieces from reliable stratigraphic contexts indicate that both the finely modeled pieces and the schematic renderings appear together among late

[^7]fourth-sixth century finds." ${ }^{36}$ This conclusion according with the identified stratigraphic context of the hoard found just outside the cubiculum.

## A Bronze Pitcher

The pitcher from the hoard is 21 cm tall made from a soft copper or bronze metal 1.82.0 mm thick (Plate 8 ). The pitcher consists of two pieces. The bottom piece of the body is 3 cm tall and 18 cm wide. The base is concave with a 10 cm basal rim. The body fits inside the base which was hammered to it and presumably soldered. The workmanship is basic and without decoration. The body rises cylindrically with a slight inward contraction to a shoulder that bends into a neck that gradually narrows from 5.5 cm to 3.7 cm . The typical round mouth of such pitchers ${ }^{37}$ is pinched to form a spout 4 cm long and 2 cm wide. The opposite side of the mouth is flattened so that the upper part of an iron handle might be attached with two pins. The rod of the iron handle (found broken) proceeded upward from the attachment at the mouth and then curved sharply downward to the shoulder of the vessel. In this part of the handle the rod is flattened to $7 \mathrm{~mm} \times 1.01 \mathrm{~cm}$. A bronze or copper strap of 1.5 cm width encircles the neck and the handle and is bonded together by two pins. If this pitcher handled hot liquids, the heat would transfer quickly to the handle. We wonder if some nowlost handle surrounded the metal.

## A Crossbow Fibula

A crossbow fibula consists of a transverse bar (the crossbar), a bow, a pin, and a catch or foot. ${ }^{38}$ The fibula from the cubiculum (Plate 9) is 7.83 cm from the top finial to the bottom of the catch with a 4.56 cm crossbar also capped with finials. The shaft of the crossbar is relatively square in cross section ( 3.7 mm ). Each finial is bulbous ( 1.04 cm ) with a small knob at the top and flaring to a ring at the base. The bow is moderately arched (Plate 10), 3.6 cm long and 2.3 cm high. The bow is triangular in cross section with a rounded front surface ( $7.8 \mathrm{~mm} \times 4.3 \mathrm{~mm}$ ). Two decorative bands (rope-like?) run down the length of the exterior of the bow. The pin is 5.87 cm in length and 2.7 mm in diameter (Plate 11). It is permanently hinged to the crossbar and secured in an open slot in the catch. The catch is 3.76 cm long and 9.8 mm thick. Its front surface is

[^8]flat and decorated with two rows of punched eyelets. Next to the bow there are four eyelets. An intervening bar ( 1 cm ) is followed by six more eyelets. Alignment of the eyelets is imprecise. Overlaps suggest that the eyelets were punched left to right and then from the bow to the tip of the catch. Symbolism is uncertain, but as we have noted previously, such punched dots may be "evil eye" dots. ${ }^{39}$

A fibula is a practical item used by both men and women to fasten clothing. But the crossbow fibula "was exclusively a male ornament, created to hold in place the heavy woolen cloak or cape that was the outer garment of a Roman soldier. ${ }^{340}$ Although the first and second centuries C.E. saw a large number of shapes and types, "in the early decades of the third century, the crossbow fibula became the dominant type." ${ }^{41}$ Crossbow fibulae made of precious metals could be worn by officers and came to take on an official nature. The length of the catch and the hinging of the pin to the crossbar suggest that this crossbow fibula is of a style from the early stage of the development of this ornament, namely 240-276 CE. ${ }^{42}$ However, transition among styles is fluid with $4^{\text {th }}$ century examples betraying "a Byzantine spirit, and later ones ... sometimes so deeply embedded in classical traditions that they suggest an earlier origin." ${ }^{43}$ In addition, crossbow fibulae also appear in non-military contexts and Christian contexts. For example, the Byzantine mosaics in Basilica of San Vitale, Ravenna, depict the Emperor Justinian flanked by three attendants with crossbow fibulae and another has Empress Theodora attended by a chaplain with a crossbow fibula (Plate 12). We are left with ambiguity. The crossbow fibula discovered in the cubiculum certainly belonged to a male. Whether he was a soldier or a church leader is uncertain. But the Byzantine context might suggest the latter.

## The Peristyle Court

Ten meters to the north of the southerly cubiculum, is a three-sided peristyle court (Plate 13). The intervening space awaits excavation in a future season. The western portion of the paved surface and a staircase against W1267 were discussed previously. ${ }^{44}$ Including the porticos, the space is 11.24 m from north to south on its

[^9]east side and 11.48 m from north to south on its south side. The space is 7.5 m from east to west at its southerly end and 7.04 m from east to west at its north end. The exposed surface of the courtyard (F1295, excluding the framing stylobates) is 5.2 m from north to south on its east side and 5.32 m from north to south on its south side. The surface is 5.04 m from east to west at its southerly end and 4.96 m from east to west at its north end.

The peristyle court is bounded to the south by W1261, to the east by W1910, to the north by W1266 and to the west by W1267. There is a major entrance to the south portico from the west through W1267. It is the only entrance to the courtyard the door of which closed from inside the courtyard. That entrance was intentionally blocked, perhaps at the same time as the other blockages in the North-East Church complex to the west. ${ }^{45}$ There are two entrances to the south portico through W1261 (Plate 14). The western entrance was published previously. ${ }^{46}$ The eastern entrance is 5.05 m from W1267. The doorway is 1.07 m wide. The door would have been 1.22 m wide and would close from the south, as does the westerly door. 1.35 m to the east there is a catch basin (L1908) in the north-west interior corner of the junction of W1261 with W1910. Many pipe fragments were found in and around the basin and plaster on W1261 hints at a route down from the roof. W1261 continues to the east as does W1910 to the south.

There are three entrances to the peristyle court from the east through W1910 (Plate 15), which is on roughly the same line as W1904 of the previously discussed cubiculum. The exterior of each of the doorways faced the west.

At the east end of the southern portico there is a doorway 67 cm from W1261. The doorway is 1.00 m wide and was closed by a 1.10 m door. To the north and 1.6 m from W1261 is W1911. It is crudely built and goes east from W1910. The room contained by W1261, W1910, and W1911 has a mud/plaster floor (F1912) is a likely another cubiculum.
3.90 m north of W1261 is a second threshold in W1910. The doorway is 1.70 m in width. Most of W1910 is gone in this area except for the base course. There may be a wall proceeding east from W1910 on the north side of this threshold, the existence of which excavation to the east will clarify. There are large flat stones to the west of the

[^10]threshold in the east portico suggesting significant traffic through this doorway. If so, this space might be a vestibulum, providing an entrance to the courtyard from Cardo 4 North.

Between W1911 and the south side of this threshold, a west-facing shelf was revealed in W1910 (Plate 16). Little survives of this poorly constructed space, but two intact oil lamps were discovered sitting on it and another was found in the threshold to the north. There is a similar but better constructed feature facing east behind cistern $G$ in W1270. South-facing niches in W1235 and in the diakonikon may be parallels. We would also note that in Roman houses, the lararium could at times be located in the peristyle court.

The remains of W1910 proceeding to the north were tipping severely to the west, so fill was removed and the stones were reset. 8.20 m north of W1261, there is a clear corner, as W1913 proceeds to the east. The function of the space between W1913 and the threshold to the south is uncertain, although portions of three partially restorable amphora were recovered from the fill. Fragments of one contained tituli dipinti (Plate 17). The markings are likely commercial symbols illegible to the modern reader.

An extension to W1910 fills the gap between W1913 and W1266. In this section of the wall at the east end of the north portico is the third doorway. It is 72 cm wide and was closed by a 96 cm door. To the east of the threshold is evidence of a later plaster floor at the height of the top of the threshold. The exterior of the doorway is again to the west. There is a catch basin in the portico that partially overlaps the south part of the threshold.

The surface of the porticos (F1290) is a combination of flat stones, mud, and plaster. The north portico slopes downward somewhat from W1910 toward the steps that lead from the north stylobate of the courtyard to the large western doorway in W1266. A crude line of stones set on their points functions to separate the floor from the staircase.

The courtyard itself (Plate 18) is paved with (reused?) rectangular basalt pavers. The pavers are laid out in rows with the longer dimension oriented east to west. A slightly raised stylobate surrounds the courtyard. There are pilasters at the west ends of the north and south stylobates. At the east ends of these stylobates there are column bases. Both stylobates have one intervening column base. On the south stylobate, the corner column is 42 cm in diameter. The intercolumniation with the central column is 2.04 m . Between the central column and the pilaster the distance is 1.65 m . On the
north stylobate, the corner column is 44 cm in diameter. The intercolumniation with the central column is 1.16 m . Between the central column and the pilaster the distance is 3.12 m . The central column on the north stylobate is offset to the east likely because of the staircase to the north. On the east stylobate, there are two additional column bases between the corners. The intercolumniation between the column base at the south end and the next column to the north is 1.61 m . That next column is 40 cm in diameter. The third column from the south on the stylobate was tipped. Since the intercolumniation between the second and fourth columns is 3.55 m , the remaining intercolumniations would be 1.57 m . We resent the column base on the stylobate in that approximate location.

A cistern was discovered in the paved plaza. Its head is a column drum that has been hollowed out. The inner diameter of the head is 37 cm with the wall about 6 cm thick. The drum was originally about 50 cm in diameter. The cistern is located 1.2 m from the north edge of the south stylobate and 4.2 m from W1267. Although we did not enter the cistern, the top of the dirt pile in the bell of the cistern is 4.5 m below the top of the cistern head. Both catch basins previously identified likely drain into this cistern.
"The peristyle house has a long tradition in the East going back at least to the fourth century B.C.E." ${ }^{47}$ Despite Roman influence, peristyle houses at Pergamon, Delos, and Ephesus remain essentially Greek-Hellenistic and lack the atriums seen in Italy. ${ }^{48}$ In the remaining unexcavated space of this house at Hippos we would be surprised to find an atrium. So, although Romanization can be seen at Hippos, in this house Hellenization seems to prevail.
"The known distribution of the peristyle house in Palestine is quite limited." ${ }^{49}$ Hirschfeld lists four sites from the late Roman and early Byzantine periods (Umm elJimal, Sepphoris, Aphek and Jerusalem). ${ }^{50}$ At least two others have been subsequently published from Sepphoris ${ }^{51}$ and 'Ein ez-Zeituna. ${ }^{52} \mathrm{~A}$ three-sided peristyle is particularly characteristic of the evolution of the peristyle house in Roman North

[^11]Africa, ${ }^{53}$ although both the House of the Tragic Poet ${ }^{54}$ and the House of Sallust ${ }^{55}$ at Pompeii have three-sided peristyle courts. Ellis has argued that the latest peristyle houses were constructed in the mid-sixth century. ${ }^{56}$ Although we cannot yet date this structure as we have not excavated under the floors, the likely construction of the church to the west in the early sixth century and its possible connection to this structure suggest a similar dating for this putative house and such a date fits within Ellis' timeframe.

A typical array of architectural and domestic small finds occurs in the destruction fill of the peristyle court. Several column drums of diameters from 32-47 cm were retrieved in addition to the two marble Corinthian capitals from previous seasons. Some fifty pieces of marble cornice (roughly 10.5 m in combined length) were recovered, the majority of which were found in the south portico. Widths and ornamentation patterns varied with most displaying one to three rounded or vshaped grooves and occasionally one rib. Some twenty nail fragments were retrieved, many of which were bent (Plate 19). Fragments of wall plaster with some hints of color may point to decorative paintings, especially on the western wall of the peristyle court. Also recovered was a portion of a floor/decorative stone tile with a flared-arm cross (Plate 20). A fragmentary metal cross medallion may have been part of a polykandelon (Plate 21) similar to one found in 2007. ${ }^{57}$

Typical of a space with significant domestic usage, we recovered two substantive lower or cone portions of hourglass grinding mills (Plate 22), other fragmentary grinding bowls and mortaria (Plate 23), two knives ( 16.5 and 17.5 cm , Plate 24), a cylindrical mount of carved bone, and a small two-headed flask (see below).

A peristyle court is a strong indication that the structure is an urban house that continued to be used as such by one prominent family into the Byzantine period without the subdivision of space typical of that period.

[^12]Cylindrical Mount
A hollow cylindrical object fashioned of bone (tibia of a medium sized animal?) was recovered from the peristyle court. It is 3.98 cm tall, 2.54 cm in diameter with an interior hole of 1.4 cm (Plate 25). The surface is smoothed but not polished. Two shallow grooves divide the length of the cylinder into three bands. The middle band ( 9.8 mm wide) is plain. The top and bottom bands are decorated with a sharper groove around the outside of the cylinder 2.5 mm from each end and by a row of eyelets. One band has twelve eyelets; the other band has thirteen. Rosenthal suggests that "hollow bones with carving" were "used as handles." ${ }^{58}$ According to St. Clair, "surviving evidence documents the use of cylindrical and ring-shaped mounts primarily on furniture legs, which were assembled around an iron rod. Cylindrical members turned from a single length of hollowed bone ... [were] then drilled through to receive the rod. They vary considerably in size and are both undecorated and decorated. ${ }^{59}$

## Small Two-headed Flask

Next to the south-east column base of the peristyle court, a small two-headed flask (Plate 26) was recovered, sitting on the stylobate. The glass is 2 mm thick and light greenish grey (GLEY $17 / 5 \mathrm{GY}$ ). The fabric is translucent with some granularity and small bubbles. The glass is weathered and somewhat calcified. The body is 4.5 cm tall and approximately 4 cm in diameter. The body was blown in a two-part mold with two heads set back to back. Seam lines are visible. Two row of globules indicate long hair on the nearly identical figures. The faces are nondescript with large noses and chubby cheeks. The base is flat and shows some imprecision in the alignment of the two molds. The neck is cylindrical ( 1.5 cm ) although the misalignment makes the neck appear in cross section more like a Cassini oval than a circle. The neck of the flask is broken about a centimeter above the body.

The flask is a common type with nearly identical examples in the Museum of Bosra, ${ }^{60}$ the Museum of Fine Arts in Boston, ${ }^{61}$ and the Royal Ontario Museum. ${ }^{62}$ Hayes dates the flask he is documenting to the "late $3^{\text {rd }}-4^{\text {th }}$ century A.D." ${ }^{63}$ Von Saldern dates his

[^13]example to "about $2^{\text {nd }}$ century A.D." ${ }^{.64}$ Earlier examples of mold-blown flasks with human heads come from Pompeii and Dura-Europas. ${ }^{65}$ Barag claims that the manufacture of vases with two masks probably began in the late Flavian period or slightly later and they were common in the West and East until the end of Roman period. However, Foy believes, "ces pieces n' apparaissent pas avant le début du V ${ }^{e}$ s. ${ }^{" 66}$ All such dates are prior to the last active period of the house, making the find likely residual.

## A northerly court/garden

2.8 m north of the north stylobate is W1266. An open doorway of 2.32 m is 1.08 m east of W1267. It was later closed by a doorframe of 1.72 m the exterior of which faces south. The elevation of the threshold is 1 m below the north stylobate. ${ }^{67} \mathrm{~W} 1266$ proceeds 3.94 m to the east to W1910 and then another 5.36 m to W1298. 72 cm from W1298 is a 98 cm doorway in W1266 that was subsequently blocked.

To the east of W1298, we exposed the line of an alley (Cardo 4 North, Plate 27). In the 5 m section exposed, the alley varies in width from 1.55 to 1.32 m . The existence of the alley was predicted in the excavation proposal. At the decumanus, the center-to-center measurement from Cardo 3 North to this new Cardo 4 North is 16.65 m . The same center-to-center measurement in the current excavation area (at the north end of the streets) is 16.9 m .

The easterly north-to-south wall of the alley is W1297. We exposed it to the level of the top of the second course. This wall is constructed mostly of limestone ashlars and may make a corner (or doorway) 3.4 m from the south end of the portion exposed.

The westerly wall of Cardo 4 North is the previously mentioned W1298. It is 90 cm wide. This wall also is constructed of ashlars. W1298 was exposed to a depth of about 50 cm on its eastern face, slightly exposing the second course of stones. Fragments of painted plaster are still visible on the western face of W1298. Some fragments have dark red paint and other have yellow.
1.48 m north of W1266, W1922 proceeds west from W1298 for 2.55 m where it terminates at a vertical column, the base of which has not been reached (Plate 28). ${ }^{68}$ At

[^14]the west end of W1922 is a pilaster on the north side of the wall protruding 60 cm to the north with a 30 cm bench on the east and west sides of the pilaster. We surmise that W1922 forms a corner with W1298 and that the space to the north of W1922 was some sort of entrance from the alley to the east. The small doorway in W1266 suggests that the space south of W1922 was an entrance vestibule from the private sections of the house.

In summary, the large space to the north of W1266 has at least three entrances: a doorway to the north of and below the peristyle court that was later narrowed and fitted with two doors, a doorway at the east end of the same wall from the private area to the south, and some sort of entrance from the alley to the east in the space north of W1922.

At a significantly later time, an olive vat was constructed in the space between W1922 and the blocked doorway of W1266 (Plate 29). The vat begins approximately 80 cm below the surviving surface of W1298. The previous walls were surfaced with smaller stones and plaster 20 cm thick. On the north side of W1266, there are at least two layers of plaster. The outer layer is 6 cm thick. North to south, the vat is 1.4 m . East to west, the vat is approximately 1.55 m , as the west wall of the vat was destroyed by a column shaft that fell against it. The vat is about 1.65 m deep. An hour-glass mill sat on the floor of the vat. It is 45 cm in external diameter and 24 cm internally slanting to that diameter over 15 cm . From the sifted fill at the bottom of the vat a dozen olive pits were retrieved (Plate 30).

20 cm west of the probable outside of the vat is the neck for a cistern. It survives to a height of 28 cm above the floor of the vat. A tape measure showed a depth of at least 4.5 m . The neck of the cistern consists of two additional hour-glass mill stones. We surmise that the hour-glass mill found in the vat was used secondarily as the head for the cistern. When an earthquake toppled a column, that falling column broke the west side of the vat and pushed/toppled the mill into the vat, where it was recovered.

To the north of W1266, some work was done previously at its west end, exposing the south-west corner of an opus sectile floor with benches next to W1266 and W1267. Work was expanded in 2010 to the north line of the square.

The north balk provides a soil profile of the excavation area. The top layer (approximately 1.10 m ) is fill from previous excavation work dumped on the north cliff, as one can see from multi-colored layers of soil. The second layer is Horizon A (approximately 20 cm ) of black soil. The third layer is Horizon B (approximately 35
cm ) of tan soil with little heavy fill. The fourth layer is Horizon C (approximately 1.70 m ) of $\tan$ soil with heavy destruction fill. Approximately 35 cm into this layer, we encountered a pottery dump (mostly large fragments of Beisan jars). The dump is about 1.2 m wide and 50 cm deep. Its northerly extent is uncertain.

In line with the pilaster and column identified last year, we revealed a second column base to the east with an approximate column diameter of 40 cm . Further to the east are the remains of a masonry podium 1.10 m north to south and 60 cm east to west (Plate 31). Only some of its base blocks survive to a height of about 90 cm . The podium has two stairs on either side that rise to the east. The first step of the north stairs has an elevation of 14 cm and a tread of 23 cm . A second step of 20 cm brings one to the level of a floor. The first step of the south stairs is 10 cm with a tread of 41 cm . The second step has an elevation of 20 cm .

From W1267 to the stairs is 4.8 m . The intercolumniation from the west pilaster to the west column is 1.45 m ; the intercolumniation between the two columns is also 1.45 m . From the east column to the stairs is 1.1 m .

To the north of the line of the southern end of the two columns of the two columns, the floor is stone pavement (not opus sectile). There is no discernable stylobate. South of the columns, the opus sectile is missing east of the second column. The opus sectile was likely arrayed only south of the two columns, providing a decorative entrance to the larger space north of W1266. In the south-east corner of this entrance space a small patch of industrial sized tesserae were discovered at a level 2 cm below that of the opus sectile floor (Plate 32). It was likely an earlier floor replaced by the opus sectile floor. South of the westerly column base, a cavity had developed under the floor that apparently exited out somewhere on the northerly cliff as air could be detected moving through it. For safety sake, the cavity was filled with stones and earth. Restoration of the damaged floor will be attempted in a future season.

There is a plastered fixture in the north balk extending west of first northerly stair (Plate 33). The easterly edge of the fixture is 3.43 m from W 1266 . The westerly edge is 3.53 m from the wall. The fixture is 1.43 m from east to west and is plastered with a hard plaster showing only minor damage. The vertical edges curve in to the north. The plaster shows some slight curving onto the stone paving, on the top of which the fixture is situated. At 35 cm above the floor is a shelf 20 cm deep. The plaster curves down to cover the marble slabs used to make the shelf. The next level is an additional 56 cm higher. The top surface is again faced with marble slabs. $18-20 \mathrm{~cm}$ to the north
into the structure the plastering curves down on the south and west sides, confirming that the fixture is some sort of basin or small pool. The east side of the fixture overlays the first step north of the podium ( 17 cm high and 24 cm deep). The second step rises to the level of the first shelf. Plaster from the fixture covers the west face of the second step. This second step is topped by a thin marble slab. The steps continue south to the masonry pedestal.

It is possible that the two columns and the basin standing on a stone floor may be the south edge of a small peristyle court. In North Africa, many courts "were filled with basins and pools." ${ }^{" 99}$ In the House of Europa at Cuicul the peristylum has three complex basins. Four basins flank the porticos in the House of Castorius. At Bulla Regis in the House of the Fisherman, the peristyle court is given entirely over to water. ${ }^{70}$ Basins could be decorated with marine motifs and, at times, fish were raised in such pools. ${ }^{71}$ The two steps east of the opus sectile floor lead to another level including a mosaic floor and a fountain. The area extends 2.84 m to the east to a single step which aligns roughly with the line of W1910. The a single-niche fountain (Plate 34) sits in the north-west interior corner formed by W1266 and a 1.44 m wall segment that roughly extends the line of W1910 north of W1266 with an offset of 40 cm to the east.

The fountain is semicircular (Plate 35). Its niche is 55 cm across with a depth of 33 cm . The structure is composed of reused roof tiles and floor pieces that have been plastered. At about 11 o'clock is a ceramic pipe that provides water for the fountain. The pipe has a 9 cm interior diameter and an 11 cm exterior diameter and passes through the wall to the east to a catch basin on the opposite side. The center of the pipe feeding the fountain is 36 cm from the top of the fountain. A decorative spout is missing. The fountain has a stone base 96 cm from the top. The base stone (marble) is broken in three parts and is 4.5 cm thick.

The water to feed the fountain apparently came from the roof of the complex. A pipe brought the water down from the roof, as plaster evidence on W1266 indicates, to a shallow basin (Plate 36) that then channeled the water through the extension of W1910 to the fountain.

[^15]The water from the fountain flowed into a pool (L1918, Figure 6, Plate 37). The pool is $1.67 \times 1.67 \mathrm{~m}$ (interior dimension). The south and east faces follow the line of walls. The west face curves into the north face by a semi-circular route. The wall of the pool is 25 cm thick on the west and north. 20 cm of plastering lines W 1266 . Outside the pool and 54 cm below the top of the pool is a 25 cm "step" paved with stones (some reused marble) set into the plaster. The design is similar to the design of the water basin in the north balk. Part of the north-west wall of the pool has been damaged by falling debris. There is at least one interior shelf in the pool. It is of similar width and is 77 cm below the top of the pool. We have not yet reached the bottom of the pool. As the season was drawing to a close, we stopped excavation work on the pool so that conservators could stabilize the fountain and the pool wall.

The pool has a second source of water. Over the top of the north wall of the olive vat previously mentioned (W1922) is an open water channel (Plate 38). It originates in a pipe in W1298 about 30 cm south W1922. The pipe has an internal diameter of 9 cm and runs straight for at least 26 cm inside of W1298. From the pipe the water flows into a channel about 15 cm wide and 12 cm deep. The water flows north along the side of W1298 briefly and then flows west down the centerline of W1922. At the west end of W1922, some of the water is channeled down the west side. Part of the channel turns to the north. The terminus of this section is uncertain as the plaster breaks down.

At the base of the west end of W1922 and 1.65 m from W1266 the channel continues, running parallel with W1266 (Plate 39). The channel is 9 cm wide and 6 cm deep. It curves away in a north westerly direction when it approaches the extension of W1910. The channel then curves back to the south-west in the form of a question mark. The water then flows through the wall of the pool into the basin through a 3.5 cm ceramic pipe. This lower channel seems to sit on some sort of low wall, although the area is not completely excavated.

While removing destruction fill from the mosaic floor north of the fountain pool, we removed a 2.91 m monolithic column from the square and balk. Its base and top are quite similar to parts of a column previously removed in an earlier season from this same general area (NEC58). After lifting out the column, underneath it we recovered a limestone block ( $24 \times 38 \times 22 \mathrm{~cm}$ ) to which plaster holding a partial face of a woman was attached. It is a fragmentary fresco of a Tyche corona muralis (see below). The mouth and left side of the face are missing.

A mosaic floor proceeds north from the fountain and pool. Pieces of marble in secondary use form a western border for the floor at the top of the two stairs. The design of the floor is geometric and similar to other Byzantine floors at Hippos (Plate 40). The concentration of tesserae is 34 per dm ${ }^{2}$. A black border of three cubes parallels the curve of the wall of the pool demonstrating contemporaneous construction. From the west, the floor begins with a black band of three tesserae, then a white band of eight tesserae. Then a guilloche ( 19 cm wide) runs north to south. It consists of two five-tesserae bands (black, white, double blue, black; and black, white, double orange, black). An identical pattern follows the curve of the pool (black band, white band, guilloche). The two guilloche bands are woven together when they meet in the southern part of the floor. Inside each guilloche is a band of five white tesserae. Between the guilloche bands are triangular geometric patterns that continue under the balk to the north.

In summary, the space to the north of W1266 has three discernable areas. The lowest area is in the west, consisting of an entrance paved in opus sectile with a stone floor to the north bounded by two columns and a small above-ground pool. An intermediate area is two steps up to the east with a fountain in the south-east corner and a geometric mosaic floor proceeding north. A third area is one step further up to the east. It has entrances from the house and from the alley, but also shows some additional phasing with a secondary channel feeding the fountain and a later olive vat blocking the entrance from the house. Excavation of this area is incomplete.

The area to the north of W1266 is also fed by three distinct sources of water. A channel (L1292) brings water through W1266 from the peristyle court. A second pipe from the roof feeds the fountain. And a third channel brings water to the pool of the fountain from the area of W1288.

These water features, the fountain, the small basin and the stone floor all suggest that the area is likely an elaborate garden (hortus). Row houses at Pompeii devote significant space to gardens. ${ }^{72}$ The House of the Small Fountain at Pompeii places the single-niche fountain in a garden. ${ }^{73}$ The House of the Moralist has an extensive garden in the form of a sacred grove. ${ }^{74}$ Osiek and Balch point to several homes at Pompeii where the owners "placed priority on horticulture and outdoor living, being willing to

[^16]live rather modestly indoors." ${ }^{75}$ Examples include the Houses of Diomedes and Epidius Rufus, the House of the Faun, of which the rear third of the property is taken up by a huge peristyle garden, and the House of D. Octavius Quarto of Loreius Tiburtinus, of which two-thirds of the property is occupied by a garden. ${ }^{76}$

## Tyche corona muralis

The fragment of a fresco of the Roman goddess Tyche, recovered from the northern garden, preserves the upper right portion of the face and the crown (Plate 41). The left cheek and half of the left eye are missing, as is everything below the upper lip. The wide eyes look off to the left. Such a glance may be imitative of the oft-copied Tyche of Antioch by Eutychides of Sikyon. "Cities throughout the ancient world employed the image of the statue as ... the archetypal representation of a city's protector."77

The right eyebrow is prominent. The dark brown hair is pulled back toward the ears, perhaps with plaited braids.

Fortifications of a city form the crown. The main gate consists of a Roman arch, as can be seen typically in detail of fortifications from Trajan's Column. The tops of the towers appear bulbous - a most unusual configuration. We wonder if what look like towers might instead be columns with capitals. The two possible columns next to the gate have identical elevations and the one closest to the gate has a square top (viewed from an angle). As mural crowns could reflect actual circumstances of the city to which the Tyche belonged, these standing columns might point to a time when some decline had already come to Hippos.

Detailed photos of the find were examined by Keith Williams, Professor of Art, at Concordia University. In private correspondence, he writes:

The fresco of the head and crown of the goddess Tyche from the Hippos archeological site has many aesthetic characteristics that are worth noting. These may help us suggest dating based on stylistic analysis. Some of these observations include:

The red iron oxide pigment that remains after these years gives us a Tyche that is nearly life-sized. It is a three quarters view of the head. It is painted with observational realism and idealism, showing little stylization of proportions or flattening of the shape

[^17]of the head. The sense of observational perspective of the structures on the crown, although not in strict western perspective, does show the orthogonal lines that are associated with an attempt to give the illusion of depth.

These observations, from the size of the image to its observational realism, make the style of the fresco very similar to the third Roman style of villa painting frozen at Pompeii and Herculaneum--the Architectural Style. This style was common throughout the Roman Empire, but often was practiced in different areas at different times based on remoteness and acceptability within the cultural context.

The context of the Middle East saw a strong disposition toward stylization prior to Roman influence and was an early area in returning to stylization in aesthetics as the Roman Empire gave way to the Byzantine. Jewish frescos remained stylized throughout the Roman occupation. Early Christian and Byzantine images began to lose their classical Roman observational realism as early as the $4^{\text {th }}$ and $5^{\text {th }}$ centuries.

With these things broadly stated, and due to the remoteness and eastern location of the site, aesthetic observations suggest that this artifact is probably rather early in its date. That this image would have been painted near the end of the activity at Hippos is unlikely. It is more likely that the image was painted in the $3^{\text {rd }}$ or $4^{\text {th }}$ centuries and perhaps repurposed in its meaning and use as the site became Christianized. ${ }^{78}$

Tyche played an important role in the self-identification of Hippos. Four of the eleven city-coin types from Hippos enumerated by Spijkerman involve a representation of Tyche, two of which make specific connection by including a horse or a little horse. ${ }^{79}$ During last season, an inscription was uncovered beginning with the words АГАӨН TYXH. ${ }^{80}$ But Tyche's importance extended far beyond Hippos.
"La référence à la Tychè était universelle dans les cités du Proche-Orient romain." ${ }^{81}$ Chance or fortune (tyche) was an element of life in Greek culture. Since fortune could be unpredictable and fate seemingly evil, cults devoted to Good Fortune (АГАӨН TYXH) developed. Tyche came to personify the fortune of a city or an individual. ${ }^{82}$ As Greek colonists in the wake of Alexander settled in the east, "Tyche appeared in many

[^18]guises, absorbing traits of other divinities in some cases, becoming simply an aspect of a stronger divinity in others." ${ }^{83}$ A head of a Tyche was discovered in the southern temple at Petra. ${ }^{84}$ The Tyche of Dura-Europas sits next to the Tyche of Palmyra in a fresco from Dura. ${ }^{85}$ In a limestone cult relief from Dura, the Tyche crowned by Seleukos Nikator is a bearded male. ${ }^{86}$ At Caesarea, one statue of Tyche depicts her as an Amazon while also invoking images of Posidon, Demeter and the cult of Roma and the emperor; another statue seems to equate Tyche with Fortuna. ${ }^{87}$ In Spijkerman's catalogue, almost every city has one or more coins types with Tyche. In view of social conditions and the uncertainties of life at the eastern fringe of the Roman Empire, "Fortune became an obsession." ${ }^{88}$
"The idea of Tyche as a city goddess and her visual representation in this role developed for the most part in the ancient Near East." ${ }^{89}$ The origins of the idea are quite ancient. As Greek towns developed into $\pi$ ó $\lambda \varepsilon 1$, each city united individuals, a governing system and a set of religious beliefs into a cohesive whole that was more than just a physical entity. In uncertain times, each city, "hoping for a favorable destiny, came to rely on its Tyche, its protecting goddess." ${ }^{\text {90 }}$ As new Greek cities were founded in the east after the conquests of Alexander, "Tyche assumed a propagandistic role, ${ }^{" 91}$ uniting disparate peoples especially in view of the vulnerabilities of life on the frontier. Broucke summaries:
[Tyche's] prominence as a civic deity in these later phases of Antiquity resulted from the fact that populations of these cities were characterized by cultural diversity. Tyche as the city goddess, then, functioned as the point around which all citizens could rally; despite their different cultural backgrounds and religious beliefs, all had an interest in the communal fate of the city. As such, Tyche, the great protector of cities in Antiquity, belonged both to the realm of secular rite and to the religious sphere. ${ }^{92}$

[^19]The fragmentary fresco from Hippos was recovered on top of a Byzantine mosaic floor, having been knocked down by a column collapsing during an earthquake likely late in the major occupational phase of the site. This Tyche becomes another example of the persistence of Tyche into and beyond the time of Christianity's intentional destruction of pagan worship and its images. Evidence for such persistence is widespread.

When Constantine made Byzantium the new Rome as Constantinople, this Christian city held a temple for Tyche with a statue of the Fortuna of Rome. ${ }^{93}$ Various Tychai also appear on fourth-century coins of the city. When Julian visited Antioch in 361/2, few pagan temples remained. Nonetheless, he could still sacrifice to the city's Tyche. ${ }^{94}$ In the early fourth century, Fortune is a topic for speculative discussion by Nemesius of Emesa. ${ }^{95}$ In the fifth century, the "Tyche of Antioch is attested as late as the reign of Theodosius II (A.D. 408-450)."96

Closer to Hippos, at Scythopolis on the west side of Palladius street is the Sigma Plaza, which according to a mosaic inscription was built in the beginning of the 6th century. The mosaic floor of one of the twelve rooms around it has a round frame with a portrait of Tyche. ${ }^{97}$ The Tyche of Madaba appears on a mosaic floor in the Hall of Hippolytus, an early 6th century mansion, later leveled to make room for the Church of the Virgin. ${ }^{98}$ In the Church of St. Bacchus at Horbat Tinshemet is a marble medallion of Tyche that is 67 cm in diameter. The frame of the medallion contains two inscriptions beginning and ending with crosses. "The lower inscription reads, 'In the month of Xanticus Year 654.' The year mentioned in the inscription probably follows the Pompeian indiction, so that the date corresponds to $582 \mathrm{CE} .{ }^{\text {.99 }}$ These examples demonstrate that Tyche persists well into the period of the occupation of the northeast insula at Hippos.

The sixth-century chronicler Malalas provides some nuance to the persistence of Tyche into the Byzantine period. Having noted the sacrifice of the virgin Aimathe by

[^20]Seleukos to Tyche at the founding of Antioch and the sacrifice of the virgin Kalliope by Trajan to Tyche at the reconstruction of Antioch following the earthquake of 115 C.E., Malalas emphasizes that Constantine made a Tyche for Constantinople with a "bloodless sacrifice to God" rather than a human sacrifice. ${ }^{100}$ "In both pagan and Christian hands, therefore, Tyche exercised a very real protective function over a city. In Malalas's Chronicle, the triumph of Christianity expresses itself not through the repudiation of the idea of the personification of fortune, but through differences in ritual." ${ }^{101}$ "The risk to the city of ignoring its Tyche appeared to have been too great, even for Christians." ${ }^{102}$

But more than "differences in ritual" may be involved in the persistence of Tyche into the Byzantine period. Tsafrir posits a distinction between the classical heritage of an aesthetic object and cultic connotations surrounding that object. The former persists into the late fourth and fifth centuries, even as the later are forbidden and forgotten. Cult centers were closed, but in non-cultic and private locales, the classical heritage continued. "The classical tradition (which cannot be differentiated from its polytheistic origin) remained alive. The population, at least the elite classes, tried to preserve this classical heritage and there were many ways to do so: maintaining the theatre and other spectacles, studying classical Greek literature and philosophy, and keeping alive artistic motifs. ${ }^{103}$ To discover a fresco of Tyche in the private garden of a prominent family of Hippos ought not to be surprising.

In a related way, the aesthetic object -- in this case Tyche figures -- may lack significant religious connotations in the Byzantine period. Pollitt writes of them serving "the same function that flags and state seals do in our own time." ${ }^{104}$ Having noted the scarcity of actual places of worship of Tyche in Palestine, Belayche concludes:

En tant que patronne tutélaire en laquelle on pla ait une confiance permanente, sa seule évocation iconographique, omniprésente en public comme en privé, suffisait ... Donc en Palestine, la figure de Fortune semble

[^21]avoir servi prioritairement de support pour exprimer la participation à un univers gréco-romain reconnaissable à des codes sémantiques. C'est pourquoi nous allons la rencontrer aussi dans des cités à direction juive où, comme dans la majeure partie des cités, elle était convoquée sans être divinisée. ${ }^{105}$

Tyche functions as a language or a code. Tyche is not systematically the divine personification of a city. Rather, Tyche in Palestine appears mostly as an artistic expression of the reality of the city, both institutional and cultural. The Tyche expresses loyalty to the empire and civic pride. ${ }^{106}$ By way of analogy, the discovery of an image of a "blue devil" in Raleigh-Durham, North Carolina, would not convey religious overtones, but rather identity with and civic pride in the sports program of Duke University. Interestingly, a mosaic sidewalk in front of the entrance of a shop southeast of the ancient city center at Scythopolis has a carefully executed Greek inscription which reads, "To the victory of Tyche of the Blues." The "Blues" were one of two circus factions known from the Byzantine period. ${ }^{107}$

## Conservation

Along with annual maintenance on the site (removal of weeds and minor collapsing of balks), conservation efforts focused on three part of the north garden. The work was supervised by Mrs. Ewe Radziejowska and was assisted by volunteers from the Concordia team. Specifically, repairs were made to the plaster on the walls in the south-west corner of the garden (Plate 42) in an attempt to preserve some exemplars. Similarly, plastering on the benches in that corner received attention. The fountain and pool further to the east also received attention (Plate 43). The single-niche fountain was stabilized, as was the damaged wall for the pool. Both were covered with tarps held in place by buckets of earth at the conclusion of the season. Lastly, the edges of the layers of plaster sealing the olive vat were protected (Plate 44). The mosaic floor north of the fountain was recovered with earth.

## Conclusions

The excavation of the late Roman house east of the North-East Church is far from complete. As a result, any conclusions are provisional. But the work in 2010 has significantly advanced the identification of the complex as a house sitting between

[^22] Fig 3.
two of the cardines of ancient Hippos. The presence of a peristyle court is the most significant datum.

Two years ago we noted that the south door jamb in W1267 was incorporated into the wall of the apse and thus constructed at the same time. ${ }^{108}$ Last year we suggested that the structure east of Cardo 3 North might be a peristyle court house that later reached its "fulfillment" as a monastery. ${ }^{109}$ In terms of the architecture revealed in 2010, we have greater confidence that we are dealing with a house. But its later use as a monastery or part of one remains only a hypothesis.

The appearance of pagan elements among the small finds, especially the Tyche and the maenad, could argue against such a hypothesis. But as demonstrated above counter arguments are possible. The maenad may be defaced, depriving it of any numinous power and religious significance. The Tyche may be little more than a symbol of civic pride and classical heritage.

The work of 2010, as is often the case in archaeology, raises more questions than it answers and motivates future work.

[^23]
[^0]:    ${ }^{1}$ The size would be comparable to the "enlarged normal houses" which make up $24 \%$ of the excavated houses at Delos. Monika Trümper, "Material and Social Environment of Graeco-Roman Houses in the East," in Early Christian Families in Context, David L. Balch and Carolyn Osiek, eds. (Grand Rapids: Eerdmans, 2003), p. 25; Paul Zanker, Pompeii: Public and Private Life (Cambridge: Harvard University Press, 1998), fig. 11. While significantly larger houses appear at Delos, Pompeii, and elsewhere, topographic constraints likely limited the size of palatial houses at Hippos.
    ${ }^{2}$ W1236 is the northerly wall of a later structure tentatively identified as an Umayyad farmhouse in Hippos 2007, p. 87.

[^1]:    ${ }^{3}$ De architectura 6.7.1-5.

[^2]:    ${ }^{4}$ Carolyn Osiek and David L. Balch, Families in the New Testament World: Households and House Churches (Louisville: Westminster John Knox Press, 1997), 9.
    ${ }^{5}$ A descriptive range of colors is provided by Robert H. Brill, "Scientific Investigations of the Jalame Glass and Related Finds," in Excavations at Jalame: Site of a Glass Factory In Late Roman Palestine (ed. Gladys Davidson Weinberg; Columbia, Mo.: University of Missouri Press, 1988), p. 269. This particular color corresponds to Saldern's "fabric 1": Alex von Saldern, Ancient and Byzantine Glass From Sardis (Cambridge, Mass.: Harvard University Press, 1980), p. 36.
    ${ }^{6}$ Part of one fragment expands to 2.1 mm in thickness, a common variation arising from the manufacturing process.
    ${ }^{7}$ Slope $=$ rise $/$ run $=210 / 65[\mathrm{~mm}]=3.23$. Conical vessels from other excavations almost always reflect much lower slope-values (that is, their profile is a wider "V"). A good example is the corpus reported by Véronique Arveiller-Dulong and Jacques Arveiller. The five vessels for which slope can be calculated all have values between 1.7 and 2.4 (Le Verre d'époque romaine au Musée archéologique de Strasbourg [Paris: Editions de la Réunion ds musées nationaux, 1985], p. 146).
    ${ }^{8}$ For example, Dussart's Type B.VI.1111b has a (calculated) height of 171 mm (Odile Dussart, Le Verre en Jordanie et en Syrie du sud [Beirut: Institut Français d'Archéologie du Proche-Orient, 1997]). ArveillerDulong reports on five intact conical vessels ranging between 94 and 140 mm in height (Le Verre d'époque romaine, 146). Another important study, covering several variations of conical beakers, reports heights ranging between 115 and 150 mm (Clasina Isings, Roman Glass From Dated Finds [Groningen: J. B. Wolters, 1957], pp. 126-131, \#\# 106a-d). The rim diameter of most other straight-sided conical vessels ranges from ca. $60-95 \mathrm{~mm}$, including those in the prototypical study by Grace M. Crowfoot and D. B. Harden ("Early Byzantine and Later Glass Lamps,"JEA 17 [1931], 196-208, especially Plate XXVIII \#\# 1-3). See also John W. Hayes, Roman and Pre-Roman Glass In The Royal Ontario Museum (Toronto: Royal Ontario Museum, 1975), \#\#365, 366, 380, 477; Saldern, Glass From Sardis, \#\#288, 289; Einat Cohen, "Roman, Byzantine, and Umayyad Glass," in Yitzar Hirschfeld, ed., The Roman Baths of Hammat Gader (Jerusalem: Israel Exploration Society, 1997), p. 406. Larger rim-diameters include Dussart's B.VI.1111b and Arveiller-Dulong's \#\# 323 and 327, all three of which have exactly the same rim diameter ( 104 mm ) as this vessel, plus four vessels discussed in Weinberg, "Glass Vessels," 91 (\#\# 404, 405, 406, 408, 410),

[^3]:    which range from 100-108 mm in diameter. All 8 of these larger vessels, however, exhibit a smaller slope-value (i.e., they are shorter for their width; their profile is a wider " V ").
    ${ }^{9}$ Conical vessels that lack this pontil-mark always feature a rougher, cracked-off rim. Their manufacture is described and illustrated by Gladys D. Weinberg and Sidney M. Weinberg, "The Glass Vessels," in Weinberg, Excavations at Jalame, pp. 87-89). This simpler type was common in both East and West; they were known already both to Crowfoot and Harden ("Early Byzantine and Later Glass Lamps," p. 200) and to Isings (Roman Glass, p. 127), and they dominate the examples provided by many studies, including those of Dussart (groups BVI. 1111 a1 and BVI. 1111 a2), Hayes (\#\#380, 476, 477), Cohen ("Roman, Byzantine, and Umayyad Glass"), and Arveiller-Dulong (the entire corpus of conical vessels, \#\# 321-329).
    ${ }^{10}$ Weinberg, "Glass Vessels," pp. 87-89; Crowfoot and Harden, "Early Byzantine and Later Glass Lamps," p. 198; Isings, Roman Glass, pp. 127, 130-31; Cohen, "Roman, Byzantine, and Umayyad Glass," p. 408.
    ${ }^{11}$ In Baur's study of glass from Jerash, many conical lamps (= his Type E, including \#13, which is morphologically similar to this one) are dated $5^{\text {th }}$ to $7^{\text {th }}$ century. P. V. C. Baur, "Glassware," in Carl H . Kraeling, Gerasa (New Haven, Conn.: American Schools of Oriental Research, 1938), pp.523-524. Note also the strikingly similar vessel shown in Alex von Saldern, Ancient Glass in the Museum of Fine Arts, Boston (Boston: Museum of Fine Arts, 1968), \#61, which is unprovenanced but dated by the author to "late $4^{\text {th }}-$ early $5^{\text {th }}$ century."
    ${ }^{12}$ Noted by Crowfoot and Harden ("Early Byzantine and Later Glass Lamps," p. 200 n. 4); Saldern (Glass From Sardis, p. 50); Cohen ("Roman, Byzantine, and Umayyad Glass," p. 408).
    ${ }^{13}$ For discussion and bibliography of these images, see Weinberg, "Glass Vessels," p. 90 nn. 206, 208.
    ${ }^{14}$ The plate is published in Nahman Avigad, Beth She'arim: Report On The Excavations During 1953-1958. Vol. III: Catacombs 12-23 (New Brunswick, N.J.: Rutgers University Press, 1976), p. 210 fig. 100. The grouping of this vessel with a jug and a pitcher suggests, however, that Avigad is wrong in calling it a lamp (p. 211). A different section of the same plate portrays a hanging lamp of a different shape. See Weinberg, "Glass Vessels," p. 90 n. 212.

[^4]:    ${ }^{15}$ Discussion and photo: Weinberg, "Glass Vessels," pp. 89-90 and 322 Pl. 4-17.
    ${ }^{16}$ Piriform: a globular body having its greatest diameter at the base, in distinction from oval (greatest diameter at center) and ovoid (greatest diameter at shoulder). Saldern, Glass From Sardis, p. 3.
    ${ }^{17}$ This style of neck resembles Isings' \#103, although she notes that "a more or less outsplayed rim is very rare" (Roman Glass, p. 121).
    ${ }^{18}$ Saldern, Glass From Sardis, p. 89. Hayes presents a parallel vessel that has vertical ribs, probably indicating a bottle that was not rotated upon extraction from the mold (Roman and Pre-Roman Glass, p. 93 \#311).
    ${ }^{19}$ Dussart portrays four bigger and more elaborate mold-decorated bottles of varying shapes (Le Verre en jordanie, B.X.1111.b.1; B.X.42; B.X.631; B.XIV.4; B.XIV.131), while Cohen reports six6 much smaller ones ("Roman, Byzantine, and Umayyad Glass," Type 7.15-20).
    ${ }^{20}$ Most mold-decorated bases are oval or ovoid. Examples: Hayes, Roman and Pre-Roman Glass, \#\#282, 306; Saldern, Glass From Sardis, \#647; Dussart, Le Verre en jordanie, B.X.1111a.1. Cohen shows one molddecorated piriform bottle from Hammat Gader ("Roman, Byzantine, and Umayyad Glass," Type 7.21, p. 429), although its base is much more globular than this one.

[^5]:    ${ }^{21}$ Wider or conical necks: Hayes, Roman and Pre-Roman Glass, \#\#300, 327; Dussart, Le Verre en jordanie, B.X.1111.a.2. As noted above, this bottle too might have had a conical (funnel-shaped) mouth.
    ${ }^{22}$ Bottles with funnel-shaped mouths have been published by Hayes (Roman and Pre-Roman Glass, \#\#282, 306, 311, 327), Cohen ("Roman, Byzantine, and Umayyad Glass," Type 7.21), and Dussart (Le Verre en jordanie, B.XIV.4).
    ${ }^{23}$ The problem is noted by Weinberg, "Glass Vessels," p. 79. Hayes very consistently reports dates in this range for the numerous vessels of this type in the Royal Ontario Museum-most of which resemble this flask fairly closely (Roman and Pre-Roman Glass, p. 78 re. \#282, p. 82 re. \#306, p. 91 re. \#300, p. 95 re. \#327). ${ }^{24}$ I have not been able to see the discussion of the piece from El Bassa (bibliography: Weinberg, "Glass Vessels," p. 79 n.156). For the other, see Saldern, Glass From Sardis,p. 87. Note too the many similarly decorated-though considerably larger-items recorded by Dussart and sourced from tombs at Mahayy that are provisionally dated to the late $3^{\text {rd }} /$ early $4^{\text {th }} \mathrm{c}$ (Le Verre en jordanie, \#\#B.X.1111.b.1, B.X.42, B.X.631, B.XIV.131, B.XIV.4).
    ${ }^{25}$ D. B. Harden, "Tomb-Groups of Glass of Roman Date From Syria and Palestine," Iraq 11 (1949): 154 item W.1.
    ${ }^{26}$ Isings, Roman Glass, p. 122.

[^6]:    ${ }^{27}$ Without the vessel having been transferred from the blowing-rod to a pontil, it is hard to imagine how such a specialized rim-contour could have been created.
    ${ }^{28}$ Hayes, Roman and Pre-Roman Glass, p. 94 \#320; Dussart, Le Verre en jordanie, B.X. 611 (noting parallels at Hanita and Peqin), Arveiller-Dulong, Le Verre d'époque romaine, \#\#279-297. Isings goes so far as to say, regarding her Type 104 (which this bottle closely resembles), "It is mainly a $4^{\text {th }}$ century type" (Roman Glass, p. 122). It should be noted, of course, that both she and Arveiller-Dulong deal primarily with examples from the West, not the East. Hayes' and Dussart's examples are more relevant in this respectas is the close parallel from a $3^{\text {rd }}$ century grave in Samaria reported in G. M. Crowfoot, "Glass," in The Objects From Samaria, eds. J. W. Crowfoot, G. M. Crowfoot, and Kathleen Kenyon (London: Palestine Exploration Fund, 1957), p. 410 (Item C 665, cf. fig. 94.9).
    ${ }^{29}$ Pinhas Delougaz and Richard C. Haines, A Byzantine Church at Khirbat al-Karnak (Chicago: University of Chicago Press, 1960), pp. 28-29, 49, and plate 50 \#\# 6, 15.
    ${ }^{3030}$ Haim Goldfus and Kim Bowes, "New Late Roman Bone Carvings from Ḥaluṣa and the Problem of Regional Bone Carving Workshops in Palestine." Israel Exploration Journal 50 (2000): 190.

[^7]:    ${ }^{31}$ F. R. Trombly, "Destruction of Pagan Statuary and Christianization (Fourth-Sixth Century C.E.)," in The Sculptural Environment of the Roman Rear East, Y.Z Eliav, E. A. Friedland, and S. Herbert, eds. (Leuven: Peeters, 2008), pp. 156-157.
    ${ }^{32}$ Renate Rosenthal, "Late Roman and Byzantine Bone Carvings from Palestine," Israel Exploration Journal 26 (1976): 97.
    ${ }^{33}$ Maenads are at times a partially nude. See Kurt Weitzmann, Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection, vol. 3 (Washington, D.C.: Dumbarton Oaks Center for Byzantine Studies, 1972), pp. 24-25, plate XII. See also Anthony Cutler, The Craft of Ivory (Washington, D.C.: Dumbarton Oaks Research Library, 1985), p. 19, figs. 22-23. Other bone figures are often nude. See Goldfus and Bowes, pp. 190, 193, 196, 200-201; Rosenthal, Plate 22, but also see in contrast Plate 23.
    ${ }^{34}$ Rosenthal, p. 103.
    ${ }^{35}$ Goldfus and Bowes, p. 198.

[^8]:    ${ }^{36}$ Goldfus and Bowes, pp. 200-201.
    ${ }^{37}$ George Bass and Frederick van Doorninck, Yassi Ada: A Seventh-Century Byzantine Shipwreck, vol. 1 (Texas Station: Texas A\&M University Press, 1982), pp. 270-271, MF5; Frederick O. Waagé, "Bronze Objects from Old Corinth, Greece," American Journal of Archaeology 39 (1935): 89, fig. 9; G. R. H. Wright , "Some Byzantine Bronze Objects from Beycesultan," Anatolian Studies 50 (2000): 166, fig. 12a.
    ${ }^{38}$ Pete Dandridge, "Idiomatic and Mainstream: The Technical Vocabulary of a Late Roman Crossbow Fibula," Metropolitan Museum Journal 35 (2000): 72, fig. 3.

[^9]:    ${ }^{39}$ Hippos 2009, p. 66.
    ${ }^{40}$ Barbara Deppert-Lippitz, "A Late Antique Crossbow Fibula in the Metropolitan Museum of Art," Metropolitan Museum Journal 35 (2000): 41-42.
    ${ }^{41}$ Deppert-Lippitz, p. 42.
    ${ }^{42}$ For more detailed discussion of dating, see E. Tóth, "Zur Datierung der Zwiebelknopffibeln," Folia Archaeologica 31 (1980): 146-154; and P. M. Pröttel, "Zur Chronologie der Zwiebelknopffibeln," Jahrbuch des Römisch- Germanischen Zentralmuseums Mainz 35.1 (1988): 347-372.
    ${ }^{43}$ Deppert-Lippitz, p. 67.

[^10]:    ${ }^{44}$ Hippos 2009, p. 69.
    ${ }^{45}$ See fuller discussion in Hippos 2008, p. 45.
    ${ }^{46}$ Hippos 2009, p. 70.

[^11]:    ${ }^{47}$ Trümper, p. 37.
    ${ }^{48}$ Trümper. p. 41.
    ${ }^{49}$ Yizhar Hirschfeld, The Palestinian Dwelling in the Roman-Byzantine Period (Jerusalem: Franciscan Printing Press, 1995), 86.
    ${ }^{50}$ Hirschfeld, p. 86
    ${ }^{51}$ O. Sion and A. Said, "A Mansion House from the Late Byzantine-Umayyad Period in Beth SheanScythopolis," Liber Annuus 52 (2002): 353-366.
    ${ }^{52}$ David Milson, "Design Analysis of the Peristyle Building from 'Ein ez-Zeituna," Atiqot 51 (2006): 71-75.

[^12]:    ${ }^{53}$ Yvon Thébert, "Private Life and Domestic Architecture in Roman Africa," in Paul Veyne, ed. A History of Private Life, vol. 1: From Pagan Rome to Byzantium (Cambridge: Harvard University Press, 1987-1991), pp. 357-364.
    ${ }^{54}$ In this case the peristyle court is against the outside wall of the house. Bettina Bergmann, "The Roman House as Memory Theater: The House of the Tragic Poet in Pompeii," The Art Bulletin 76 (1994): 225-256.
    ${ }^{55}$ Zanker, p. 43.
    ${ }^{56}$ Simon P. Ellis, "The End of the Roman House," American Journal of Archaeology 92 (1988):565.
    ${ }^{57}$ Hippos 2007, p. 85 and fig. 129.

[^13]:    ${ }^{58}$ Rosenthal, p. 101.
    ${ }^{59}$ Archer St. Clair, Carving as Craft: Palatine East and the Graeco-Roman Bone and Ivory Carving Tradition (Baltimore: Johns Hopkins University Press, 2003), p. 69.
    ${ }^{60}$ Dussart, pp. 175-176, fig. BXIII.31.
    ${ }^{61}$ von Saldern, fig. 37.
    ${ }^{62}$ Hayes, p. 50, n. 94. Hayes includes an extensive list of parallels.
    ${ }^{63}$ Hayes, p. 50, n. 94.

[^14]:    ${ }^{64}$ von Saldern, fig. 37.
    ${ }^{65}$ Isings, p. 93.
    ${ }^{66}$ Quoted in Dussart, p. 176.
    ${ }^{67}$ For a fuller description, see Hippos 2009, p. 70.
    ${ }^{68}$ The excavation of squares XX99 and YY99 is yet to be completed.

[^15]:    ${ }^{69}$ Yvon Thébert, "Private Life and Domestic Architecture in Roman Africa" in A History of Private Life, vol.1: From Pagan Rome to Byzantium, Paul Veyne, ed., Arthur Goldhammer, trans. (Cambridge: Harvard University press, 1987), p. 362.
    ${ }^{70}$ Thébert, p. 362.
    ${ }^{71}$ Thébert, p. 367.

[^16]:    ${ }^{72}$ Trümper, pp. 34-35.
    ${ }^{73}$ Zanker, Plate 12.
    ${ }^{74}$ Zanker, pp. 163-165.

[^17]:    ${ }^{75}$ Osiek and Balch, p. 15.
    ${ }^{76}$ Osiek and Balch, p. 227, n. 27; Lawrence Richardson, Pompeii: An Architectural History (Baltimore: Johns Hopkins University Press, 1988), pp. 329-343.
    ${ }^{77}$ Pieter Broucke, "Tyche and the Fortune of Cities in the Greek and Roman World," in An Obsession with Fortune: Tyche in Greek and Roman Art, ed. Susan Matheson (Yale University Art Gallery, 1994), pp. 39-40.

[^18]:    ${ }^{78}$ Private correspondence 2 September 2010.
    ${ }^{79}$ Augustus Spijkerman, The Coins of the Decapolis and Provincia Arabia (Jerusalem: Franciscan Printing Press, 1978), p. 169.
    ${ }^{80}$ Hippos 2009, pp. 74-79.
    ${ }^{81}$ Nicole Belayche, "Tychè et la Tychè dans cités de la Palestine Romaine," Syria 80 (2003):112.
    ${ }^{82}$ Susan Matheson, "The Goddess Tyche," in An Obsession with Fortune: Tyche in Greek and Roman Art, ed. Susan Matheson (Yale University Art Gallery, 1994), p. 19.

[^19]:    ${ }^{83}$ Matheson, p. 23.
    ${ }^{84}$ Joseph Basile, "A Head of the Goddess Tyche from Petra, Jordan," Annual of the Department of Antiquities of Jordan 41 (1997):255-266.
    ${ }^{85}$ Broucke, p. 41.
    ${ }^{86}$ Matheson, pp. 26-27.
    ${ }^{87}$ Rivka Gersht, "The Tyche of Caesarea Maritima," Palestine Exploration Quarterly 116 (1984): 110-114. ${ }^{88}$ J. J. Pollitt, "An Obsession with Fortune," in An Obsession with Fortune: Tyche in Greek and Roman Art, ed. Susan Matheson (Yale University Art Gallery, 1994), p. 14.
    ${ }^{89}$ Basile, p. 259.
    ${ }^{90}$ Broucke, p. 37
    ${ }^{91}$ Broucke, p. 38.
    ${ }^{92}$ Broucke, p. 44.

[^20]:    ${ }^{93}$ John Ferguson, Religions of the Roman Empire (Ithaca: Cornell University Press, 1970), p. 87.
    ${ }^{94}$ Ferguson, pp. 86-87.
    ${ }^{95}$ De natura hominis 39 (Minge, PG 40 cols. 761b-764a), cited in Glenn Chestnut, "The Pagan Background," in The Christian and Judaic Invention of History, ed. Jacob Neusner (Atlanta: Scholars Press, 1990), p. 34.
    ${ }^{96}$ Broucke, p. 46.
    ${ }^{97}$ Gabriel Mazor and Rachel Bar-Nathan, "The Bet Shean Excavation Project (1989-1991): City Center (South) and Tel Iztabba Area," Excavations and Surveys in Israel 11 (1992): 42-44.
    ${ }^{98}$ The Madaba Map Centenary, 1987-1999: Travelling Through the Byzantine Umayyad Period, eds. M. Piccirillo and E. Alliata (Jerusalem: Franciscan Press, 1999), pp. 246-248.
    ${ }^{99}$ Uzi Dahari, "Ḥorbat Tinshement, Church of St. Bacchus," Excavations and Surveys in Israel 18 (1998): 68.

[^21]:    ${ }^{100}$ Mark Stansbury-O'Donnell, "Reflections of the Tyche of Antioch in Literary Sources and on Coins," in An Obsession with Fortune: Tyche in Greek and Roman Art, ed. Susan Matheson (Yale University Art Gallery, 1994), pp. 52-53.
    ${ }^{101}$ Stansbury-O'Donnell, p. 53.
    ${ }^{102}$ Matheson, pp. 25-26.
    ${ }^{103} \mathrm{Y}$. Tsafrir, "The Classical heritage in Late Antique Palestine," in The Sculptural Environment of the Roman Rear East, Y.Z Eliav, E. A. Friedland, and S. Herbert, eds. (Leuven: Peeters, 2008), p. 212. ${ }^{104}$ Pollitt, p. 15.

[^22]:    ${ }^{105}$ Belayche, p. 125.
    ${ }^{106}$ Belayche, p. 126.
    ${ }^{107}$ Danny Syon, "Bet She'an," Hadashot Arkheologiyot - Excavations and Surveys in Israel 116 (2004): 10 and

[^23]:    ${ }^{108}$ Hippos 2008, p. 45.
    ${ }^{109}$ Hippos 2009, p. 71.

