## AN ASSEMBLAGE OF FRANKISH POTTERY AT CORINTH

(Plates 22–24)

INITIAL EXCAVATION during April 1986 to the south of the southeast corner of the podium of Temple E<sup>1</sup> revealed a deep fill containing Frankish pottery belonging to the late 13th or early 14th century after Christ.<sup>2</sup> Expanded excavation in the area more than doubled the volume of the deposit recovered and uncovered the walls of a room into which the fill had been dumped. A total of 6.8 cu.m. of the fill was excavated, of which 3.8 cu.m. from the expanded operation was sieved. From this earth approximately 12,000 sherds, weighing ca. 165 kg., were retrieved along with nine coins, much bone, fragmentary glass,

<sup>1</sup> The material presented in this paper was excavated, washed, sorted, mended, weighed, counted, inventoried, drawn, and written up during the regular excavation season without recourse to a computer. The conditions available were excellent, but the time available did not permit as thorough an analysis as may be desired; it should be recognized that other efforts to quantify will certainly be attempted under similar circumstances on other sites and will be subject to the same constraints of excavation schedule and facilities.

I am deeply indebted to Dr. C. K. Williams, II who kindly invited me to participate in the Corinth season in 1986 and who subsequently offered the Frankish pottery from the excavation for publication. The interest of Dr. Kathleen Slane in this project has also been extremely important. Many months of assisting Dr. Slane with her study of the Roman material from East of the Theater at Corinth and discussions resulting from this work impressed on me the full value of a thorough description of pottery within a deposit. Dr. Nancy Bookidis has helped again and again with the complexity of the Corinth system of recording. This system and her guidance have made working at Corinth a refreshing experience. Finally I offer my thanks to Jan Motyka Sanders for her almost tireless efforts processing this paper.

Works frequently cited are abbreviated as follows:

Buerger, "Pottery" = J. Buerger, "The Medieval Glazed Pottery," in Diocletian's Palace III, S. McNally, J. Marasović, and T. Marasović, edd., Split 1979 Corinth XI = C. H. Morgan, Corinth, XI, The Byzantine Pottery, Cambridge, Mass. 1942 = T. S. Mackay, "More Byzantine and Frankish Pottery from Corinth," Hespe-Mackay ria 36, 1967, pp. 249-320 Megaw, "Zeuxippus Ware" = A. H. S. Megaw, "Zeuxippus Ware," BSA 63, 1968, pp. 68-88 Pringle, "'Athlit" = D. Pringle, "Some More Proto-Maiolica from 'Athlit (Pilgrims' Castle) and a Discussion of its Distribution in the Levant," Levant 14, 1982, pp. 104-117 Pringle, "Caesarea" = D. Pringle, "Medieval Pottery from Caesarea: The Crusader Period," Levant 17, 1985, pp. 171–202 Pringle, "Carmel" = D. Pringle, "Thirteenth-Century Pottery from the Monastery of St. Mary of

Carmel," Levant 16, 1984, pp. 91–111

Carmel, "Thirteenth-Century Pottery from the Monastery of St. Mary of Carmel," Levant 16, 1984, pp. 91–111

Sanders, "Pottery" = G. D. R. Sanders, "The Medieval Pottery," in Agios Stephanos. Excavations in 1973, 1974 and 1977, W. D. Taylour, ed., British School at Athens, Supplementary Volume, forthcoming

Whitehouse = D. Whitehouse, "Proto-Maiolica," Faenza 66, 1980, pp. 77–87

<sup>2</sup> For this material there is no firmly dated or stratified evidence either from the excavations in the Forum, which took place during the first part of the century, or in the surface levels and Bothroi I–V of the excavations conducted between 1959 and 1961 in the southwest corner of the Forum. For the early excavated material see *Corinth* XI. For the 1959–1961 excavation see Mackay and also H. S. Robinson and S. S. Weinberg, "Excavations at Corinth, 1960," *Hesperia* 31, 1962, pp. 95–113.

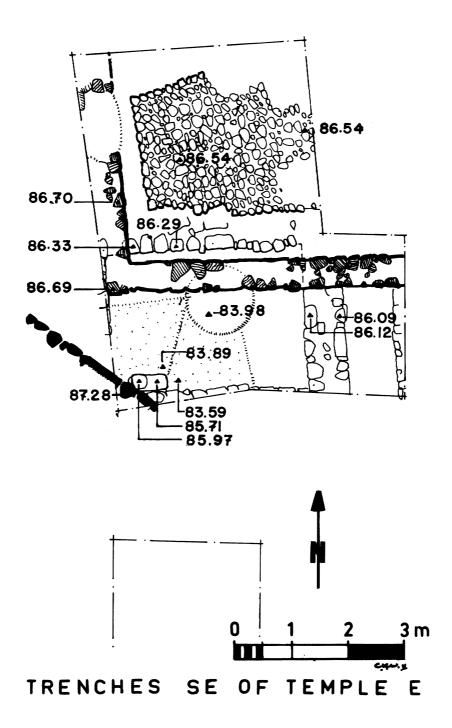


Fig. 1. Mediaeval walls (unshaded) beneath walls of Tourkokrateia (shaded)

and iron objects.<sup>3</sup> The pottery appeared to be largely of a single period, along with a few survivors. The quantity of material was so great, uniform, and apparently representative, as an assemblage of a single period, that a statistical examination seemed worthwhile, with the hope that the results can, in the future, be used for comparison with other material similarly treated.

The pottery under study here came from a fill dumped between four walls of a ruined room of an as yet incompletely excavated Frankish structure (Fig. 1, Pl. 22). This fill, composed of lots 1986-17, 1986-18, and 1986-27-1986-31, extended over the whole area of the room to a height of between 0.70 and 0.80 m. above the floor level of the room. The upper layers of the fill were spread over the top of the walls, perhaps owing to subsequent disturbance.4 The walls of the room bounded the excavated area on all four sides. Three walls, the east, the west, and part of the south wall, were built directly on the floor surface without foundations. These three walls were made of large, re-used, dressed poros blocks and smaller boulders bonded with an earth mortar. The north wall, robbed of its stones at the east end, was constructed of roughly coursed and dressed boulders; it was founded at floor level on an earlier wall of regular, well-dressed, small stones and tile. The south wall, built of rubble, protruded from the subfloor fill to some 0.30 m. above floor level. The Frankish fill under discussion extended over this wall into the south baulk. Below the floor was a fill 0.50 m. deep which contained numerous sherds of late 12th-century types of amphoras and cooking pots and also occasional early 13th-century sherds. This fill was bounded by the earlier phase of the north wall which belongs, perhaps, to the 12th century.<sup>5</sup> Immediately beneath the fill was a deep 10th-century layer into which a pit had been dug from the level of the bottom of the fill. This pit contained sherds of the late 12th and early 13th centuries, including the base of a green glaze-painted bowl and a single rim fragment of Proto-Maiolica with a blue guilloche pattern bracketed between manganese lines on the rim. 6 The structure excavated seems to have been built at the beginning of the 12th century and was already out of use as early as the second third of the 13th century, at which time the space served as a dump.

Nine coins were recovered from the Frankish fill above the floor. Six of these were Byzantine, including, on preliminary reading, two of Manuel I (1143–1180), and three were Frankish. Two of the Frankish coins, one from immediately above the floor, were of William Villehardouin (Clarenza issue, 1250–1278). The third Frankish coin (coin

<sup>&</sup>lt;sup>3</sup> Sieving was directly and indirectly responsible for the recovery of all the coins in the stratum and increased the count of bone, shell, iron, and especially glass. The effect of sieving on the relative proportions of different wares recovered was not marked, but, as might be expected, actual counts and weights of pottery increased with the collection of small sherds from the sieve. This increase is significant: the unsieved portion yielded 1130 sherds weighing 19.4 kg. per cu.m., while the sieved portion yielded 2430 sherds weighing 30.1 kg. per cu.m. Sieving also proved valuable in the recovery of diagnostic sherds, especially the thin, rather delicate rim sherds of Late Sgrafitto Ware and the rims of closed Plain Ware vessels. This increased the number of complete and nearly complete profiles of these wares that could be restored. Sieved areas produced 89 rim fragments per cu.m. as opposed to only 39 rim fragments per cu.m. from the unsieved area.

<sup>&</sup>lt;sup>4</sup> Disturbed layers of fill above the wall-top level equal lot 1986-16.

<sup>&</sup>lt;sup>5</sup> Excavation of lower levels of the area has not yet been completed, so that the relationship between the wall and strata excavated has yet to be determined.

<sup>&</sup>lt;sup>6</sup> Stored in lot 1986-33. For the shape see **10** below.

1986-67), found at the interface of lots 1986-16 and 1986-27, was a billon denier of Charles I of Anjou (1278–1285). The two coins of William Villehardouin and one of Charles I of Anjou suggest a date after the third quarter of the 13th century.

The date of the deposit can largely be fixed by the pottery itself. Notably absent in the assemblage were sherds of the first three quarters of the 13th century such as Zeuxippus Ware, <sup>7</sup> Aegean Ware, Glaze Painted Ware, Painted Sgraffito, and Late Slip Painted Ware. <sup>8</sup> Present were large amounts of Italian Proto-Maiolicas including "Grid-iron" and RMR (Ramino Manganese Rosso) Wares datable to the later 13th century or after, Archaic Maiolica, <sup>9</sup> and small quantities of Metallic and Rouletted Wares which Mackay dates tentatively to the last decades of the 13th century and the first years of the 14th century. <sup>10</sup> Along with these glazed wares were large quantities of cooking and plain vessels of types that were also found in profusion associated with the late 13th-century glazed wares noted by Mackay.

Finally, at the bottom of the fill, two sherds were found which probably belong to a type of amphora that lasted at least until the first decade of the 14th century.<sup>11</sup> At present a firm

<sup>7</sup> According to Megaw, Zeuxippus Ware was current in the late 12th century and the early part of the 13th century. Megaw down-dated the examples of Zeuxippus Ware catalogued by Mackay to the first part of the 13th century (Megaw, "Zeuxippus Ware"). Six of seven bowls, however, built into the cross-vault gables of the late 13th-century church of Agios Demetrios at Kouvarakianika at Krokeai, Lakonia are Zeuxippus Ware similar to the types described by Mackay (see her Glossy Ware and Shiny Olive Incised Ware). The bowls have a fine red fabric (close to 7.5R 5/6) with occasional small voids. The surface is covered with a pale cream-colored slip and a rich orange glaze. All have widely flaring bodies with a tall vertical rim (similar to Megaw's fig. 3, no. 7004). The decoration consists of incised lines inside: a pair just below the lip, a pair at the angle where the rim joins the body, and a pair defining the central medallion. One bowl has pendent semicircles and four incised lines at the carination, a second has four broad combed bands, alternating with wavy lines, radiating from the center. The church is dated by a painted inscription which records the foundation by the monk Gerasimos and others and the dedication on the 10th of May, A.M. 6794 (= A.D. 1286), indiction 14. For the inscription, see D. Feissel and A. Philippides Braat, "Inscriptions du Peloponnèse," *Traveaux et memoires* 9, Paris 1985, no. 59.

If the bowls were in current use when immured, the history of Zeuxippus Ware can be extended beyond the first part of the 13th century. Megaw notes numerous eastern sites yielding Zeuxippus Ware. To these should be added examples in Italy from Venice (L. Lazarini and E. Canal, "Ritrovamenti di ceramica graffita bizantina in laguna e la nascita del graffito veneziano," *Faenza* 69, 1983, pp. 19–59), in the 1231 addition to the Episcopal Palace at Parma, and immured in the church of S. Antonio in Polesine constructed between 1257 and 1270 (H. Blake and S. Nepoti, "I bacini di S. Nicolò di Ravenna e la ceramica graffita medievale nell'Emilia-Romagna," *Faenza* 70, 1984, pp. 354–368, pl. XCI:a, b).

<sup>8</sup> According to Megaw's chronology, Aegean Ware seems to have outlived Zeuxippus Ware (A. H. S. Megaw, "An Early Thirteenth Century Aegean Glazed Ware," in *Studies in Memory of David Talbot Rice*, G. Robertson and G. Henderson, edd., Edinburgh 1975, pp. 34-45). For the mid-13th-century wares, see C. K. Williams, II, "Corinth 1976: Forum Southwest," *Hesperia* 46, 1977, pp. 40-81, nos. 43-48 and Mackay, p. 304.

<sup>9</sup> For a discussion of the date of these wares, see below.

<sup>10</sup> Mackay, pp. 265–267: Bothroi I–V and lots 25 and 26. Lots 25 and 26 both date to the second half of the 12th century but contain intrusive sherds of "Grid-iron" Proto-Maiolica, Metallic Ware, and coins of William Villehardouin (Clarenza issue, 1250–1278) and Isabella Villehardouin (1297–1301). These intrusions obviously belong together and may be part of an unobserved pit dug into the 12th-century strata. For the late date of "Grid-iron" Proto-Maiolica see below, p. 170.

<sup>11</sup> Two amphoras of this type have been found in Yugoslavia and are probably misdated to the 12th century (Z. Brusić, "Byzantine Amphorae (9th to 12th Century) from Eastern Adriatic Underwater Sites," *Archaeo-*

terminus post quem cannot be established, while a terminus ante quem can only be guessed at.

Once preliminary analysis of the pottery indicated the relative homogeneity of the pottery assemblage, a quantitative description of the pottery was decided upon. Such an approach has several advantages over a qualitative analysis. Analysis by numbers of sherds and weights of individual wares in an assemblage offers a more precise description of relative abundance. Quantification also permits direct comparison with chronologically and geographically discrete assemblages and facilitates an understanding of changing trade patterns, taste, and usage. It possibly allows more precision in dating any given group of pottery, as does large-scale geographical comparison. On a small scale, geographical comparison may help to identify and describe specialized functions in different parts of a site or domestic complex. Quantification also ensures that function and even chronology are not misinterpreted on the basis of a unique object or accidental contamination. Finally, by treating the pottery found within a stratum as a whole, one describes more closely the chronological range of the deposit than does the latest datable sherd model.

The 1986 material has been divided into four groups: Glazed Wares, Cooking Wares, Plain Wares (including storage amphoras), and Transport Amphoras. Within each group the sherds were further divided as much as possible by ware and type, and then into rims, bases, handles, and body sherds. These groups were weighed and counted by subgroup. All pottery was mended to a greater or lesser extent, but no estimate of vessel numbers was attempted.<sup>14</sup>

#### **GLAZED WARES**

LOCAL WARES

Late Sgraffito

Locally produced bowls and dishes represent the largest group of glazed wares (47.4%) in the 1986 Corinth assemblage. The shapes include large and small bowls with flaring bodies and vertical rims and dishes with flaring bodies and rounded lips. Both shapes can be plain or decorated with sketchily rendered sgraffito.

logia Jugoslavica 17, 1976, pp. 37–49, pls. 5:3, 6:4, 10:6, 11:3). Two complete examples were built into the angle between an arch and the dome of the Church of Aphendikou of the Brontochion monastery at Mistra, the construction of which was probably started in 1310. A. K. Orlandos, « Εργασίαι ἀναστηλώσεως Βυζαντινῶν μνημείων τῆς Ελλάδος 42, 1935, pp. 197–208, pl. 6 and M. G. Sotirou, Mistra, Athens 1956, p. 33. Further examples have been found at Agios Stephanos in Lakonia; see Sanders, "Pottery."

<sup>&</sup>lt;sup>12</sup> For instance, "33 fragments of Rouletted Ware as compared to 953 sherds of Late Sgraffito Ware" is a more precise indication of quantity than "a few sherds of Rouletted Ware, while Late Sgraffito is abundant".

<sup>&</sup>lt;sup>13</sup> For instance: a gradual or sudden change from Aegean imports to Italian imports can be demonstrated; a decorational style may be influenced by, or develop from, a new import style or new technique; an increase in "frying pan" shapes in cooking ware may indicate a change in culinary practices. Minor changes in time of manufacture or proportions of wares may help more precise relative dating.

<sup>&</sup>lt;sup>14</sup> Counting and weighing is the simplest and quickest measure of quantity. For various other treatments see M. Millet, "How Much Pottery?" in *Pottery for the Archaeologist*, University of London, Institute of Archaeology, Occasional Publication 4, London 1979. The percentages given in the following discussion are by weight; see Table 1, pp. 193–195 for actual counts and weights.

Bowls are the commonest shape.<sup>15</sup> They range in size from small (D. 0.13 m.) to large (D. 0.21 m.) with little variation in form. The low ring foot frequently has a small, low, pendent cone on the undersurface, and the wall flares widely to a vertical, outwardly concave rim with a pointed lip. The outside is wheel ridged, but the heavy lower body is frequently pared, leaving deep scratches where inclusions in the clay have been dragged by the knife. After being pared, the surface is hastily smoothed with wet hands. The rim is thin and breaks into small fragments recoverable in quantity only by sieving.

The fabric is probably local. It is fine and hard with numerous tiny sparkling inclusions, occasional voids, and small white grits. <sup>16</sup> It is generally reddish brown, ranging in color from 5YR 6/6 to 7/6 although occasional pinker examples exist. <sup>17</sup> The slip is white with a pink or cream-colored hue and covers the inside of the vessel to over the lip on the outside wall. Over the slip, a dirty, glossy, yellow or green glaze is applied which does not quite cover the slip on the outside. The glaze is often impure and appears on some vessels to be brown in patches. The white lime inclusions in the fabric give the glaze a rough surface, and explosion of these inclusions during firing causes spalling of the glaze.

Decoration is limited to sgraffito in a wide range of abstract and nearly regular designs. The central floor is often inscribed with a short spiral or, less frequently, with concentric circles either incised on the wheel or compass drawn; other examples occasionally have a large curvilinear scrawl at the center of the floor, while the rim may be decorated with a wavy line, horizontal lines, swirls, or a combination of designs. Scars in the glaze on the outer body indicate that the bowls were fired stacked one upon the other. There is no indication that firing tripods were used.

The dishes are identical to the bowls except in rim form. From the ring foot, the walls flare widely to a thick, rounded lip. When present, the decoration consists of scrawls in the central floor and lines below the lip incised while the pot was still on the wheel.

Although the shapes, fabric, slip, and glaze are uniform, Morgan treated sgraffito-decorated vessels separately from undecorated glazed vessels. He considered the bowls to be a degenerative development from 12th-century sgraffito which declined steadily through the 13th and into the 14th century. The dishes he regarded as a development from the local 12th-century plain wares, but ones which were mimicking contemporary Sgrafitto and Slip

<sup>&</sup>lt;sup>15</sup> A sample from three of the larger baskets in the lot showed that bowl rims accounted for about two thirds of Late Sgraffito rims by weight and dish rims the remaining one third. It should be noted that dish rims are much more heavily potted.

<sup>&</sup>lt;sup>16</sup> The fabric resembles that of Sgraffito, Slip Painted, and Measles Wares of the 11th and 12th centuries that were produced in Corinthian pottery establishments excavated in the 1930's. See *Corinth* XI, pp. 7–25.

<sup>&</sup>lt;sup>17</sup> All references to color used in this paper are those prescribed by *Munsell Soil Color Charts*, Baltimore 1975. This is done in the interest of standardizing color descriptions, even though it is acknowledged that notations such as "weak red" are not immediately comprehensible to those not familiar with Munsell Soil Color Charts, and that "light brown", for instance, is not necessarily what one may understand as light brown.

<sup>&</sup>lt;sup>18</sup> Corinth XI, pp. 135–140, nos. 1308, 1309, 1313, 1350, 1352, 1356, and fig. 111:e, j–l. Morgan recognized the similarity between the shapes of these Late Sgraffito pieces and those of his fifth division of 13th-century Green and Brown Painted Ware, nos. 545–547, fig. 59:j.

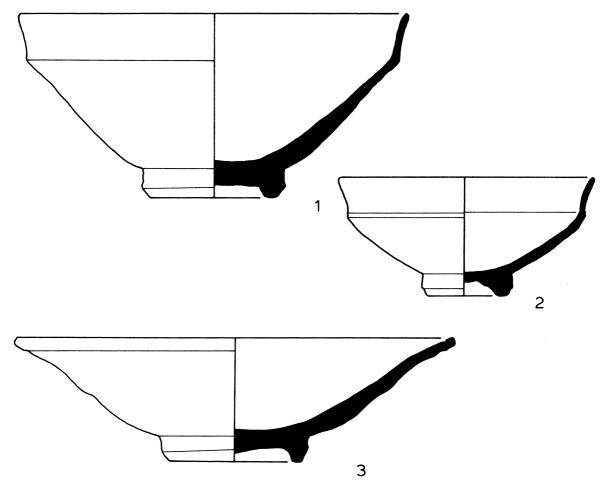


Fig. 2. Local glazed bowls: 1–3. Scale 1:2

Painted Ware shapes.<sup>19</sup> Mackay suggested that Late Sgrafitto was locally made and took the place of Late Painted Incised Sgrafitto and Zeuxippus Ware.<sup>20</sup>

As examples decorated with sgraffito have been published from Corinth, only plain-glazed pieces were inventoried from the fill.

Large bowl Fig. 2
 (C-1986-36) H. 0.096, D. base 0.077, est. D. rim
 0.210 m. Wt. 0.295 kg.

Fine, hard, light-red fabric (2.5YR 6/8) with

numerous tiny sparkling inclusions, occasional small white grits and small voids.

Complete profile. Whole base, about one third of body, and fraction of the rim of a large bowl preserved. Low ring foot with cut edge, widely flaring

<sup>&</sup>lt;sup>19</sup> Corinth XI, pp. 61–62, nos. 282–284, 286–292, fig. 44:a-d.

<sup>&</sup>lt;sup>20</sup> Mackay did not remark on the relative abundance of the ware, nor that undecorated examples were common, but published two sgrafitto bowls from late 13th- or early 14th-century bothroi. Mackay, p. 264, nos. 29, 30, pl. 63.

wall to carination, vertical, outwardly concave rim with pointed lip.

Decoration: Clean white slip inside and outside to just below lip. Blistered, glossy yellowish green glaze inside, not quite covering slip outside.

#### 2. Small bowl Fig. 2

(C-1986-41) H. 0.061, D. base 0.048, est. D. rim 0.135 m. Wt. 0.119 kg.

Fine, hard, reddish yellow clay (5YR 7/8) with numerous tiny sparkling inclusions, occasional small white and tiny red and black grits. Pale pink slip (close to 7.5YR 8/4), pale yellow lustrous glaze (close to 5Y 8/6).

Decoration: slip over inside and to just below lip outside. Yellow glaze with patches of olive brown inside, not quite covering slip outside.

#### **3.** Dish Fig. 2

(C-1986-98) H. 0.065, D. base 0.084, D. rim 0.235 m. Wt. 0.395 kg.

Hard, fine, light-red fabric (2.5YR 6/6) with occasional white and numerous tiny sparkling inclusions.

Complete profile. All of base and one third of body and rim preserved. Low ring foot with cut edge and low cone on roof. Widely flaring wall to slightly outturned rim with squared lip. Lower body pared. Upper body wheel ridged.

Decoration: pink slip inside to over lip outside. Pale yellow glaze with patches of olive brown over slip inside and outside. Glaze unintentionally dribbled on outer wall. Glaze on bearing surface of foot from stacking in kiln. Stacking scar inside.

#### IMPORTED WARES

Proto-Maiolica and related wares

These Italian products were first recognized at Corinth by Waagé who, on considering the then recent finds from 'Atlit, suggested an Eastern Mediterranean source for the ware.<sup>21</sup> Morgan published a large number of Maiolica vessels, which he divided into four broad categories based on decorational style. He considered that the wares were imported to Corinth from before the Frankish conquest in 1210 and were the product of an Aegean site, possibly Sparta.<sup>22</sup> Mackay greatly added to the understanding of the ware at Corinth by observing that, although a few sherds were found in late 12th- and earlier 13th-century contexts, the quantity greatly increased after the middle of the century, while examples of "better" Proto-Maiolica I were rarely found in later deposits. She noted further that Proto-Maiolica II was common in late 13th-century bothroi and suggested that it was imported only in the second half of the century.<sup>23</sup>

Since Waagé's publication of the finds at Corinth, Proto-Maiolica has been reported from a number of sites in the east,<sup>24</sup> from Sparta,<sup>25</sup> from Split,<sup>26</sup> and from sites, including factory sites, in Italy and Sicily.<sup>27</sup> The early finds of the ware in Italy suggest an Italian

<sup>&</sup>lt;sup>21</sup> F. Waagé, "Preliminary Report on the Medieval Pottery from Corinth I," *Hesperia* 3, 1934, pp. 129-139.

<sup>&</sup>lt;sup>22</sup> Corinth XI, pp. 105–114, note 35, nos. 789–945, figs. 83–90, 193, 194.

<sup>&</sup>lt;sup>23</sup> Mackay, pp. 257–258. The increase of Proto-Maiolica may be connected with increased commercial contacts with the West encouraged by William Villehardouin (1246–1278) and the ceding of the suzerainty of the Morea to Charles I Anjou, King of Naples in 1267. See W. Miller, *The Latins in the Levant*, London 1908, pp. 102, 106–107, 126–127.

<sup>&</sup>lt;sup>24</sup> These include Fustat, Famagusta, Paphos, Hama, Al Mina, Acre, 'Atlit, Caesarea, Jaffa, Jerusalem, Khirbat-al-'Aiadiya, and Khirbat-ad-Dair. For bibliography, see Pringle, "'Athlit," pp. 104–117.

<sup>&</sup>lt;sup>25</sup> R. M. Dawkins and J. P. Droop, "Byzantine Pottery at Sparta," BSA 17, 1910/1911, pp. 23-28.

<sup>&</sup>lt;sup>26</sup> Buerger, "Pottery." This also contains a good discussion of Mediaeval pottery in Italy, cf. chap. 1.

<sup>&</sup>lt;sup>27</sup> Cf. Whitehouse.

rather than Aegean source for Proto-Maiolica,<sup>28</sup> while later discoveries not only confirm this suspicion but also help to locate the origin of certain distinctive styles and to demonstrate that the groups defined by Morgan, particularly his Group II, were too broad and simplistic.<sup>29</sup> The Italian origin of selected Corinthian finds has been further confirmed by spectrographic analysis, which has demonstrated a close affinity between the clay of sherds of Morgan's Group I and that of Hellenistic black-glazed pottery originating in Apulia, but little similarity to local Corinthian clays, and no correspondence to Constantinopolitan White Wares.<sup>30</sup>

The certain Italian imports in the 1986 Corinthian assemblage, namely "Grid-iron" Proto-Maiolica, Archaic Maiolica, RMR Ware, and miscellaneous Proto-Maiolicas make up 21.4% of all the glazed pottery in the group. The classes will be discussed separately by type.

#### "Grid-iron" Proto-Maiolica

"Grid-iron" hemispherical bowls always have a ring foot; the undersurface has a small pendent cone, the body is deep and hemispherical, and the rim is thickened, squared, and inwardly sloping. This class, with a "grid-iron" decoration in the central medallion, represents 28% of the imported Italian Maiolicas and 6% of all glazed wares in the assemblage. The fill contains a variety of "Grid-iron" bowls, usually decorated with a chevron band below the rim inside and manganese loops on the lip, manganese lines on the body below the rim, and sometimes defining the central medallion. The "grid-iron" and chevron band are most often both brown,<sup>31</sup> green, or blue but are frequently a combination of blue chevrons with brown in the central medallion.<sup>32</sup> The decoration is sometimes sloppy, sometimes well drawn. On a few examples, a broad blue band replaces the chevrons<sup>33</sup> or the manganese loops on the rim. The fabric is invariably sandy, with small voids and tiny sparkling inclusions, and usually pale brown in color (10YR 7/3).

**4.** Hemispherical bowl Fig. 3, Pl. 22 (C-1986-34) H. 0.059, D. rim 0.149, D. base 0.060 m. Wt. 0.192 kg.

Sandy, very pale brown (10YR 8/3 to 7/3) fabric with many small voids, occasional tiny sparkling and rare red and white inclusions.

Complete profile. Foot, two thirds of body and rim preserved. Low ring foot with pendent cone inside,

deep body with flaring, outwardly convex walls to inwardly thickened, inward sloping rim.

Decoration: thin, matt, grayish white tin glaze inside and outside to below lip. Brown lead-glazed "grid-iron" design in central medallion outlined by a single manganese line. Brown lead-glazed chevron band below three horizontal manganese lines on wall. Manganese loops on upper surface of rim.

<sup>&</sup>lt;sup>28</sup> G. Ballardini, La maiolica dalle origine al Cinquecento, Faenza 1938.

<sup>&</sup>lt;sup>29</sup> Whitehouse, pp. 77–78.

<sup>&</sup>lt;sup>30</sup> A. H. S. Megaw and R. E. Jones, "Byzantine and Allied Pottery: A Contribution by Chemical Analysis to Problems of Origins and Distribution," *BSA* 78, 1983 (pp. 235–263), p. 249, Batch L, and p. 262.

<sup>&</sup>lt;sup>31</sup> Cf. Corinth XI, nos. 824–829.

<sup>&</sup>lt;sup>32</sup> Cf. Corinth XI, nos. 819-823.

<sup>&</sup>lt;sup>33</sup> Cf. Corinth XI, no. 830.

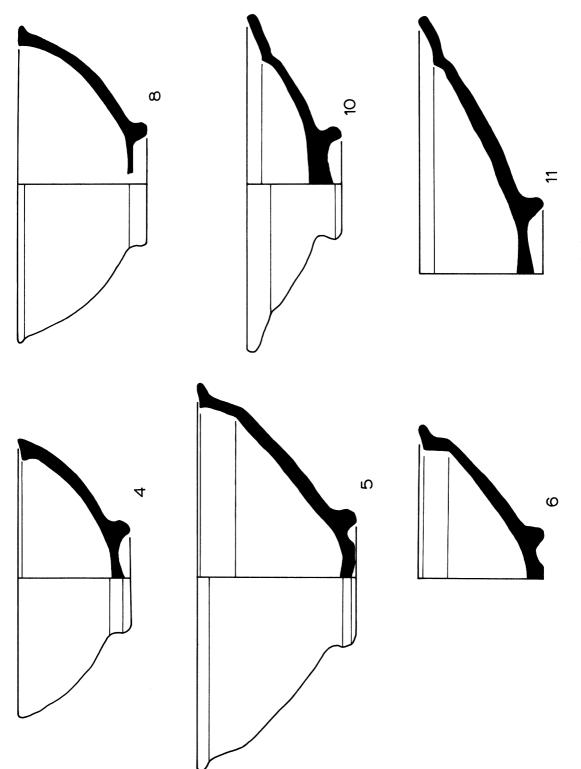


Fig. 3. Proto-Maiolica and related wares: 4-6, 8, 10, 11. Scale 1:2

At Corinth the "Grid-iron" style is common in late 13th- and early 14th-century levels but is also reported in smaller quantities in mid-13th-century deposits.<sup>34</sup> Morgan assigned "Grid-iron" Proto-Maiolica to his Group I, which included Proto-Maiolicas with figural designs such as fish, animals, ships, and humans, which usually occur in earlier 13thcentury contexts at Corinth. The "Grid-iron" style is well represented from early excavations on the site35 and is similar in fabric and shape to vessels with more varied decoration, such as radiating pointed ovals, dotted "grid-irons", and blue circles.<sup>36</sup> These latter motifs are probably earlier than the floruit of "Grid-iron" proper and rarely occur in late 13th-century deposits.

The ware is thought to originate in Apulia, although only a few pieces are known from the area.<sup>37</sup> Finds are reported from numerous other sites both in the Near East and in Greece, but evidence for dating has been, until recently, poor. "Grid-iron" Proto-Maiolica was considered to be among the earliest types of Proto-Maiolica, largely on the strength of a number of "Grid-iron" bowls immured in the churches of Gastouni in Elis and Merbaka in the Argolid, which were dated on architectural style to the second half of the 12th century and to circa 1200, respectively.<sup>38</sup> Merbaka has subsequently been dated to the 13th century by Bon.<sup>39</sup> The "Grid-iron" bowls, as suggested by Nikolakopoulos, are found only in later 13th-century contexts at Corinth. Since, according to Megaw, the bowls were immured when the church was built, a late 13th-century date for Merbaka is likely.<sup>40</sup> It is possible that the name of Merbaka provides a clue to the precise date; the church may, after all, have been commissioned by William of Merbeke, Bishop of Corinth from 1277 to 1286.41

Έταιρείας, 4th ser., 4, 1964, pp. 145–162.

<sup>39</sup> A. Bon, "Monuments d'art byzantine et d'art occidental dans le Peloponnèse au XIII<sup>e</sup> siècle," in Χαριστήριον εἰς 'Αναστάσιον Κ. 'Ορλάνδον, Athens 1966, III, pp. 92-93. This date is accepted by Megaw ("Zeuxippus Ware," p. 83).

<sup>40</sup> A date in the second half of the 13th century for most of the bowls built into the church at Merbaka has been suggested by G. Nikolakopoulos, "Céramiques encastrées d'anciennes églises de Grèce," Faenza 67, 1981, pp. 166-178, pls. LV-LIX. One example from Gastouni and six from Merbaka resemble, in most respects, types common only in later 13th-century contexts at Corinth except that they employ manganese overpaint with a dull yellow rather than brown or blue "grid-iron" in the central medallion. A seventh piece from Merbaka substitutes a blue line for the chevron band. Megaw argued for an early date for these simple decorational elements and compared them to motifs found on 12th-century Green and Brown Painted Ware and Sgrafitto Ware from Corinth, Athens, and Constantinople. He suggested that the absence of figural decoration, which he considers to be, perhaps, a late development, was further proof of the early date of simple designs on the Merbaka bowls. The excavated material suggests otherwise. The other vessels at Gastouni and Merbaka are plain or decorated with sgrafitto; a number resemble Proto-Maiolica forms, for instance nos. 3 and 25 (Megaw [footnote 38 above]) are similar to Corinth XI, nos. 840, 909, and 910.

<sup>41</sup> Both Megaw and Bon remarked on a possible connection between Merbaka and William of Merbeke but felt that the church was an earlier building which only later became the property of the Bishop.

<sup>&</sup>lt;sup>34</sup> Mackay, pp. 257–258.

<sup>&</sup>lt;sup>35</sup> Corinth XI, nos. 819–832.

<sup>&</sup>lt;sup>36</sup> For example, Corinth XI, no. 870, fig. 36:d.

<sup>&</sup>lt;sup>37</sup> Whitehouse (p. 81) suggests an Apulian origin but knows of only two bowls, both from Brindisi. The form is similar to common Apulian types, while the decoration is paralleled on a carinated bowl from Lucera. <sup>38</sup> A. H. S. Megaw, "Glazed Bowls in Byzantine Churches," Δελτίον της Χριστιανικης 'Αρχαιολογικης

"Grid-iron" Proto-Maiolica is reported from the monastery at Khirbat-ad-Dair along with bowls and dishes decorated with stylized vegetal and dotted "grid-iron" motifs, while figural decoration is absent. This assemblage probably dates later than 1247, when the rule of poverty for Carmelite monasteries was relaxed, and certainly before 1291 when the site was abandoned. "Grid-iron" bowls, along with numerous pieces of Gela Ware and figure-decorated Proto-Maiolicas, are also found at 'Atlit, a site occupied from 1217 to 1291. At Caesarea, abandoned in 1265, rather earlier than 'Atlit and Khirbat-ad-Dair, no "Grid-iron" Proto-Maiolica was found. Rather, shapes similar to "Grid-iron" bowls with decoration perhaps antecedent to it were found at the site as well as a Gela Ware dish decorated with a fish in the central medallion. These Near Eastern finds tend to support rather than to contradict a late date for "Grid-iron" styles; they are absent at Caesarea but present at Khirbat-ad-Dair and 'Atlit.

## Ramina Manganese Rosso (RMR) Ware

RMR Ware, as defined by Whitehouse,<sup>45</sup> is marginally more common in the Corinthian assemblage than "Grid-iron" Proto-Maiolica. It represents over 31% of the Proto- and related early Maiolicas and 6.7% of all glazed pottery in the assemblage. The shapes are exclusively bowls with a low, false ring foot, a straight-flaring body rising to a carination at the junction of the vertical rim with a flattened outturned lip that sometimes has a slight internal ridge. The fabric is hard fired, sandy, and usually of a very pale brown color with occasional red, white, and rare, tiny sparkling inclusions. The decorational scheme is limited to a variety of simple motifs or bands of varying thickness in red and brown, or both. The upper surface of the lip is generally decorated with a broad red line, brown loops, or red semicircles alternating with manganese hatch marks. The wall is usually painted with bands of red and brown but is sometimes decorated with a large abstract floral design. The central medallion is occasionally left open, but more frequently it has a triangular motif made up of horizontal lines or, as in two cases, a brown "Grid-iron". The interior is covered with a thin white glaze to just outside the lip.<sup>46</sup>

At Corinth, RMR Ware was found in quantity in early excavations and was consigned to Group II by Morgan.<sup>47</sup> Mackay reported numerous pieces of Group II Proto-Maiolica from late 13th- to early 14th-century bothroi.<sup>48</sup> These are identical in the range of colors, designs, and shapes to the pieces in the 1986 assemblage. Mackay noted that the ware does

<sup>&</sup>lt;sup>42</sup> Pringle, "Carmel." There are four "Grid-iron" bowls, nos. 80–83; no. 84 is a bowl with foot decorated with a dotted lattice; no. 85 is a dish with a pointed-oval-and-circle motif in blue and brown outlined in manganese.

<sup>&</sup>lt;sup>43</sup> Pringle, "'Athlit," nos. 12, 13, pls. IX:c, XI and C. N. Johns, "Medieval Slip Ware from Pilgrims' Castle, 'Atlit," *QDAP* 3, 1934, pp. 136–144, pl. LII:2.

<sup>&</sup>lt;sup>44</sup> Pringle, "Caesarea," nos. 91–101.

<sup>&</sup>lt;sup>45</sup> Whitehouse, pp. 82–83. The ware is decorated in a combination of green, red, and brown.

<sup>&</sup>lt;sup>46</sup> For an example of this style of decoration, see *Corinth XI*, pl. XXXVII:b.

<sup>&</sup>lt;sup>47</sup> Corinth XI, pp. 108–111, nos. 883, 884, 886–888, 892–896.

<sup>&</sup>lt;sup>48</sup> Mackay, pp. 257–258, 265–267, Bothroi I–V.

not seem to occur in quantity in earlier contexts. Apparently it was imported only in small quantities in the third quarter but achieved widespread popularity in the last quarter of the century.<sup>49</sup> In Italy the type has been found at sites in Basilicata, where pieces from Policoro may date from as early as 1250 to as late as 1350, and from Anglona, perhaps to as late as 1400. RMR bowls decorated in green and red are also known from Bari.<sup>50</sup> The ware is not reported from Eastern sites which were deserted by their Latin population perhaps before the ware achieved general popularity.<sup>51</sup>

5. Carinated bowl Fig. 3, Pl. 22 (C-1986-3) H. 0.084, D. base 0.073, est. D. rim

Hard, sandy, white to very pale brown fabric (10YR 8/2 to 8/3) with a few, tiny sparkling inclusions.

Complete profile. Most of base and about one third of rim and body of bowl preserved. Low torus false ring foot, straight flaring walls to carination. Vertical, slightly everted rim, flat, outturned lip with low internal ridge.

Decoration: brown-glazed, crosshatched central medallion defined by broad line and encircled by one red and one brown band. Red stripe on rim, three thin brown and one thick red band around upper body.

6. Carinated bowl Fig. 3 (C-1986-4) H. 0.065, D. base 0.062, D. rim 0.162 m.

Hard, sandy, white to very pale brown fabric  $(10 \text{YR} \ 8/2 \ \text{to} \ 8/3)$  with rare, small red and tiny sparkling inclusions.

Complete profile. Part of foot, body, and rim preserved. Low false ring foot, straight flaring body to carination at junction of vertical rim, flat outturned rim inwardly sloping.

Decoration: broad red band on lip, appears weak red to red where paint is more thickly applied (10YR 5/6 to 5/4). Three manganese lines with broad red bands below rim.

7. Bowl Pl. 23 (C-1986-44) H. 0.082, D. base 0.070, D. rim 0.210 m. Wt. 0.178 kg.

Hard, sandy fabric fired very pale brown (10YR 8/4) on surface and to pink (5YR 8/4) at core. Sparkling and occasional large red inclusions.

Complete profile. About one quarter of base, body, and rim preserved. Low false ring foot; deep, flaring body, outwardly convex to slightly thickened, flaring lip.

Decoration: large abstract vegetal(?) motif in manganese, added curvilinear red lines and crossed ovals in manganese over whole of inside. Three manganese lines below rim, broad red stripe on top of rim.

<sup>49</sup> Mackay, p. 258. Close examination of the pottery from the 1959–1961 excavations at Corinth reveals three fragments of RMR Ware in mid-13th-century lots. These come from non-closed deposits in upper levels, accompanied by coins of William Villehardouin (1245–1250, Corinth issue). According to Mackay, these and the superimposed levels were not noticeably stratified. The upper layers were dug with arbitrary changes of baskets. As the contexts are not closed, no sound reason exists for attributing a mid-13th-century date to the earliest imports of RMR Ware. The ware probably belongs exclusively to the last third of the 13th century. See Mackay, p. 251, no. 7, lots 346 and 355.

<sup>50</sup> Whitehouse, pp. 82–83. This type occurs commonly in Apulia and is reported from other sites in southern Italy and Sicily. One kiln is known at Ugento. M. Salvatore, "Ceramica medievale da alcuni restauri e recuperi in Puglia e Basilicata," *Faenza* 66, 1980, pp. 253–257. The ware is also mentioned by Buerger, "Pottery," pp. 35–36, 61–62.

<sup>&</sup>lt;sup>51</sup> Pringle, "'Athlit," "Caesarea," "Carmel."

Archaic Maiolica (Morgan's "Late Proto-Majolica, Group I")

This group, defined by Morgan,<sup>52</sup> makes up only a small proportion of the glazed wares (2.4%) and about 11% of the Proto-Maiolica in the assemblage. Two basic shapes are represented: hemispherical bowls and dishes with flaring rim and internal ridge. The fabric tends to be pink to light red and very fine with rare inclusions.

The decoration is executed entirely in manganese and green. One dish in the assemblage closely parallels a piece found in the Corinth excavations of 1959–1961<sup>53</sup> in both shape and in motif; a green abstract floral motif outlined with manganese inside and green hatch marks on the rim between manganese lines.<sup>54</sup> One bowl fragment, similar in shape to the inventoried piece **8**, has a thick, clear glaze with a yellowish tinge and green painted decoration bleeding into the glaze. Two ring-footed bowls have an abstract motif in rich green, crisply outlined in manganese, with manganese loops on the flattened outturned lip.

At present, I am not aware of any close parallels outside Corinth for this particular type. The rim and general shape resemble that of an Archaic Maiolica bowl built into the wall of the belltower of S. Domenico at Prato in Tuscany. The decoration of the Corinth examples is not so well executed, but the color scheme is the same, and the design follows the same general idea. The church was built between 1281 and 1322; it is likely that the pots belonged to the same approximate time span and that the Corinth pieces are of a similar date.<sup>55</sup>

**8.** Hemispherical bowl Fig. 3, Pl. 23 (C-1986-38) H. 0.068, D. base 0.068, est. D. rim 0.170 m. Wt. 0.106 kg.

Fine, hard, light-red fabric fired to reddish brown at core (core 5YR 6/6 to 5YR 7/6). Tiny sparkling inclusions, occasional voids and black grits. Over-all appearance of fabric is lustrous from sparkling nature of clay.

Complete profile. Two thirds of base and less than

one quarter of rim and body preserved. Low ring foot with deep, flaring, outwardly convex body. Rim slightly outturned with flattened lip overhanging inside.

Decoration: black loops on lip; inside, three manganese horizontal lines below rim and manganese linear design infilled with green in bowl. Thick, yellowish glaze over inside and to just below lip outside.

#### Other Proto-Maiolicas

The remaining Proto-Maiolicas, 6.4% of the glazed wares and about 30% of the Proto-Maiolicas themselves, include probable survivors, notably the base of a dish with a large winged horse, probably Pegasos, rendered in brownish yellow.<sup>56</sup>

<sup>&</sup>lt;sup>52</sup> Corinth XI, pp. 111-112, nos. 911-930. Decorated in green and black.

<sup>&</sup>lt;sup>53</sup> Mackay, p. 271, no. 26.

<sup>&</sup>lt;sup>54</sup> The fabric is very hard and clean with sparkling inclusions. The color is a little lighter than 7.5YR 7/4 (pink). See, also, *Corinth* XI, nos. 911–914.

<sup>&</sup>lt;sup>55</sup> G. Berti and L. Tongiorgi, "Altri bacini ceramici in Toscana," Faenza 63, 1977, pp. 75–77, pl. 18:c.

<sup>&</sup>lt;sup>56</sup> Only the body, part of the hind legs, and the base of the wings are preserved.

The shapes are all dishes with ring bases, flaring walls, and everted rims with an internal ridge. Some of the rims are decorated with a blue guilloche, bracketed between manganese lines; one sherd has a manganese guilloche infilled with blue. The interior decoration of one fragment has what may be a human figure in blue and manganese. Another with a ring base and sandy fabric, fired red at the core, with a few micaceous inclusions, has a radiating pointed-oval motif outlined in manganese infilled with blue against a rather greenish background (lot 1986-29).<sup>57</sup>

Two pieces, one fragmentary and one inventoried (C-1986-39), employ a thick glaze-paste outline for the designs. The uninventoried fragment (lot 1986-29) is a body sherd with a sandy fabric fired orange at the core. Its decoration is carefully drawn, green floral buds with thick black stems, which stand out in relief against the background. I have not been able to find parallels for this piece from Greek or Levantine sites. The inventoried piece with its geometric design is not paralleled at Corinth, but the rim decoration in combination with figural motifs does resemble pieces from 'Atlit<sup>58</sup> and Corinth.<sup>59</sup>

**9.** Dish Pl. 23

(C-1986-39) H. 0.064, est. D. base 0.080, est. D. rim 0.280 m. Wt. 0.171 kg.

Hard, sandy fabric fired to very pale brown at surface (10YR 8/3) and pink at core (5YR 7/4). Occasional red, gray, and white and some sparkling inclusions.

Complete profile. One half of base, a quarter of body, and a fragment of the rim preserved. Low ring foot, widely flaring, slightly convex wall to broad flaring rim with rounded lip and internal ridge.

Decoration: large concave-sided triangles, infilled with "grid-iron", crosshatching extending from rim to center. Between the triangles are circular motifs divided into four segments alternately filled with dots and spirals. Circles are attached to center by pointed ovals. The restored design consists of four repetitions, one in each quadrant. The outlines are carefully drawn with a thick, green glaze paste and the infill decoration painted with a thinner glaze.

Two bands of three manganese lines on rim bracket a band of manganese chevrons on a broad, green stripe. Interior covered with thin, greenish yellow glaze to outside of lip.

**10.** Dish Fig. 3, Pl. 23

(C-1986-35) H. 0.051, D. base 0.061, D. rim 0.177 m. Wt. 0.208 kg.

Sandy, pink fabric with sparkling and rare, red, gritty inclusions.

Complete profile. Entire base and two thirds of rim and body preserved. Low ring foot with conical roof; widely flaring body to flaring rim with internal ridge.

Decoration: thin, matt white glaze inside and to outside of lip. Green "grid-iron" pattern in central medallion surrounded by row of green dots. Three horizontal manganese bands below rim, blue guilloche on rim below two manganese bands at lip.

## Bowl as Mackay, no. 20

A single fragment of a bowl (11) was found of a type paralleled only at Corinth by an example from a late 13th- or early 14th-century bothros excavated in 1960.<sup>60</sup> The clay,

<sup>&</sup>lt;sup>57</sup> See Corinth XI, no. 849, pl. XXXVI:d and Pringle, "Carmel," no. 85, fig. 9.

<sup>&</sup>lt;sup>58</sup> Johns (footnote 43 above), pl. XLIX, figs. 1, 2; Pringle, "'Athlit," pl. IX:a, b.

<sup>&</sup>lt;sup>59</sup> Waagé (footnote 21 above), fig. 5:9 and an unpublished piece from the Temple Hill excavations in 1977. <sup>60</sup> Mackay, p. 256, no. 20, fig. 1, pl. 63.

hard and coarse with a variety of inclusions including gold mica and shell, does not seem to be local, and the incised decoration with added green and yellow glaze is unlike locally inspired efforts.<sup>61</sup>

**11.** Bowl Fig. 3, Pl. 23 (C-1986-61) P.H. 0.039, D. base 0.072 m. Wt. 0.198 kg.

Very hard, coarse reddish yellow fabric (5YR 7/6) with rare white, red, and black grits, tiny shell and gold mica inclusions.

Base and lower wall only preserved. Ring base with flattened bearing surface; flaring, outwardly convex wall.

Decoration: white slip inside incised with stylized floral motif resembling a fern-frond bud in central medallion. Six indeterminate incised motifs radiate from medallion. Clear, colorless lead glaze over slip. Added strong yellow glaze around edge of medallion over motif and on alternating radiating motifs. Added green glaze in center of medallion and in remaining wall motifs.

#### Rouletted Ware

Rouletted Ware as defined by Mackay<sup>62</sup> makes up only a small proportion of the glazed wares in the deposit. Most fragments are from bowls with a low ring foot and a high vertical rim decorated on the outside with a rouletted design. The remaining fragments of this class, including one inventoried piece (12), belong to hemispherical bowls with a narrow outturned rim without rouletted decoration outside but with incised lines inside. The two types, although very different in appearance, are certainly the same ware, sharing a common fabric. Morgan illustrated a rouletted example<sup>63</sup> which he considered to be a Turkish product. Mackay described Rouletted Ware and its variant in detail and remarked on the hard, fine, red fabric with numerous sparkling inclusions and the use of thick orange or thick green glaze over a slip that does not extend far down the outside of the vessel. The ware is not reported from other sites, nor does it seem to be a local product.

**12.** Bowl Fig. 4 (C-1986-2) H. 0.056, D. rim 0.140, D. base

(C-1986-2) H. 0.056, D. rim 0.140, D. base 0.056 m. Wt. 0.107 kg.

Medium, fine, hard, light-red fabric (10R 5/6) with sparkling inclusions and a few voids.

Complete profile. One half of foot and one third of body and rim preserved. Low, flaring ring foot with outwardly convex body turning up slightly at rim. Rim slightly flaring with inwardly sloping, pointed lip.

Decoration: pink slip inside and part way down outside wall. Three incised lines around central medallion, one at top of body inside and two just below lip inside. Light-yellow glaze over whole surface of pot, including the inside of the foot. Glaze peeling where applied over slip inside.

<sup>&</sup>lt;sup>61</sup> Cypriot and North Italian Painted Sgrafitto Wares are also dissimilar although the piece may be related to Port St. Symeon Ware. A. Lane, "Medieval Finds at Al-Mina in North Syria," *Archaeologia* 87, 1937, pp. 19–78, esp. 45–54. See also Buerger, "Pottery," p. 41.

<sup>&</sup>lt;sup>62</sup> Mackay, pp. 254–255, nos. 11–16.

<sup>63</sup> Corinth XI, fig. 156.

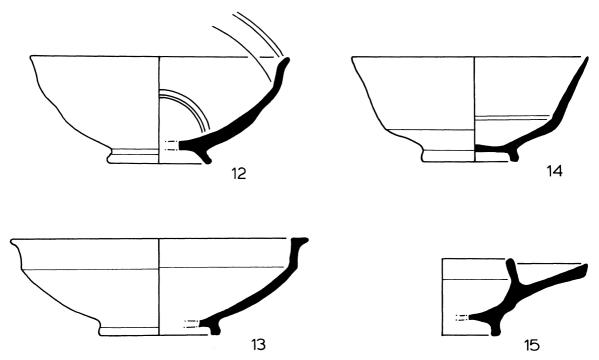


Fig. 4. Rouletted Ware: 12; "Metallic Ware": 13-15. Scale 1:2

## Green-glazed wares, "Metallic Ware"

Morgan discussed this ware, remarking on the angular shapes and dark green or opaque white glaze, and illustrated a range of the forms. He considered the ware to pre-date Rouletted Ware with which he compared, by shape, one of his simpler Metallic Ware bowls. <sup>64</sup> It was Mackay who originally named the ware, adding brown to the range of glaze color. She dated "Metallic Ware" to the turn of the 14th century and remarked on its relative abundance in late bothroi compared to Zeuxippus (Glossy) and Rouletted Wares with which it was found. <sup>65</sup> The ware has also been identified at Split where the vessels are mostly large basins of a type not found at Corinth, although a fragment of a handle with an appliqué twisted-rope cordon does parallel Corinthian examples. <sup>66</sup>

Although only a single fragment is known from Italy, at Lucera, Buerger argues the case for an Italian origin but allows for other possible sources in the East.<sup>67</sup> Judging from the variety of shapes and range of fabric and decoration at Corinth and Split, it is possible that "Metallic Ware" includes a number of different wares and that further research here will be rewarded.

<sup>&</sup>lt;sup>64</sup> For example, **12** above. Cf. Corinth XI, pp. 62–63, nos. 285, 293–306, figs. 45, 46, 176.

<sup>65</sup> Mackay, p. 252, nos. 1-6, pl. 62, fig. 1.

<sup>66</sup> Buerger, "Pottery," p. 67, no. G.IV:12 and p. 266.

<sup>&</sup>lt;sup>67</sup> Buerger, "Pottery," p. 266 and appendix. Mineralogical analysis of the Split finds apparently eliminates North Africa as the source.

Despite the fact that "Metallic Ware" makes up only a small portion of the glazed wares in the assemblage (3.2%), a variety of forms is represented. The most common shapes are two small bowls of types illustrated by Morgan. Related to these is a bowl with a broad, flaring rim with a high internal ridge, common in southern Italian Proto-Maiolica and related wares but not found before at Corinth in "Metallic Ware". These three bowl types have identical thin, low ring feet. Their shapes are angular and metallic, and they are glazed inside, outside, and inside the feet with a vitreous, dark green glaze. The fabric ranges from light red to light brown in color and from grainy to very fine in texture. Inclusions consist of occasional gray or red particles, or both, tiny sparkling specks, and sometimes small-to-large shell fragments. Although pitchers account for much of the weight, only small fragments are preserved, including a handle with a twisted-rope appliqué. There are two sherds, one rim and one base, of dishes with a horizontally everted rim. These fragmentary pieces have fabrics close to the red, hard and fine fabric described by Mackay.

Fig. 4

#### 13. Small carinated bowl

(C-1986-37) H. 0.042, est. D. rim 0.160, est. D. base 0.065 m. Wt. 0.063 kg.

Hard, sandy, very pale brown fabric (10YR 8/3) with tiny sparkling inclusions and occasional red grits.

Complete profile. One third of base and body and *ca*. one tenth of rim preserved. Thin, low ring foot, flaring walls to carination at junction of vertical rim with slightly thickened, flaring lip, flat on top.

Decoration: thick, glossy, dark green glaze applied directly to fabric inside, outside, and inside foot. Appears iridescent green on outside. Stacking scar outside. Form as *Corinth* XI, no. 293, fig. 45:a.

## 14. Small carinated bowl Fig. 4

(C-1986-88) H. 0.956, D. base 0.052, est. D. rim 0.130 m. Wt. 0.080 kg.

Hard, grainy, pink fabric (5YR 7/4) with red, gray, and sparkling inclusions and occasional shell fragments.

Complete profile. Base, one third of body, and rim preserved. Thin, low ring foot, widely flaring wall to carination, close to vertical, upper wall flaring to thin pointed lip.

Decoration: thick, glossy, dark green lead glaze applied directly to fabric inside, outside, and inside

foot. Incision inside marks angle of upper and lower wall. Shape as *Corinth* XI, no. 295, fig. 45:b.

## **15.** Small double-rimmed bowl Fig. 4

(C-1986-43) H. 0.042, est. D. rim 0.154, est. D. (inner) 0.074, est. D. base 0.064 m. Wt. 0.111 kg.

Hard, fine, light-red fabric with many sparkling inclusions, some red and gray particles, and occasional fragments of shell.

Complete profile. One half of base and inner rim, one third of body and outer rim preserved. Thin, low ring foot, wall flaring widely to broad rim with pointed lip squared outside. Inside, deep central portion drawn up to subsidiary, slightly inturned rim with rounded lip.

Decoration: thick, dark green glaze applied directly to fabric inside, outside, and inside foot. Glaze iridescent in places and paler outside than inside.

Parallels for this shape in Proto-Maiolica wares occur, mainly in Italian wares (Megaw [footnote 38 above], no. 25 and *Corinth* XI, no. 840, fig. 83:d) but also plain glazed wares (D. Whitehouse and R. Whitehouse, "Excavations at Anglona," *BSR* 37, 1969, pp. 34–75) and plain wares (D. Whitehouse, "Excavations at Satriano, A Deserted Medieval Settlement in Basilicata," *BSR* 38, 1970 [pp. 188–219], p. 207).

<sup>&</sup>lt;sup>68</sup> Corinth XI, fig. 45:a and b.

Other green-glazed wares

Partially green-glazed vessels (6.3% of all glazed wares) form a rather larger group of pottery than does the "Metallic Ware" in the 1986 assemblage. These are not treated by Morgan, nor by Mackay, despite their presence in the excavated material of both the early and the 1959–1961 excavations. While the shapes have a superficial resemblance to "Metallic Ware", the fabric is a clean, very pale brown while the glaze is usually dark green and is only applied to the inside and part way down the exterior of the bowls and jugs. Jugs represent the most common shape (3.5%). These are flat bottomed with a squat, rounded body curving to a narrow neck and opening out to a very wide, trefoil mouth. The handles join just below the rim and near to the base. The shape and fabric, similar to a yellow jug catalogued by Mackay, 69 resembles Archaic Maiolica in form and fabric. It shares, most likely, a common origin with northern Italian Maiolica. 70

Two bowl shapes are common. One is hemispherical with a thickened rim and flattened lip; the other has a carinated body with an almost vertical upper wall similar to simpler "Metallic Ware" bowls, as 14. The fabric of both types is that of the jugs, while the shape of the hemispherical bowls is similar to that of Proto-Maiolica and Archaic Maiolica bowls.<sup>71</sup> Another shape represented in the assemblage is a small pitcher with a tubular pouring spout attached at the shoulder. This, too, is in the same fabric and is green glazed.

**16.** Trefoil-mouthed pitcher Fig. 5, Pl. 24 (C-1986-76) H. 0.240, D. base 0.112 m. Wt. 0.515 kg.

Hard, clear, very pale brown fabric (10YR 8/3) with minute red and sparkling inclusions and occasional small white grits.

Complete profile. Base, two thirds of body and rim, and half of handle preserved. Flat base, rounded body to narrow neck, opening to very wide trefoil mouth with pointed lip and narrow pinched spout. Vertical, oval strap handle attaching below lip and just(?) above base.

Decoration: thick, dark green glaze from inside lip to just above base and on handle. Thin, green glaze wash inside. Traces of tin(?) glaze on lower body where left undecorated.

**17.** Carinated bowl Fig. 5 (C-1986-42) P.H. 0.053, D. 0.128 m. Wt. 0.077 kg.

Hard, fine, very pale brown fabric (10YR 8/3) with tiny sparkling and occasional gray and red inclusions. Some small voids.

About one quarter of body and rim and fraction of base preserved. Traces of low ring foot, flaring wall to carination. Upper wall close to vertical, flaring to rounded lip.

Decoration: thin, green lead glaze applied directly to fabric inside and outside to below lip. Glaze trailed unintentionally down lower body.

Similar to shape of Corinth XI, no. 295.

<sup>69</sup> Mackay, no. 33.

<sup>&</sup>lt;sup>70</sup> See *Corinth* XI, no. 924, fig. 89:c.

<sup>&</sup>lt;sup>71</sup> The catalogued piece **18** is from Bothros II, excavated in 1960 (lot 474). It is described by Mackay as "Metallic Ware" and as one of "two bowls, nearly complete" (p. 266). This piece, **18**, as well as **20**, **29**, **31**, and **33**, were selected to illustrate more complete examples of which only fragments exist in the 1986 assemblage.

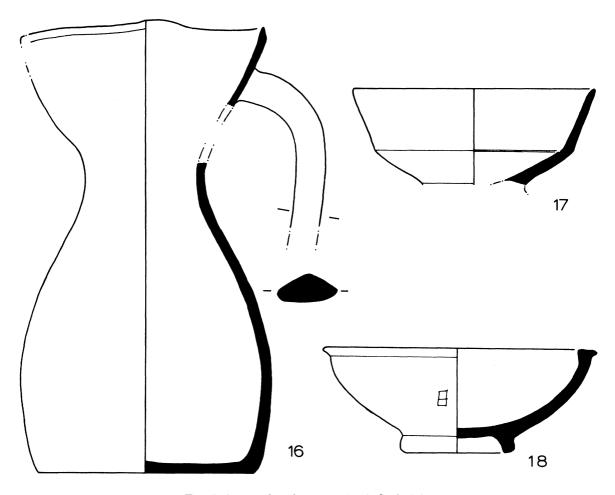


Fig. 5. Green-glazed wares: 16-18. Scale 1:2

#### 18. Bowl

Fig. 5

(C-60-353; lot 474)<sup>72</sup> H. 0.055, D. rim 0.145, D. base 0.60 m. Wt. 0.180 kg.

Hard, fine, reddish yellow to light-red fabric (closer to 5YR 7/6 than to 2.5YR 6/6) with red, white, and sparkling inclusions and some voids.

Complete profile. Three quarters of base, body,

and rim preserved. Low ring foot slightly flaring. Flaring, outwardly concave walls to slightly thickened, outturned rim with flat lip.

Decoration: possible thin white slip over entire surface. Thick green glaze inside and to outside of lip. Traces of opaque white tin(?) glaze on lower body. Grafitti theta and phi incised on outside wall.

## Other late 13th-century fine wares

The remaining late 13th-century material includes lamps, fragmentary yellow-glazed jugs, and part of a pale green-glazed jug rim. The lamps (1.8% of the glazed pottery) are yellow glazed and belong to Broneer's type XXXVI/XXXVII.<sup>73</sup> The yellow-glazed jugs

<sup>&</sup>lt;sup>72</sup> See footnote 71 above.

<sup>&</sup>lt;sup>73</sup> O. Broneer, *Corinth*, IV, ii, *Terracotta Lamps*, Cambridge, Mass. 1930, pp. 124–125. The dates ascribed to these types are very general, but it is evident that these lamps continue in use into the late 13th century.

(4.6% of glazed wares by weight) are made of local clay coarser than, but similar to, that of Late Sgraffito. No examples appeared to resemble the jug inventoried by Mackay. A creamy yellow slip extends down the outside of these jugs from rim to base. The slip is overglazed from inside the lip to two-thirds the way down the body with a dirty, bright yellow glaze. The rim fragments of these jugs indicate that the mouth was pinched to form a pouring spout. One yellow jug sherd is decorated with sgraffito of an indeterminate design. A pale green jug fragment comes from a very wide trefoil-mouthed vessel similar in shape to 16. The jug is thinly potted and covered with a thick opaque green glaze outside. It shows traces of having been decorated with a brown glaze design. A likely origin for this vessel is in Italy, perhaps in the north. A proportion of the glazed wares belonging to various bowls, jugs, and cups of indeterminate date could not be identified (6.2%).

### Earlier glazed wares

Probable or certain survivals from the early to mid-13th century or before represent 5.4% of the glazed wares. The majority of these are Glaze Painted Wares which were relatively common into the second third of the 13th century. The eight sherds of Painted Incised Ware also belong to the early 13th century. Glossy Ware, described by Mackay and thought by her to belong in the late 13th century, is extremely rare. Also present in small quantities are Aegean Ware (one sherd), 12th-century Incised Wares, Sgraffito, Measles, and 10th- or 11th-century Constantinopolitan White Wares.

#### COOKING WARES

Approximately 13% of the assemblage by weight and count are cooking wares. The shapes represented are exclusively stewpots, of which some 23% of the identifiable, late 13th-century sherds are imports.<sup>77</sup> The predominant shapes include those discussed by Mackay, particularly small stewpots with a high, nearly vertical rim,<sup>78</sup> plus four new forms. Notably absent from the assemblage are Mackay's no. 131 from a late 13th-century bothros,<sup>79</sup> and no. 133, from a stratum also with late material. Mackay's no. 127, with an offset vertical

<sup>&</sup>lt;sup>74</sup> Mackay, p. 272, no. 33.

<sup>&</sup>lt;sup>75</sup> These amounted to 3.4% of the glazed wares. For examples of these bowls see C. K. Williams, II (footnote 8 above), nos. 43–47, fig. 7, pls. 30, 31 and *idem*, "Corinth 1977, Forum Southwest," *Hesperia* 47, 1978 (pp. 1–39), p. 34, pl. 6, nos. C-1977-2 and C-1977-5. These bowls tend to have a coarse, hard fabric with white inclusions, a ring base sometimes with a pendent cone on the undersurface, and flaring walls to a rounded lip. The decoration consists of green or brown painted glaze lines or spirals inside, with a colorless to yellow overglaze. With time the fabric becomes coarser, the glaze dribbled on without intention of creating a design, and the overglaze omitted.

<sup>&</sup>lt;sup>76</sup> Mackay, p. 252, nos. 7–10 and see footnote 7 above.

<sup>&</sup>lt;sup>77</sup> The imported vessels have everted rims and a very micaceous fabric and were easily separated from local wares. Assuming that the bulk of the miscellaneous local unidentifiable body sherds are also of late 13th-century forms, this percentage of imported vessels is reduced closer to 25%.

<sup>&</sup>lt;sup>78</sup> Mackay, pp. 299–300, nos. 127–133.

<sup>&</sup>lt;sup>79</sup> Mackay, Bothros I.

rim and body handles, which was found in 1959 in association with two coins of William Villehardouin (Corinth issue, 1245–1250) and Late Sgraffito Glazed Wares, is rare in the assemblage (only 3% of the identifiable sherds).<sup>80</sup> It may be that the form is a rare Corinthian product of the late 13th century. Alternatively, the 1959 example may belong with the coins of William Villehardouin with which it was found, rather than the Late Sgraffito, and its use may predate the 1986 assemblage, where the shape appears only as a survivor.

Few 13th-century cooking wares from other sites have been published. The published eastern Mediterranean forms, for instance those from Caesarea and Paphos, are dissimilar. These are almost all glazed "frying pans" and stewpots with horizontal loop handles.<sup>81</sup> Cooking pots with everted rims have been found at Agios Stephanos in Lakonia in late 13th-or early 14th-century contexts along with unglazed "frying pans", but the high-rimmed varieties common in Corinth are not present.<sup>82</sup>

#### LOCAL WARES

The locally produced wares are predominantly shapes characterized by a spherical body with a very tall, slightly flaring rim and a flat strap handle (48% of the identifiable late 13th-century sherds). Of these a majority (88%) have handles attached on the rim below the lip and at the shoulder. A minority (12%) have vertical handles attached below the rim and at the maximum diameter of the body. About 6% of the identified, late 13th-century sherds have a spherical body and everted rim with handles attached at the lip and on the shoulder.

There are a small number of 12th-century survivors. The majority of these have triangular, grooved rims.<sup>83</sup>

**19.** Stewpot Fig. 6, Pl. 23 (C-1986-79) P.H. 0.152, est. D. rim 0.210 m. Wt. 0.620 kg.

Dense, hard fabric with numerous red and gray grits. Fired to weak red at core (10R 4/2), red on inside surface (10R 5/6), and from weak red to black from use on outside surface (10R 5/3).

Profile from lower body to rim, two thirds of upper body, one handle, and a fraction of rim preserved. Baggy, hemispherical body curving in to tall, vertical, inwardly thickened rim with low external ridge and beveled lip. Vertical, flat loop handle

attaches at shoulder below rim and on body at maximum diameter.

**20.** Stewpot Fig. 6 (C-59-72)<sup>84</sup> H. 0.175, est. max. D. rim 0.150, min. D. rim 0.139, max. D. 0.175 m. Wt. 0.965 kg.

Dense, hard fabric with numerous white and occasional gray and sparkling inclusions. Fired from reddish brown (5YR 5/3) to black where burnt with use. Spalling on surface from explosion of white inclusions.

<sup>&</sup>lt;sup>80</sup> Mackay, p. 330.

<sup>&</sup>lt;sup>81</sup> Pringle, "Caesarea," pp. 176–177, nos. 3–11, figs. 2, 3; A. H. S. Megaw, "Excavations at Saranda Kolones, Paphos. Preliminary Report on the 1966–67 and 1970–71 Seasons," *RDAC*, 1971, pp. 117–146, esp. p. 125, no. 5, fig. 3, pl. 33:3; *idem*, "Supplementary Excavations on a Castle Site at Paphos, Cyprus, 1970–1971," *DOP* 26, 1972, pp. 322–343, esp. p. 334, fig. D, pl. 24.

<sup>82</sup> Sanders, "Pottery."

<sup>83</sup> See Mackay, no. 116.

<sup>84</sup> See footnote 71 above.

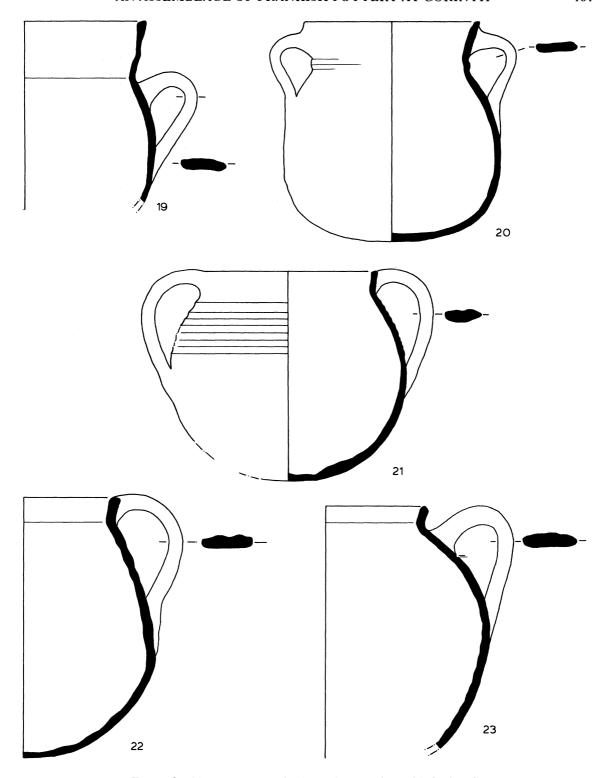


Fig. 6. Cooking wares. Local: 19–21; Imported: 22, 23. Scale 1:3

Almost complete, restored with plaster. Complete profile. Handles, five sixths of body and three quarters of rim preserved. Broad, flat strap handle attached on rim below lip and on shoulder above maximum diameter.

Mackay, no. 129.

**21.** Stewpot Fig. 6 (C-1986-77) H. 0.170, D. rim 0.151 m. Wt. 0.715 kg.

Hard, coarse clay with numerous white, red, and black grits and some sparkling inclusions. Fired to light red at core (2.5YR 6/6) and from reddish yellow to reddish gray on outer surface (5Y 6/6 to 5/2).

Complete profile. Both handles and nine tenths of body and rim preserved. Round bottom, spherical body to vertical, slightly flaring rim with rounded lip. Vertical strap handles with longitudinal groove attach at lip and on body at maximum diameter. A broad band of shallow grooves on upper body above maximum diameter and below rim.

#### IMPORTED WARES

The imported cooking wares can be identified by their shape and their extremely micaceous fabric. The bodies of the stewpots are hemispherical and the rims low and flaring. Forms are present with vertical handles attached both at the rim and body or at the shoulder and body. The fabric is atypical of mainland Greece and is suggestive of a possible origin in Asia Minor.<sup>85</sup> This distinctive fabric and form was not discussed by Mackay, nor does it seem to have been reported elsewhere.

**22.** Stewpot Fig. 6, Pl. 23 (C-1986-78) H. 0.205, D. rim 0.160 m. Wt. 1.035 kg.

Dense, hard fabric with some red, white, and gray grits and very numerous sparkling inclusions. Inner core fired light reddish brown (5YR 6/3), outer core fired red (7.5YR 5/6). The surface inside is pinkish gray (5YR 6/2), outside light reddish brown (5YR 6/4) blackened by fire in places.

Complete profile. Two thirds of body, both handles, and entire rim preserved. Hemispherical lower body, upper body inturned at slope of less than  $ca.5^{\circ}$  from vertical to slightly flaring, thick rim with squared lip. Vertical, flat strap handle attaches at lip and on body above maximum diameter. Upper body wheel ridged.

**23.** Stewpot Fig. 6 (C-1986-80) P.H. 0.191, D. rim 0.156 m. Wt. 0.630 kg.

Dense, hard, sandy fabric with numerous small white, red, and black and very numerous, small and large sparkling inclusions. Red to reddish brown clay (closer to 5YR 5/6 than to 5/4) burnt in places outside.

Two thirds of profile preserved from lower body to rim. One sixth of upper body rising to vertical, slightly flaring, outwardly thickened rim with rounded lip. Vertical strap handle attaches at shoulder below rim and on body at maximum diameter; two lightly incised grooves on shoulders.

<sup>&</sup>lt;sup>85</sup> This source was suggested by Dr. K. W. Slane who has worked extensively with the local and imported Roman pottery at Corinth.

#### PLAIN WARES

Towards the end of the 13th century, Corinthians developed a marked taste for matt-decorated, open and closed vessels. Until this time the open bowls were of simple shapes and exclusively undecorated, <sup>86</sup> while pitchers, jugs, and small amphoras, although infrequently decorated, when they were, were decorated with tight, well-painted designs. <sup>87</sup>

The Plain Wares in the 1986 assemblage account for about 60% of the total by weight. Numerous open shapes could be mended, but because of the hard, thin, and brittle fabric of the closed vessels only parts of profiles could be reassembled and identified with any certainty, and then only after weighing and counting had taken place. The material was divided into open and closed shapes, subdivided into matt-decorated fragments and those with no apparent matt decoration, and then further sorted according to size.

#### OPEN VESSELS

Decorated Plain Wares

Open vessels make up 20.2% of the late 13th-century Plain Wares, about 87% of which were matt decorated. Of these a little under three quarters are carinated bowls with ring feet, reminiscent of Late Sgraffito bowl forms. The remainder are miscellaneous shapes including a flat-based, hemispherical bowl, occasional fragments of flat-based, loop-handled basins (such as 28 and 29) and dishes (such as 27). 27 is similar in shape to a Late Sgraffito dish. The fabric is hard and fine with numerous gritty inclusions and is almost certainly local. The shapes are usually wheel ridged and clumsily thrown, many standing with a steeply angled rim. The decoration is limited to incised lines outside, a matt band around the lip, and large clumsy spirals inside.

Less complete examples of matt-painted, plain bowls have been found in earlier seasons at Corinth. Of these, two have been published, with photographs only, by Mackay. 88 Neither closely resembles the bowls represented in the 1986 assemblage. It should be noted that there is a considerable variety of rim, body, and foot forms which may have some chronological significance but may equally be differences resulting from large-scale production in a workshop with more than one employee. Further comparison of assemblages of this date may help to ascertain the significance of the degree of variety in shape.

#### 24. Carinated bowl

Fig. 7

(C-1986-93) Max. H. 0.095, min. H. 0.075, D. base 0.076, D. rim 0.220 m. Wt. 0.460 kg.

Fine clay with numerous large and small white, red, and black grits. Core fired pink to reddish yellow (closer to 7.5YR 8/4 than to 8/6), surface

reddish yellow (7.5YR 8/6). Some voids and surface pocked.

Complete profile. Base, two thirds of body and half of rim preserved. Low, poorly made ring foot. Wall flaring to carination at junction with high flaring, inwardly convex rim with rounded lip. Rim angles from horizontal. Interior wheel ridges. Exterior

<sup>86</sup> Mackay, pp. 300–301, nos. 134–140.

<sup>&</sup>lt;sup>87</sup> Mackay, pp. 279–288, nos. 62–91. The later 11th-century and early 12th-century designs are generally geometric, later 12th- and early 13th-century motifs are more curvilinear but still neatly drawn.

<sup>88</sup> Mackay, p. 301, nos. 139, 140, pl. 69.

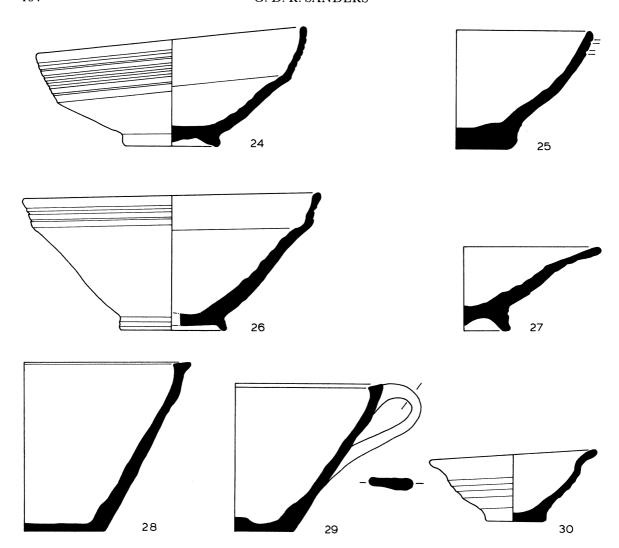


Fig. 7. Open plain wares. Matt decorated: 24-29; undecorated: 30. Scale 1:3

lower wall scarred by trailing grits when turned on wheel.

Decoration: seven incised lines in broad bands occupy exterior of rim. Inside, four large, clumsy, matt pink or light reddish brown (between 5YR 7/4 and 6/4 [where thin]) spirals on walls of rim and circular spiral in center. Band of matt weak-red paint on lip (2.5YR 4/2).

## **25.** Bowl Fig. 7

(C-1986-94) H. 0.092, D. base 0.085, est. D. rim 0.225 m. Wt. 0.475 kg.

Fine, very pale brown clay (10YR 8/4) with

numerous gray and occasional red grits. Numerous tiny voids.

Complete profile. All of base, one quarter of body and rim preserved. Flat, vertical-sided base. Walls flaring, outwardly convex to rounded lip. Interior wheel ridged.

Decoration: two incised lines on exterior below lip, traces of matt brown painted decoration of indeterminate pattern inside.

# **26.** Carinated bowl Fig. 7, Pl. 24 (C-1986-95) H. 0.109-0.101, D. base 0.086, D. rim 0.234 m. Wt. 0.685 kg.

Fine, very pale brown clay (10YR 8/3) with black, red, and white inclusions and numerous voids.

Complete profile. Three quarters of base, nine tenths of body and rim preserved. Low, flaring ring foot. Wall flaring, straight to carination at junction of nearly vertical, flaring, outwardly concave rim with rounded lip. Wheel ridged inside and outside near base.

Decoration: three incised lines on outside of rim. Three large, clumsy, matt weak-red to reddish gray spirals (10YR 5/3 to darker than 5/1) on wall inside and large spiral in center. Band of paint on lip.

#### **27.** Dish Fig. 7

(C-1986-96) H. 0.065, D. base 0.075, est. D. rim 0.230 m. Wt. 0.320 kg. Hard, fine, very pale brown clay (10YR 8/4) with numerous large red and occasional small white grits.

Complete profile. All of base, one third of body and one tenth of rim preserved. Low, flaring ring base with pendent cone inside. Flaring walls curving to everted rim with rounded lip. Wheel ridged inside and out. Surface outside roughened by grits trailed when on wheel.

Decoration: large, matt light-brown spirals (7.5YR 6/4) on inside wall and spiral in center. Line of paint on lip.

#### **28.** Basin Fig. 7

(C-1986-97) H. 0.133, D. rim 0.30, D. base 0.150 m. Similar to **29** but taller.

Pink clay (2.5YR 5/4) with many voids and numerous white, red, and gray grits.

Flat base with straight flaring walls to flattened, outwardly thickened, outturned lip.

Decoration: matt brown spiral inside on bottom and wavy line on rim with brown diagonal hatch marks. Matt paint is thin and reddish brown (2.5YR 5/4).

#### **29.** Basin Fig. 7

(C-1978-6)<sup>89</sup> H. 0.115, max. D. rim 0.223, min. D. rim 0.215, D. base 0.092 m. Wt. 0.935 kg.

Hard, fine, pink clay (darker than 7.5YR 8/4) with numerous voids and occasional large white and small gray inclusions.

Complete except for small chips from base and body. Half of one handle missing. Flat base, steeply flaring walls, slightly inturned, thickened rim with flattened lip sloping down inside and overhanging interior wall. Wheel ridged outside. Two broad, flat loop handles attach at lip and mid-body.

Decoration: broad, matt reddish gray hatch marks (5YR 5/2) on top of lip and dribbling onto upper wall inside and on top of handles.

#### Undecorated Plain Wares

The undecorated bowls are much less common than those that are decorated (13.3% of plain open shapes by weight). Bowls with a flat base, flaring wall, and an everted rim predominate, and these are paralleled in material from the 1959–1961 excavations. <sup>90</sup> Less common still are bowls with carinated walls, i.e. with shapes similar to the matt-painted forms, although some of these fragments may be from undecorated portions of decorated bowls.

#### 30. Plain undecorated bowl

Fig. 7

(C-1986-30) Max. H. 0.059, min. H. 0.049, D. rim 0.134, D. base 0.046 m. Wt. 0.143 kg.

Hard, fine, reddish yellow clay (5YR 7/6) with numerous large red, gray, and white grits and voids.

Complete profile. Base and two thirds of body and rim preserved. Flat, vertical base, flaring outwardly convex walls to flaring rim with rounded lip. Wheel ridging outside.

Undecorated.

<sup>&</sup>lt;sup>89</sup> See footnote 71 above.

<sup>90</sup> Mackay, p. 300, no. 135.

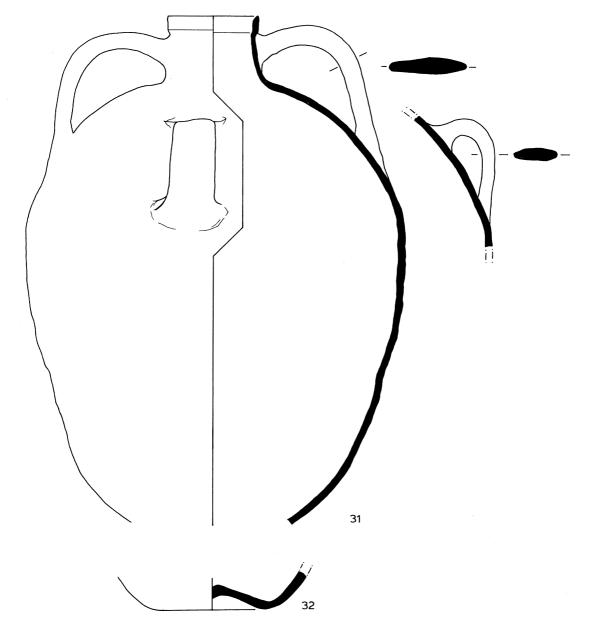


Fig. 8. Three-handled storage amphoras: 31, 32. Scale 1:3

#### CLOSED VESSELS

### Decorated Plain Wares

As already stated, the closed shapes were difficult to determine as to type. When analyzed, certain shapes could be identified provisionally by their rims, handles, or bottoms, although problems arose because of the small variation in diameter and similarity in the shape of the rims and because of the range in width of the handle in both small and large

amphoras. Further difficulty was presented by the fact that all matt-painted vessels are decorated on the shoulder, handles, and rim alone, making it impossible to distinguish between the lower portions of decorated and undecorated, local Plain Wares. The fabric, subject to some variation of color, is that of the decorated bowls.

Two sizes of storage amphora are present. Both have concave dimpled bottoms, wide necks, and offset rims. The larger is more ovoid than cylindrical and has broader handles and a third, small body handle to facilitate pouring. Probably all the "large" matt-painted body sherds belong to the three-handled amphora type; these with the identified handles and rims equal 27% of all the closed vessels by weight. The three-handled class probably also supplies the bulk of "large" undecorated body sherds, some of the miscellaneous body sherds, many of the offset rims, and a proportion of the concave bottoms (a further 28.5%, 8.5%, 1.6%, and 0.6% of the closed Plain Wares, respectively). A proportion of the "medium" sized sherds, both plain and decorated, and some of the concave bottoms and offset rims belong to small amphoras, although the handle width of these amphoras is similar to that of jugs.

## **31.** Three-handled storage amphora

Fig. 8, Pl. 24

 $\begin{array}{l} (C\mbox{-}37\mbox{-}2014)^{91}\ P.H.\ 0.402,\mbox{ est. D. rim }0.07,\mbox{ max.}\\ D.\ body\ 0.302\ m.\ Wt.\ 3.920\ kg. \end{array}$ 

Hard, fine clay with numerous large gray, red, and white grits. Surface pitted with voids. Fabric white at core (5Y 8/2) and on surface (2.5YR 8/2).

Profile from lower body to rim, three handles, two thirds of body, and one sixth of rim preserved. Restored with plaster. Concave bottom with central dimple missing. Ovoid body; flaring, outwardly convex to maximum diameter two thirds of way up body, thence inward curving to vertical, low, slightly inturned neck. Outwardly thickened, slightly flaring vertical rim tapering to pointed lip. Small vertical loop handle attaches on body at maximum diameter and at shoulder in middle of side wall. Two broad, flat strap handles attaching below rim on neck and on shoulder.

Decoration: double row of matt weak-red (10R 5/2 to 7.5R 6/3), large painted spirals on shoulder above maximum diameter. Three broad weak-red diagonal lines on upper surface of the three handles with spirals at bases of handles. Painted band on tip.

Lightly incised, wavy lines at base of neck and on shoulder cut before painting.

Similar to Mackay, no. 81.

**32.** Large, three-handled storage- Fig. 8 amphora bottom

(Lot 1986-30:3) P.H. 0.003, D. base 0.090 m. Wt. 0.079 kg.

Hard, fine, very pale brown clay (10YR 8/3) with numerous large gray and black inclusions and voids. Concave, dimpled bottom with pendent central nipple. Flaring wall.

## **33.** Small table amphora

Fig. 9

(C-59-74)<sup>92</sup> H. 0.280, D. rim 0.074, D. base (approx.) 0.05, max. D. body 0.186 m. Wt. 1.430 kg.

Fine clay with numerous, large red and white and small black inclusions. Surface of fabric fired to very pale brown (10YR 8/3) to pink (5YR 8/4) at bottom. Surface pocked with voids created by explosion of white grits in firing.

Complete profile. Base, half of body, entire rim, and one half of each of the two handles preserved. Restored with plaster. Concave bottom with central

<sup>&</sup>lt;sup>91</sup> See footnote 71 above.

<sup>92</sup> See footnote 71 above.

dimple. Wall flaring from bottom then rising almost vertically, slightly flaring to maximum diameter. Steep convex shoulder to broad, vertical, inwardly flaring neck. Outwardly thickened vertical rim, outwardly concave with lip tapering to point. Vertical, flat strap handle attaches at neck below rim and at shoulder above maximum diameter.

Decoration: single row of large, matt red to reddish brown (2.5YR 5/6 to 2.5YR 5/4) spirals on shoulders. Broad diagonal strokes of matt paint on handle and band around lip.

Mackay, no. 80, Bothros I; illustrated in Robinson and Weinberg (footnote 2 above), pl. 59:b.

34. Small table-amphora neck

Fig. 9

(Lot 1986-30:4) P.H. 0.041, D. rim 0.054 m. Wt. 0.042 kg.

Fine, hard, pale yellow clay (5Y 8/3) with numerous voids and occasional white and black inclusions. Fired to very pale brown in patches outside (10YR 8/4).

Vertical neck with protruding collar offsetting a vertical, outwardly concave rim with squared, inward sloping lip. Strap handles attach at rim. Decoration of matt grayish brown (10YR 5/2), painted diagonal hatch marks on handle and band on lip.

Perhaps to be associated with the amphoras are the 22 or more stoppers(?). These small conical objects with hollowed interiors may have been used for corking during storage. Whether they were inserted open end up or down is debatable. The absence of rims that are offset to support stoppers suggests the former disposition. Although, in most cases, the fit in the mouths of the amphoras is not tight, a wax sealing would make the vessel airtight. The Corinthian stoppers are altogether different from the local plain-ware stoppers from Agios Stephanos which more resemble caps than bungs.<sup>93</sup>

**35.** Stopper(?)

Fig. 9

(C-1986-92) H. 0.044, D. rim 0.051, D. knob 0.025 m. Wt. 0.033 kg.

Medium hard, fine clay with some black and white grits. Core reddish yellow (paler than 5YR 7/6), surface a very pale reddish yellow (paler than 7.5YR 7/6).

Complete except for chip from rim. Hollow, wheelmade cone with solid knob. Rounded lip, body flaring in to vertical knob, outwardly flaring with flat top cut from wheel with string. Surface smoothed with wet clay.

The large number of flat bases from closed vessels attests the relative abundance of medium-sized jars other than small amphoras. A substantial portion of such vessels were mended. Rim fragments indicate that some of these vessels were trefoil-mouthed jugs, but it is possible that others were round-mouthed pitchers with rims and handles similar to the small amphoras. Ten of the flat bases have accidental splashes of matt paint, while a further three or four flat bases join bodies with decorated shoulders. Together these suggest that the majority of flat bases belonged to decorated rather than undecorated vessels.

**36.** Trefoil-mouthed(?) jug

Fig. 9

(Lot 1986-30:5) H. 0.091, D. base 0.079 m. Wt. 0.440 kg.

Fine, hard, pink clay (paler than 7.5YR 7/4) with numerous large red, white, and black inclusions and voids visible at break and on surface.

Flat base, flaring lower wall, ovoid body to

<sup>93</sup> Sanders, "Pottery."

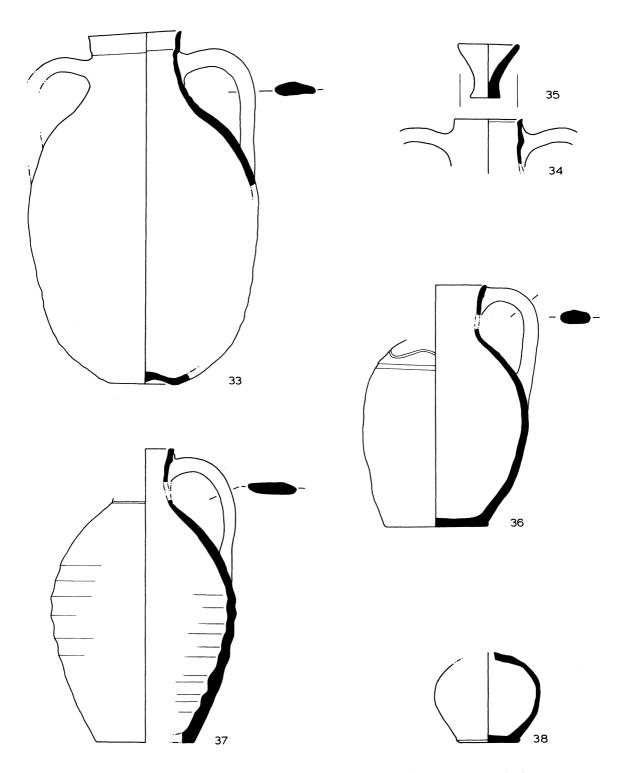


Fig. 9. Closed plain wares. Matt decorated: 33, 34, 36, 37; undecorated: 35, 38. Scale 1:3

vertical neck. Rim flaring with rounded lip. Single oval strap handle attaches at lip and above greatest diameter on body.

Decoration: large matt light-brown (2.5YR 6/4), painted spirals on shoulder above maximum diameter and diagonal hatch marks on handle. Painted stripe on lip. Lightly incised circumference ring around shoulder with lightly incised wavy line above.

37. Trefoil-mouthed(?) jug Fig. 9 (Lot 1986-30:6) H. 0.303, est. D. base 0.08 m. Wt. 0.380 kg.

Fine, hard, white clay (5Y 8/2) with large white and black inclusions and numerous voids. Upper outer surface fired pink.

Flat base, lower wall flaring almost to vertical; ovoid body to vertical neck. Outwardly thickened, outwardly convex rim with flattened lip. Broad, flat strap handle attaches below rim and on body above maximum diameter. Heavily wheel ridged inside.

Decoration: matt spirals on shoulder colored pale red (10R 6/3) where thinly applied and weak red (10R 5/2) where thicker. Diagonal hatch marks of weak-red paint on handle and broad band on rim.

Finally, a number of fragments of narrow handles and small trefoil rims attest the presence of small jugs in the assemblage.

#### Undecorated Plain Wares

A large number of undecorated sherds belong to decorated vessels. There are also relatively few plain rims and handles without decoration, indicating the presence perhaps of a few undecorated vessels. It is possible that many of these are survivals, although one partially mended jug similar to the decorated jugs is probably contemporary. Two smaller vessels also belong with the main body of material. These have spherical bodies with no apparent trace of neck, rim, or handle. If not small juglets, then these may be unguentaria or "money boxes". 94

**38.** Spherical juglet(?) Fig. 9 (Lot 1986-30:2) H. 0.072, max. D. 0.085, D. base 0.05 m. Wt. 0.083 kg.

Hard, fine, pink clay (paler than  $7.5 YR \ 7/4$ ) with numerous small gray, white, and red grits and voids.

Flat base, squat spherical body. No trace of neck. Clay of upper body thickened and uneven, perhaps sealing top of vessel.

#### TRANSPORT AMPHORAS

Only two sherds of recognizable late 13th- or early 14th-century transport amphoras were found. These belong to a type found at Mistra and Agios Stephanos in 14th-century contexts. <sup>95</sup> The remaining amphora sherds are unidentified or belong to 12th-century or Roman types. These latter represent 7.8% of all sherds by weight.

<sup>&</sup>lt;sup>94</sup> "Money boxes" are completely closed vessels with a slit cut in the side to receive coins. Ancient examples exist from Roman levels in the East of Theater area. These are being published by K. W. Slane.

<sup>95</sup> Sanders, "Pottery."

#### CONCLUSIONS

Much of the pottery in the assemblage discussed above is locally produced. The Plain Wares, for instance, seem to be exclusively the products of Corinthian kilns. The plainware shapes cover the range of daily household use and include bowls, dishes, jugs, table amphoras, and larger, storage amphoras. The open vessels are clumsily potted but fairly robust and may have survived for some time without breakage. The closed vessels, however, have a hard fabric, are thin walled, and are consequently very brittle and fragile. The likelihood of breakage of closed vessels is perhaps reflected in the great number of fragments of closed shapes in the assemblage. No doubt these vessels were cheap and readily available, thus making replacement easy. The quantities of plain-ware vessels in the assemblage is paralleled by the early 14th-century assemblage at Agios Stephanos in southern Lakonia. There, locally made, small, flat-based, matt-painted amphoras, which may also have been used on a limited scale for transport, made up about half of the saved material (by count) from the late levels on the site. These amphoras were found at Agios Stephanos with small numbers of locally produced plain-ware bowls. The Corinthian assemblage has considerably more variety of Plain Ware forms than Agios Stephanos, but the taste for matt decoration at the end of the 13th-century is apparent at both sites despite the considerable distance separating them. This tendency is also marked in southern Italy where similar dipintodecorated jugs and amphoras are common in Apulia and Basilicata in the 13th and 14th centuries.96

The scarcity of transport amphoras at Corinth contrasts with the relative abundance on the site in the late 12th century, when amphoras were still locally produced. The few late 13th-century amphoras may reflect the use of different containers for transport, perhaps wooden kegs, rather than a reduction of trade in liquids. The transport amphoras found at Mistra, Agios Stephanos, Corinth, and in wrecks off Yugoslavia are of an identical type and conceivably are the products of a small-scale specialist industry originating from a single locality, perhaps a southern Aegean workshop. An example of such a specialized use would be the shipping of a local wine of note such as Malmsey, supposedly from Monemvasia, Candia, or the southern Cyclades, northwards along the Adriatic coast to Venice.

The cooking vessels are all stewpots. Completely absent are the glazed braziers of the 12th century and earlier, "frying pans" such as those found at Agios Stephanos, and glazed cooking pots such as those found at Paphos and at Caesarea. Over 50% of the sherds can be described with confidence as locally produced. By contrast, the "micaceous" imported wares make up only 18% of cooking wares. These may have been imported from some distance and were probably valued for their durability and their resistance to heat, rather than for their appearance.

The local glazed wares are fairly crude and exceptionally common. Their decoration and shape is simple and repetitive. They seem to be a continuation of a long local tradition of production and have not been reported from other sites. It may be surmised that the

<sup>&</sup>lt;sup>96</sup> Salvatore (footnote 49 above), pls. XLIX-LI.

potters of glazed wares at Corinth manufactured mainly for the domestic market. The imported wares are almost entirely from southern Italy. This western presence contrasts with the Corinthian assemblage of the early Frankish period in which, except for occasional Italian Proto-Maiolicas, the imports, such as Zeuxippus Ware and Aegean Ware, were all eastern Mediterranean or Aegean products. The change in focus from east to west which takes place in the third quarter of the century probably reflects the reconquest of Constantinople in 1261 by the Byzantines and the loss of the Latin kingdom of Jerusalem in 1291, as well as the assertion and consolidation of Angevin power in the Peloponnesos.

Only tentative conclusions can be drawn from this statistical study of the Corinthian late 13th—early 14th-century assemblage, since it, at present, stands in isolation. More analyses of this kind are needed to be of benefit to the interpretation of the economy and polity and to the dating of pottery of the Byzantine and Frankish periods.

Ware		Sher	ds by	Count	:	Sherds by Weight					
	R	В	Н	S	Т	R	В	Н	S	Т	%
GLAZED WARES, LOCAL											
Late Sgraffito	440	47		466	953	4.970	3.571		4.627	13.168	47.4
GLAZED WARES, IMPOR	TED										
Maiolicas											
"Grid-iron" Proto-Maiolica	42	16		24	82	0.950	0.543		0.178	1.671	6.0
RMR Ware	59	2		31	92	1.310	0.095		0.428	1.833	6.6
Archaic Maiolica	15	3		13	31	0.357	0.119		0.203	0.679	2.4
Other Proto-Maiolica	31	11	1	33	76	0.718	0.546	0.040	0.470	1.774	6.4
Metallic Green-glazed Ware.	s										
Bowls as 14	8	1			9	0.122	0.007			0.129	0.5
Bowls as 13	16	2		3	21	0.175	0.042		0.005	0.222	0.8
Bowls as 15	1					0.120				0.120	0.4
Miscellaneous Bowls	3	1		11	15	0.014	0.006		0.071	0.091	0.3
Metallic Pitchers	8	1	3	16	28	0.055	0.060	0.095	0.122	0.332	1.2
Other Green-glazed Wares											
Bowls as 18	19	1		11	31	0.403	0.025		0.043	0.471	1.7
Bowls as 17	7			4	11	0.087			0.023	0.110	0.4
Miscellaneous Bowls		5		24	29		0.202		0.201	0.403	0.7
Jugs as 16	6	4	4	43	57	0.414	0.151	0.102	0.296	0.963	3.5
Rouletted Ware Bowls	6	3		24	33	0.201	0.089		0.135	0.425	1.5
Bowl as Mackay, no. 20		1					0.202			0.202	0.7
Glazed Lamp	9	2	4	3	18	0.043	0.212	0.082	0.155	0.492	1.8
Plain Green Jug	4			5	9	0.049			0.019	0.068	0.2
Yellow Jug	7	3	7	49	66	0.045	0.335	0.281	0.625	1.286	4.6
Zeuxippus Ware**	1			7	8	0.007			0.085	0.092	0.3
Glaze Painted*	14	6		26	46	0.192	0.298		0.445	0.935	3.4
Incised Ware**	1	2		8	11	0.012	0.090		0.091	0.193	0.7
Painted Incised*	1	1		6	8	0.021	0.010		0.096	0.127	0.5
Aegean Ware**				1	1				0.012	0.012	
Slip Painted**	2	1			3	0.043	0.028			0.071	0.3
Measles Ware**	1			1	2	0.010			0.025	0.035	0.1
Champs Levée w/ rabbits**		1		2	3		0.046		0.045		0.3
White Wares**	2			2	4	0.023			0.005		0.1
Miscellaneous Bowls	33	8		54	95	0.143	0.359		0.382		3.2
Miscellaneous Jugs	3	4	3	33	43	0.053	0.296	0.051	0.427		3.0
Miscellaneous Cups	1		3	1	5	0.002		0.015	0.005		
TOTAL	731	126	24	901	1781	10.539	7.332	0.666	9.219	27.756	100

		Sher	ds by	Count	:		Sherds by Weight					
Ware	R	В	Н	S	T	R	В	Н	s	Т	%	
COOKING WARES, IMPOI	RTED											
as 22	1				1	1.040				1.040	4.9	
as 23	2	1	12		15	0.630	0.045		0.495	1.170	5.5	
Miscellaneous Micaceous wit	h											
everted rim	21		1	177	199	0.385		0.073	2.202	2.660	12.5	
Subtotal	24	1	13	177	215	2.055	0.045	0.073	2.697	4.870		
COOKING WARES, LOCAL	L											
as 20	29		9		38	2.754		0.245		2.999	14.1	
as 19	2		1		3	0.376		0.045		0.421	2.0	
Miscellaneous Vertical Rims	17		10	68	95	0.298		0.297	1.874	2.469	11.6	
as 21	3				3	1.170				1.170	5.5	
as Mackay, no. 127**	14		1		15	0.255		0.025		0.280	1.3	
Miscellaneous Local Fabrics	32	6	44	1060	1142	0.401	0.220	0.883	7.360	8.864	41.7	
as Mackay, no. 116**	10				10	0.103				0.103	0.5	
Glazed Chafing Dishes**	1			2	3	0.025			0.037	0.062	0.3	
SUBTOTAL	108	6	64	1131	1309	5.382	0.220	1.495	9.271	16.368		
TOTAL	132	7	77	1308	1522	7.437	0.265	1.568	11.968	21.238	100.0	
PLAIN WARES												
Bowls, Decorated												
Everted Rim as 25	108	1		36	145	3.685	0.490		0.694	4.869	28.2	
Vertical Rim as 26	140			10	150	3.390			0.070	3.460	20.1	
Dish as 27	21				21	0.348				0.348	2.0	
Torus Bases		40			40		3.645			3.645	21.1	
Miscellaneous	8	7		212	227	0.146	0.210		3.620	3.976	23.0	
Basins as 28 and 29	8	3		2	13	0.625	0.200		0.130	0.955	5.5	
TOTAL	285	51		260	596	8.194	4.545		4.514	17.253	100.00	
Bowls, Undecorated												
Everted Rim as 30	62	11		5	78	0.793	0.404		0.050	1.247		
as decorated shapes	22	8		9	39	0.196	0.347		0.155	0.698		
Miscellaneous	6	4		10	20	0.192	0.325		0.120	0.637		
TOTAL	90	23		24	137	1.181	1.076		0.400	2.657	7	
Closed, Decorated												
Large Amphora as 31	21		146	926	1093	0.462		<b>6.30</b> 7	14.605	21.374		
Medium Vessels	19		86	823	928	0.542		3.000	6.985	10.527		
Base as 32		38		66	104		0.735		0.530	1.265		

		She	rds by	Count	:	Sherds by Weight					
Ware	R	В	Н	S	Т	R	В	Н	S	Т	%
Flat bases		10			10		0.992			0.992	
Misc. Rim as Amphoras	92				92	0.465				0.465	
Trefoil Rims	23				23	0.120				0.120	
Small Vessels	10			44	54	0.222		0.797		1.019	
Small Trefoil Mouth	17				17	0.110				0.110	
TOTAL	182	48	232	1859	2321	1.921	1.727	10.104	22.120	35.872	
Closed, undecorated											
Large			15	1892	1907			0.527	22.365	22.892	
Medium	9	109	13	1007	1136	0.145	4.017	0.193	7.435	11.790	
Miscellaneous			6	1262	1268			0.185	6.720	6.905	
Small		6	18	33	59		0.195	0.409	0.282	0.886	
Trefoil Rims	5				5	0.100				0.100	
Miscellaneous Rims	9				9	0.074				0.074	
TOTAL	23	115	52	4194	4384	0.319	4.212	1.314	36.802	42.647	
Large Storage Vessels		8			8		1.490			1.490	
Lamps	6			5	11	0.014			0.240	0.254	
Stoppers as 35	13	<b>2</b> 2			35	0.047	0.409			0.456	
Misc. Stoppers	2				2		0.040			0.040	
Late 13th-century											
Transport Amphora	1			1	2	0.020			0.040	0.060	
Misc. Plain Byzantine**	7		8	37	5 <b>2</b>	0.405		0.310	0.615	1.330	
Misc. pre-Frankish Amphoras**					763					12.805	
Roman & Classical Finewares**				159					0.995		

R = rims B = bases H = handles S = sherds T = total

1470 402 393 8588 11175

ALL POTTERY

G. D. R. SANDERS

30.077 21.046 13.962 85.918164.853

University of Missouri Department of Art History and Archaeology Columbia, MO 65211

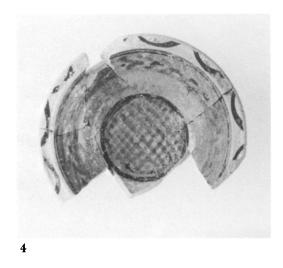
Possible survivals

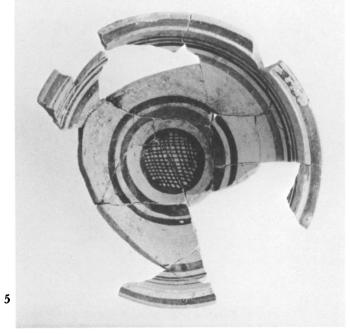
<sup>\*\*</sup> Certain survivals

## PLATE 22



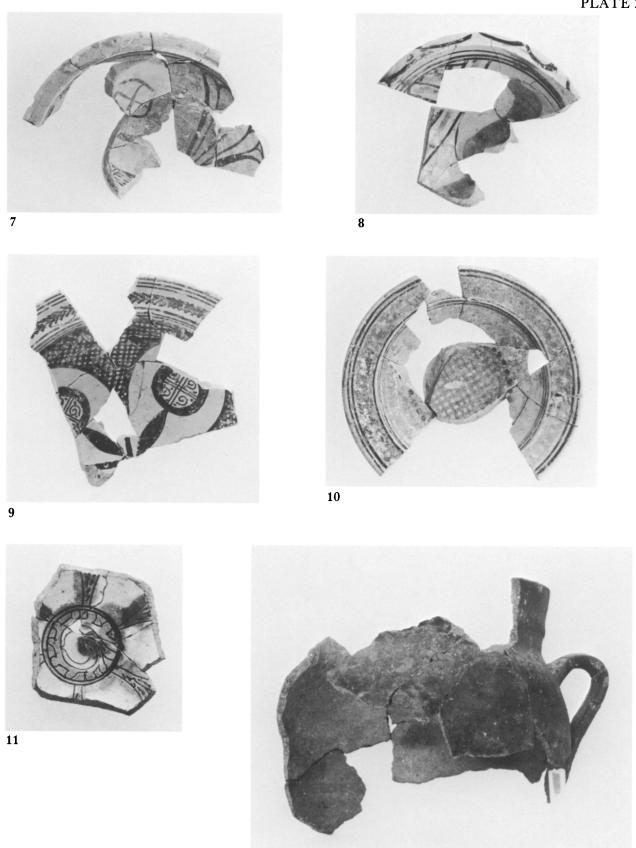
Trenches southeast of Temple E, from the west





Scale 1:3

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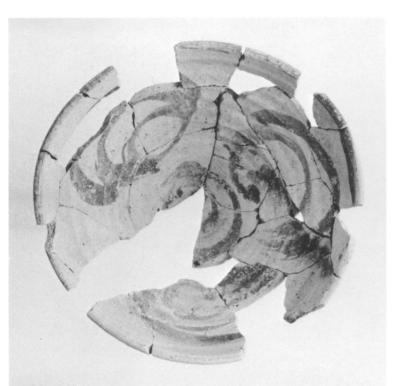
Scale 1:3 19

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## PLATE 24









Scale 1:3 **26**