



A Fill from a Potter's Dump at Morgantina

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The excavations at Morgantina in Sicily have now proceeded for 60 years, and items excavated in the first years are even now just being studied. This paper presents a fill excavated in 1956 in the area of Morgantina's monumental Central Steps in the Agora, an architectural feature which has been interpreted as an Ekklesiasterion¹. The ceramics were deposited in successive strata at the end of a drain line (**fig. 3**) that channeled the torrential rainwaters characteristic of central Sicily away from the Steps. The interest of the superimposed fills at the end of the drainline lies in two reasons. First, the date of deposit(s) can be placed in the first third of the 1st century BCE, and the pottery thus dates to the late 2nd or early 1st BCE. This is important because of the paucity of well-dated fills in Sicily from the 2nd century BCE². Even more important is the source of the ceramics, since wasters and multiples of the same shape and size indicate that the fill was brought from a potters' dump, which must be that of the large Pottery built into the old East Granary at Morgantina, located around thirty meters from the deposit (**fig. 1**)³. The Pottery is interesting because it manufactured a full range of household ceramics from around 130 to around 50 BCE, when it was abandoned. This paper will examine first the circumstances of the deposit and its chronology, and then its range of ceramics.

The Circumstances and Location of the Deposit

The Central Steps are made up of three broad flights of fifteen risers (**figs. 1–2**) extending across the Agora roughly east-west in an area where the ground fell rapidly towards the south. They were initially constructed around 260 BCE to serve as a meeting place for the citizenry⁴. Professor Malcom Bell, who is publishing Morgantina's Agora, has observed that, since the Morgantinians knew well that the Steps were built in the area of the natural drainage of the Agora (the terrain slopes down from the north to the south, and there was a natural drop in elevation of around three meters at the location of the steps), they installed a large central drain at the level of the lowest five risers in order to keep the open area at the base from silting up from annual drainage (visible in **figs. 2–3**).

¹ See BELL 2012, 96 on the Ekklesiasterion. Others, notably F. Kolb, have suggested that the Steps were used for religious rather than political gatherings: KOLB 1981, 85–86. I am deeply indebted to Professor Bell for elucidating the archaeology of Trench 39.

² See STONE 2014, 137–142.

³ A ›Pottery‹ is a place of business where ceramic ware is made, confusing since English also defines pottery as ceramic ware, and also the craft (or art) of making ceramic ware.

⁴ See above n. 1.

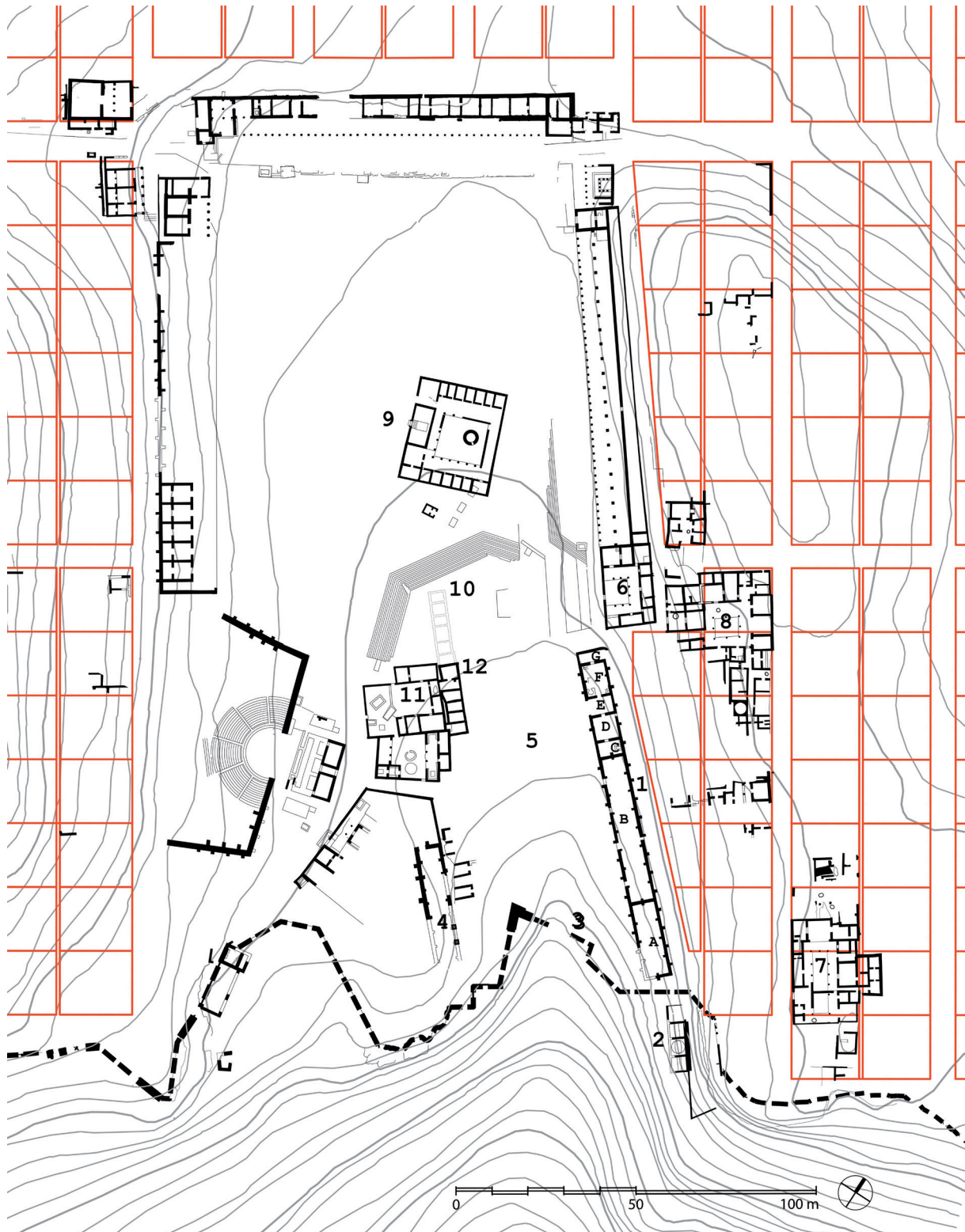


Fig. 1: Plan of the Agora at Morgantina after ca. 130 BCE. Key: – 1. East Granary (Pottery in rooms b–g); – 2. Large kiln for industrial materials (preparation room a); – 3. South City Gate; – 4. West Granary (in ruins after 211); – 5. Presumed location of East Granary Pottery’s dump; – 6. City Office; – 7. House of Ganymede (abandoned by 150 BCE); – 8. House of the Doric Capital; – 9. Macellum; – 10. Central Steps; – 11. Central Sanctuary; – 12. Trench 39 drainage channel fill.



Fig. 2: from the Central Sanctuary's NE corner (location of the Trench 39 fill) to the Central Steps.



Fig. 3: The second, later drain of the Central Steps in 1956. Both drain openings are visible in the Steps.

After the Roman capture of the city in 211 BCE, the Steps were gradually buried by three layers of fill. The uppermost of the three fills, which buried steps 12–15 (step numbers start at the original base), occurred after 40 BCE, since it contained coins of Sextus Pompey, and corresponds to the end of use of the Steps. Bell notes the lower eleven steps were covered by two alluvial fills in the 2nd century, each around 1.2 m in depth. The first layer of fill occurred during the first half of the 2nd century BCE, when the large drain at the base of the steps became clogged, followed by the burial of the lowest six or seven steps. This fill included much animal bone, ash and charcoal, which likely comes from the Macellum (**fig. 1, 9**) just north of the Steps, which had been constructed in the second quarter of the 2nd century⁵. The first alluvial fill seems to have concluded by the middle of the 2nd century. A second layer of silt then covered Steps 7–11 during the second half of the 2nd century, and again held much bone, suggesting that the fill came in part from the Macellum. After this second fill had been deposited, the complex was leveled out with the old Step 11 as the new ground level. Steps 12–15 became the meeting facility, which was refurbished with a new drain (which is our point of interest) built of rectangular blocks (**fig. 3**). This was excavated to drain downward from Step 11 (the new ground level) to Step 7, then proceeded southwest across the open area at the base of the Steps to the northeast corner of the Central Sanctuary (11 on **fig. 1; fig. 2**), where it discharged its contents. Associated with this refurbishment is a large rectangular statue base added at the west end of the Steps by the Central Sanctuary (see **fig. 1, 10–11**), which appears to have supported an equestrian statue. This suggests that the renewal of the Steps occurred after one of the two Slave Wars that engulfed central Sicily in second half of the 2nd century (137–132 and 104–101 BCE), with a victorious Roman general the honoree of the statue. Since the fill that covered Steps 1–7 can be reasonably placed around 160–150 BCE, given the depth of the second fill (1.2 m) the latter date is more probable (thus the statue probably honored M. Aquillius, the victor in the Second Slave War). The Steps were thus refurbished and provided with a new drain around 100 BCE. The fact that only four steps were left uncovered and were sufficient

⁵ The Macellum was once thought to have been constructed after 137 BCE (see BUTTREY ET AL. 1989, 171 strat. Dep. 41), but recent study has shown that the numismatic evidence said to be »sealed in the fabric of the building« was not. The complex now is thought to have been built around 175 BCE: SHARP 2016, 177.

for civic assemblies during the first half or so of the 1st century BCE (ending around 35 BCE) testifies to the decline in population at Morgantina after 211⁶.

On May 12, 1956 Trench 39 was begun to follow, expose and, finally remove the late drain line that had been discovered leading south from the midpoint of the Steps (see **fig. 3**). Initially directed by the trenchmaster P. Gierow, it was taken over by Site Director Richard Stillwell on May 24, and he oversaw the completion of the trench on May 29. As can be seen in **fig. 3** the drain line was rather monumental, running approximately 30 meters from the Steps to end by the corner of the Central Sanctuary (**fig. 1, 11**)⁷. Directly to the east of the drain, and running east-west towards the City Office (**fig. 1, 6**), a retaining wall was built at the same time as the drain to prevent erosion of the flat area below the Steps. As is usual for the early notebooks, the text is terse. May 24 Stillwell notes: »at 1.0 m. below the top of wall at NW angle of large room of building A [= Central Sanctuary, NW room, trench 3H; he's looking north towards the Steps as in **fig. 2**] there is a dark deposit with some carbon and a fairly large amount of pottery. This extends to [the] north for about 3–4 m away from [the] wall.« Then: »on [the] scarp of trench [39] looking north from Building A, this dark layer appears to slope gently downwards to [the] east. Rooftile frag[ment]s and bones appear.« »In tr 39, the ›gully‹ continues down from the building [Central Sanctuary] as though it had been deposited there after a destruction (shown by tile layer Schutt)...« Stillwell goes on to state that »farther north [the] same level continues [as] practically pure sand, light yellow with very few sherds.« This is the area through which ran the drain for the Steps. The reader will note that the dumped fill with tile, bones and pottery appears at the south end of the drain, and indeed after its termination. Following the removal of the fill, Gierow also describes the area where it was deposited as a ›gully‹, which provides important information explaining the reason for the dumped fill. Not only did the large drain terminate at this point, but the east-west retaining wall built across the lower end of the flattened area at the bottom of the Steps also terminated at the end of the drain, and any rain water channeled west by that wall would also have run into the ›gully‹, increasing the erosion in this area. The gully, it would seem, demonstrates the reason why two extensive layers of broken pottery were dumped at the end of the drain. Obviously, the city's administration were worried about the erosion caused by rainwaters beside a main exterior wall of Morgantina's most important religious centre in this period (**fig. 1, 11**). It is important to realize that, while the bone in the fill may have washed through the drain, the pottery (and tile) is too heavy and extensive to be wash, and must represent a deliberate deposit⁸.

The dumped fill constitutes the second and third strata of fill, beneath which were two further strata of earlier fill. The evidence is wholly preserved in the sherd boxes, which contains the material the excavators chose to keep. There was, of course, no attempt in those days to quantify the ceramics, and it is difficult to know what was discarded, since a record of discards was rarely kept⁹. In strata 2 and 3 of Trench 39, many sherds were preserved, because they were large fragments of vases, and it was the second year of the excavations, before there was a storage problem in the magazzino. On the other hand, no fragments of amphorae are preserved in the sherd boxes for Trench 39, which suggests material was discarded. It must

⁶ On the population of Morgantina in the 3rd and 2nd centuries BCE: STONE 2014, 10–13. It peaked in the 3rd century BCE at over 8000. By 100 BCE the city likely had diminished to 2000–3000 inhabitants.

⁷ Obviously, digging this amount of fill in two weeks indicates that the excavation did not correspond to modern standards.

⁸ The bone, however, could simply be debris from the adjacent Central Sanctuary.

⁹ In 1957, Helen Woodruff dug Trench 39A to the east of Trench 39 in the area at the base of the Steps. Her notebook states that the trench produced many sherds, which were edited: »6 boxes condensed to 2«, and »5 boxes condensed to 1«. There is no record of how the ›condensed‹ material was selected. The size of a pottery box at Morgantina (called a ›cassetta‹) was 30x50x10 cm outside dimensions, made out of wood about 1 cm thick. My thanks to Morgantina architect Erik Thorkildsen for this information.

also be admitted that the pottery found around the drain line was combined with that from the dumped fill, but the notebooks make it quite clear that the bulk of the pottery fill in the trench was at the end of the drain. It is clear from the surviving pottery boxes from this trench that the fill in this area was a secondary dump of mainly pottery, a material resistant to erosion. The fact that there are two strata of dumped fill indicates that there was an initial filling of the gully, followed some years later by a second layer. Since both strata are virtually identical in terms of their material and both contain wasters, it seems indisputable that the material came from the same source, which was a potter's dump. It also would seem that the two strata were separated by only a few years (perhaps a decade at most), due to their similarity, but the lack of joins across them indicates a chronological gap. Another sherd box contained miscellaneous ceramics from the first stratum (all of Hellenistic / Republican date), and a final box contained small amounts of sherds from the fourth and fifth strata beneath the dumped fill¹⁰.

The Date of the Dumped Fills: Numismatic Evidence

The numismatic evidence for the date of this dumped fill is, for a dump, surprisingly informative. The second stratum included four coins, of which the most significant is a bronze coin of the Hispani (i.e. Morgantina) likely minted in the second quarter of the 2nd century BCE¹¹. The third stratum revealed near its bottom, another Minerva /Horseman issue of the Hispani, which can be assigned to the first half of the 2nd century¹². In addition, a bronze issue of Aetna (inv. 56-2760) was found in the construction trench within which the Roman drain was laid. This coin-type (head of Persephone/cornucopia) seems to have been issued during the second half of the 2nd BCE¹³. From this numismatic evidence, it can be concluded that the fill in Trench 39 likely dates no earlier than the second half of the 2nd century. As was presented above, the construction of the drain is more likely ca. 100 BCE, with the dumped fill at the drain's termination in the first quarter of the 1st century. This date is reinforced by an examination of the ceramic evidence.

The Source of the Ceramics and Their Date

While it is probable from the practices of the Morgantina excavations in the 1950s that around half of the ceramics found in this trench were discarded, it seems likely that the sherd boxes for strata 2 and 3 preserve a reasonable cross-section of what was found. As noted above, extensive amounts of pottery were kept for both strata and include wasters (**figs. 4–5**), indicating that the debris used to fill the gully at the end of the drain comes from a potter's dump. This is demonstrated also by large fragments of dishes in multiples of the same shapes and sizes. The pottery includes Campana C black gloss, thin-walled wares, cooking and plain wares. Local

¹⁰ The fourth stratum contains material roughly datable to the second half of the 3rd century and first half of the 2nd century BCE. No Campana C black gloss appears in this layer. The small amounts of sherds from stratum 5 include skyphoi I would place in the first half of the 3rd century BCE.

¹¹ The Hispanorum is 56-2440 (Minerva/Horseman, 2nd issue), BUTTREY ET AL. 1989, 93 no. 252. The close study of the Hispanorum coinage now indicates that coinage was issued beginning around 200 BCE (the first issue is BUTTREY ET AL. 1989, 93 nos. 249–251), with a second version of the most common denomination issued around 175 (BUTTREY ET AL. 1989, 93 no. 252 – the original issue is no. 249). A bronze coin of Katane (inv. 56-2403) that was likely issued in the early 2nd century was also found in this stratum (BUTTREY ET AL. 1989, 83 no. 138a), as were two 3rd century coins.

¹² The Hispanorum coin (56-2515) could be either BUTTREY ET AL. 1989, 92–93 nos. 249 or 252. The other coin in this stratum is a Mamertine issue dated ca. 212–200 BCE (inv. 56-2561, BUTTREY ET AL. 1989, 91 no. 235).

¹³ Inv. 56-2760, BUTTREY ET AL. 1989, 76 no. 69a. The issues of Aetna and the Apollo/Isis coinage of Katane seem to have become very popular at Morgantina after ca. 150 BCE. They are common in fills such as the Macellum (now believed to have been constructed ca. 175 BCE according to SHARP 2016) and the East Granary Pottery (active ca. 130–50 BCE according to STONE 2014, 51–53 Context IIC). The potter in the East Granary came from the region of Mt. Etna, testifying to a strong Katanese influence at Morgantina in the second half of the 2nd century.

production of thin-walled ware suggests the fill cannot be in earlier than ca. 100 BCE¹⁴. There are a few obviously imported fragments, but no Eastern Sigillata A, which was fairly common at Morgantina by ca. 50 BCE¹⁵. The fill, in fact, seems to include no red gloss fine ware, which becomes dominant at Morgantina by the middle of the 1st century BCE¹⁶. This suggests that the fill represents debris from a Pottery which was redeposited in the gully to stabilize the drain during the first quarter of the 1st century BCE.

Since the ceramics come from a potter's dump, it is legitimate to seek the source. Unusually, the Agora at Morgantina includes three centers of pottery manufacture¹⁷. A single medium-size kiln was built into a service room of the Central Sanctuary (directly above Trench 39), where it was operating in the third quarter of the 1st century, until the sanctuary was abandoned (ca. 35 BCE)¹⁸. It is unclear when this kiln was built, and it appears to have made only small votive lamps (and perhaps small two-handled shallow dishes), although in enormous numbers. Only one lamp of this type was found in the Trench 39 fill (which is, in fact, the only lamp found in the fill). The kiln in the Central Sanctuary thus is too specialized in its production to be the source of the pottery in Trench 39. A kiln adjacent to the Fountain House in the northeastern corner of the Agora (which is around 150 m from Trench 39) operated after ca. 90 BCE until around 35 BCE, but only made plain wares¹⁹. Again this is an improbable source for our ceramics.

The obvious source of the material in the Trench 39 fill is a large Pottery located in the northern rooms of the old East Granary (**fig. 1, 1**, rooms B–G). This establishment was established by a potter who moved to Morgantina from the vicinity of Mt. Etna (since he imported clay from there, as will be shown) around 130/125 BCE, and was abandoned during the second quarter of the 1st century BCE, for unknown reasons²⁰. Occupying five rooms and with an attached enclosure for fuel for its three kilns in an old state granary built in the 3rd century, the Pottery appears to be a family operation since its facilities have room for, at most, two wheels. This workshop made Campana C black gloss throughout its career, and also cooking wares and plain wares. Its dump, facilities for storage of water and for clay purification have not been located but must exist in the unexcavated area west of the Granary (**fig. 1, 5**), across the street that leads past the Granary to the South City Gate, only 25–30 meters from the Trench 39 ›gully‹, and thus convenient to the area that was filled. The East Granary pottery was part of a larger ceramic business that included a very large kiln (called the ›Great Kiln‹, **fig. 1, 2**) outside the South City Gate²¹. Such a large kiln could only be used to fire building materials, including roof tiles, which Stillwell noted were common in the Trench 39 fill. The East Granary's ceramic manufactory thus seems clearly to have been the source of Trench 39's fill, which must have been brought from the Pottery's dump.

Many pottery fragments were found in the Pottery making areas in the East Granary, and a good deal, at least, of the Campana C was preserved in the sherd boxes, allowing the

¹⁴ See DENARO 2008, 89 on the earliest thin-walled production on Sicily.

¹⁵ See STONE 2014, 193–200.

¹⁶ See below p. 13 for the only possible red gloss vase in the fill. On Republican red gloss at Morgantina: STONE 2014, 169–192.

¹⁷ See STONE 2014, 410–414 on the pottery industry at Morgantina after 211 BCE until ca. 35 BCE. Pottery production in the old Agora is a sign that the Hispani who ruled Morgantina after 211 BCE (*Livy* 26.21.12 and 17) did not have wholly Hellenized ideas of an urban centre. Beyond the kilns discussed in the text, a further kiln is located in the old North Stoa in the Agora, but its production appears to have been limited to pipes: CUOMO DI CAPRIO 1992, 24–26 fornace n. 8.

¹⁸ CUOMO DI CAPRIO 1992, 20–22 fornace n. 7 (dated 2nd/1st BCE).

¹⁹ CUOMO DI CAPRIO 1992, 26–28 fornace n. 9.

²⁰ STONE 2014; MALFITANA 2011, 190–193; CUOMO DI CAPRIO 1992, 13–16 fornace ns. 1–3.

²¹ CUOMO DI CAPRIO 1992, 28–40 fornace n. 10.

pottery found in the Granary and that dumped in Trench 39 to be easily compared. The major differences are that little thin-walled ware is preserved in the East Granary sherd boxes, and the fill of Trench 39 does not have any of the numerous moldmade lamps manufactured in the Pottery. The absence of lamp debris is, however, hardly conclusive, since the fill in Trench 39 is a secondary dump of material taken from part of the East Granary's dump. The material dumped in Trench 39 includes many large sherds, which appear to have been selected to channel the water and decrease erosion. It has been a matter of conjecture whether the Granary Pottery made thin-walled wares, like its probable successor, the Pottery in the House of the Official²². Since the Trench 39 fill appears to derive from the East Granary Pottery, and there is a good amount of thin-walled in its fill (and of the same shapes as were made in the House of the Official) it thus appears that the East Granary made thin-walled pottery. Since the Granary Pottery also made some red gloss wares at the end of its life, its absence in the drainage fill suggests again that the filling of Trench 39 must date before ca. 75–50 BCE, when red gloss begins to appear in quantity at Morgantina.

Most of the pottery in Trench 39 must have been broken between the firing and transport to place of sale, since few pieces show signs of any use. But it needs to be pointed out that some of the pottery in the fill was clearly used²³. One platter fragment was mended in antiquity with the standard lead dove-tailed clamp²⁴. Another platter base has a grafitto ›M‹ on its undersurface; a Campana C plate fragment with a grafitto ›M‹ was found in Room B of the East Granary, where pottery was stored before sale²⁵. The Pottery's staff presumably worked long days in the building to produce the ceramics, and meals were likely cooked and consumed in the large Room B (over 40 m. in length), which was not connected by an interior door to the production rooms, but where large amounts of pottery were found.

There follows an account of each type of pottery found in the Trench 39 fill.

Campana C

Campana C, a gray-black fine ware created through double reduction firing, was the common tableware of eastern Sicily during the last third of the 2nd century and first two thirds of the 1st century BCE²⁶. Its manufacture at Morgantina was begun around 130–125 BCE by the potter who established the shop in the East Granary, who had been previously trained in the Campana C technique on the east coast of Sicily. The gloss of Campana C is sometimes lustrous black, but frequently variable in hue, with matt black to grayish black areas, often flaking. The fabric at Morgantina, as elsewhere, is gray to grayish brown, but the fragments in Trench 39 illustrate clearly that the potter used two different sources of clay, one local, but the

²² On the House of the Official, which is located on the western side of the hill west of the Agora (around 200 m from Trench 39) and its pottery shop: STONE 2014, 55–57 Context IIE and Deposit IIE.1 and 412–413. The workshop there seems to commence in the early 1st century BCE, when its kilns were constructed in an addition to the house.

²³ See below p. 18 for a mortarium in the fill that was also repaired in antiquity.

²⁴ Both repaired vases in the fill use the standard ›hole and clamp‹ method: see PEÑA 2007, 232–249.

²⁵ For the plate fragment found in the East Granary (room B) with a grafitto ›M‹ on its floor: STONE 2014, 340 no. 192D.

²⁶ On Campana C: STONE 2014, 146–164. On its technique: MIRTI ET AL. 1998; MOREL – PICON 1994, 45–46.



Fig. 4: Campana C plate waster, inv. 56-3276.



Fig. 5: Campana C out-turned rim cup waster, inv. 56-3269.

other imported from the coastal region of Sicily around Mt. Etna, thus betraying his origins²⁷. The shapes of Campana C appear to derive mainly from the traditions on the Italian mainland, and are similar to the shapes used by contemporary Campana B black gloss wares of central Italy.

In Trench 39, as elsewhere at Morgantina, the most common shape in Campana C is a vertical rimmed platter/plate (**fig. 6, A, C**)²⁸. In the two strata making up the drain fill, 32 fragments of such plates are preserved in the sherd boxes (some perhaps pieces of the same vase). Seven of these are now catalogued, and vary in diameter of the lip from around 20 to over 50 cm. There are also eight fragments of plates with outturned undulating rims, of which three catalogued all have diameters of approximately 28 cm (**fig. 6, C**)²⁹. Both of these shapes derive from central Italy and illustrate a major cultural influence on Sicily after the mid-2nd century BCE. 29 platter or plate bases in the fill have grooving on their floors (**fig. 6, B**), some also rouletting between grooved circles. A fragment of the waster of a plate body (**fig. 4**, which shows the exterior of the vase) has traces of a rouletted band on its floor. There are no other types of decoration (stamped, incised, or overpainted) on the plates in the Trench 39 fill³⁰.

Campana C cups and bowls are indistinguishable, since open vases in the ware rarely had handles, and the exact usage of open dishes with deep interiors is unclear. As with the plate shapes, the Campana C cup/bowls found in the Trench 39 fill are identical to those found in the East Granary. Outturned rim cups survive in six examples (**fig. 6, H–I**); this was the most common cup/bowl shape in the Campana C found at Morgantina³¹. The versions found in Trench 39 vary from around 12 to 18 cm in the diameter of the exterior of the lip. The largest is

²⁷ On the use of local and imported clay to make Campana C black gloss pottery at Morgantina: CUOMO DI CAPRIO 1992, 92–93; see also 158–160; MALFITANA 2011, 192. X-ray fluorescence in 2007 by M. and M. Morgenstein concurred with Cuomo's conclusions that two fabrics were used to make Campana C at Morgantina, of which only one was local; STONE 2014, 444–449. Of the 14 catalogued plate fragments from this fill seven appear to be made of local clay, which fires grayish brown and includes small inclusions such as mica (Munsell 5 YR 5/2 to 6/2). Usually the local vases are fired hard, but some of these are soft (but the material comes from a potter's dump, and they may be misfires). These are inv. 56-3248, 3249, 3250, 3271, 3275, 3278. Inv. 56-3266 probably has the same fabric, although its biscuit is soft and its color somewhat different (7.5 YR 6/2). All three of the plates with curving outturned rims were found in the third stratum, appear to be in coastal clay and look to be part of the same lot (inv. 56-3281-3283). The waster inv. 56-3276 has been badly overfired and has a black-gray fabric with inclusions that cannot be visually categorized (Munsell 5 YR 4/1). See, on Morgantina's Campana C, STONE 2014, 74–75.

²⁸ On this shape see STONE 2014, 177–179; MOREL 1981, espèce 2250.

²⁹ STONE 2014, 155–156; MOREL 1981, genre 1440.

³⁰ See STONE 2014, 163–164 on the decoration of Campana C at Morgantina (and other sites). See also 200–206 for general remarks on vase decoration in the period ca. 175 – ca. 35 BCE.

³¹ STONE 2014, 160–161; MOREL 1981, espèces 1220–1250.

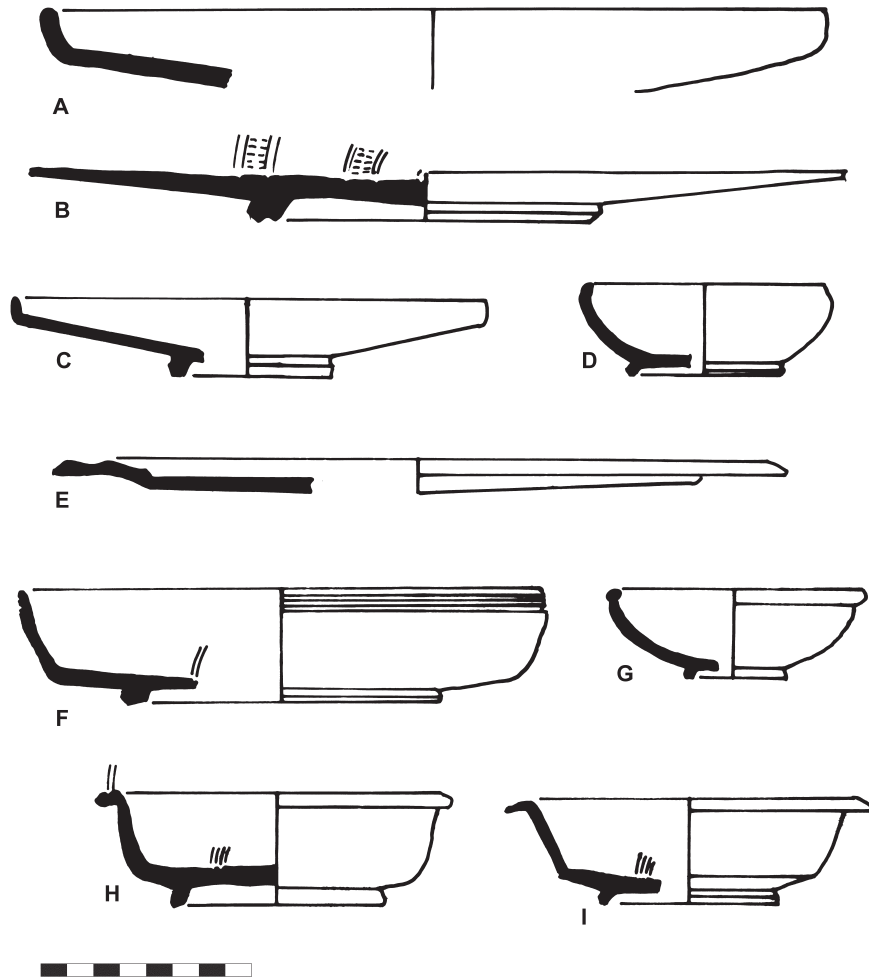


Fig. 6: Campana C black gloss wares in the Trench 39 fill. – A: inv. 56-3249; – B. inv. 56-3280; – C: inv. 56-3256; – D. inv. 56-3270; – E. inv. 56-3281; – F. inv. 56-3245; – G. inv. 56-3272; – H. inv. 56-3273; – I. inv. 56-3274.

a waster (**fig. 5**). Two other examples have grooved circles decorating their floors. The waster and two other cups in the fill with outturned rims appear to be made of clay imported from the area of Etna, the others in local clay. The other common shape is a bowl that has a horizontal body and a tall straight vertical rim, usually decorated with grooves (**fig. 6, F**)³². Fragments of five of these were found in Trench 39, all around 20 cm in the diameter of the lip; all appear to be in local clay and one appears to be a waster. Three small hemispherical bodied cups with lip diameters around 8 cm (**fig. 6, D and G**) are possibly smaller versions of this shape, although one has an outward and inward thickened lip (**fig. 6, G**)³³.

There is also a small fragment of a chalice (**fig. 7, A**) with a curving vertical lip at the end of an out-flaring body. The interior forms a resting surface for a lid. It seems likely that this vase, which had a lip diameter of around 18 cm, may have been used as a carafe for wine. Similar chalices were made in the East Granary³⁴. This vase-type probably imitates a metal prototype.

³² STONE 2014, 160. 343 nos. 214–218; MOREL 1981, espèce 2350.

³³ STONE 2014, 159–160. 342–343 nos. 206–210; MOREL 1981, espèce 2760–2780.

³⁴ STONE 2014, 162. 345 nos. 229. 230B. 230C; MOREL 1981, espèce 4740.

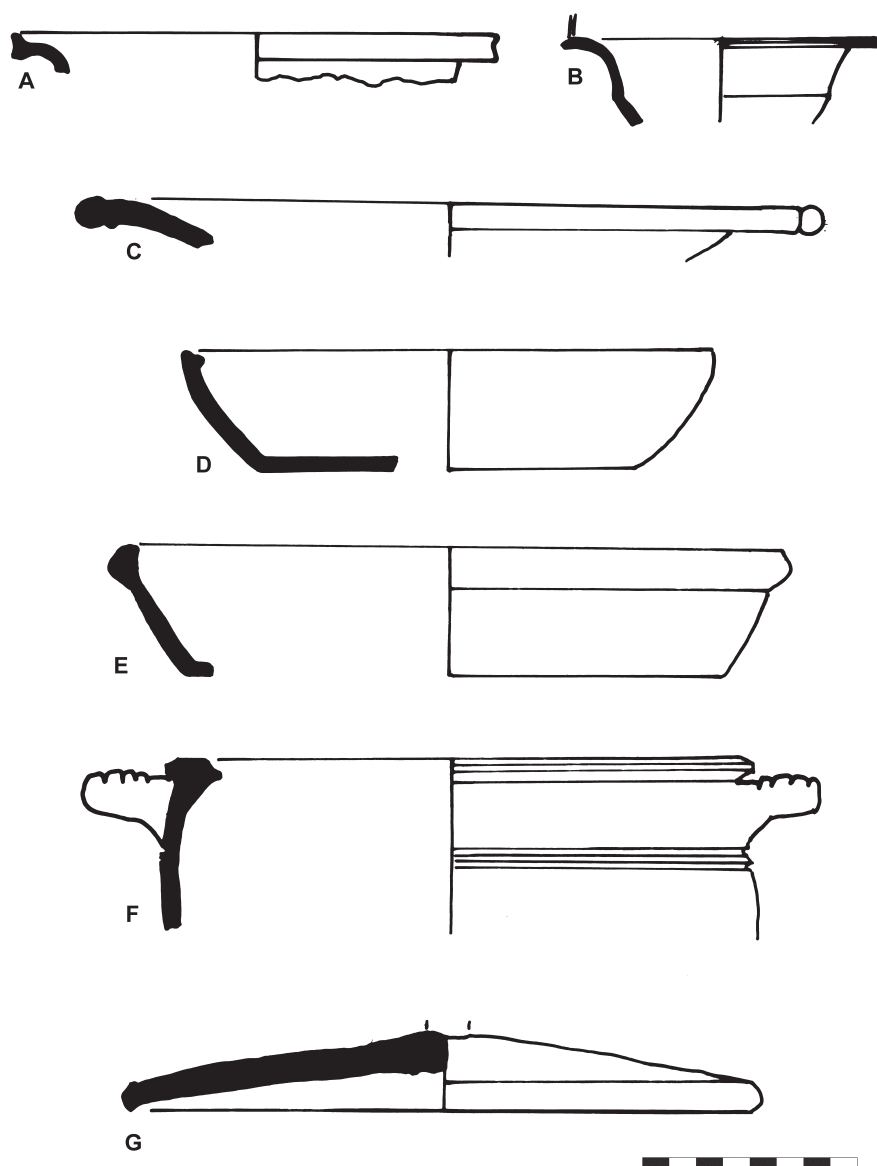


Fig. 7: Vases from Trench 39. – A. Campana C chalice: inv. 56-3247; – B. Campana C cup waster (red gloss?): inv. 56-3284; – Cooking Wares: – C. Pan inv. 56-3301; – D. Orlo bifido pan inv. 56-3296; – E. Rounded lip pan inv. 56-3299; – F. Chytra inv. 56-3292; – G. Lid inv. 56-3303.

The only closed shape in Campana C firing found in the Trench 39 fill is a small fragment of a lekythos or bottle which once had a stemmed foot³⁵. From its lustrous black gloss and hard fine gray fabric (7.5 YR 7/) this vase was imported to Morgantina. Quite a number of imported vases were found in the Pottery in the East Granary at Morgantina; apparently the potter liked to study his competition's work³⁶.

³⁵ See STONE 2014, 162 nos. 238, 239 for similar lekythoi.

³⁶ Imported vases found in the East Granary's pottery workshop include an incised and overpainted black gloss cup that likely comes from the eastern Mediterranean, a moldmade hemispherical cup (>Megarian bowl<), a moldmade chalice fired in Campana C technique, a thin-walled beaker from central Italy, and a Syracusan red-gloss chalice. See STONE 2014, 169, 349 no. 264; 189, 361 no. 350; 231, 398 nos. 663 and 665; 404 no. 705. A number of imported Campana C molded lamps were also found in the fill.

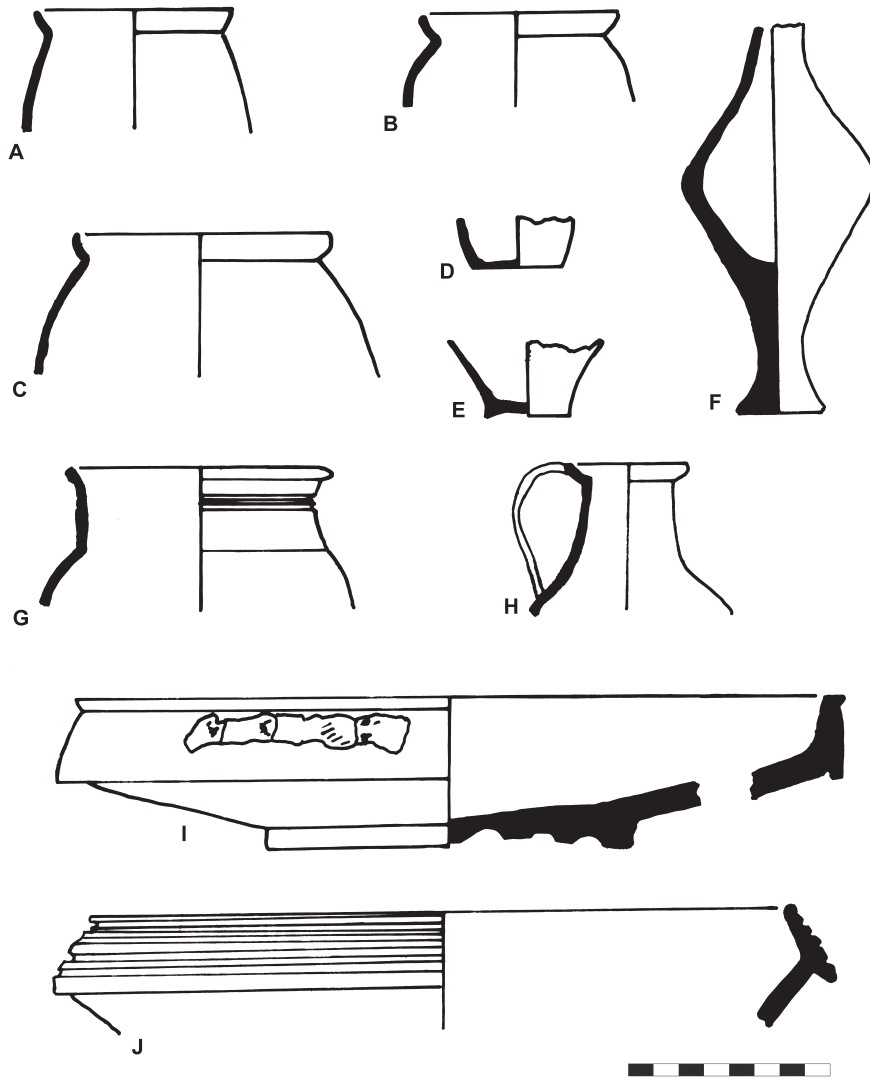


Fig. 8: Thin-walled beakers: A. inv. 56-3252; – B. inv. 56-3252; – C. inv. 56-3287; – D. inv. 56-3255; – E. inv. 56-3286; – Plain Ware: – F. Unguentarium inv. 56- 3291; – G. Plain pitcher inv. 56-3304; – H. Plain pitcher inv. 56-3305; – I. Mortar inv. 56-3306; – J. Large plain bowl inv. 56-3257.

A single fine ware cup (inv. 56-3284, **fig. 7, B**) with an outturned rim (grooved on its top) has a pale red brown fabric that is likely local, and is partially covered with dilute orange gloss of type seen on thin-walled and plain vases of the 1st century BCE at Morgantina. The dilute orange gloss of this vase is not typical of red gloss pottery produced at Morgantina. The shape was the most common cup in Campana C, as noted above, and it is most likely that this is a misfired vase that was intended to be Campana C. A Campana C cup of the same shape in the fill (inv. 56-3269, **fig. 5**) is a waster with a pale reddish brown fabric, but a grayish brown gloss. A waster of a moldmade lamp type that only appears in Campana C was found in the East Granary (inv. 61-1444) and has a reddish brown fabric and a dilute olive green to brown gloss. These provide likely parallels to the cup with orange gloss as misfired Campana C.

Thin-walled ware

Since the pottery in Trench 39 appears surely to come from the nearby dump of the East Granary, the fill demonstrates that the Pottery there made thin-walled pottery (**figs. 8; 9, A–E**), even though few thin-walled fragments survive in the cassette from the East Granary excavations³⁷.

This brings up one of the problems in dealing with that Pottery. The notebooks for the East Granary inform the reader that the bulk of the ceramics found there were plain or cooking wares, but that virtually all of these were discarded (without further record). It would appear that the excavators classed the thin-walled wares with plain pottery, not surprising for 1959–1960, when thin-walled wares were little known. The locally manufactured thin-walled wares at Morgantina also have relatively thick sections compared to vases of this type made in central Italy, averaging around 0.4 cm in wall thickness, and so resemble the thickness of the walls of small pitchers in plain pottery. Since fragments of the same shape and fabric were found in both strata 2 and 3, it seems uncontested that Morgantina was making the ware by the early years of the first quarter of the 1st century BCE. If a small city in east central Sicily was making the ware in the first quarter of the 1st century BCE, it must have been manufactured also on the east coast of the island, notably in Syracuse, where manufacture of thin-walled is documented in the first centuries BCE and CE, but also likely in the region around Mt. Etna³⁸. The evidence from Trench 39 bolsters Denaro's hypothesis that production of thin-walled pottery began on Sicily in the late 2nd century BCE³⁹.

If the examples found in Trench 39 are a fair cross-sample, the Pottery in the East Granary made only one or two shapes of beaker (**figs. 8, A–E; 9**). The surviving fragments can belong either to a relatively thin ovoid to conical bodied and flat bottomed beaker or jar (MARABINI MOEVS 1972, forms I–IV), or an ovoid to globular bodied jar (MARABINI MOEVS 1973, forms V–VI)⁴⁰. Both terminate in an outturned rim that terminates in a vertical lip, allowing the vase to be fitted with a lid. Both of these general shapes were found in the potter's dump in the House of the Official of ca. 35 BCE⁴¹. Most of the fragments found in Trench 39 do not preserve enough of the shape to indicate which of these two shapes each fragment represents, although one base (56-3286, **fig. 8, E**) seems surely the thinner shape. Two base fragments and five examples of the same rim-type appear in the two strata of fill in vases of identical size⁴². Interestingly, the thin-walled appears to be made both in local clay and in imported clay. As with the thin-walled found at Syracuse, and Morgantina's thin-walled from the House of the Official's pottery, the Trench 39 fragments are decorated with dilute gloss on their rims and upper bodies⁴³.

³⁷ STONE 2014, 53. 294 argues that the East Granary Pottery did not make thin-walled wares due to the paucity of the wares in the retained pottery from the complex. STONE 2014, 291 suggests thin-walled manufacture began at Morgantina around the middle of the 1st century BCE. Both of those conclusions are here revised in light of this new evidence.

³⁸ On Syracusan thin-walled production see DENARO 2008, 13. 81–84, MALFITANA – CACCIAGUERRA 2015, 236. 248–255.

³⁹ See DENARO 2008, 89, also 19–20, 86 (start of Segestan production), MALFITANA – CACCIAGUERRA 2015, 251.

⁴⁰ See, for forms I–IV MARABINI MOEVS 1973, 49–62; for forms V–VI, 62–66; DENARO 2008, 75–76.

⁴¹ See STONE 2014, 296–297.

⁴² The rims are inv. 56-3252-3253 from stratum 2, and inv. 56-3287-3289, from stratum 3, all diam. lip est. 8. The bases are inv. 56-3255 from stratum 2, diam. base 3.4, and inv. 56-3286 from stratum 3, diam. base 4.0.

⁴³ See STONE 2014, 292. 301; FALLICO 1971, 603.



Fig. 9: Thin-walled beakers. Inv. 56-3287, 3288, 3289.

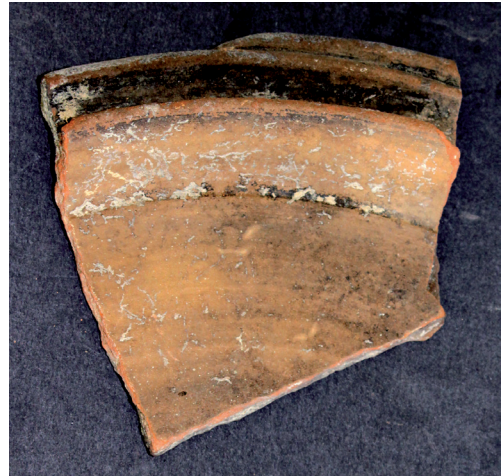


Fig. 10: Cooking pan inv. 56-3302.
The broad rim was used for agitating contents?

Cooking wares

In this class of ceramics, the loss of the material from the East Granary fills is mitigated somewhat by the quantity of cooking vases saved in Trench 39 (fig. 7, C–G). The notebooks for the East Granary state that vast amounts of cooking and plain pottery were simply discarded. A few fragments were later culled from the sherd boxes of the East Granary, but much of this surviving cooking ware is from the first stratum of fill. It appears, however, to belong to the material manufactured there from its unified fabric, a hard red with sand and grog, including black volcanic flecks and, at times, calcite (Munsell 2.5 YR 5/6). Interestingly, until the Granary material was catalogued, this fabric was thought to be imported, since it was not used by the later potter in the House of the Official at Morgantina for his cooking wares⁴⁴. But since all the cooking vases in the East Granary are in this fabric, it seems this is another example of imported clay used to make pottery at Morgantina.

Much cooking ware was preserved in the strata 2–3 sherd boxes for Trench 39 (figs. 7, C–G; 10–11). A representative sample has been catalogued, since it presents a picture of the shapes manufactured in the East Granary. On the other hand, half of the fourteen catalogued vases show burning on the exteriors, suggesting that they had been used for cooking before being discarded. Again, as observed in the fine wares, some of the vases may have been used by the staff of the Pottery for their meals. The dump of the East Granary would also have been easily accessible to the House of the Doric Capital on the East Hill overlooking the Agora (fig. 1, 8), and the City Office (fig. 1, 6), just north of the Pottery. The latter, which looks much like a house, may also have cooked meals for its staff. But it is also possible that combustible material was thrown into the kiln when firing cooking wares to create a pleasing ›use look‹ on newly produced cooking wares.

One interesting aspect of Morgantina's cooking ware is that the city seems to have made most of the cooking pots that were used in the town throughout the last three centuries BCE. However, the material from Trench 39 uses two fabrics. The first is the same dark red fabric seen in the cooking vases found in the East Granary fill, again showing black volcanic inclusions and occasional calcite that suggests that the clay came from eastern Sicily. A single (inv. 56-3301) catalogued pan found in the Trench 39 fill has a grayish brown fabric without volcanic

⁴⁴ The cooking wares found in the House of the Official's dump (see STONE 2014, 56–57 deposit IIE.1) have a hard fired coarse grayish to reddish brown fabric (5 YR 6/2–6/3), which does not include many, if any volcanic inclusions.

inclusions (Munsell 5 YR 5/2), and appears to be in local fabric. This fabric, fired either grayish or reddish brown, appears in the cooking wares made the Pottery of the later 1st century BCE in the House of the Official⁴⁵. This fabric is likely local clay. Since its base shows burned deposits, it may not have been made in the East Granary.

Trench 39 preserves four different shapes of cooking vases (**fig. 10, C–G**). The first is two kinds of shallow pan. There are two slightly different versions of a sort of skillet (**figs. 7, C; 10**) which has a shallow body with burning on its undersurface. Vases somewhat similar to this with slightly rounded bases have been identified as used to parch nuts and grains, but alternatively the pans may have been used as a sort of skillet to fry food⁴⁶. One pan of this type (inv. 56-3301, **fig. 7, C**) has a short flaring body and (apparently) a flat bottom. Attached to the exterior of its lip are cylinders of clay, which appear to have been used as handles. Since handles do not appear on other pans at Morgantina, these may suggest that the items prepared in this vessel needed to be agitated during the cooking process, which might support a theory that this vessel was used for parching. This shape of cooking vessel is, insofar as I know, unparalleled elsewhere on Sicily, but is close to a form of pan found at the Athenian Agora⁴⁷. The other vase of this type in the fill (inv. 56-3302, **fig. 10**) has a broad outturned rim, grooved on its top (and with a vestigial horizontal ‘handle’ attached to it lip), and a shallow curving body/base. The broad rim again might facilitate shaking the pan while using it. Both of these dishes are 26–28 cm in diameter of the lip.

A second, more common, type of pan (**fig. 7, D–E**) is flat-bottomed and shallow, with no handles. Five examples from Trench 39 were catalogued, of which three have a heavy red slip inside (**fig. 11**), imitating ‘Pompeian Red’ ware from central Italy⁴⁸. Pans of this shape were made from the 3rd century in Etruria, and first appear at Morgantina at the end of the 3rd century BCE, including the first example with an interior slip⁴⁹. They may have been used to bake bread, but have also been proposed as pans to make egg dishes such as the quiche-like dish called *patina* by the Romans⁵⁰. These have various forms of lip. One has an *orlo bifido* (**fig. 7, D**) with a narrow groove on top of the lip to fit a lid⁵¹. While pans of this shape were made on the Italian mainland, and exported widely, this example appears to be a local imitation. Most of the pans in the fill (**fig. 7, E**) have an outturned, rolled rim, which will continue to be popular in the later House of the Official⁵². Save for one at 33 cm, all have a diameter of lip around 26–28 cm.

⁴⁵ Above, note 44.

⁴⁶ For parchers ROTROFF 2006, 186–188.

⁴⁷ ROTROFF 2006, 190–191 form 3; see also BERLIN 1997, 107–108 Italian triangular rim pan.

⁴⁸ Pompeian Red ware GOUDINEAU 1970; BRECCIAROLI TABORELLI 1997, 216–218. This type of cooking ware now goes back to the 3rd century in Etruria: PENA 1990, 647.

⁴⁹ STONE 2016, 118–119.

⁵⁰ BERLIN 1997, 104; ROTROFF 2006, 193.

⁵¹ On *orlo bifido* pans see BERLIN 1997, 106–107; ROTROFF 2006, 192–193. See also DYSON 1976, 21 Class 1 CF 6 fig. 1; 40 Class 1 FG 4 fig. 7.

⁵² For cooking pans with a rounded lip at other sites on Sicily: PELAGATTI – CURCIO 1970, 487–489 no. 77; BERNABÒ BREA – CAVALIER 1998, 396–399; BACCI – TIGANO 1999, vol. I, 202 CST/100. From sites on the Italian mainland: HAYES 1994, 217 nos. 85–87. 89; DYSON 1976, 21–22 CF 75 fig. 1; 69–70 V-D 8–9 fig. 19 and V-D 16 fig. 19; 89–90 P-D 14–15 fig. 29 and P-D 17 fig. 30; SANTROT 1995, 169–170 nos. 417–418; GOUDINEAU 1970, 166–167 pl. 1, 1–3. 5. 7–8. 11; 168–169 pl. 2, 17. 21–22; 176–177 pl. 7, couche 3B nos. 5–9, couche 3 nos. 7–12; 176–179 pl. 8 couche 2B nos. 2–4, couche 2C nos. 5–8, couche 3 nos. 13–15; BRECCIAROLI TABORELLI, 1997, 217–218 nos. 628–631. See also BERLIN 1997, 107–108 Italian triangular rim pan.

Another shape is a saucepan or *chytra* (**fig. 7, F**), of which three were catalogued⁵³. These pots were used to make soups, porridges and stews. All of these deep pots in the Trench 39 fill had outturned and flat-topped lips with depressions at their inner edge to facilitate fitting a lid. The same type of lip appears in the East Granary cooking wares and the House of the Official⁵⁴. One *chytra* (**fig. 7, F**) preserves a broad horizontal handle that bows up to its centre. No handles are preserved on the other catalogued fragments. The final shape in the fill is a cooking ware lid (**fig. 7, G**) with a shallow domical curve⁵⁵. This was probably used to cover a variety of cooking pots.

Plain Wares

Consideration of the utilitarian pottery found in Trench 39 raises a number of questions. The apparent source of the pottery, as has been noted, is the East Granary Pottery, where the excavation notebooks state that much plain pottery was found but discarded. A very small sample was kept in the sherd boxes, and some examples have been catalogued. The sherd box material and the catalogued vases indicate that the main products in the plain wares made there were pitchers for use in the kitchen. Another common product was large bowls for mixing foods.

The plain pottery found in the Trench 39 fill, like the fine wares, is made of several fabrics, including the local reddish brown clay, but also a hard red fabric that is similar to that used for cooking wares (with added grog) in both the Granary and Trench 39. The later pottery workshop in the House of the Official at Morgantina, which was likely owned by a potter trained in the East Granary, uses only the local fabric.

The shapes catalogued (**fig. 8, F–J**) include one *mortarium* or mortar (**fig. 8, I**) for food preparation (diam. lip est. 30 cm), which, however, is in the red imported fabric⁵⁶. This vase was clearly used, since it is mended with a lead swallowtail clamp. It is the standard form at Morgantina, with opposed ›piecrust‹ finger-rests made by impressing a clay strip with the thumb to the broad down-turned rim. From this vase again, which was used to crush and mix vegetables, it appears that the potters prepared food in the East Granary⁵⁷. The mortar may have been imported to Morgantina, but local potters made mortars from the 3rd to the 1st century BCE. The fabric of the Trench 39 mortar suggests its clay comes from the east coast of Sicily.

The fill also produced three large (mixing) bowls (diam. lips 28–30 cm), and two fairly large large pitchers. These are obviously kitchen equipment. Two of the mixing bowls have in-turned rims (**fig. 8, J**), which suggests they may have been used for preparing foods that produced excess fluids that needed to be poured off while retaining heavier solids. A bowl

⁵³ ROTROFF 2006, 165. Her flat rimmed *chytra* (175–176) is the closest to the Morgantina versions. BERLIN 1997, 97–100 presents casseroles with various rims.

⁵⁴ For other *chytrai* at Morgantina (called ›casseroles‹) see STONE 1981, 456–457.

⁵⁵ On cooking ware lids: ROTROFF 2006, 195. 197–198 forms 3–5; BERLIN 1997, 115–118; SLANE 1990, 72. 77 nos. 158–159. For cooking lids in a context of the third quarter of the 1st century BCE on Lipari: BERNABÒ BREA – CAVALIER 1998, 162–165 fig. 51i. For cooking ware lids from the 1st century potter's dump on Lipari: BERNABÒ BREA – CAVALIER 2000, 312. 319–321. The potter in the House of the Official at Morgantina made the lids for his cooking wares both from cooking ware fabric and the finer fabric used for plain pottery: STONE 1981, 457–458.

⁵⁶ Three of seven mortars of the 3rd century at Morgantina are in local clay, a fourth likely is made of local fabric, although fired orangish (5 YR 7/6). The three mortars in the fills of ca. 35 BCE are all in local fabric, and one comes from the potter's dump in the House of the Official. See STONE 1981, 459.

⁵⁷ See ROTROFF 2006, 99–100; BERLIN 1997, 123–124. The closest mortar at the Athenian Agora to the Trench 39 example is ROTROFF 2006, 100–102 form 1 (which has the same kind of ›handles‹); at Tel Anafa the ›curled-rim *mortarium*‹ BERLIN 1997, 129–130.



Fig. 11: Interior red slip cooking pan, inv. 56- 3295



Fig. 12: Imported lagynoi with orange fabric, inv. 3258, 3259, 3260.

with this type of rim was found in the potter's dump of the House of the Official⁵⁸. One of these large bowls is decorated with multiple grooving on its outer rim (fig. 8, J). The pitchers (fig. 8, G–H) both have ovoid bodies, and one is decorated with grooves on its neck. Similar pitchers were found in fills of ca. 35 BCE at Morgantina⁵⁹. There is also a single fusiform unguentarium (fig. 8, F) that appears to be in local clay, and which may therefore have been manufactured in the East Granary⁶⁰. It would, of course, have been used in the bath or the bedroom.

Imports

The East Granary preserves a number of imported vases that show that the potters working there liked to keep up with developments in ceramics⁶¹. Three lagynoi necks have a soft textured orange fabric (fig. 12)⁶². Orange fabrics were reasonably commonly imported to Morgantina, and are associated with the north coast of Sicily and also Campania⁶³. While the multiplicity of the same shape (but in different sizes) would argue that these vases were manufactured in the Granary, their fabric indicates that they were imports. It would seem likely that these bottles contained an imported beverage (fine wine?) consumed by the potters.

⁵⁸ STONE 1981, 474–475 nos. 537–540. For similar utilitarian bowls at other Italian sites: BERNABÒ BREA – CAVALIER 1998, 402 fig. 9, h; AYLWIN COTTON – MÉTRAUX 1985, p. 220 i ›flanged rim bowls‹.

⁵⁹ For pitchers and jugs similar to those of Morgantina of late Republican or early Imperial date: PELAGATTI – CURCIO 1970, 478 nos. 39–41; BERNABÒ BREA – CAVALIER 2001 (vol. XI.1), 36 tombs 534 and 535 pls. 21, 1 and 22, 4; 37 tomb 547; 44 tomb 582 pl. 22, 2; 45 tomb 586 pl. 22, 1; 114 tomb 698 pl. 49, 2; 185 tomb 869 pl. 77, 1; 185 tomb 866 pl. 76, 5; 244 tomb 612 pl. 110, 3; 252 tomb 1154 pl. 110, 2; 339 tomb 928 pl. 18, 1; 392 tomb 1012 pl. 185, 1; 391 tomb 1006 pl. 185, 4. See also FALLICO 1971, 604–606 for similar plain pitchers of the ›San Giuliano‹ class. For similar pitchers from the Italian mainland: HAYES 1994, 220–221 nos. 112–117; DYSON 1976, fig. 38 no. PD-122; fig. 39 no. PD-125; fig. 49 no. 22II-87–89; fig. 50 nos. 22II-93–96; fig. 51 nos. 22II-109. 111. 114–116; AYLWIN COTTON 1979, 153–155 fig. 46; AYLWIN COTTON – MÉTRAUX 1985, 228–232 fig. 58.

⁶⁰ On fusiform unguentaria: ROTROFF 2006, 137–140. 154 category 6; BERLIN 1997, 58–59. 65–66 ›semi fine elongated fusiform unguentaria‹; ANDERSON-STOJANOVIC 1987, 110–114. For examples from other Sicilian sites: PELAGATTI 1970, 478 nos. 43–45; FALLICO 1971, 627 F1-4 fig. 46; BERNABÒ BREA – CAVALIER 1998, 402–403; BERNABÒ BREA – CAVALIER 2001, 178 tomb 837 pl. 74, 1; 185 tomb 866 pl. 76, 5. From South Italy: HAYES 1994, 224–226 nos. 157–163; AYLWIN COTTON 1979, 133–135 fig. 38, 1–5; AYLWIN COTTON – MÉTRAUX 1985, 176 fig. 38, 6–7; perfume vases were made at Morgantina in the 1st century BCE: STONE 2014, 415 pl. 141.

⁶¹ See above n. 36 for the fine ware imports found in the East Granary.

⁶² On plain lagynoi: BERLIN 1997, 42–47; ROTROFF 2006, 82–84. See also STONE 2014, 191.

⁶³ This fabric or related fabrics (Munsell 5 YR 7/6) often contains much mica. On orange fabrics at Morgantina: STONE 2014, 77–79 (Fabric II).

Both strata of fill also included a fragment of a large open Spanish bowl or goblet with a broad outturned rim⁶⁴. The fragments come from different vases and are decorated with gloss on the top of the body and the rim, including compass drawn circles in one case. Several other examples of these vases were found at Morgantina, as well as other Sicilian sites from this period, attesting to the breadth of trade throughout the western Mediterranean⁶⁵.

Conclusions

The Trench 39 fill thus presents a well dated deposit of ceramics of the first quarter of the 1st century BCE, and also a picture of ceramic production at the end of the Hellenistic Age in central Sicily. It also illustrates another use of discarded ceramics in the Greco-Roman world, in this case to retard erosion in a drainage channel.

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⁶⁴ On these vases see PERICOT 1979, 207.

⁶⁵ Other examples of the same shape found at Morgantina are inv. 59-924, 79-749. Neither comes from a stratum that can be dated more accurately than 3rd-1st centuries BCE.

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