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Source: American Journal of Archaeology, Vol. 116, No. 4 (October 2012), pp. 649-691

Published by: Archaeological Institute of America

Stable URL: http://www.jstor.org/stable/10.3764/aja.116.4.0649

Accessed: 27/03/2013 13:07

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FIELD REPORT

Public Space in Late Antique Ostia: Excavation and Survey in 2008–2011

LUKE LAVAN

Abstract

This article presents the work of the University of Kent section of the Late Antique Ostia Project, which since 2008 has studied the evolution of public space in the central area of the city, in conjunction with the Humboldt University of Berlin. This research has sought to detect and document Late Antique remains within a clearanceexcavated classical site using minimally invasive methods. It has demonstrated that Ostia saw a level of investment in secular public buildings that surpassed other cities in Italy outside of Rome. Thus, Russell Meiggs' view that the construction of Portus led to the demise of Ostia, in terms of its political and economic vitality, now seems unlikely. Until the mid fifth century, Ostia was still significant as a center of political representation that followed the urban fashions of the age, which now came from the eastern Mediterranean rather than from Rome. English summaries of the work of the Berlin team are provided by its director, Axel Gering; that work is published in greater detail in a parallel report in Römische Mitteilungen.3

PUBLIC SPACE IN THE LATE ANTIQUE CITY

In the last 30 years, archaeological fieldwork has led to a revision of negative generalizations about the Late Antique city. Excavations have shown that in much of

the central and eastern Mediterranean, cities remained prosperous, although urban centers in other regions experienced contraction and dislocation. Studies of internal urban topography have tended to concentrate on fortifications, churches, and houses in cities of the first type, or on the abandonment and ruin of classical monuments in cities of the second type. In contrast, the last fully "Roman" phases of streets, plazas, and secular public buildings have been neglected. This is perhaps because scholars have preferred to study newly built architecture rather than the repair of earlier structures. Yet, from the 1980s, interest grew, first in the civic building inscriptions of the period in Africa, Italy, and Asia Minor, and later in pertinent structural remains. Since the 1990s, excavations in the eastern Mediterranean have fully documented late repairs to civic public buildings. Western digs also now record late repair and occupation, though in a piecemeal fashion, while pursuing other objectives. No previous archaeological study has systematically reexamined a clearance-excavated classical city of the western Mediterranean to detect Late Antique repairs to secular public buildings that were missed or ignored by earlier excavators.

*The Kent division of the Kent-Berlin Late Antique Ostia Project was directed by Luke Lavan from 2008 to 2011, in collaboration with A. Pellegrino, director of the Soprintendenza of Rome, Ostia section, and A. Marinucci, head of the works on-site. We are grateful to A. Gering for arranging the permit in 2008-2010. In the Ostia site archive we benefitted from the kindness of E. Angeloni and in the depot from the help of P. Germoni. Trenches supervisors were H. Harrington, V. Reilly, K. Madigan, J. Fides, Z. Magyar, S. Matz, J. Hutchins, D. Jackson, B. Harp, and M. Mulryan. Assistant supervisors were M. Joyce, B. Knapp, C. Collard, P. Maranzana, J. Wolf, A. Roder, and J. Williams. Finds were supervised by H. Harrington, assisted by A. Hammett and E. Blanning. Ceramics were studied by E. Pamberg, S. Costa, and especially E. Vaccaro. S. Hamilton-Dyer studied faunal remains, and A. Rovelli studied coins. A. Sanchez, A. Fitzgerald, and S. Kamani analyzed building decoration and design. Wall photography was undertaken by L. Figg, L. Bosworth, and D. Underwood. Principal drawers were J. Williams, J. Measor, C. Murphy, E.

Joergensen, and T. Manahai, while A. Bates, C. Spence, and D. Underwood undertook survey. E. Luby and L. Figg produced numerous digitized plans and sections, which were finished for publication by E. Boast. Spolia studies were undertaken by R. Sadler and P. Maranzana. M. Mulryan provided archive support as well as excavation and recording on-site in a thoroughly dedicated manner. Logistical support was provided by B. Laing and S. French. The Kent part of the project was funded by a field school grant from the University of California, Los Angeles, in 2009; fieldwork bursaries from the University of Kent in 2008–2010; grants from the Faculty of Arts at Kent; and donations from Context Travel, Caroline Lawrence, John Osborn, and especially John Beale, without whom the 2010 and 2011 seasons would not have been possible. Gering wrote the English summaries on the work of the Berlin team (see the sections titled "Main Forum Portico" and "Architectural Work on the Foro Paving"); all other parts of the article were written by Lavan. Figures are by Lavan unless otherwise noted.

OSTIA: A CASE STUDY

The site of Ostia is one of the most extensively excavated Roman cities and certainly one of the most accessible as far as late antiquity is concerned. It provides an unparalleled opportunity to study the secular urban topography of that period. Although the city is dominated by buildings dating from the first three centuries C.E., there is much evidence for continued occupation and repair of public and private structures from the fourth to sixth centuries. The desertion of Ostia in the ninth century, along with the deposition of flood and dune sediment, means that the Late Antique levels of the city were, prior to excavation, well preserved. Unfortunately, field techniques of the early 20th century were often primitive, especially those of the archaeologists working under Mussolini, who cleared huge areas on the west and south sides of the city on a quest to reveal the glories of Roman civilization. Many traces of the Late Antique period were brushed aside. Yet this work did leave some lenses of late stratigraphy untouched. Furthermore, it revealed such a large area that the city now offers considerable scope for research into Late Antique public space. Recent studies of the site, especially the habilitation thesis of Gering, have suggested that there was a great deal of secular public building in the fourth and early fifth centuries, which demands to be investigated more closely.1

STREETS AND SQUARES IN LATE ANTIQUE OSTIA

One area of great potential is the network of streets and squares in Late Antique Ostia, which underwent considerable changes during this period, as Gering has described.² The main part of this transformation saw the monumentalization of the Decumanus and the creation of major new plazas along its length. At the same time, minor avenues were closed, and walls were built along insula boundaries, dividing the city up into cantonments, sometimes focused on a large house.3 Similar developments have been seen in the eastern Mediterranean, but they have never been studied on the scale possible at Ostia or interpreted in the systematic manner that the city permits. In the western Mediterranean, the monumentalization of major avenues with colonnades and nymphaea was rare; these developments at Ostia seem to have more in common with the urban style of Constantinople than that of old Rome. Yet it is at Ostia that we have the best chance of seeing

METHODOLOGY

Ostia offers an exceptional opportunity to investigate the Late Roman urban style and to examine Late Antique mutations in public space within a stronger interpretative framework. Drawing on ideas I developed at Sagalassos in 2004-2006, the Kent team has explored field methods specifically appropriate to the urban evidence of late antiquity, as found on large clearance-excavated sites.⁵ Our work has focused on the survey, cleaning, and recording of clearanceexcavated public buildings, with selective excavation of surviving stratigraphy rather than deep open-area excavation. We have also carried out surveys of spolia use, stone surface markings, and decorative traces, in the city as a whole. Within excavated areas, we have carried out mortar analyses of walls along with extensive photomosaicing and laser scanning of devegetated walls. Areas of high archaeological potential have been investigated using a grid of 1 x 1 m test pits every 5 m. These are cut through the topsoil but stop at the first archaeological layers. Where late surfaces are intact and the topsoil is shallow enough to permit hand digging, large-scale cleaning has taken place, with an emphasis on sequencing and evaluating deposits rather than digging them in their entirety, so long as the ceramics obtained can provide meaningful support for dating. Our aim has never been total excavation, especially not of Early Imperial and Republican-period layers.

These techniques are minimally invasive and quick to execute, and they fit within the definition of "site cleaning," as they avoid trenches beyond 0.60 m in depth. Such methods provide, at minimal cost, a sur-

the representative aspirations of the—now lost—urban form of Late Antique Rome, which was becoming overshadowed by the eastern capital, culturally as well as politically. In 2008, Lavan (University of Kent) and Gering (Humboldt University of Berlin) began a collaboration under the supervision of the Soprintendenza Speciale per i Beni Archeologici di Roma (Ostia section) to investigate these questions through a campaign of excavation and survey in the central areas of the city, focusing on separate areas. The results of the work of the Kent team are presented in this article, and a detailed report of the work of the Berlin team has now appeared. For full details of architectural decoration and epigraphy, it is important to refer to the full German text.

¹ On secular building in Late Antique Ostia, see Gering 2004, 2010, 2011a. On the habilitation thesis, see Gering 2006, (forthcoming).

²Gering 2004.

³ For the report from the Humboldt University of Berlin

team, see Gering 2011a.

⁴Gering 2011b.

⁵On the methodology developed at Sagalassos, see Lavan (forthcoming).

prisingly rich harvest of new observations on the urban history of the period. It is hoped that, from this work, the extremely fragile Late Roman repairs, which are often touched by tourists' feet, are better presented and will not end up being removed by conservation efforts, which may not always detect the complexity of Late Roman modifications to Early Imperial public buildings. We have also tried to interact with established methods of both classical archaeology (architectural decoration and epigraphy, as practiced by our German colleagues) and Roman urban archaeology (study of finds and stratigraphy, according to the Museum of London Archaeology Service context-recording system). Thus, we hope to develop a methodology that might be used more widely in clearance-excavated sites to evaluate efficiently the Late Roman history of cities where the architectural imprint of the period has been slight but in which the traces of occupation are present and are easily accessible to survey.

INTRODUCTION TO THE FIELDWORK

The fieldwork has to date been able to investigate three major civic plazas and three public fountains, along with various street blockings (fig. 1). The Kent team's work has included excavation in the Main Forum "Sidewalk," the Palaestra of the Forum Baths, and the Foro della Statua Eroica, along with the nymphaeum opposite and the Nymphaeum Bivium, and geophysical survey in the Magna Mater precinct. The works were brought to an end in 2011 with the cleaning of the nymphaeum in the Piazzale della Vittoria, itself a Late Roman square, and a sondage in the Temple of Hercules. The team from Berlin worked with the Kent team in the Foro della Statua Eroica (paving area) in 2008; in separate excavations in the center of the foro in 2009; and in the Via della Forica, the Casa della Basilica with the adjoining Aula del Buon Pastore, and the Main Forum in 2010-2011. We are especially grateful to the Soprintendenza di Roma, represented by the director of the Ostia section, Angelo Pellegrino, for granting us permission to undertake our cleaning and record work, and to Alfredo Marinucci, for facilitating and encouraging our work on-site. All compass directions are set to the expedition site grid, in which site north is set 60° east of magnetic north. This was done to facilitate an initial alignment along the Decumanus and the excavation of the Foro della Statua Eroica.

MAIN FORUM SIDEWALK

In the Main Forum (fig. 2), the Kent team investigated the northeast corner of the plaza, 6 opposite the Temple of Rome and Augustus; the area, uncovered by Calza, was also the subject of undocumented excavation in the early 19th century.7 This area was mainly occupied by a portico, 4 x 23 m in size, thought to be Hadrianic,8 and by an associated monumental arch independently dated to the second century. 9 The arch was blocked in antiquity, while the portico has seen several recent changes designed to please modern tourists; for instance, the portico's rear wall was capped by prewar excavators, who reconstructed there the pediment of the Temple of Rome and Augustus. Our test pits across the forum revealed subsurface layers from beneath the paving, which itself was no longer extant. This caused us to concentrate our efforts on the portico and along the face of the arch (see the bottom righthand corner of fig. 3). We encountered no remaining trace of the destruction layer of the temple, which earlier excavators had encountered; however, a single fragment of the pediment was uncovered, which had been missed by the restorers of 1924.¹⁰ The portico was also heavily denuded, stripped down by previous investigators to a robbed mortar layer of Early Imperial date. Nevertheless, we were able to make a number of observations from both stratigraphic archaeology and masonry that revealed continued investment in public building here in late antiquity.

 $^{^6{\}rm The}$ Main Forum Sidewalk area was supervised by S. Matz, assisted by J. Wolf in 2010.

⁷ Paschetto 1912, 508–14 (1803–1804 excavations), 528 (1824–1825 excavations).

⁸The portico is made of *opus latericium* and partly conjoins an arch of the same masonry. Assumptions have been made that the portico and arch were built as part of a wider program of building work enclosing the Main Forum, and thus Trajanic/Hadrianic brickstamps found nearby can be related to this portico. The height of the portico surface is commensurate with other Hadrianic structures, and it fits within a realignment of roads around the Main Forum seen at this time (Delaine 2002, esp. 93–9). See Calza et al. (1953, 130) and Pensabene (2007, 265–67) for discussion.

⁹ The dating of the arch is complemented by composite capitals for arches found in this area, stylistically dated to the

Hadrianic period (Pensabene 1973, 107 n. 390). *Opus Latericium* walls on level with the level of the Cardo behind suggest a fit with the wider Hadrianic works described above. A more secure date may be provided by two second-century inscriptions, one mentioning works on the forum (*CIL* 14 353) and another describing the arches of the forum (*CIL* 14 375), thus providing a rough terminus post quem.

¹⁰ As archive photographs show, large amounts of the temple pediment were found in this area, probably for the first time in 1802. (All photographs cited herein are from Archivio Fotografico of the Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica.) However, Calza's excavators restored the pediment before excavating down to the level at which we found our fragment (archive photograph B2288), which suggests that several pieces of the temple pediment lay in a destruction layer, without being reused.

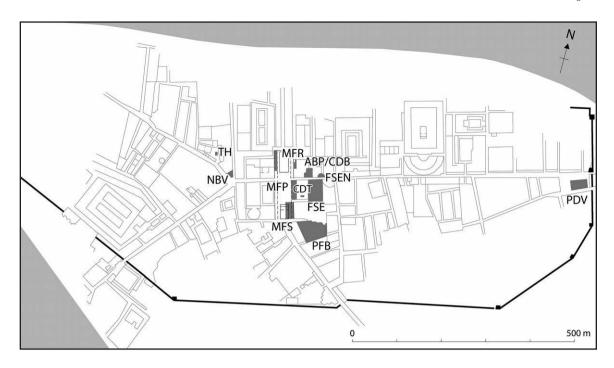


Fig. 1. Map of Ostia with location of areas studied (ABP/CDB = Aula del Buon Pastore; CDT = Casa dei Triclini; FSE = Foro della Statua Eroica; FSEN = Foro della Statua Eroica Nymphaeum; MFP = Main Forum Portico; MFR = Main Forum Rooms; MFS = Main Forum Sidewalk; NBV = Nymphaeum Bivium; PDV = Piazzale della Vittoria; PFB = Palaestra of the Forum Baths; TH = Temple of Hercules) (drawing by E. Boast).

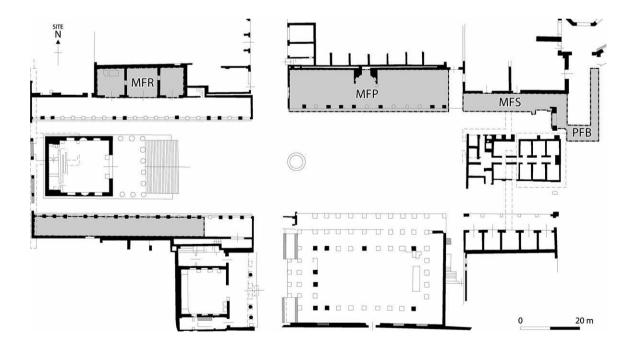


Fig. 2. Main Forum trench location map (MFP = Main Forum Portico; MFR = Main Forum Rooms; MFS = Main Forum Sidewalk; PFB = Palaestra of the Forum Baths) (drawing by E. Boast).

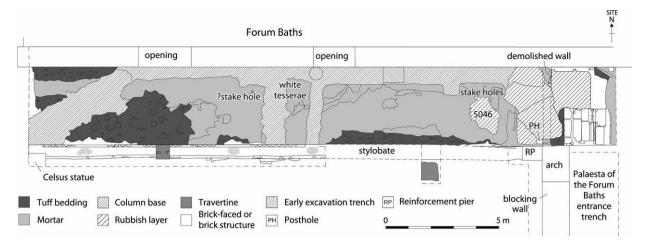


Fig. 3. Preexcavation plan of Main Forum Sidewalk trench (drawing by E. Boast, E. Luby, J. Measor, C. Murphy, and R. Manahai-Mahai).

The primary phase of the portico (phase 1a) was made up of a tuff foundation overlain by a mortar bedding, which supported a mosaic floor, now heavily denuded. The few remaining tesserae were white. The portico's colonnade, with an eroded stylobate in brick-faced concrete (seemingly opus latericium), fronted the Main Forum. A travertine block, 0.59 x 0.59 m, with dowel holes to support a column base of around the same size, was found in situ on this stylobate. An intercolumniation of about 3.5 m can be discerned from holes in the mortar where other blocks have been removed. Pensabene suggests, on slender evidence, that these columns may have been brick, with Doric capitals.11 The back wall of the portico, also in opus latericium, was bonded with the adjacent arch, although the north pier of this arch overlapped the colonnade stylobate, as if it were slightly later. We detected no decorative traces on the rear wall of the portico in this first phase, despite its proximity to the great arch that led out of the Main Forum into the Cardo.

Two minor phases were identified from within the life of the portico, representing both repair and decay. Unfortunately, it is not possible to establish the relative order in which these processes occurred. Repair can be identified in a pier (phase 1b; "RP" on fig. 3) faced in well-coursed reused brick, which was built against the

east end of the portico stylobate. The pier was probably designed to reinforce the colonnade, along with others that are now lost. Decay can be identified in a wooden structure (phase 1c), perhaps a small cabin, which was established in the eastern end of the portico. Two square stake holes were found parallel with the portico back wall, about 1.05 m apart, with another hole along the stylobate. A line of nails had been hammered between the back pair, into the mortar of the robbed mosaic. Just south of this line was the only late deposit found on the portico: a dump that contained several nails, some fused with tesserae.12 The deposit filled a patch of wear in the robbed portico floor and was composed of third-century pottery mixed with bones and small artifacts (a secondary rubbish deposit). But the tesserae fused with nails are likely related to the original floor and perhaps to the wooden structure. This "cabin" was built at a time when the portico was no longer used as a thoroughfare, when its mosaic was heavily damaged. The condition of this area was then utterly inappropriate for the place where the Cardo came out into the Main Forum.

This state of decay was brought to an end by comprehensive replanning. A second major architectural phase (phase 2a) was detected in the rear wall of the portico (fig. 4). This phase, which included some re-

stake holes and nail line described above related to a modern scaffold for rebuilding the temple pediment on the portico back wall, as archive photographs B2287 and B2288 show this was done when the earth was much higher. The dump is notable for the presence of large bronze coins (as yet unprocessed), and the absence of modern finds confirm that the layer is ancient.

¹¹The ideas of Pensabene (2007, 267) seem to be based on finds of Doric capitals in this area and a lack of finds of columns. Capitals from composite columns were found in the room behind the portico wall of the Main Forum Sidewalk and were dated to the second quarter of the second century, although it is not certain that they belong to our portico (Pensabene 1973, no. 390).

¹² We are able to set aside the suggestion that the adjacent

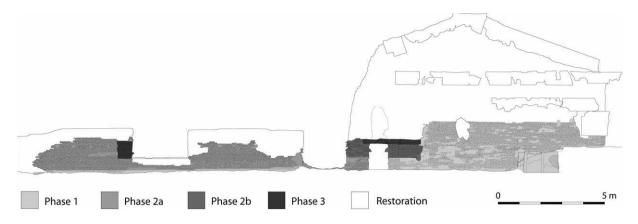


Fig. 4. Elevation of Main Forum Sidewalk rear wall, with blockings (drawing by E. Boast).

used brick, saw the upper part of the wall rebuilt in its western half, with marble revetment of gray and white marble with bronze pins. In contrast, the only possible traces of revetment from the eastern half of the wall are two iron pins. As part of the second phase, the wall connecting the arch to the portico was demolished, and the floor of the portico seems to have been raised. This latter development is indicated by several features: the demolition height of the connection wall; the height of the new portico revetment, which did not reach below about 0.50 m; and the level of one ceramic drain in the same wall. Two openings set within the rebuilt portico rear wall now led into the Forum Baths, the floor of which was now about 0.70 m higher than the original portico. This general raising of the portico floor should be dated in or after the third century C.E., on account of rubbish layer context MFS 5046. We might link this work to the time of Maxentius and Constantine or to the later 380s; brickstamps and inscriptions from each period show works taking place in the Forum Baths complex, which evidently benefitted from this new access. At around the same time, it was felt possible to seal the former main entrance to the baths from the Via della Forica and rely on this access and another entrance from the palaestra.¹³

Such great works seem to have sat within a comprehensive redevelopment of the wider area. The rebuild-

ing of the back wall of the portico in phase 2a would have necessitated a reroofing of the portico. However, it is more likely that the portico was in fact entirely eliminated in phase 2a, as implied by the poor survival of architectural fragments from the colonnade. Indeed, it is possible that the wider zone of the Main Forum, out onto the paving, was leveled to the same height; the +0.50 m threshold level of the portico coincides roughly with a drain within the blocking of the adjacent monumental arch. This would imply a coordinated program of works designed both to close the Cardo and to provide a monumental access to the Forum Baths from the main square. Yet the higher level seen in this area was not present elsewhere in the Main Forum, where the second-century occupation height persisted, as made clear by the excavation of the Berlin team, described below.

At an even later date, the access from the portico into the Forum Baths was improved. The threshold level of the doors leading into the complex was raised again, to a level of 1.35 m above the original portico. This phase (3) saw one entrance blocked with tuff and a second entrance raised up with well-sorted but reused bricks. Here sat a new elegant travertine threshold, with marble revetment on its jambs, measuring some 2.85 m wide, wide enough to have served as a new main entrance to the complex. The raised thresh-

¹³ For building work of the time of Maxentius and Constantine, see brickstamps at infra n. 48. For a suggestion of building work in the 380s, see architrave of Ragonius Vincentius Celsus (*praefectus annonae* during the later 380s). One piece of this was found in the Decumanus Exedra/Sigma Plaza (*CIL* 14 4718) and another "in the room of the baths building overlooking the east [i.e., our north] side of the Forum" (described in Calza 1927, 399–400 nn. 48–9). It is important to point out that neither fragment was found in situ. See the discussion in Gering 2011b, 487–89; (forthcoming), 186–90. Theories of late renovation for the Forum Baths are proposed by Cicerchia and Marinucci (1992, 22–3, 44–51, 52–7), including a detailed discussion of Room 1 (Trajanic with fourthcentury work) and Room 2 (Antonine with fourth-century reconstruction). On the closure of the former entrance in *opus vittatum mixtum* A (not dated), see Cicerchia and Marinucci 1992, 22, 53.

olds again coincided with a higher level inside one of the rooms of the Forum Baths behind. Here, a mosaic of large tesserae is visible (comparable to that in the frigidarium of the Porta Marina Baths, which is dated to the fourth/fifth century).14 We might date all of this phase of work in our area to the time of the reign of Honorius; an inscription found within the Forum Baths suggests repair work taking place in the complex at this time. Within the portico, the 0.5 m level probably persisted, as there is a level of whitewashing/mortar that overlies both the blocking walls and the rest of the back portico but does not extend below the 0.5 m height. Furthermore, there is no structural trace of a higher floor level in the portico to match the 1.35 m height inside the baths. This implies that stairs must have been used to bridge the difference between the levels here. These must have existed already in phase 2a to provide access from the east end of the portico to the area behind the blocked arch. Here, a set of possible brick stairs from phase 1a of the portico had been destroyed by phase 2a, creating a height difference that no recorded structure masked.15

The eventual robbing of veneer from the portico was probably undertaken while the building was fully intact, before a buildup of soil obscured any part of it; only a few marble dowels remain in the masonry. Such behavior would have been unthinkable before the middle of the fifth century, when secular monuments were still being repaired in the city center. Sometime later, when there was already deep soil in the area, further activity can be detected. Investigations in 1921 recorded a rough wall—on top of the portico rear wall-made up of broken mortar fragments and other materials, in a single skin of brick, "un sol filare di mattoni." This sounds very like structures we found in the Foro della Statua Eroica (which are possibly associated with metal recycling, as discussed below). 16 A fragment of these layers may be represented by a layer with first-second century pottery, redeposited in the fifth century, without metal finds, found at the east end of the portico (context MFS 5040–5041). The final event recorded on the site was the cutting of wall-chasing trenches, which were dug either by recyclers or by early excavators along the portico back wall and along the line of drains coming from the baths.

In front of the portico, we have searched for the late paving of reused blocks seen by Calza in 1921 ("lastre di travertino in sito certamente del pavimento tardo del foro"), so far without success. 17 A deeply set stone block in front of the portico (0.60 x 0.60 m) is unfortunately not a possible foundation for a late statue base on the Main Forum paving. 18 Yet the late fourth-century statue base of Ragonius Vincentius Celsus (praefectus annonae during the later 380s) seems to have sat on the portico steps somewhere in this area. Although it is not now in situ, it was found in this part of the Main Forum in the early 19th century by Giuseppe Petrini; a notch was cut out of its base, as if to allow it to be set up over two steps. This sort of ungainly setting would not have been employed in the Early Imperial period but is known in the Late Antique period at other sites, such as the Forum of Caesar and Sagalassos. 19 Elsewhere in the Main Forum, surviving statue bases are predominantly Late Roman, suggesting that forgotten civic leaders of earlier centuries were removed by fourth-century city fathers, who undertook a conscious renewal of political and cultural display in the square. The most prominent base today is a fourth-century equestrian statue to a praefectus annonae and patron of the city, Manlius Rusticus. Significantly, this base once had metal clamps to hold the split base together. These are comparable to the clamps found in the Forum Romanum on the statue base of Stilicho, which are now considered to be ancient.²⁰ Finally, another base records the movement of a statue from a "sordid place" into the Main Forum by another fourth-century praefectus annonae, Publius Attius Clementinus.21

¹⁴A mosaic of similar large polychrome tesserae found in the frigidarium of the Porta Marina Baths was dated to the fourth/fifth century based on the technique and design. A slightly later date was suggested by the discovery of brick-stamps of Theodoric in the excavation of the baths in 1971–1973 (Mannucci 1980, 130). The 1.35 m level is also the level of the Late Roman mosaic behind the adjacent arch, discussed later in this article. For the "Honorian" inscription, which certainly dates to the Late Antique period, see infra n. 48.

¹⁵The earlier brick stairs were identified by J. Delaine during her visit to our excavation in 2011.

¹⁶On late walls above the rear wall of the portico, see Calza 1921, 50, 87, 88.

 $^{^{17}\}mbox{On late paving, see Calza 1921, 61; see also archive photograph B2284 (1923).}$

¹⁸The deeply set block, floating in soil, is shown on archive

photograph B2288 to be a foundation for a modern crane.

¹⁹ For the statue base of Ragonius Vincentius Celsus, see CIL 14 4717 (Jones et al. 1971, Celsus 9); Gering 2011b, 487–89. For late statue bases standing on steps, (with a recess cut into base) in the Forum of Caesar and (with a support) at Sagalassos, see Meneghini et al. 2010; Lavan (forthcoming).

²⁰ On Manlius Rusticus, see AÉpigr 1924, 112 (later fourth century). Clamps on the Stilicho base are considered ancient by the "The Last Statues of Antiquity" Project at the University of Oxford because they are systematic but partially missing, making a modern conservation effort unlikely (Ward-Perkins, pers. comm. 2010).

²¹ "Ex sordentibus locis" (*AÉpigr* 1914, 0159; *CIL* 14 4721). On statues in Main Forum, see Gering 2011b, 458–61, 466, 475–85, 491–93.

MAIN FORUM PORTICO

In the adjacent portico, the following results (summarized in this section by Gering) were obtained by the Berlin team in 2010, thanks to the interest of Angelo Pellegrino and the Soprintendenza. A large section of the paving slabs, not documented before, was found below a thin layer of vegetation. This included several phases of Late Antique stratigraphy. Monumental spolia and inscriptions of second-century buildings were reused for the slabs, while the mortar bedding contained fourth/fifth-century coins. The late Main Forum was not—as previously thought—entirely lost during Calza's clearance in 1921-1924. A detailed analysis of all slabs, foundations of bases, postholes, and finds from earlier excavations shows that the Main Forum's biggest portico was a center of late statue display-on the one hand, for images of the prefect, and on the other hand, for sculptures of pagan gods and philosophers. Public seats have also been identified. Different layouts of the slabs illustrate the process of spoliation in its last monumental phases of the fifth century C.E., when monuments of the Egrilii, one of Ostia's leading families of the first and second centuries, were reused for a new marble floor. The portico was extended onto former street space, and its central apse was redecorated in its late fourth- and fifthcentury phases. Thus, the size and level of public amenities had increased in the Main Forum area in late antiquity instead of decreasing, providing an obvious parallel to the installation of two luxurious toilets in the Via della Forica and the fountain room in the Forum Baths. The portico itself seems to have gained its biggest extension and complete marble cover only by the massive use of spolia, which came from temples, arches, door pillars, and honorific monuments from the Main Forum.

Several so-called second-century walls and floors in this sector appear to be products of late fourth/fifth-century repairs. They are still preserved in their upper sections, and much of their marble veneer survives, including porphyry. A similar sequence of sunken floors and relaid slabs was found in the curia, the adjoining portico, and three newly decorated public reception halls at the opposite side of the Main Forum (Aula del Buon Pastore, Casa dei Triclini, and Main Forum Rooms). Almost identical slab phases and slab patterns seem to underline a continuing care for colorful

THE PALAESTRA OF THE FORUM BATHS

The Cardo Arch

Immediately east of the Main Forum portico excavated by Kent,22 there is a second-century arch (fig. 5), built in brick-faced concrete, for which parts of the thick (4.5 cm) white marble revetment survive, covered by the blocking wall that seals this great opening.²³ The closing of the arch is of great interest, as this route was the main entrance from the Cardo into the Main Forum. The blocking of such a major avenue represents a serious change in urban organization. It is significant that this event seems to have coincided with the creation of a new Late Roman monumental entrance, for the adjacent palaestra was opened up from the Cardo on this side by the removal of a boundary wall. To investigate, the Kent team opened a trench immediately behind the arch and along the facade of the monumental late entrance. The area had two main late phases. In the first, the level east of the arch

marble floors in all these areas until the middle of the fifth century, if not longer, although the final repair slabs on top of the sunken older slabs were laid without mortar. The slab surfaces finally show many traces of the collapse of the portico's columns and capitals, after the partial robbing of the veneers. The scattered remains of stratigraphy on top of the latest slabs and the better-preserved material above the robbed mortar bedding, including late nummi and oil lamps of the fifth/sixth century, seem to prove that spoliation did not take place before the late fifth century at least. Until then, the Main Forum obviously remained in use as a civic center with a rich display of statues, both reused examples concentrated here in late antiquity and newly made portraits of magistrates and emperors, along with repaired late sacella. The Main Forum's monumentality was not diminished, and its "pagan" furniture was never systematically robbed but rather buried under a now completely lost Early Medieval filling. This fill raised the unusually low level of some parts of the Late Antique Main Forum (Main Forum pavement +2.40 masl; Foro della Statua Eroica pavement +3.60-3.80 masl; latest doors of the Forum Baths +3.60 masl). Thanks to this fill, many traces of the fifth-century Main Forum remained at least partially untouched until the excavations of 1802-1804 and 1921-1924, and some even remain so today.

²² The Palaestra of the Forum Baths northeast portico was supervised by J. Fides, assisted by C. Collard, in 2009. M. Mulryan supervised the small temple trench in 2009 and further work in the interior in 2010 and 2011. The Late Roman entrance area was managed by S. Matz, assisted by M. Mulryan and M. Joyce. A further trench in the interior was supervised

by S. Matz in 2011, assisted by J. Wolf. Archive research was carried out by M. Mulryan.

²³ Mortar traces on the arch pier closest to the temple are visible on early photographs (e.g., B2284 [1923]) and likely also relate to veneer.

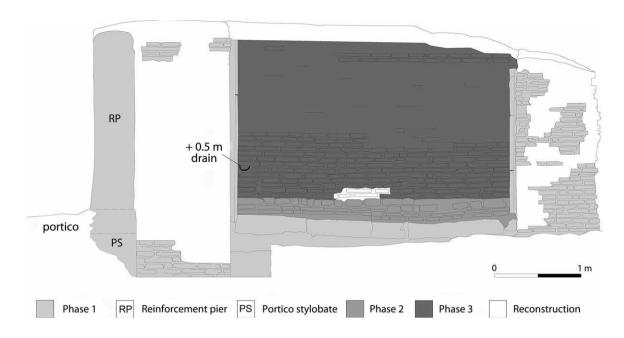


Fig. 5. Elevation of blocked arch from the Main Forum into the Cardo (drawing by E. Boast).

was raised by about 0.60 m through the deposition of a thick dump of mortar into which were set basalt paving slabs. This new level coincided with the blocking of the arch, which is unlikely to postdate the time of Maxentius (on account of its lack of reused bricks).²⁴ Furthermore, the presence in the blocking of a drain, relating to the +0.50 m height within the adjacent forum portico, suggests a provisional terminus post quem of the third century C.E. This new level was built over a third-century C.E. rubbish layer (context MFS 5046).

The Late Roman Entrance

The second phase behind the arch coincided with the installation of a new entrance to the palaestra from the Cardo, which involved a further raising of the floor by about 0.20 m above the basalt, with a thick layer of mortar, to support a new mosaic (figs. 6, 7). This higher level was accessed by brick steps (wdth. 2.80–2.90 m), leading up from the Cardo to the south,

The dating of the great mosaic of the palaestra is not straightforward. Its tesserae overlap/lap against

which were set on a brick-concrete foundation that cut through the basalt mentioned above. Flanking the steps were set two large, reused blocks (ca. 1.40 x 1.0 m) with dowel holes for column bases. These likely supported some kind of reused pediment, as seen in other Late Antique cities, thus creating a new propylon for the palaestra.25 The new mosaic in the entrance passage seems to be of the same style as that of the palaestra proper: a white mosaic of crudely cut tesserae with a black border (wdth. 0.65 m) running along the edge and another black ribbon set about 1 m forward from the first.²⁶ Within the palaestra proper, this same mosaic extends right across the plaza, without any obvious phasing. It is certainly not the original (travertine) floor of the square, which we uncovered in a few places in front of the northeast portico, bonded into its travertine drain.

²⁴On the arch (without discussion of date), see Calza 1928, 160; Cicerchia and Marinucci 1992, 138. The arch blocking is not described in original published material but is discussed in Calza 1921, 87–8, 91–6. On Maxentian building using new bricks, see Heres 1982, 103–6, 223–32, 238–44. Below the blocking was an earlier raising of the threshold above the great stone threshold of the arch, which had involved the insertion of a single tuff step. It was not possible to connect any stratigraphy behind the arch to this phase.

²⁵A propylon with a reused pediment at Corinth is thought

to have been rebuilt in late antiquity because large recut blocks found in the area are of a size appropriate only for propyla (Scranton 1957, 14). A possible nymphaeum with a reused pediment appears at Aphrodisias (Smith 1996, 23–7).

²⁶ Admittedly, in the palaestra, the mosaic has a second black band, 0.20 m wide, that is set 0.35 m in front of the black border, but this would not have been necessary in the much narrower confines of the new entrance passage behind the blocked arch.



Fig. 6. Levels behind the arch of the Cardo, showing basalt level (contemporary with blocking of arch) and higher mosaic level.

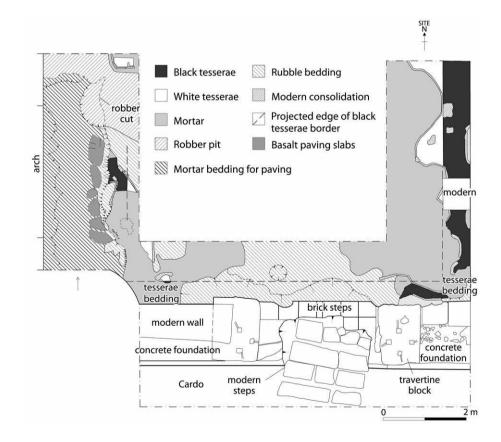


Fig. 7. Preexcavation plan of entrance to the Palaestra of the Forum Baths (drawing by E. Boast, E. Luby, C. Murphy, and J. Measor).

some features relating to the late transformation of a fountain into a temple (see below). One must remain cautious in generalizing the sequence, as such mosaics could have been developed to the same design over an extended period. Perhaps more reliable is an observation that the mosaic with its "border band" was carefully laid (with a finished edge) to respect a series of late basins set secondarily against the northeast portico of the square. These basins (only one of which remains) were placed directly onto the original travertine paving, which survives only beneath them. Rough round holes were cut through the old paving into the drains below to provide an outlet. These awkward features were thus installed before any mosaic reached this area, suggesting a late date. Furthermore, a thirdcentury rubbish layer (context PFB 5301) found a few meters away was probably part of the leveling layer for the black-and-white mosaic. It is hoped that coins (once cleaned) from within the fill layers of the Late Roman entrance area will provide further precision.

Palaestra Interior

The area of the palaestra proper (see fig. 7) is an irregular trapezoid, some 50 x 77 m at its widest points, bounded by the Forum Baths to the northwest and a vaulted portico to the east. The portico seems to have been arcaded, judging from archive photograph B3134 of the collapsed ruins, from the Archivio Fotografico of the Soprintendenza Speciale per i Beni Archeologici di Roma-Sede di Ostia Antica (all other archive photographs are from this source). Late piers reinforcing the portico suggest the columns carried a vault, which certainly existed farther along the walkway, within the adjacent Forum Baths. The west side and center of the plaza were excavated in 1927–1928, and the portico and its rooms in 1939-1940.27 From the back wall of the portico are openings into shops, a latrine, a possible collegium, and the original main entrance (wdth. ca. 5 m), coming off part of the Cardo, farther away from the forum. Most of these walls likely date to the second or early third century, based on the uniformly high standard of the work: well-leveled and closely bonded courses of bricks of a regular size. In places, one can detect traces of a thick (ca. 3 cm)

white marble revetment well doweled into the wall, covering a height of up to 1.5–1.8 m from the floor. This was not original but was added after two phases of secondary blocking, within openings in the rear wall. The palaestra portico appears to have been built in a single architectural program, to the same standards as the rear wall of the portico. However, this is not true of the two temples within the square, which were not aligned with any other walls.28 The entire plaza was sampled by a grid of 1 x 1 m topsoil test pits, which revealed intact surfaces within the portico along the east side of the square and around the two small temples. Large excavation areas were thus opened here, with outlying trenches to evaluate key features (fig. 8). Unfortunately, roots prevented an examination of the boundary wall of the palaestra at the point where it had been demolished to permit access into the plaza via the new entrance.

There are numerous Late Antique modifications within the plaza. We cannot give an absolute date for these; their dating mainly relies on one of two factsthat they cut through the rough white mosaic or that they reuse building materials. The portico saw a number of changes (fig. 9). First, some nonmatching columns may have been inserted into it; at present, there are Aswan red granite, cipollino, and Africano Rosso monoliths in the restored colonnade, with the granite set in the corners. Nonetheless, any hypotheses of reuse remain speculative, as only one column certainly survived in situ when the area was excavated (archive photograph B2903 of 1940). It has since been moved elsewhere. A group of Ionic capitals now reset into the colonnade (which do not have a clear notebook provenance) might date to the fourth century. Cicerchia and Marinucci assert this dating, without specifying why.²⁹ Yet the capitals need not date the portico itself: the solid stylobate supports well-cut Ionic bases with no trace of reuse, and a travertine drain running along the stylobate forms an integral part of the original travertine paving of the plaza.30 It is perhaps likely that, because of the solid vault, one or two of the columns failed over time and that replacements were necessary. However, in no case do columns seem to be obviously reused or seem not to fit their bases.

²⁷ For excavation in 1927–1928, see archive photographs A2173 and A2217. For excavation in 1939–1940, see Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica 1939–1940. There seems to have been some early 19th-century work in the far southwest of the plaza, as shown on the plan of Holl 1805; Marini 1998, 78.

²⁸ On previous work on the palaestra, see Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica 1939–1940. Mar (1991, 97–103) argues that it was already a public space before the Forum Baths were constructed, al-

though structurally the present arrangement seems to postdate the first (second-century) phase of the Forum Baths. Geophysical work by the British School at Rome in 2005 revealed a row of cellular rooms under the palaestra defining one side of an open space on a different alignment (Strutt 2005).

²⁹Cicerchia and Marinucci 1992.

³⁰ Cicerchia and Marinucci (1992, 138) date the portico columns to the fourth century.

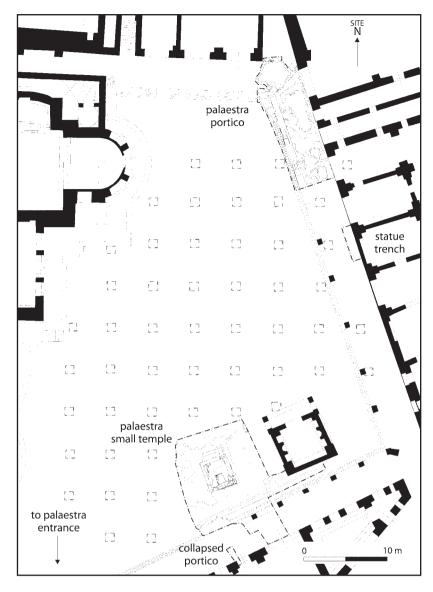


Fig. 8. Palaestra of the Forum Baths trench location map (drawing by E. Boast, E. Luby, and L. Figg).

At a later period, a series of brick-faced piers was inserted, hugging the columns, to reinforce the vault of the portico; the piers were arranged irregularly along its full length, leading into the Forum Baths proper (fig. 10). These piers, all of which contain reused brick, seem quite ugly compared with the portico and are irregularly spaced and shaped. Even so, they contain

traces of veneers, attesting to a surviving aesthetic pretention (fig. 11). It can be affirmed that the piers postdate the colonnade:³¹ the earlier examples were built to fit around columns in each angle of the plaza and also to fit around a column that is now missing (at context PFB 2089).³² The piers were inserted in at least two different phases, suggesting incremental

their style of construction: *opus latericium* with mainly regular facing and both new and reused bricks. Cicerchia and Marinucci (1992, 23, 138) argue for a phase of Severan piers followed by an early fourth-century insertion of columns, on the basis of Ionic capitals found here (no reason given—style?)

³¹Contra Cicerchia and Marinucci 1992.

³² Piers inside the corridor of the Forum Baths (i.e., five piers of portico coming out from the baths in the palaestra) have been tentatively suggested as third century, but not on very strong grounds. Heres (1982, 398–99, 401) argues from

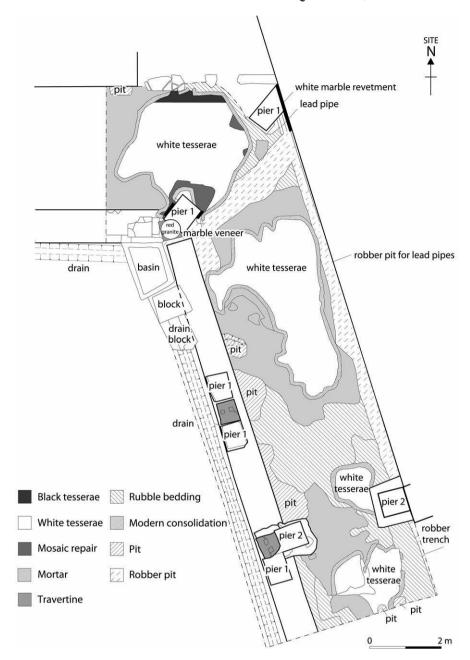


Fig. 9. Preexcavation plan of the northeast trench of the palaestra portico (drawing by E. Boast, J. Fiddes, and C. Murphy).

repair as the vault became more and more unstable. The first group of piers has a style of revetment associated with the finest late buildings, with white marble dowels and bronze tabs set in the wall, while a second

group is undecorated. The first group was constructed at the level of the portico stylobate. One of these piers pierced the portico mosaic, which was then patched with an unsightly mix of black and white tesserae (see

(see also Pensabene 1973, 44 n. 140) and Constantinian brickstamps found in rooms behind the portico, of imprecise provenance (Cicerchia and Marinucci 1992, 244–49). Two piers on the western (our southern) side of portico have also been regarded as securely Severan (no reason given) (Cicerchia and Marinucci 1992, 23, 138). On the piers as predating the colonnade, see Cicerchia and Marinucci 1992, 138.



Fig. 10. The bracing piers of the palaestra portico.

fig. 11). In contrast, the second group of piers seems to have been set into a (now lost) higher floor level, which covered the portico mosaic and was possibly composed in part of reused slabs, now stripped away.³³ Surprisingly, most piers of the second group were built after a robbing trench was dug along the portico to extract a lead pipe. The fill in this trench produced a fourth-century coin, providing a terminus post quem for the higher piers. Thus, the piers attest to successive Late Antique attempts to preserve the portico, alternating with periods of neglect.

Over time, the portico decoration became a mixture of new and old. It is surprising that the first set of piers were veneered, even if the marble revetment was only 1 cm thick. It is remarkable that any decorative impulse still remained to Late Antique builders, who created so much visual disjuncture; they used different marbles to cover ill-spaced piers and were, from the beginning, prepared to refill holes cut in the mosaic with tesserae of mixed colors. There is no trace of any new decoration on the back wall of the portico that might date from late antiquity, except in one spot:

an opening was closed by a new wall in *opus vittatum mixtum* B, which was built on a foundation level some 25 cm above the floor of the portico. At the base of this new wall, pieces of dark-red painted wall plaster with thin white lines were found in a disturbed fill (context PFB 2049, 2051). Elsewhere, along the back wall of the portico, the thick white Early Imperial marble revetment seems to have been retained, for a while: the earliest reinforcement piers (that cut or stand on the mosaic) were built covering the original veneer. Yet the later piers were installed when this original veneer had already been stripped. Thus, the palaestra was plundered for its high-quality veneers and lead long before the city lost interest in maintaining its superstructure.

Within the plaza itself, earlier excavators found a range of statuary, both Early Imperial and, in one case, Late Antique. We do not know what the first excavators found in 1927–1928, as their diaries are lost. The 1939–1940 excavation uncovered a bearded consular statue, probably an urban prefect of the fourth century (found in a *taberna* in our northwest corner of the

³⁸ Several inscribed marble slabs were found by the first excavators on the south side of the palaestra and its rooms, suggesting a higher floor; in one case, a slab was reused as a socle (Cicerchia and Marinucci 1992, 223–28, cat. no. C125). While some of this mainly (white marble) may have been used as veneer for the first phase of piers, one slab came from a pavement overlapping (*sourap-posta*) a black-and-white mosaic from the room with two columns in our east side of the palaestra (Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica 1941–1950, 22). This recalls mortar layers seen on top of the white mosaic in front of the small temple, within the plaza itself.



Fig. 11. Detail of a pier (first set), showing a cut into the earlier mosaic and decoration with thin revetment.

plaza), along with a statue of Isis, which was walled up on our north side of the square. The head of an athlete (thought to be a boxer) was found in a room on our eastern part of the plaza, while the head of a boy was found in our southeast corner of the square. In rooms adjacent to this area were found a head and torso of Eros and the trunk of a Hellenistic youth, perhaps Apollo; a statue group (a snake, Asclepius, and two goddesses); and a head of Severan date, identified as Julia Domna. In 1996, a second group was found by Marinucci on our western side of the palaestra, during work on a drain of the Forum Baths. This group consisted of a head of Marcus Aurelius, a foot, a torso of Diana, and the head of a sheep.

These statues all seem to have been found out of context, and all but two were fragments. A single statue base (uninscribed) was recovered from the plaza, sug-

gesting at the very least some disturbance.³⁶ Notable is the absence of civic honorific statuary from the principate, for which period the statues are either imperial or religious figures mainly associated with youthful vigor (as might be expected for a palaestra that was also a sacred area); the boxer reinforces the athletic theme. The presence of the sheep's head is less easy to explain. Some of the collection may have been brought from elsewhere, as part of the late renovation of the plaza or as building material.³⁷ It is even possible that some examples were already broken when they were erected in the square, a phenomenon known at other Late Antique sites.³⁸ We have not been able to locate any emplacements for these statues, except for one rough-hewn stone foundation about 1 x 2 m, which interrupts the mosaic tesserae between the two temples. This fragment of the original travertine

³⁴ Palaestra statuary of 1940 included a consular statue (archive photograph B2894 [1939]; Soprintendenza Speciale per i Beni Archeologici di Roma-Sede di Ostia Antica 1939-1940, 60-2); a statue of Isis on the east (our north) side of plaza, walled up, horizontal (64); the head of an athlete comparable to that of Lysippos' seated boxer, from the room with columns in the central southern (our eastern) part of palaestra (138); the small head of a boy from southwest of the piazza (our southeast corner) (64); the head and torso of Eros from rooms south (our east) of the palaestra, behind the room with marble niches (58); the trunk of a Hellenistic young man, perhaps Apollo, in the same location, close to the Cardo (60); and the head of a boy in corner by the Cardo (60). For the statue group (votive with Asclepius, a serpent, and two female figures) found near the Cardo on the south (our east) of the piazza, along with the torso of an Ephebe, see Soprintendenza Speciale per i Beni Archeologici di Roma-Sede di Ostia Anti-

ca 1939–1940, 64, 66. For the head of Severan date, Julia Domna, in one of the rooms on the east side of the Cardo near the corner (our southeast corner) of the palaestra, see Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica 1939–1940, 52. For the togate statue, see Cicerchia and Marinucci 1992, 153 n. 22, figs. 83, 84. For Julia Domna, see Cicerchia and Marinucci 1992, 154. For these and finds of an *imago clipeata* in the room with columns and other minor marble finds, see Cicerchia and Marinucci 1992, 153–57.

 $^{^{35}}$ The palaestra statuary found in 1996 is visible on archive photographs R6411, R6413.

³⁶On the uninscribed statue base, see Cicerchia and Marinucci 1992, 161, cat. no. B4.

 $^{^{37}}$ A. Marinucci, pers. comm. 2009. See also the archive photographs cited in supra n. 35.

³⁸On the display of broken statues in late antiquity, see Myrup Christiansen 2010.

paving was retained here when the mosaic was laid, perhaps to support an equestrian statue, which was erected, or already existed, at this time.

Palaestra Small Temple

The large temple of the palaestra was constructed of brick-faced concrete without any reused material and has produced second-century brickstamps.³⁹ It is revetted in white marble attached with dowels. Unfortunately, the relationship between this revetment and the mosaic of the palaestra plaza has been lost to stone robbing. The small temple is a much more complex structure (figs. 12, 13). It has at least one Late Antique phase, unknown until cleaning by the University of Kent team in 2009.40 Here, our recording revealed what seemed to have been a basin, which was transformed into a very small temple in the Late Roman period. The first phase of the building was a roughly square structure of brick-faced concrete, 3.6 x 3.8 m, rising 0.83 m above the floor of the palaestra, with travertine blocks at its corners and upper parts. This square platform rests on a low foundation (opus caementicium with tuff caementa) that is a little wider (13.5 cm) than the building elevation. On the top of the travertine platform, we recorded attachments for columns and straight-sided grooves (9 cm wide in the west wall and 8 cm in the east, where it was 6 cm deep). These grooves could have held upright stone screens between the columns. The interior, covered by a layer of late mortar, was about 0.2 m lower and had a white marble lining of two layers, suggesting a basin that had been repaired on one occasion. Stone markings (pitting and calcination) consistent with the discharge of running water were detected in the stonework on the north side.

The dimensions and design of this primary structure proved to be very similar to a fountain on the Decumanus (the Fontana con Lucerna), which has similar struc-

tural features and the same external decoration. This fountain has a final phase of decorative features similar to our own (with openwork stone screens set between columns), which has been dated to the third century C.E.⁴¹ A decorated fountain spout, found in 1939 in a late wall just behind the small temple, may relate to this structure. 42 Thus, there once was a fountain in this so-called palaestra, the original functional character of which is far from certain. Such an attribution seems odd given the presence of shops and the first (larger) temple, although the statue decoration of the plaza partially supports this function. The external decoration of the fountain/temple was in thin slabs of white marble revetment (probably Carrara marble) 0.75 m in height (as known from clamp marks). This may have been repaired in places, as some of the slabs are 2.6 cm in width, while others are 1.6 cm, while others are between 1.6 and 1.9 cm. At least the thicker slabs are likely to represent the primary decoration of the fountain, as they match the basin lining inside. Small pieces of decorated tile found around the building seem to have come from the soffit of the roof. It is significant that a terracotta antefix from the first or second century C.E. was found at the small temple by the early excavators, showing a winged Victory killing a bull. This, like the other material, may have been reused.⁴³

To convert the fountain into a small temple (see fig. 12), the interior basin was filled with mortar and raised to match the top of the basin walls; two steps were added to the front; finally, projecting elements composed of gutter blocks were added to the corners of the new front side, probably to support columns for a pedimental porch. The guttering may have come from the drainage of the primary structure or perhaps from nearby. The exterior of the structure was redecorated in places with thin pieces of white marble revetment, secured only by a thick layer of mortar. Directly in the front center of the temple, a roughly cut square stone

³⁹A. Marinucci, pers. comm. 2010.

⁴⁰ Previous work on the temple is unpublished. The only source materials are archive photographs and a field notebook (Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica 1939–1940) that describes the palaestra excavation but not the temple itself, as far as we could discern.

⁴¹On the dating of the Fontana con Lucerna, see Ricciardi and Scrinari 1996, 157–61 n. 150. This phase, the third of the structure, involved the addition of marble on the sides and marble columns that may have supported a pergola. The phasing of the fountain has been linked to the evolution of the portico and the *caseggiato* behind, as scholars regard it as being of a single connected space. Dating of earlier phases relies on wall type and the discovery of 114 C.E. brickstamps in the *caseggiato* (Calza et al. 1953, 227). The third phase is also dated based on the assumed evolution of the building to

its rear (demolition of the north portico and widening of the Decumanus) and a believed connection with construction of the nearby forum outside the Porta Marina at that time. The capitals that were set above the columns of the fountain (now removed) have been classified as Hadrianic Corinthian by Pensabene (1973, 146), although Ricciardi and Scrinari (1996, 157) see the decorative elements as being spolia, without providing reasons.

⁴²The fountain spout was found "murato" (which I take to mean walled up in a late wall) between two collapsed arches (which can be seen on archive photograph B3134) (Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica 1939–1940, 62; see also Cicerchia and Marinucci 1992, 154, cat. no. A23).

⁴³ For the antefix, see Calza and Floriani Squarciapino 1962, 89; Cicerchia and Marinucci 1992, 153 n. 21, fig. 83.

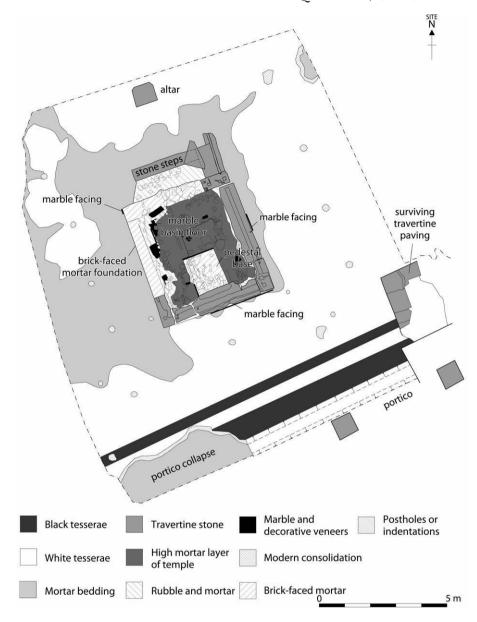


Fig. 12. Preexcavation plan of small temple, showing surrounding stake holes (drawing by E. Boast, E. Luby, J. Measor, R. Manahai-Mahai, and A. Sanchez).

block was set into the plaza $(0.70 \times 0.55 \, \mathrm{m})$. This, from its position, should have supported an altar. Within the building, an emplacement for the base of the cult statue $(0.82 \times 0.59 \, \mathrm{m})$ was established opposite the steps, over the mortar layer used to fill up the basin. This statue base was cut into the basin wall of the pre-existing structure behind it. The very thin revetment of the base survives (only a few millimeters thick), as do fragments of the geometric *opus sectile* floor that was

set inside the building into the new mortar layer. The surviving slabs are of cipollino, serpentine, and schist, revealing that although the temple was carefully decorated, it was completed on a modest budget.

The transformation of the fountain into a temple could be dated on several grounds. First, the abundance of reused material, especially very thin revetment, with one inscribed face hidden from view, suggests a date after the mid third century.⁴⁴ Second,

 $^{^{44}}$ For thin revetment reused in fourth-century contexts, see Heres 1982, 386–89.

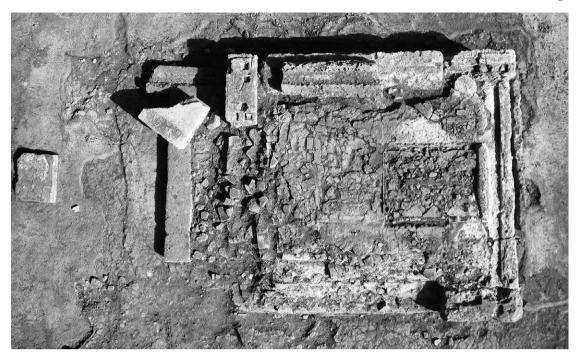


Fig. 13. Aerial photograph of small temple in 2010 (courtesy C. Krug).

the white mosaic surrounding it and lapping against the altar may date to the third or early fourth century, as mentioned previously, tentatively providing a terminus ante quem for the temple phase. It is true that the mosaic may have been repaired to permit the temple to be inserted. However, the provision of oddly shaped basins on the plaza when the mosaic was laid may have been made to compensate for the contemporaneous loss of the temple fountain within a single comprehensive renovation of the square. This is credible if one considers the ambition of the great black-and-white mosaic that was laid from the north portico as far as the new entrance from the Cardo. Unfortunately, we cannot use for a terminus post quem a fourth-century coin (of 347/8 C.E.) found against the side of the foundation layer of the temple steps, since that layer was not sealed. We must be content with a mid third- to fourth-century attribution.

Final Antique Occupation

For the northeast portico, a study of archive photographs (B2903, B2943) from the 1940 excavation of the palaestra revealed some disconcerting facts (fig. 14). When excavated, the colonnade was found to be blocked in three of its intercolumniations by a well-made series of walls (at least one of which was *opus vittatum mixtum* B) and a doorway, set about 0.5 m above the present floor level, with a floor level visible

at the same height. A fourth blocking wall may have existed between piers in the southeast corner of the portico (seen on archive photograph B2897). Thus, there was a Late Antique building set within the portico, postdating the robbing of the veneers of the reinforcement piers. All traces of this late "privatization" of the portico were removed by the early excavators, who wanted to create the aesthetically beautiful palaestra that tourists experience today. This unmonumental "utilitarian" occupation of the palaestra portico after the robbing of the veneers cannot be dated, though ceramics from pits inside part of the portico await study. It may date from the later fifth century, if developments were similar to those in the adjacent Foro della Statua Eroica. Surprisingly, it seems that the late house still enjoyed a porch frontage reminiscent of the northeast portico: a line of shallow postholes between 10 and 12 cm in diameter and about 8 cm deep was found in front of the structure in the mortar of the robbed mosaic. This may have represented a light lean-to porch built to compensate for the loss of the walkway.

Around the small temple, aerial photography by the German team alerted us to a line of much smaller postholes. A second line was also detected on our photomosaic and confirmed on-site (see fig. 12). These postholes ran around the structure, 1.5 m away from the south side and 2 m away from the north side, and



Fig. 14. Archive photograph of palaestra portico in 1940, showing the colonnade blocked with an *opus vittatum* wall and a threshold (Ostia Archive Service; by permission of the Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma—Sede di Ostia Antica, Archivio Fotografico, photograph no. B2903).

were spaced 1.5 m apart on the south side and 2 m apart on the north side. Like those in front of the northeast portico, these postholes were often ephemeral indentations on the ground, suggesting either that the soil level into which they were cut was found above the present mosaic or (more likely) that the structure was a lean-to relying on the extant temple building for support. The best defined posthole, cut 5 cm into the mortar, was context PFB 2182; this yielded a perfectly round hole 12 cm in diameter. The round profiles suggest timber posts, while the slender diameter of this and other holes points to a light porch with only a thatch or shingle covering. There are further indentations in the mosaic between the two temples, which might indicate the presence of beams laid flat to take upright posts. That the surrounding porch seems to have been relying on the superstructure of the temple suggests that there had been no Christian destruction of the structure; it was allowed to stand and was eventually reused rather than demolished.

FORO DELLA STATUA EROICA

Introduction

The Foro della Statua Eroica is a square plaza, some 42 x 46 m. It is equivalent in size to the Tetrastoon of Aphrodisias, which is dated by epigraphy to the reign of Julian.45 It has a stepped facade of brick piers on the west leading up from the Decumanus, and it has two lateral porticoes of columns. Traces of a possible third portico are present in a line of piers on the west side, while the east side is made up of the Forum Baths, an apse of which protrudes onto the piazza. The paving survives in the southeast corner and in an isolated patch off the north portico, in which stone gutters survive, set about 1.15 m in front of the portico. There are two lesser entrances, one from a doorway into the Forum Baths and another from the Via della Forica, coming from the Main Forum. A current entrance from the Casa dei Triclini was blocked for some and perhaps all of late antiquity by a wall removed by the early excavators. The facade was exposed in 1913, and

⁴⁵University of Kent excavation work on the Foro della Statua Eroica was supervised by H. Harrington, V. Reilly, and K. Madigan in 2008, K. Madigan and J. Fiddes in 2009, and Z. Magyar in 2010–2011, assisted in different years by J. Williams, M. Joyce, B. Knapp, and D. Watson. Roueché (1989, nos. 20, 21) records the work on the Tetrastoon of Aphrodisias, which is dedicated to Julian (361–363 C.E.) but has a matching inscription for Valens (364–378 C.E.).

the interior was excavated from 1927 to 1938/9; the republican roads beneath the site were exposed in 1995. The history of previous excavation is described in full by Gering in his parallel report in *Römische Mitteilungen*, ⁴⁶ accompanied by an account of the architectural decoration of the facade and the excavation of the paving area, which was begun jointly by the University of Kent and Humboldt University of Berlin teams in 2008 but finished by the Berlin team in 2009.

Architectural Phases

At the Foro della Statua Eroica, the Kent team conducted both cleaning and survey work (fig. 15) to resolve a confusing sequence of walls revealed by early excavations and to characterize the Late Roman layers. These are very thin in many areas and have been severely truncated or removed over much of the plaza; in some places, the square can be detected only as a negative feature: a flat level cut into earlier structures, with its own architectural fabric now lost. 47 The presence of a pine tree in the center of the plaza has limited our investigation, as did a very reasonable request from the Soprintendenza to leave the excavation of the baths below to Marinucci, who has already dug part of the complex. Aside from these areas, the whole plaza was sampled with 1 x 1 m test pits every 5 m to distinguish areas where surfaces and subsurface deposits survived that could answer questions about the date, decoration, and character of the complex. These investigations not only established a chronological sequence for the construction and repair of the structure but also illustrated a clear narrative of declining technical competence in both the planning and execution of large-scale building work.

Pre-Foro Levels. Below the level of the plaza is a second-century bath building with Severan additions. It does not appear to be part of the Forum Baths, or those to the north, which are now beneath the fourth-century Decumanus Exedra/Sigma Plaza; our bath building is separated from these by two basalt roads on its eastern and northern sides. On the far side of the latter is a row of cellular rooms, probably shops. All these structures were demolished and filled in to allow the

building of the foro. It has been hard to identify the correct stratigraphic sequence of these walls, as the baths and the foro were both made from similar brick-faced concrete (opus latericium and opus reticulatum for the baths and opus latericium alone for the foro). Furthermore, modern restoration has obscured the phasing. However, careful study of brick sizes and coursing, assisted by sondages, has resolved the sequence here. The basalt roads are the earliest elements at the site (covering even deeper stratigraphy), followed by the row of shops and the baths; these baths eventually encroached onto the northern road when a Severan piscina was built with an apse that projected into the street. A similar development took place on the eastern road when an apse of Maxentian or more likely Constantinian date was added to the adjacent Forum Baths and completely closed the roadway. The same road was also encroached on by a room built out under a street porch, which narrowed the roadway, before being blocked with a wall of reused material. All these events predated the building of the foro, which cut through the baths and the shops and sealed both roadways under fill, mortar, and paving.48

The cellular rooms on the northern part of the site were 2.5 x 2.5 m in size and paved with white mosaic. Only one has been completely excavated, revealing a latrine. Of the baths below the plaza, the cleaning by the Kent team revealed a number of features that had not been recorded before: the perimeter wall, a brickfloored room, a praefurnium, a hypocaust, and sunken compartments of varying depths. We initially thought that all the sunken compartments were cisterns, but their varied depth makes this unlikely, especially as one had an entrance with a doorjamb on a lower level. A round chamber with niches was discovered in the southeast corner in 2008 by both teams. 49 Earlier excavation in 1995 by Marinucci (in the northeast corner of the complex) identified the Severan piscina⁵⁰ and an area of white mosaic similar to that located by the Berlin team on the south side of the site in 2009.

Foro Phase 1. To construct the *foro*, builders removed the front wall of the baths along the Decumanus. This was done to allow a wide new facade to be established,

⁴⁶ Gering 2011b, 419-20.

 $^{^{\}rm 47}$ For previous work on the Foro della Statua Eroica, see Gering 2011b, 414–57.

⁴⁸The baths under the *foro* are tentatively dated to the Late Hadrianic period based on (1) generic dating of the inscribed cippi found there and (2) the dates of buildings on either side of the complex. These buildings include the Caseggiato dei Triclini, with brickstamps of ca. 120 C.E.; the Caseggiato della Cisterna, with brickwork of same period, for which see Calza et al. 1953, 132. The apse of the piscina is dated to the Severan period based on the style of the mosaic (A. Marinucci,

pers. comm. 2008). The apse of the Forum Baths is dated to the Maxentian/Constantinian period based on brickstamps (Calza et al. 1953, 159, 218; Pensabene 1973, 100 n. 358; Heres 1982, 396, 401; Cicerchia and Marinucci 1992, 22, 104–5, 137, 234). An inscription found in the Forum Baths, thought to be Constantinian (based on the language employed), may relate to this work (*IG*14 1073a; Lazzarini 1983; Cicerchia and Marinucci 1992, 167, cat. no. C3).

⁴⁹ See Gering (2011a, 309–10; 2011b, 448–52) for full reports on this work.

⁵⁰A. Marinucci, pers. comm. 2008.

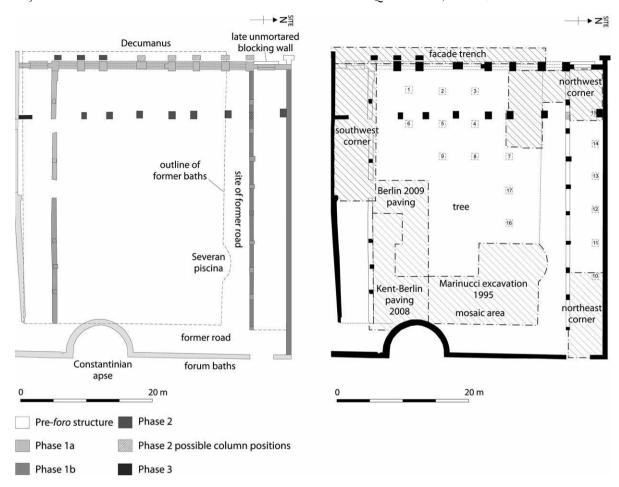


Fig. 15. Trench location map and phase plan of the Foro della Statua Eroica (drawing by E. Boast, E. Luby, L. Bosworth, and A. Bates).

set back from the road and composed of brick piers (see figs. 15, 16, 17). Between the piers, well-cut travertine staircases were set, leading up from the roadway into the interior. The stairs themselves have survived in two places. Inside the plaza, the baths were demolished down to a consistent level, over which paving was later set. In much of the complex, this involved dumping into the cavities large quantities of white mortared rubble and building debris, which were most likely derived from the demolition of the baths themselves. Elsewhere, the leveling dumps consisted of a layer of amphoras and tile, or domestic rubbish deposits, found in two other places; some of these deposits seem to date from a secondary phase of the foro (see below). The interior architectural arrangement of the foro consisted of two columnar porticoes on the north and south sides of the plaza. The wall of the Forum Baths formed the eastern boundary of the plaza and was not porticoed. The site does not seem to have any internal public buildings. Away from the Decumanus entrance, it was possible to access the complex from the Main Forum through a gap in the wall in the southeast corner. A door was also cut into the Forum Baths at the east end of the north portico at a height that suggests it dates to the *foro* period. ⁵¹

There seem to be two main phases to the *foro*, the first of which is divided into two subphases (phases 1a and 1b). The main element of phase 1a is represented by the piers of the street facade. These are well aligned but slightly irregular both in their dimensions (ca. 1.20 x 1.40–1.70 m) and in their spacing (ca. 3.60–4.60 m apart). They are of a similar style—*opus latericium* piers faced with brick that was perhaps reused (as it is of different colors) but was well sorted and well leveled.

⁵¹A door in the south portico wall leading to the Casa dei Triclini was closed by a wall when first excavated (archive photograph A2471). The photograph does not show whether it was in *opus latericium* or *opus vittatum mixtum*.

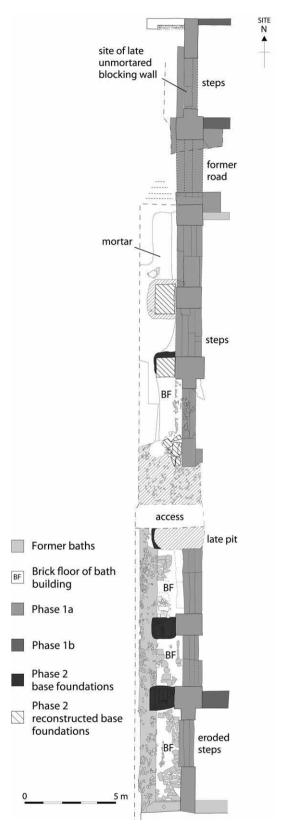


Fig. 16. Facade trench phase plan of the Foro della Statua Eroica, showing Decumanus piers and surviving steps (drawing by K. Madigan, L. Bosworth, E. Boast, and D. Underwood).



Fig. 17. Wall of baths demolished to build the *foro* facade, showing brick floor of room inside baths.

Significantly, its below-ground courses were constructed to the same high standard as the above-ground parts. Between each set of piers were set well-cut travertine steps, which survive in two places. On the second pier from the north, the foundation trench clearly cuts through the walls of the baths. This is also true of the southern end of the new facade, where the walls of the baths have been demolished and the piers of the facade rest directly on the brick floor of the bath building. At the north end, the facade crosses a void over the basalt road by means of two great concrete foundations, which each support a pier.

One short section of the south portico seems to be contemporary with the facade piers of phase 1a. This stylobate wall, which was not designed to be visible aboveground, rests against the first pier from the south and is built in the same style as the facade in wellcoursed opus latericium with bricks of the same sizes, though of mixed colors. Significantly, it cuts through an opus reticulatum wall of the baths complex. It is important to note that this part of the south portico stylobate, running for some 20 m, is not of the same phase as the rest of the portico given that it is set on a slightly different alignment. It was later widened to the north by two rows of bricks to reach the new line. It may be pertinent that the westernmost column-base emplacement, which has survived in situ on the portico, is newly cut (unlike the others in spolia) and was not designed to extend over the full later width of the portico, only the first line of extra facing. Whatever the microhistory of this area, it seems that the south portico was begun in phase 1a, a time when there was

no obvious reuse and when bricks were well coursed and stone elements were cut for the first time.

Phase 1b includes the two lateral porticoes inside the complex and the plaza paving that is associated with it. The lateral porticoes of phase 1b are distinct from the Decumanus piers of phase 1a in terms of their building style and their stratigraphic relationships. The north portico stylobate of phase 1b overlies a Decumanus pier of phase 1a and reuses the earlier line of the street frontage of the pre-foro row of shops (visible on fig. 18). The south portico of phase 1b is considered contemporary with the north portico based on their common characteristics: carefully planned alignment, symmetrical column spacing, and similarity of building materials. Both include reused nonmatching spolia set into concrete foundations that are faced with poorly sorted reused brick set in uneven courses (fig. 19). Similarly, the first phase of the paving across the plaza, which laps over the south portico of phase 1b, contained many reused slabs. 52 This is shown by the reverse imprints of inscribed blocks in the primary mortar layer, which were later reset at a higher level. This reset paving also contains a large monumental inscription with letters about 20 cm in width, similar in size to one reused for a column emplacement base in the north portico (unfortunately not shown in limited prerestoration photographs), though they are not carved into the same material. This spolia is not known elsewhere in the foro or in the vicinity. The existence of floor projections in brick from the rear wall of the north portico may belong to phase 1; they were above the demolished level of the earlier shops but below the final floor in this walkway. These projections probably indicate a brick floor for the portico in phase 1b.

While it is tempting to place the Decumanus facade (phase 1a) in an earlier time period than that of the porticoes and the paving (phase 1b), the overall design of the plaza suggests that this is unnecessary. It can be observed that the architect of the facade definitely intended to front the entire space of the later square. He also arranged for the baths to be leveled down to the top of his facade steps, which became the paving level of the new plaza. To achieve this, he demolished a row of shops quite distinct from the baths. These measures prepared the way for phase 1b of the plaza, which completed these works. Indeed, a short part of the south portico that belongs to phase 1a confirms that the conception of the project was, from the start, to build a porticoed square. Perhaps the project began in the late third or early fourth century but was suspended and only completed a decade or two later.

Foro Phase 2. Signs of a second phase are evident in three disconnected areas that are assumed to be contemporaneous based on the style and coherence of the works. Phase 2a is evident along the street facade (see fig. 16). Here, a series of irregularly spaced bases was established in front of the piers, two of which clearly cut into the flat level established by phase 1a when it demolished the baths, as the photomosaic reveals. Furthermore, the piers include, among their reused materials, two pieces of steps taken from phase 1a. These steps came from somewhere between the facade piers of phase 1a, suggesting a remodeling of the access routes, at least for part of the facade. The bases of phase 2a seem to have supported an ambitious freestanding architectural screen, which was found here.⁵⁴ The screen contained some irregular blocks, such as poorly cut Aswan granite columns and capitals.

Dating evidence for phase 1a is not yet fully processed. However, a single amphora of third- to fourthcentury date (Dressel 20 or more probably Dressel 23) was found in the fill (context FSE 1076) of the foundation trench of the facade. A large third-century rubbish layer (context FSE 1017) dumped over the bath floor inside the south portico, behind the stylobate of phase 1b, likely relates to the leveling for this phase. For phase 1b, dating evidence is copious. A sondage into the fill (context FSE 4002) of the north portico foundation trench has yielded some third-century ceramic finds (African Red Slip C). A foundation dump from the same portico, on top of the demolished shops (the lower part of context FSE 1043 [FSE 4049]), dates to the fourth century with no residuals. The foundations of the south portico have yielded an altar rededicated as a statue base of 285/6 C.E.53 We have also been able to confirm that the mortar layer for the first paving of our foro definitely does lap up over the Maxentian/Constantinian apse of the Forum Baths, thus providing a second terminus post quem for the complex. Furthermore, coins from the dump layers inside the demolished baths end with issues of Maxentius and Constantine. It is worth noting that the brickwork in the "Constantinian" apse, like phase 1a, is well sorted and well coursed, even if its colors and lengths suggest it may comprise reused materials. Thus, phase 1a does not, on style alone, have to date much earlier than phase 1b, which looks likely to be mid fourth century. The difference in building quality might be explained by a downgrading of the funds allocated to the project. It may have started as the preferred project of one praefectus annonae, only to be grudgingly completed by another.

⁵²Gering 2011b, 431-46, 450-54.

⁵³Gering 2011b, 428–29, 496–97.

⁵⁴For a detailed description, see Gering 2011b, 419–24.

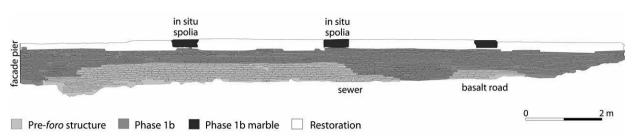


Fig. 18. South-facing section of north portico (west end) of the Foro della Statua Eroica, showing reuse of the "shops" wall as a foundation for the colonnade stylobate in phase 1b (drawing by E. Boast, E. Luby, L. Figg, L. Bosworth, and A. Fitzgerald).

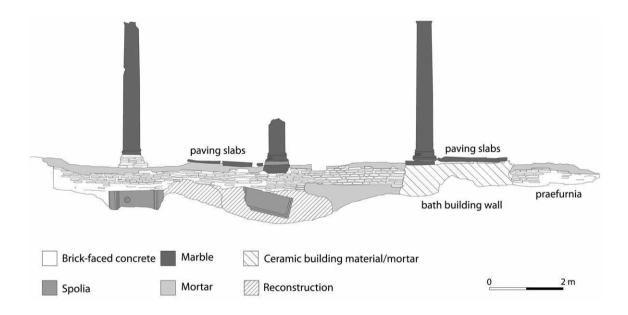


Fig. 19. South-facing section of south portico (east end) of the Foro della Statua Eroica. Note the poor leveling and irregular sizes of bricks used in phase 1b (drawing by E. Boast, E. Luby, R. Manahai-Mahai, J. Measor, and J. Wolf).

However, it seems unlikely that the projecting elements in this facade were originally commissioned for this project, given the wider quality of the work done on this screen. Thus, a projecting element cut from an altar of 242 C.E. should be taken only as a very general terminus post quem for this phase. A coin of Arcadius from the fill of the cut for the step should be ignored, as it provides a terminus post quem only for the robbing of the structure. However, an inscription of 418–420 C.E. recording the repair of a macellum by the urban prefect Aurelius Symmachus was found by early excavators

in the street in this area. This likely relates to work in our complex, as Gering discusses in his parallel report in *Römische Mitteilungen*, though we cannot be certain that it relates to these projecting piers.⁵⁵

A second phase of the complex (phase 2b) can also be clearly seen in the internal colonnade of the facade portico (fig. 20). The piers of the internal colonnade are of either brick-faced concrete or irregular stone construction with some spolia. The third pier from the north (in stone), removed by earlier excavators, contained not only the heroic statue that now stands at

⁵⁵ For the macellum inscription, see CIL 14 4719 (prefect in office December 418–January 420 C.E.); Gering 2011b, 442–45.

the center of the square but also part of the Temple of Rome and Augustus.⁵⁶ The piers are of irregular sizes $(ca. 0.80-1.00 \times 1.00-1.20 \text{ m})$, are not aligned with one another, and are very poorly spaced (2.0–2.5 m apart). A masonry lump on top of the stylobate of the north portico, visible in an early photograph (B2374) and generally aligned with the piers, may itself belong to a pier in the line. If so, the piers must belong to a later phase than that of the north and south porticoes. Unfortunately, early excavations that "chased" the walls removed stratigraphy from around the piers. However, we were able to connect the northernmost pier (of brick) with a stratigraphic sequence in the north portico. Here, the northernmost pier was clearly a secondary addition, not part of the original portico. The floor fill that covered it (context FSE 1075) contained late fourth- to mid fifth-century ceramics, providing a rough terminus ante quem of the mid fifth century. Our cleaning of old excavation trenches around the fourth pier from the north (in stone) demonstrated something of the architectural character of the west portico: the foundations were very shallow (ca. 20 cm deep, built of one course of blocks). The third pier from the north (in stone), seen on early excavation photographs (e.g., B2374), was slightly deeper, about 50 cm deep. Thus, if the piers supported anything (irregularly spaced as they were), it was either a wooden portico or, less likely, a row of statue bases (fig. 21).

Phase 2 is also visible in the north portico (phase 2c) and on the plaza (phase 2d). On the plaza (fig. 22), the second phase is visible as two distinct mortar layers for the paving, detected in the northeast and southeast corners of the foro. In the southeast corner of the square, traces of this second phase are particularly visible within the stratigraphy. Here, the paving was uprooted and then relaid at a higher level in a new mortar, in a broken condition (see Gering's summary below). The fill between the two paving levels includes a destruction layer, recorded against the portico, which contained a number of roof elements (tiles and lead). This may indicate that the south portico was partially restored at the same time. Ceramic dating is pending. Finds have included coins up to the reign of Honorius, which provides only a general terminus post quem rather than a specific date, since at Rome coins became less common at this time. In the north portico, ceramics reveal that the fill immediately below the last known floor is fifth century. These come from context FSE 1075 (as above) and context FSE 1043 (2009 sample dating to the last quarter of fifth



Fig. 20. Archive photograph, showing internal piers of west portico (phase 2) of the Foro della Statua Eroica (Ostia Archive Service; by permission of the Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma—Sede di Ostia Antica, Archivio Fotografico, photograph no. B2374).



Fig. 21. West portico (phase 2) of the Foro della Statua Eroica, east-facing section of fourth pier from the north.

 $^{^{56}}$ The internal portico pier with spolia from the Temple of Rome and Augustus is visible on archive photograph B2373.

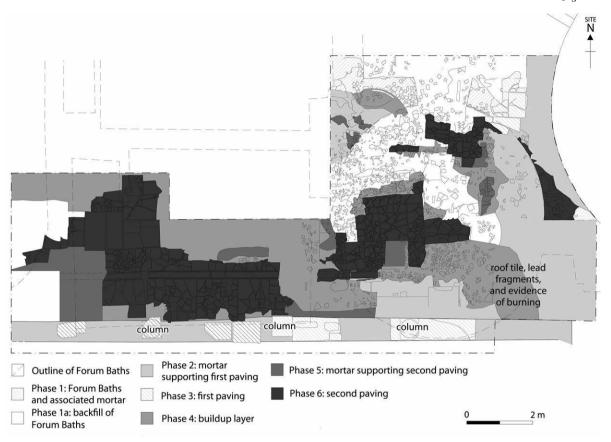


Fig. 22. Phase plan of plaza paving area in the Foro della Statua Eroica, as jointly excavated by the University of Kent and Humboldt University of Berlin in 2008 (drawing by E. Boast, L. Bosworth, J. Williams, K. Madigan, and M. Joyce).

century), under and mixed in with the plain mortar floor in the northeast corner of the complex. Here, it was directly covered by collapsed roof plaster. The floor may represent a slightly later event than the rest of phase 2 given that its foundation fill overlies the northernmost internal pier of the west portico. Finally, early excavators recovered a group of very poorly measured blocks (phase 2e), including some arcaded elements.⁵⁷ These might relate to a central roundel or some arcaded structure.

It is possible that the second phase described here represents a series of different initiatives. We are not able to connect all these areas stratigraphically because of robbing activity, rough early excavation, and the distances between different sections. However, the poor alignment of the piers, in both the facade and the west portico, can be compared with the very crude, even lazy, character of the second phase of the paving. The common style of these works makes it likely that

Architectural Work on the Foro Paving by the Berlin Team Following a first season of excavation with the Kent team in 2008, the Berlin team made detailed records of the surviving paving area in 2009 (their results are summarized in this section by Gering). All stone slabs were numbered and measured separately by recording the traces of Late Antique usage and repair on their surfaces, the original architectural decoration of their back sides, and their mortar bedding. Surface analysis

they belong in the same building campaign, with the exception of the plain mortar floor in the north portico, which is clearly later fifth century and seems to postdate the west portico. The other parts of phase 2 recorded elsewhere cannot be securely attached either to the work in the portico or to the repair of 418–420 C.E. recorded in the inscription. Nevertheless, so much late repair, of one phase or many, postdating the sack of Rome in 410 C.E. is significant.

⁵⁷See Gering (2011b, 419–27) on architectural blocks.

allowed us to verify the functions of the building as an open plaza and macellum based on the postholes for wooden market tables. The presence of a cross-incircle game board attests also to social activity. Different building techniques and "typologies" of the slab arrangements demonstrate a long and complex building history even after a fire collapse of the fifth century C.E. and the late resetting of the older slabs in a new mortar level, sometimes 20 cm above the original level. The analysis of the architectural decoration of the spolia allowed us to trace their original contexts. By having a stratified context of spolia deriving from the Temple of Rome and Augustus, the fasti Augustales, and some other guild temples, it is now possible to date and reconstruct the latest phase of Ostia's secular building activities-namely, the creation of new plazas above intentionally demolished temples, which were once connected to the imperial cult or guild seats (Main Forum, Piazzale della Vittoria, plazas outside Porta Marina, Piazzale del Tempio Rotondo).

Architectural Aesthetics

The architectural aesthetics of the first phase of the *foro* are mixed. The site is not a perfect square, either in its dimensions (41 x 44 m from the internal corners) or in the alignment of the back walls of the porticoes, which owe their position to earlier structures. However, the new portico colonnades were well aligned with one another, and the columns were fairly evenly spaced, every 4 m, giving a certain symmetry to the plaza. Though the portico stylobates do sit on top of earlier walls, an effort was made to ensure measured regularity-most obvious in the slight widening of the south portico in phase 1b—to suit a new line, as described above. Modern anastylosis work on the north portico does not seem to have altered the position of the column emplacement blocks: an early excavation photograph (B2374) taken before the restoration shows two column emplacements of spolia in the same position as they are in now. The bases on the south portico are today still in situ, as supported by an archive photograph (R883-2) of the main restoration works on this wall. Above these bases, columns of the south portico (reerected by 1928 [archive photograph A2210]) seem unlikely to be entirely invented. Excavation photographs of 1928 (e.g., A2471) show one column lying on this spot and another poking out of the unexcavated ground, suggesting that the columns were actually found here. Whoever restored

The main aesthetic disjuncture in phase 1 of the foro was produced by the apse of the Forum Baths, which awkwardly protruded into the east side of the site, where there was no portico. The steps ornamenting the first phase of the street facade were well cut, but in the south portico, the colonnades were composed of mixed reused elements (Ionic bases with columns of granite or Africano Rosso of differing widths). They likely looked this way in antiquity, despite restoration, because the plaza paving was composed of reused slabs in its first phase, including many inscriptions; their imprints occur in the first phase of mortar in both the northwest and southeast corners of the plaza. A sequence of late mason's marks in an undisturbed eastern area of paving shows that mixed colors of paving stone were laid together in this first phase. This is because the number sequence covers both types of stone, while a fracture line through the number XIIII shows that these marks were inscribed in the first phase; the same fracture line can be seen in the phase 2 mortar below, when the slabs were relaid as shattered fragments.⁵⁹ The differences between the slabs may not have been obvious in the dust of a dry day, but in the winter rain the plaza would have looked terrible, a mishmash of multicolored spolia. Any attempt to hide the reuse of pieces was limited to placing inscribed and decorated faces downward.

The overall architectural aesthetics of phase 2, though ambitious, are poor. Despite the use of colored marbles and prestigious spolia, all sense of proportion, alignment, and symmetry is missing. Not only was the quality of the paving lamentable, but the piers of the internal west "portico" were not well spaced, even for an artisan working without a piece of string. The same can be said for the group of newly cut architectural blocks found within the complex, if they do relate to this phase. Viewing these elements and the irregular spacing of the facade bases, which are not really aligned with the piers or with one another, it is difficult

them felt they should be kept here, in an incomplete colonnade, rather than saved for work elsewhere. The architectural elements present on-site today suggest an Ionic colonnade constructed of very ill-matching parts, with a wooden architrave, as no blocks of this kind have been found.⁵⁸ The burnt layer found between the two layers of the paving of the *foro*, against the south portico, yielded a tile collapse with some leaden elements, suggesting a tile roof with lead guttering in phase 1b.

⁵⁸No capitals were found in the south portico, either. These may have been robbed; more probably (in view of the presence of the columns), they never existed.

 $^{^{59}\,\}mathrm{See}$ Gering (2011b, 435–38) for full discussion of the number system and the slabs.

not to pity the official who tried to oversee the project. Quite how structural stability was achieved, on either the internal portico or the ambitious facade, in the face of such inaccurate planning is difficult to comprehend. The workmanship on this phase evokes the ill-fated bridge of Quintus Aurelius Symmachus, who, as urban prefect, managed to assemble workmen and architects to span the Tiber in the 380s. ⁶⁰ Although the arch was completed at great expense, it collapsed. The specific skills of local artisans in large-scale construction were no longer sufficient to maintain the political aspirations of its senatorial elite.

Decoration

It seems that the paving covered only the exposed part of the plaza, with tile and then simple mortar floors existing within the porticoes.⁶¹ Part of the painted wall plaster from both the north portico ceiling and walls fell directly onto the mortar floor, where it was excavated. The ceiling pieces compose a geometric pattern. The design is in red panels with green and black lines; white lines separate the panels. Other fragments from this floor area (context FSE 1043) included some motifs painted in white on an orange-brown background, which were too fragmentary to identify. Along the line of the south wall of the south portico, fragments of painted wall plaster were concentrated in post-Antique leveling contexts (FSE 1069 and 1079) against the portico stylobate and thus likely represent the Late Roman decoration. We excavated red, orange, and greenish-yellow plaster fragments, some of which were ceiling pieces; the red and orange occurred on one fragment in bands. Study of the brick facing identified mortar adhering to the piers of the street facade; thus, as in other late renovations, they, too, were faced with marble veneer, applied directly to the brick without metal tabs. The north and east walls of the *foro* have comparable thick mortar traces, suggesting veneer here also. While no pieces remain stuck to this mortar, a survey of marble fragments demonstrated that small pieces of green serpentine marble were concentrated along the facade, the decoration of which Gering has presented in more detail.62

Destruction and Spoliation

The robbing of the *foro* occurred in several phases. The process appears indirectly from the study of selected architectural survivals (what was not robbed) and the composition of later walls (which incorporate fragments), since earlier excavators removed most of the robbing deposits from the square. One very obvious point is that marble veneer was systematically removed from the whole complex. However, some of the paving survived, along with the some steps, columns, and projecting elements from the street portico (found on the street, as discussed by Gering in his parallel report in Römische Mitteilungen) 63 and some elements of the interior colonnades. As in the Main Forum and palaestra, this suggests that the robbing of the veneer took place at a time when the foro was not covered in deep debris. In contrast, the robbing of the paving and high-value architectural blocks seems to have taken place when the foro was already obscured and comprehensive looting was difficult. Notably, in the southeast corner there was no robbing of either marble paving slabs or columns, perhaps because it was covered by collapse from the adjacent Forum Baths or by earth built up against its walls.⁶⁴ Photographs taken during the excavation of this side of the foro reveal that the overburden was particularly deep here (e.g., A2471 [likely 1928]). In the rest of the plaza, the stripping of architectural elements was unsystematic-some deep holes were dug, but much was left behind, including architrave blocks and columns. The removal of architectural elements would have obviously contributed to the decay of the structure, if it had not already collapsed.

Post-Antique Occupation

Archive photographs A2476 (1925) and B2381 (fig. 23) show that the entrance in the north portico from the Decumanus was crudely blocked with what looks like an unmortared wall made of stone fragments. The blocking wall was established directly on top of a step, before any sediment could build up in the *foro* itself. This event probably dated from a time when the portico was still intact, although no veneer

⁶⁰ Symmachus, Ep. 4.70, 5.76; Relat. 25, 26.

⁶¹ The architectural decoration of the Foro della Statua Eroica was undertaken by A. Sanchez, who excavated the roof plaster and studied the mortar, assisted by A. Fitzgerald and S. Kamani.

⁶²Gering 2011b, 425–27.

⁶³Gering 2011b, 419–20, 442–43.

⁶⁴ The Forum Baths were occupied until the early fifth century C.E. (Cicerchia and Marinucci 1992, 167, cat. no. C3 [likely Honorian]; see also supra n. 48). For the latest inscrip-

tion from the complex, possibly fifth century, see CIL 14 5387 (reusing an earlier funerary inscription, CIL 14 5389). Occupation may have extended later, but so far this has not been proven. Masonry marks in late reused paving inside are the same as those from the adjacent paving of the foro phase 2 plaza, but Gering (pers. comm. 2012) has suggested this may result from modern restorers using foro material for the baths. For fifth- and sixth-century occupation of minor baths, see Gering 2004, 372–73, esp. nn. 162–63.



Fig. 23. Archive photograph showing unmortared wall blocking the steps of Foro della Statua Eroica facade entrance into north portico (Ostia Archive Service; by permission of the Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma—Sede di Ostia Antica, Archivio Fotografico, photograph no. B2381).

survived under the rubble wall, revealing that it had been built after stripping. In 2009, we found a pit cut into the final portico floor in one place, but without diagnostic finds. In 2010, we discovered further pits across the robbed plaza surface within the west portico, which we hope ceramics will date. In the south portico, a wall of *opus vittatum mixtum* A postdates the removal of any veneer that the south wall of the *foro* may have had and also seems to postdate the removal of the floor. Its alignment suggests that it was part of a structure that was either occupying the south portico by dividing it into rooms or occupying the west portico by closing its intercolumniations. Whatever its date, it is of a much better quality than the blocking wall mentioned above.

The robbing of the structural elements of the complex (columns, bases, walling material) was not the last phase of activity on the site. In the south portico (fig. 24), at some point after or during the robbing of the paving, the fill supporting the *foro* floor was dug out in an unsystematic manner, perhaps by people trying to recycle high-value items (e.g., metals) within the rich Roman rubbish that covered the floors of the bath building below. Some of these floors were more than 80 cm below the present surface (and so not reached by our hand-dug slots), while others were only 30 cm down, allowing us to excavate a whole section of the portico. A thick layer of dark earth (contexts FSE 1006, 1008, 1009) was found covering the uneven remnant

fill. This was a large, homogenous deposit with relatively few finds. Two crude retaining walls were found within it, running roughly parallel with the south portico (fig. 25). One of these walls was covered by a mortar floor (FSE 1086) of a type that was found on the portico wall (FSE 4084) overlying the exposed mortar of the robbed paving of the stylobate. It is not certain whether the tile retaining walls within the dark earth were structural or whether they were designed simply to stabilize earth for structures built above; the latter is likely, as they are single-faced (to the south) with a skin of blocks set directly into the earth to the north. Unfortunately, any occupation levels from these structures, from above the level of the floor FSE 1086, were entirely lost during early excavations.

The tile retaining walls were laid down after the partial demolition of the *opus vittatum mixtum* A wall that closed the portico and so belong to a postclassical phase, when the so-called Final Antique utilitarian structures occupying the shell of the *foro* were being ruined. Thus, there were buildings in this area that were largely unrelated to the alignment of the Roman structures, which have now been eroded away. Further robbing trenches did, however, cut through these late structures. These so-called medieval walls are very distinctive and homogenous in design: they are unmortared, single faced, and irregularly coursed, and they are only a single skin of blocks thick, relying for their strength on the earth into which they are set.

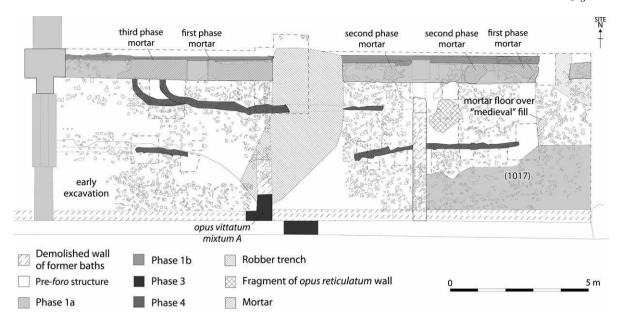


Fig. 24. Phase plan of south portico (west section) of the Foro della Statua Eroica (drawing by E. Boast, E. Luby, K. Madigan, C. Murphy, R. Manahai-Mahai, and J. Measor).

The outward face is always south, away from the portico. They include reused brick, bits of pottery, tile, and many broken mortar fragments as blocks in their wall. This is a typical post-Antique mix, with walls no longer made of carefully selected spolia or of sorted reused brick but of "broken bits" of anything available. They are surprisingly deep, some going beyond the level we could safely excavate. ⁶⁵

Although it is tempting to see a series of phases in these retaining walls, the homogenous character of both the walls and the fill surrounding them makes it look like a single operation. It is not easy to see any immediate relationship between the walls and possible overlying architectural structures. Only in one spot are there clearly two phases in the rough tile and mortar walls: against the south face of the south portico, by the first column emplacement from the west. Here, the northernmost tile wall ran parallel with the portico, 1 m south of it. However, it eventually swung in to join the stylobate wall, as if it formed part of an apse. Strangely, this apse was later extended with a second

The date of these post-Antique phases is likely to be later fifth and just possibly early sixth century; ceramics from the earth that surrounds them (specifically, contexts FSE 1008 and 1009) contained (along with residual third-century material) sherds of fifth-century African Red Slip Ware, including a base of "polished pattern" Hayes Form 87a, which was the latest piece found in these deposits. Context FSE 1069 was dated to the late fourth and fifth centuries based on ceramics (reliability 1–2 out of 4), suggesting no great

curved wall; it had the same function and shape as the first apse but terminated 1 m west of it (fig. 26). Inside the first apse was a fill (context FSE 1079) with much more rubble than elsewhere in the dark earth, as if an attempt had been made to improve the structural stability of this area. Inside the second apse was a friable, sandy silt of light brown-gray (context FSE 1069), entirely unlike the dark earth, and evidence for a different dumping operation. ⁶⁶ If any structure did sit above these curving walls, it probably reused the stylobate of the south portico to bear some of its load.

⁶⁵ Identical unmortared single-faced walls have just been excavated under untouched topsoil at the Porta Marina excavations of the University of Bologna. M. David (pers. comm. 2011) places them more toward the seventh century, although no dating evidence has yet been published.

⁶⁶The high concentration of painted wall-plaster content

in context FSE 1069 suggests that the deposit may have derived from a dump of collapsed elements of the portico. It is not the only context along this portico to have painted wall plaster concentrated in it and thus is unlikely to represent a dump from very far away.

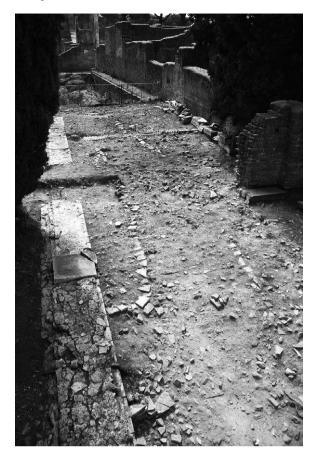


Fig. 25. Dark earth and unmortared single-face walls in the *foro* south portico. Note also the original and extended face of the portico stylobate from phases 1a and 1b of the complex. Rooms of the bath complex cut by the portico stylobate of phase 1a are also visible.

divergence in time for this slightly earlier subphase. Although we may feel that these walls ought to date to the seventh century, no such ceramic material was recovered, despite it being detected in disturbed levels in the Late Roman entrance area of the palaestra (context PFB 5106).

TEMPLE TEMENE

The Kent team examined two temple temene to determine what role the end of pagan cult played in the reorganization of public space at a time when a number of new secular public squares were being created. The great enclosure ought to have provided



Fig. 26. Detail of the unmortared walls in the south portico of the *foro*, showing the first "apse" (containing context FSE 1079) covered by the wall of the second "apse" (containing context FSE 1069).

ideal locations for a new secular plaza, so their fate is significant in terms of the evolution of public space. Surveys of the Magna Mater temple (magnetometry) and the Temple of Hercules temenos (laser scanning and limited excavation) were undertaken in 2010 and 2011, respectively. ⁶⁷ The results of this work have not yet been finalized. Reports on animal bones, ceramics, coins, glass, mortar, and decorative elements from various deposits across the city are being prepared.

THE NYMPHAEUM OPPOSITE THE FORO DELLA STATUA EROICA

Just opposite the *foro*, on the Decumanus, is a monumental fountain (fig. 27).⁶⁸ This semicircular structure occupies 11.5 m of the street frontage. Its radius measures 6.2 m from the center of its facade to its outer wall, while the internal basin has a radius of 4.5 m.

⁶⁷ Magnetometer survey in the Magna Mater temple was undertaken by D. Underwood, while the sondage in the Temple of Hercules was supervised by L. Lavan.

⁶⁸ The Foro della Statua Eroica nymphaeum was surveyed

in 2009–2010 by C. Spence, L. Bosworth, and L. Figg, who produced the photomosaic. It was excavated in 2010 by Z. Magyar. A. Sanchez studied its decoration and mortars. A. Fitzgerald studied the masonry contexts.

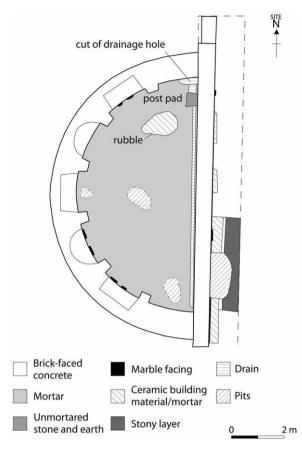


Fig. 27. Preexcavation plan of the nymphaeum opposite the Foro della Statua Eroica (drawing by E. Boast, E. Luby, C. Spence, D. Underwood, and Z. Magyar).

The Decumanus Exedra is a brick-faced concrete structure, with five niches for statues (three square and two semicircular) at a higher level, each about 1.4 m wide. Framing the niches are six ribs/pilasters reaching up from the basin floor to about 20 cm below the level of the niches. These likely supported columns. Water for the nymphaeum probably came from the rear of the Decumanus Exedra through two pipes, now represented by two round holes about 20 cm across, set about 1.25 m above the present ground surface. They have been partially obscured by resto-

ration. It is not known how water entered the basin. Water left the pool from a drain outlet that was carved into a single stone block set on a front corner of the structure. The survey of the nymphaeum revealed two phases of a very carefully designed structure. We think that it may date to the fourth century because of the level at which it is constructed and its position overlying a bakery destroyed in the 250s. However, no finds were recovered within the structure that confirm this date.⁶⁹

The perfectly measured first phase of the fountain was of opus latericium, in what appears to be first-use brick; it was followed by a rebuilding in opus latericium with reused brick and (perhaps at the same time) in reused revetment (fig. 28). This reused revetment was detected inside the basin: one piece had carved decoration on the side facing the wall; some first-use revetment was also detected, but there were two distinct mortar layers relating to these two phases. Cleaning also revealed two floor levels but no datable finds. Excavations recovered a hexagonal white marble tile loose inside the basin and some external veneer on the exterior (road) side of the basin wall, as well as the drainage system and large holes cut in the opus signinum basin floor. These holes could, from their position, indicate where internal features such as pressurized fountains or statues stood. The structure was decorated in cipollino and other white marble (possibly Pentelic). Above the top of the basin parapet, there is no trace of veneer or fresco decoration, as restoration has removed their traces. The floor of the nymphaeum was probably covered in cipollino (identified by the presence of thicker slabs, up to 40 mm thick, though not in situ). The facade decoration was also in cipollino. Most of the marbles were thinly cut (1.0–2.1 cm thick).

Excavation uncovered very few traces of post-Antique activity. A single post pad of unmortared earth and stone, measuring about 18 x 18 cm, was found against the inside of the basin wall that lines the street. This had been installed directly on top of the nymphaeum floor after robbing and likely carried a beam that supported a roof structure, which converted the fountain into a closed building. Excavation also uncovered post-Antique pitting in front of the nymphaeum that cut into the old roadway. No dating has yet been established for this poorly preserved phase. Finally, a

⁶⁹ On the dating of the Foro Nymphaeum, previously thought to be fourth century based on the type of mortar and the coursing of bricks in uniform *opus latericium*, see Calza et al. 1953, 159, 238; Neuerburg 1965, 178–79 n. 109; Heres 1982, 369–71. However, Gering (2004, 344 n. 111) notes that the nymphaeum encroaches on a bakery to its rear, which was installed in the Caseggiato del Balcone Ligneo. Gering (pers. comm. 2012) believes that this, along with the other adjacent bakeries in this area, was destroyed in a major fire of the later third century, which covered the area in destruction debris up to 3 m deep. The Caseggiato del Balcone Ligneo was largely excavated in or prior to the early 19th century (as shown on Holl 1805). However, in the Caseggiato dei Molini, the fire is given a terminus post quem by mid third-century coins described in Bakker 1999, 90; 2001, 179. The bakery under the Decumanus Exedra/Sigma Plaza produced similar results (see infra n. 82), supporting the idea of a general destruction in the area, on which see Gering 2011a, 309–10. The nymphaeum thus should date to after this destruction.

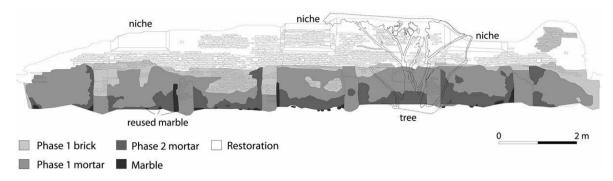


Fig. 28. Flattened elevation of curved rear wall of the Foro Nymphaeum (drawing by E. Boast, L. Figg, and L. Bosworth).

considerable amount of undocumented reconstruction work in the upper part of the structure has been identified from analysis of the brickwork, mortar, and decorative traces; reconstruction likely happened in 1915 (date of restoration stamp), a year after Roberto Paribene mentioned elements of the nymphaeum being put back up into their original positions. To This is also true of a second nymphaeum, the Nymphaeum Bivium, which formed the focus of our more substantial excavation. Early photographs (B2845/6 [1939]) show fragments of arcades seemingly within its basin. Here, the upper parts of the facade wall also have an upper section with no decorative traces, which is probably undocumented restoration.

THE NYMPHAEUM BIVIUM

The Nymphaeum Bivium (fig. 29) is a far larger structure than the Foro Nymphaeum, measuring some 26 m wide.⁷¹ It seems to be entirely Late Roman.⁷² Its position at a major road junction—the bifurcation of the Decumanus and the Via della Foce—provides a superb setting for a major street ornament, which was intended to hide a bad corner and to flatter the eye with a display of water, statues, and marble. Previous commentators have interpreted the low wall enclosing the foreground of the nymphaeum as a giant pool or as part of a fountain house, an interpretation that considers the square and cross-shaped piers within the enclosure as features of the "pool."⁷³ Scholars

A survey was carried out in 2010 by the Kent team (fig. 30), with excavations in 2010-2011. The largest trench uncovered about one-third of the anticipated "pool" of the nymphaeum, on the southern side. The trench revealed that the supposed pool wall was neither complete nor waterproof and was designed in a single phase. Indeed, the overall plan of the "basin" did not cover the whole facade and was badly aligned with key decorative features on one side. This is strange given the design of the nymphaeum facade, which, despite imperfections, was carefully conceived and lavishly decorated. A second important discovery was that there was hardly any extant floor associated with the nymphaeum. Rather, the trench exposed the floor surface of a potentially Republican house, with tuff walls and three differently orientated opus spicatum floors, which included a contemporary small basin and associated drains. Upstanding features of this phase had been cut down to the level of the nymphaeum, the back wall of which lay directly over the opus spicatum floors. The same floor was also used to support postnymphaeum structures, meaning that apart from the facade, the fountain itself was largely absent from the stratigraphy of the area.⁷⁵

have made observations concerning the water supply of the structure and especially the function of rooms (interpreted as cisterns) behind the facade wall.⁷⁴ However, our investigations have been limited to the front of the structure and have not yet reached these back rooms or considered the supply of the main fountain.

 $^{^{70}\,\}mathrm{On}$ the restoration of the Foro Nymphaeum, see Calza 1914, 70.

⁷¹The Nymphaeum Bivium excavation was supervised by J. Hutchings in 2010 and by D. Jackson in 2011.

⁷² For previous work on the Nymphaeum Bivium, see Calza et al. 1953, 160; Heres 1982, 411–13; Ricciardi and Scrinari 1996, 195–96; Gering 2004, 360–68; see also Schmölder 2010.

 $^{^{73}\}mbox{On the enclosing wall as a pool, see Neuerburg 1965, 179 n. 110.$

⁷⁴On the cisterns and the rear wall, see Ricciardi and Scri-

nari 1996, 195; Gering 2004, 360-61.

⁷⁵ Dating comparanda include brickstamps on the *opus spicatum* floor in the Hadrianic porticoes (Calza et al. 1953, 216) behind the Capitolium, in the Hadrianic basement (Calza et al. 1953, 215) of the Capitolium itself, and in the Hadrianic portico (Calza et al. 1953, 217) of the Insula dei Triclini. Tuff walls and *opus spicatum* floors were found together in the area of the so-called Four Temples, which are Late Republican (*CIL* 14 375, 14 376).

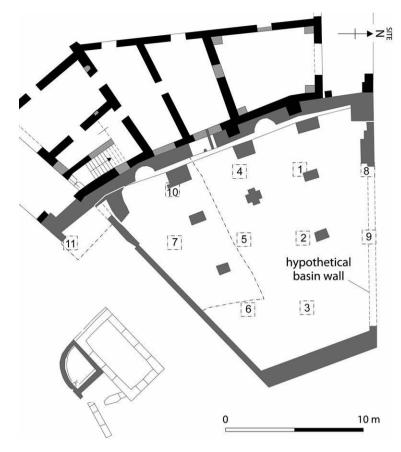


Fig. 29. Trench location map of Nymphaeum Bivium, with phases as understood by Gering (black = Early Imperial; light gray = secondary modifications; dark gray = nymphaeum structure) (drawing by E. Boast; after Gering 2004, 351).

The facade wall of the nymphaeum was not straight, as it was set into a number of earlier structures (fig. 31). However, this was masked by building a winged concave facade of three conjoining straight sections, which closed off the adjacent porticoes. The bricks facing the opus latericium wall were all reused and not laid in well-leveled courses. However, the facade was covered in white marble, including some white marble with orange veins (possibly giallo antico). This was attached in the old style by using marble dowels with iron clamps, a technique suitable for thick pieces of marble, which would indicate that, despite relatively poor wall construction, no expense was spared in its decoration. The upper part of the facade included two semicircular niches (diam. 1.7 m) framing a central square niche (2.1 m across). An archive photograph (B2846) shows that these niches were arcaded. This part of the structure was probably decorated with wall plaster; analysis of the fragments is currently under-

way. The basin (indicated by a line of opus signinum at the base of the facade wall and by a few brick tiles) had been removed during late antiquity. However, a parallel tuff-faced concrete wall (now demolished) that runs about 2 m in front of the facade may represent the basin front. The dating of the structure awaits analysis of the ceramics. For the moment, we can note that a leveling fill in a drain cut by the basin wall has been dated to the third century C.E. based on ceramics (context NBV 6060, reliability 2 out of 4); a small leveling deposit (context NBV 6041) lying directly over the demolished house has revealed a Keay 52 amphora from southern Calabria (which dates between the fourth and sixth-seventh centuries). Gering has suggested that a sculpture of a putto riding a dolphin found in the general area of the Nymphaeum Bivium might have been reused in the decoration of this structure; this is possible, although where exactly cannot be determined.76

⁷⁶Ricciardi and Scrinari 1996, 196; Gering 2004, 364–65.

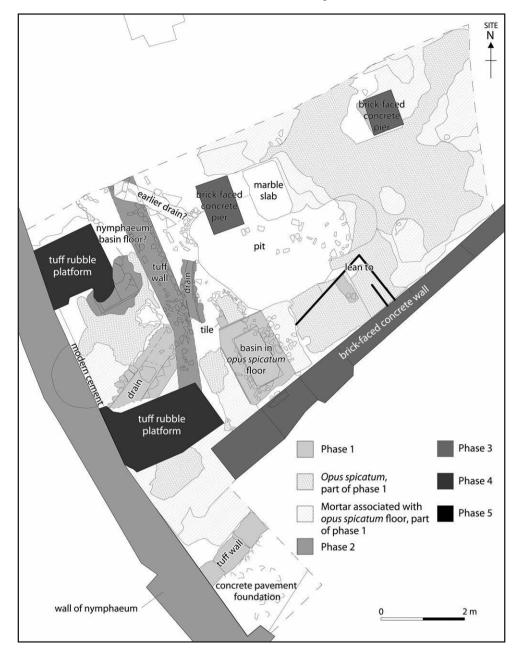


Fig. 30. Preexcavation plan of Nymphaeum Bivium (drawing by E. Boast, E. Luby, D. Underwood, C. Murphy, and E. Jackson).

The destruction of the nymphaeum involved the demolition of all structures except for the rear wall of the fountain (fig. 32). It is possible that there was a return to the use of the *opus spicatum* floor or something at a similar level of which no trace now remains. A low scruffy brick wall with several subphases (ht. ca. 0.40 m)

established an enclosure around the forecourt; a series of short brick piers of roughly the same height were installed within the enclosure. One seems to cut through the demolished "front wall" of the basin. The rectangular piers were about 0.80×1.25 m on average and set about 5 m apart; one was cross-shaped.⁷⁷ The

⁷⁷ Although the perimeter wall does not touch the surviving parts of the nymphaeum, it is not likely to predate the fountain, as its construction on one side anticipates that the portico is already blocked. This blocking was done only when the nymphaeum itself was built.



Fig. 31. Photomosaic elevation of rear (facade) wall of Nymphaeum Bivium. Targets are at 1 m intervals (L. Figg, D. Underwood, and A. Wachtel).



Fig. 32. Photomosaic plan of excavated area in Nymphaeum Bivium (L. Figg, D. Underwood, and A. Wachtel).

common height and style of the perimeter wall and piers suggest they are connected. These features may have been associated with a now-missing earth floor or may have reused the *opus spicatum* house floor. Given the survival of adjacent buildings to two stories, it is likely that the walls of this "utilitarian" structure never stood higher; they were probably footings for a

half-timbered construction. At least the external walls date to a time after the nymphaeum's real basin was removed. Although the complex might have been a fountain house, its plan recalls a storage building (perhaps with a raised floor) comparable to late granaries on the northern frontier.⁷⁸ It is likely to date from the same utilitarian phase of the city as the house

 $^{^{78}}$ For the fountain house theory, see Heres 1982, 411–13. For a storage building parallel, see Popović, 1971, 129; Bošković et al. 1974; Poulter 1999; 2007, 87–91.

built within the portico of the palaestra, in the later fifth century or early sixth century, when the classical decoration was gone but the architectural structures of the classical city were still intact.

Another important observation is that the former projecting foundations, drawn on earlier plans and thought to support an architectural screen for the nymphaeum facade, do not appear to relate to the fountain. These features seem to have been optimistically interpreted; they are rough rubble platforms of mortared tuff that were installed after the stripping of ornament from the complex (see figs. 30, 32). Thus, they relate to the post-Antique occupation of the area, apparently from a time when even the utilitarian buildings had fallen into disuse. We know that early excavators found other very rough rubble walls partly blocking the road just south of the structure and removed them. 79 These likely belong to the same phase. A structure that could be contemporary with the tuff platforms is a late wooden cabin approximately 1 x 2–3 m, distinguishable by two perpendicular cuts made in the *opus spicatum* floor. The presence of this structure, a lean-to that rested against the perimeter wall of the utilitarian phase, makes it likely that the latest occupants of the area reused the early floor, having dug through the fourth-century phase.

THE NYMPHAEUM IN THE PIAZZALE DELLA VITTORIA

This nymphaeum is a large structure loosely dated to late third century based on its construction height and its masonry style. 80 It has two basins, one 23 m wide on the front and another 4 m wide on the back, and thus serves both the Decumanus and the Via della Vittoria. In 2011, during cleaning work, we were able to document two phases of mortar in the front (Decumanus) basin, which was decorated in cipollino, and two phases of painted wall plaster on the exterior at ground level, suggesting minimal revetment. This structure is still under study following laser scanning, and mortar analysis is planned for the near future. It can be noted that the maintenance of this building—with at least one phase of repair—attests its importance in the city. It is highly likely that

STREET ENCROACHMENT

The survey work of the Kent team at Ostia extended in 2010 and 2011 to the study of street encroachment, building on the research of Gering on this subject. Relevant work took place at the Foro della Statua Eroica, the nymphaeum opposite it, and the Main Forum Sidewalk. It was possible to differentiate these developments in terms of both their character and their date. There are examples of street blocking for the purpose of public building, whereby the civic authorities decided to close a minor road in order to facilitate monumental construction. This can be seen during the later third-fourth centuries for the arch of the Cardo and during the fourth century for the macellum and the nearby Decumanus Exedra/Sigma Plaza.82 Alternatively, streets and porticoes might be narrowed for the sake of public amenity; thus, at the site of the Foro della Statua Eroica, baths encroached onto minor roads in both the third and early fourth centuries, while the fourth-century Nymphaeum Bivium closed two street porticoes. There are also examples of ordered privatization: opposite the foro, a road was closed by a brick wall that included a closeable door cut out of a sarcophagus. This wall can be dated only on account of its poorly leveled reused bricks to sometime in or after the mid fourth century, although a reused marble tile perhaps suggests the fifth century or later. Such developments seem best interpreted as the assertion of patronal control over insulae already owned by a wealthy individual. The enclosure of porticoes, as opposite the Nymphaeum Bivium, to extend a set of shops in an ordered manner suggests an

millstones). That the bakery was set within a bath building destroyed in or shortly after the time of Probus (r. 276–282 C.E.) is suggested by a terminus post quem of coins from destruction levels in this area. Gering associates the Decumanus Exedra with a generalized fourth-century rebuilding level in this area, though this theory is more suggestive (Gering 2004, 326–42, esp. 332–34 [reuse of bakery material], 335 [coins from destruction levels]; see also Calza et al. 1953, 159; Pensabene 2007, 477–79).

the late third-century plaza that fronted it served as an assembly point for city councilors welcoming incoming dignitaries, such as the *praefectus urbis Romae*, during the *adventus* ceremony; they would have arrived in the city from Rome, passed the old pomerium, and headed down the Decumanus. §1 The observation of Cassiodorus (*Var.* 6.18) that the *praefectus annonae* had the right to sit in the carriage of the urban prefect (an imperial *carpentum*) suggests that any visits to Ostia from either governor would have been undertaken as a formal *adventus* ceremony.

 $^{^{79}}$ For walls blocking the adjacent street, see Gering 2004, 342–49, figs. 22, 23.

⁸⁰ The excavation was supervised by B. Harp, assisted by A. Roder. For previous work on the nymphaeum in the Piazzale della Vittoria, see Gering 2004, 314–18.

⁸¹ On the *adventus* of governors, see Lavan 2001; 2003, 328_31

⁸²The Sigma Plaza, dated to the fourth century, was established using reused material above a bakery (by cutting the structure and employing some parts of the bakery—e.g.,

official sale or planned act of extension rather than a lack of discipline. 83

In contrast, the partial blocking of a street through the encroachment of private building suggests usurpation rather than officially approved annexation and perhaps indicates lax urban regulation. We see this in the northeast corner of the foro site prior to the construction of the macellum. It has also been identified on the Decumanus, adjacent to the Foro Nymphaeum. In the latter case, two small rooms were built out onto the street with walls that were bonded into the Late Roman shop wall. Subsequently, they were removed by being cut down to the early fifth-century street level. It is interesting to note that not all such scruffy encroachments are Late Roman or even fifth century. Encroachment did happen at Ostia, but it was a perennial problem, not just a Late Antique one. Furthermore, much encroachment was public encroachment, as with the third- and fourth-century apses of the baths at the Foro della Statua Eroica, although these are back streets and not major avenues.

Nevertheless, the closure of roads blocked by collapsed buildings that were not cleared away does seem to signal decay, though this is confined to minor roads, not the main avenues. This occurred in the fourth and fifth centuries, as Gering has documented, and suggests a change in priorities as major avenues continued to be decorated. However, the situation in the sixth–eighth centuries—whereby the level of the street was substantially raised above the last repaired surfaces of public buildings and a church was built right across the main street—reveals a city of ruins and suggests the usurpation of irrelevant property boundaries, in which the character of the classical city was definitively lost. Expression of the classical city was definitively lost.

CONCLUSIONS

The Significance of the Discoveries: Public Space

The sequence of new building and occupation identified at Ostia illuminates debates on the evolution of public space in late antiquity. It is unusual to find any newly built Late Roman public squares, especially in the western Mediterranean. Until this excavation, no examples had been systematically excavated, and only one or two others had been identified. The Foro

The increase in the number of public squares seen in fourth-century Ostia is unique in the Mediterranean. New squares are known in fourth-century cities elsewhere, but not many. This can be partly explained by the exceptional history of Ostia, which had only a very cramped forum, a legacy of its foundation as a compact defensible colony at the mouth of the Tiber. Thus, in the fourth century, the imbalance was redressed with the creation of a new macellum and other squares within the city. At the same time, the number of new squares seems to have exceeded even the needs of the Main Forum. The Piazzale della Vittoria by the eastern gate and the plaza midway down the Decumanus more likely responded to the needs of civic reception (the adventus) and ceremony, rather like the forums lining the main street of Constantinople.87 There is, however, no reason to think that the Main Forum was any less busy in the fourth century than in earlier centuries; care was being taken to update its statues, to renew its paving and porticoes, and to improve its connection to the main baths of the city, which had been the subject of various renovations.

In the palaestra, it seems likely that the installation of a new entrance with a proper facade indicates a change in function, tying it much more closely to events in the forum. The presence of a second temple makes one think that functions other than athletics were being developed there, as does the presence of a fourth-century consular statue. This is unsurprising, as the decline of athletic games is well documented

della Statua Eroica, as a porticoed square plaza without public buildings, is comparable to the Portique en Pi of Saint-Bertrand-de-Comminges, or (better) the Tetrastoon of Aphrodisias, or the late forum of Scythopolis, or the last phase of the forum of Conimbriga. These forums are roughly the same size as that of Ostia: about 50 x 50 m. These simple squares were designed for stalls—as inscriptions from Aphrodisias demonstrate—and thus could reasonably be called macella. They show continued investment in commerce and in its regulation: they kept smelly meat and fish out of the Main Forum. This work to diversify and improve public plazas lasted into the fifth century and was a serious endeavor.

⁸³ On the portico opposite the Nymphaeum Bivium, see Kockel 1999; Ortisi 1999, 71–3; Kockel and Ortisi 2000, 351–64.

 $^{^{84}}$ For collapsed buildings blocking minor roads, see Gering 2004, 356, figs. 32–6; 372, fig. 48.

⁸⁵ On the church built across Decumanus (dated to the sixth–eighth centuries), see Vaglieri 1910a, 1910b; von Gerkan 1942; Pensabene 2007, 538–39; Boin 2010. On the Decumanus church dated to ninth century, see Paroli 1993,

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 $^{^{86}}$ On Late Antique macella and plazas with simple porticoes, see Lavan 2006, 2012. The size of $50\,\mathrm{x}$ 50 m appears also to be the size of the Forum of Theodosius in Constantinople, as identified by Berger 1996, 18–19. On the excavation, see Naumann 1976.

⁸⁷On plazas along the Decumanus, see Gering 2006; 2010, 936, 105–7; 2011a, 311–14. On linear plazas at Constantinople, see Mango 2000.

from the third and early fourth centuries. ⁸⁸ It is perhaps easier to think of the palaestra as becoming more of an annex of the forum, with some religious, then administrative, functions, than continuing in an athletic role. Whatever its function, the new entrance and great mosaic carpet made a great open space available to those within the forum area.

The new temple in the palaestra is of great historical significance as the only (confirmed) late third-or fourth-century temple within the city. It was produced cheaply, although it was externally impressive. It was also very small, like the new temple made out of spolia on the agora of Argos (of some 4 x 3 m). As such, it compares unfavorably with temples of second- and third-century date in the city, which had been far larger. It does not seem to have been knocked down but rather to have rotted in situ, like many in Rome. In contrast, the Temple of Rome and Augustus in the Main Forum was demolished early, marking perhaps a reform of the imperial cult, as seen at Alexandria and Antioch, where Kaisareia were very quickly converted to other uses. Thus, complex attitudes were at work—not simply a triumph of the Christian church but also a slow decline and relatively untraumatic end to paganism, seen elsewhere in central Italy.89

The broader development of the Decumanus is of great interest. The Nymphaeum Bivium and the exedra of rooms (which we now call the "Sigma Plaza") studied by Gering in 2004 are exceptional features in Late Roman building for the western Mediterranean outside Rome, as is the street facade of the macellum.90 The latter can best be paralleled by the facade of the plaza of the Palace of the Giants at Athens, although the late facade of the Basilica Aemilia offers a parallel at Rome for a closed building.91 Overall, the improvement of the pedestrianized Decumanus reflects a trend seen elsewhere: arches and colonnades were increasingly built on main streets in the Late Roman western Mediterranean, though they were even more common in the eastern Mediterranean. Furthermore, the closing of side roads to permit the building of the macellum and the Sigma Plaza fits a pattern more genThe Significance of the Discoveries: Building Quality and Monumental Degradation

Significant results have also emerged for the later phases of the city, which go beyond the specific research interests that inspired this project. The decline in building quality seen in the fourth-seventh centuries has been well studied by several scholars, including Heres and Santangeli Valenzani. 93 Yet the stratigraphic excavations of the project have permitted us to fix elements of this story into chronological sequence. Buildings of different qualities can of course coexist at the same moment: different organizations could afford different artisans and different materials. Thus, some of the simpler walls in Ostia (in opus vittatum) actually date to the second century C.E.94 However, there are some striking differences even in monumental construction within the central area of the city. Thus, phase 1a of the Foro della Statua Eroica employs well-leveled brick facing, apparently in first use, as does the nymphaeum on the Decumanus opposite, though this is very well planned in contrast to the somewhat irregular piers of the foro. These structures belong to the fourth century, and the nymphaeum belongs probably somewhat earlier, to the later third century.

In contrast, phase 1b of the *foro*, dating to the mid fourth century, employs badly sorted reused brick in irregular courses and very mixed spolia, although a demonstrable concern for aesthetics survives. Phase 2 of the *foro*, dating across the first three quarters of the fifth century, shows a lack of concern for aesthetics except in its facade, where the intention and resources

erally observed in the eastern Mediterranean, as, for example, at Sagalassos in the fourth–sixth centuries. ⁹² Here, the development of the main axes coincided with the downgrading of smaller roads, a phenomenon also expressed in new urban foundations of the period, where the main axes were emphasized, while there was a commensurate loss of regularity in backstreets. Nevertheless, it cannot be said that Ostia developed regularly planned colonnaded streets, as did most major centers in the eastern Mediterranean.

⁸⁸ On the decline of the athletic games and education, see Liebeschuetz 1972, 136–44; Lewin 1995.

⁸⁹ On the late temple at Argos, see Piérart 1981, 906; Piérart and Touchais 1996, 85. On Kaisareion of Antioch (under Constantius II), see Malalas, *Chronographia* 13.30. On Kaisareion of Alexandria (under Valens), see Athanasius, *Historia Arianorum ad Monachos* 74.2. For more details on the regional dynamics of Italy, see Lavan and Mulryan 2011.

⁹⁰ On Sigma Plaza, see Gering 2004, 321–41, 349–72. For the dating of the plaza, see Gering 2004, 332–34 (reuse of bakery material), 335 (coins from the destruction before the plaza was built); see also Calza et al. 1953, 159; Pensabene 2007,

^{477–79.}

⁹¹ On the Palace of the Giants at Athens, see Thompson 1988. On the Basilica Aemilia, see Gering 2011b, 430–31.

⁹² On the streets of Sagalassos, see Lavan 2008. This pattern is also seen at Tropaeum Traiani and in new foundations of the period.

⁹⁸ On the decline in building quality at Ostia, see Heres 1982; Santangeli Valenzani 2007, 442–48.

⁹⁴ Opus vittatum walls of second-century date are known in houses at Ostia according to M. Danner, pers. comm. 2011 (thesis in progress). For first- to second-century opus vittatum walls in Italy, see Blake 1959, 1973.

are there but the ability is not. To an undated later time might belong the rough staircases in reused stone blocks giving access from the Main Forum portico up to the Late Roman palaestra level—this was ill-fitting spolia that had not been recut, although the staircase was solid enough to be considered monumental. The very late and post-Antique phases that follow are more difficult to put on the same scale of comparison, as they involve the appearance of simpler walls common earlier elsewhere in the city in former public areas, finishing with unmortared walls of large blocks, then small fragments, in the style of vernacular rural huts rather than urban monuments.

The final degradation of civic public buildings is visible in the central area of Ostia, as it is in so many other places within Italy. Some very late, rather anarchic modifications of the street system have been described by Gering in earlier works, but our recent excavations have allowed us to extend these observations to public buildings. Monumental repairs in the central secular public buildings seem to have continued into the early fifth century or the later fifth century at the latest, as the Main Forum porticoes, the curia, and the Aula del Buon Pastore attest; they were studied by Gering's team in 2010 and 2011.95 These repairs were then followed by a process of systematic stripping of ornamental veneer from the central public buildings sometime in the later fifth century, when churches, private houses, and some baths were still well decorated; this was followed by utilitarian occupation in structures of unveneered walls of opus latericium, opus vittatum mixtum, or large unmortared stone fragments.

The late utilitarian walls blocked up colonnades and other open spaces. The construction of the "store building" in front of the Nymphaeum Bivium blocked one of the most significant vistas in the city in an act of indifference to earlier urban planning efforts. Wooden structures also began to appear; they were set within the architectural frames of earlier buildings, sometimes in conjunction with the utilitarian structures, as in the palaestra portico, and sometimes within their ruins, as at the Nymphaeum Bivium. Nevertheless, both types of structures were built within a city that still had a street system and much of its ancient skyline. Later, deep layers of dark earth accumulated or were dumped over the ruins of ancient structures, apparently in association with recycling activity. This included quarrying thirdcentury dump layers for scrap metal. Retaining walls

Contributing Factors for These Developments

There are five factors that may have contributed to these developments: the special status of Ostia; political investment; developments in urban style at Ostia; public amenity; and imperial, regional, and local integration/disintegration.

The Special Status of Ostia. The quantity of secular public building work serving the street system marks Ostia as a high-status center. Whatever Ostia's relationship to Portus was, it does not appear that Ostia was in decline relative to other excavated cities in Italy-such as Iuvanum, Herdonia, or Paestum, all of which have had their central areas excavated, revealing no new public buildings, only minor repairs and adaptations. 96 In the fourth century, Ostia saw not only repairs to older civic structures but also completely new secular buildings such as the Decumanus Exedra/Sigma Plaza and the foro macellum. This is unusual in civic architecture of the fourth-sixth centuries, when entirely new buildings were usually found only in provincial capitals.⁹⁷ Thus, perhaps Ostia benefitted from being effectively part of Rome, with a level of urban maintenance superior to all other cities in Italy. Indeed, it maintained its monuments in the fourth century on a scale unparalleled in the western Mediterranean and reminiscent of civic public building of the second century C.E.

Political Investment. Alternatively, we might draw attention to the specific involvement of the praefectus annonae and praefectus urbis Romae, who were active in restoring the macellum and perhaps the baths. Indeed, the intensity of building work in the area of the Decumanus east of the Main Forum may be associated with the structure known as the Aula del Buon Pastore. This structure, once identified as a church, is perhaps better identified as a secular audience hall, possibly the seat of the prefect. Although it has a high apse like the fourth-century judicial basilica of Cuicul, it can be considered equivalent in function to the fourth-century civic audience hall on the agora of Cyrene and perhaps the secretaria constructed in cities across Samnium in

within these layers were constructed of unmortared, unsorted, and unleveled building detritus, material that was freely available within a ruined landscape. Although we would like—on the basis of other evidence about urban development—to place these walls in the seventh century, ceramic finds do not allow us to date the start of this process later than the end of the fifth century.

⁹⁵ Gering (forthcoming); see also Gering 2006; 2011a, 314–15; 2011b, 413–14, 489–91.

⁹⁶ For Iuvanum, see Moschetta 1980; Candeloro 1990. For Herdonia, see Mertens 1995. For Paestum (where there are some repairs but no new public buildings), see Greco and Theodorescu 1980; Greco et al. 1996; Greco and Longo 2000.

For repairs recorded in inscriptions at these sites, see the index to Ward-Perkins 1984.

⁹⁷ On the greater amount of building work in provincial capitals, see Lavan 2001.

⁹⁸ On the *praefectus annonae* and *praefectus urbis Romae*, see supra nn. 13, 19, 55; see also Gering 2011b, 442–45.

the 360s. ⁹⁹ Clearly, Ostia still was an urban community worth investing in, even in the early years of the fifth century, when there was little money to invest seriously in urban renewal. Even after the troubles of Alaric, an urban prefect felt that Ostia needed to return to normal, and he signaled that by repairing its macellum.

Developments in Urban Style. The urban style of building work undertaken on Ostian streets in the fourth and early fifth centuries was definitely more representational than it had been earlier; it was focused on the main pedestrianized avenue, which could have accommodated processions of high-status visitors. This road increasingly was adorned with new colonnades of spolia and fountains. 100 It is tempting to see something of the colonnaded streets of the eastern Mediterranean here, perhaps akin to those of Constantinople, now eclipsing Rome as the main urban model for the Mediterranean. At the same time, it is possible that the style seen in Ostia was also being adopted at Rome in the same period, now obscured by the medieval and modern city. Whom the processional route of the Decumanus was meant to serve is not clear—perhaps it was intended to impress high-status travelers arriving at Ostia, going up to Rome, as well as to serve as a backdrop to the *adventus* of a prefect in the city. ¹⁰¹

Public Amenity. Aside from a desire to invest in the architecture of display, there was an interest in improving public amenities. In the fourth century, this involved serious investment in retail spaces (a macellum and the neighboring Sigma Plaza), statuary display, and repair of the theater and baths.¹⁰² Inscriptions show that top-ranking senators participated in this work. These were not homegrown elites but senators from Rome with whom the local population cultivated links of patronage and perhaps sought to develop common commercial interests. Conversely, the later systematic stripping of secular monuments that were structurally intact symbolizes a drop in the importance of the classical buildings and the relationships they supported. The precise dating of this stripping will be of great help in understanding the later history of the city, as it ceased to be a focus for traditional civic display. As noted above, investment in churches and private houses did not follow the same chronological trends in late antiquity.

Imperial, Regional, and Local Integration/Disintegration. Similar privatization of secular monuments within an urban landscape in the fifth century and simplification in building standards in the fourth-seventh centuries can be documented elsewhere in Italy. 103 Ostia both benefited and suffered from the continuity of an imperial system that still had Rome at its center, in terms of both state subsidy and aristocratic investment. Yet just as the survival of the imperial system permitted continued investment in display monuments and commercial infrastructure, so the end of empire and the loss of aristocratic fortunes brought both the loss of secular public buildings and the vernacularization of architecture and building materials. This was perhaps exacerbated by the standardization of building techniques within an enormous construction industry. Admittedly, Ostia did retain some regional prominence in the seventh-ninth centuries, in relation to other Italian cities, but the investigation of that subject is for another project.

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Works Cited

Bakker, J.T., ed. 1999. The Mills-Bakeries of Ostia: Description and Interpretation. Dutch Monographs on Ancient History and Archaeology 21. Amsterdam: J.C. Gieben.—2001. "Les boulangeries à moulin et les distributions de blé gratuites." In Ostia: Port et porte de la Rome antique. Musée Rath Genève, edited by J.-P. Descoeudres, 179–85. Geneva: Musée d'Art et d'Histoire.

Berger, A. 1996. "Tauros e Sigma: Due piazze di Constantinopoli." In *Bisanzio e l'Occidente: Arte, archeologia, storia. Studi in onore di Fernanda De Maffei*, 17–31. Rome: Viella. Blake, M.E. 1959. *Roman Construction in Italy from Tiberius Through the Flavians*. Carnegie Institution of Washington Publication 616. Washington, D.C.: Carnegie Insti-

tute of Washington.

—. 1973. Roman Construction in Italy from Nerva Through the Antonines. Memoirs of the American Philosophical So-

ciety 96. Philadelphia: American Philosophical Society.

⁹⁹ For the judicial basilica of 364–367 C.E. at Cuicul, see *AÉpigr* 1946, 107; Février 1971. For the audience hall on the agora at Cyrene, see Stucchi 1965, 312–18. For the building of the *tribunal columnatum* and secretaria in Samnium and for the secretarium at Luceria, see Grelle 1989. For the *tribunal columnatum* at Saepinum, see *AÉpigr* 1930, 120; *CIL* 9 2448; *ILS* 5524. For the secretarium at Iuvanum, see *CIL* 9 2957; *ILS* 5521. For secretaria in Italy at Vercellae, see Jer., *Ep.* 1.3. For the secretaria in Catania, see *Acts of Euplus* 1.2. For building

phases and functions, see Gering 2011b, 489-91.

 $^{^{100}\}rm{On}$ the pedestrianized area (Fußgängerzonen), see Gering 2004, 2006, 2010, (forthcoming).

¹⁰¹On streets of the eastern Mediterranean, see Mundell Mango 2001; Lavan 2006a.

¹⁰²On public amenities, see Gering 2010, (forthcoming).

¹⁰³ For an overview of the debate on the postclassical city in Italy, see Ward-Perkins 1997.

- Boin, D. 2010. "A Campaign for Pious Tourism in Late Antique Ostia: Epitaphs for Bishop Cyriacus and Monica, Mother of Augustine." *IRS* 100:195–209.
- Bosković, D., N. Duval, P. Gros, and V. Popović. 1974. "Recherches archéologiques à Sirmium: Campagne francoyougoslave de 1973." *MÉFRA* 86:608–9.
- Calza, G. 1914. "Continuazione dello scavo sul Decumano: Scoperta di nuove scholae nel portico dietro il teatro." NSc69-74.
- . 1921. "Giornale di Scavi 16." Unpublished field notebook. Rome: Soprintendenza Speciale per i Beni Archeologici di Roma–Sede di Ostia Antica.
- ——. 1927. "Rinvenimenti epigrafici." NSc:379–431.
- ——. 1928. Ostia: Guida storico-monumentale. 2nd ed. Milan and Rome: Bestetti & Tumminelli.
- Calza, R., and M. Floriani Squarciapino. 1962. Museo Ostiense. Itinerari dei musei, gallerie e monumenti d'Italia 79. Rome: Libreria dello Stato.
- Calza, G., G. Becatti, M. Floriani Squarciapino, R. Calza, P. Pensabene, A.L. Pietrogrande, P. Baccini, L. Paroli, and C. Pavolini. 1953. *Topografia generale*. Scavi di Ostia 1. Rome: Libreria dello Stato.
- Candeloro, A. 1990. "Alcuni aspetti della zona sud del Foro." In *Iuvanum: Atti del convegno di studi, Chieti, maggio 1983*, edited by E. Fabbricotti, 95–9. Chieti: Marino Solfanelli Editore
- Cicerchia, P., and A. Marinucci. 1992. *Le Terme del Foro* o di Gavio Massimo. Scavi di Ostia 11. Rome: Libreria dello Stato.
- Delaine, J. 2002. "Building Activity in Ostia in the Second Century A.D." In Ostia e Portus nelle loro relazioni con Roma: Atti del convegno all'Institutum Romanum Finlandiae, 3 e 4 dicembre 1999, 41–101. ActaInstRomFin 27. Rome: Institutum Romanum Finlandiae.
- Février, P.A. 1971. *Djemila*. Algiers: Ministère de l'Information et de la Culture, Sous-Direction des Arts, Musées, Monuments Historiques, Antiquités.
- Gering, A. 2004. "Plätze und Straßensperren an Promenaden: Zum Funktionswandel Ostias in der Spätantike." RM 111:299–381.
- . 2006. Die Bewältigung des Verfalls: Urbane Lebensräume im Wandel zwischen Prinzipat und Spätantike. Berlin: Habilitationsschrift Humboldt-Universität.
- ———. 2010. "Genußkultur und Ghettobildung: Ist Ostia repräsentativ für spätantike Metropolen?" In *Die antike Stadt im Umbruch: Kolloquium in Darmstadt, 19. bis 20. Mai 2006*, edited by N. Burkhardt and R. Stichel, 92–109. Wiesbaden: Reichert.
- . 2011a. "Ein urbanistischer Überblick zur größten Flächengrabung der Römischen Welt: Krise, Kontinuität, Auflassung und Aufschwung in Ostia seit Mitte des 3. Jahrhunderts." In Das Römische Reich im Umbruch: Auswirkungen auf die Städte in der zweiten Hälfte des 3. Jahrhunderts. Internationales Kolloquium, Bern/Augst (Schweiz) 3.–5. Dezember 2009, edited by R. Schatzmann and S. Martin-Kilcher, 301–16. Archéologie et Histoire Romaine 20. Montagnac: Éditions Monique Mergoil.
- ——. 2011b. "Das Stadtzentrum von Östia in der Spätantike: Vorbericht zu den Ausgrabungen 2008–2011 mit Beiträgen von Lena Kaumanns und Luke Lavan." *RM* 117:409–509.
- Forthcoming. Ostias vergessene Spätantike: Die größte Flächengrabung als Schlüsselzum Verständnis städtebaulichen Wandels im 4. und 5. Jh. n. Chr. Palilia. Rome: Deutsches Archäologisches Institut Rome.

- Greco, E., and F. Longo. 2000. Paestum: Scavi, studi, ricerche. Bilancio di un decennio (1988–1998). Paestum: Pandemos.
- Greco, E., and D. Theodorescu. 1980. *Poseidonia-Paestum*. Vol. 1, *La 'curia.' CÉFR* 42. Rome: École Française de Rome, De Boccard, and L'Erma di Bretschneider.
- Greco, E., I. D'Ambrosio, and D. Theodorescu. 1996. Guida archeologica e storica agli scavi, al museo ed alle antichità di Poseidonia Paestum. Taranto: Editrice Scorpione.
- Grelle, F. 1989. "Iudices e tribunalia nella documentazione epigrafica della regio secunda." In *Novedades de epigrafia jurídica romana en el ultimo decenio: Actas del coloquio internacional A.I.E.G.L., Pamplona, 9–11 de abril de 1987*, by C. Castillo, J.M. Bañales, R. Martinez, and R. Serrano Suñer, 115–23. Pamplona: Servicio de Publicaciones de la Universidad de Navarra.
- Heres, T.L. 1982. Paries: A Proposal for a Dating System of Late-Antique Masonry Structures in Rome and Ostia. Studies in Classical Antiquity 5. Amsterdam: Rodopi.
- Holl, P. 1805. Icnografia delle fabriche dell'antica città di Ostia. www.ostia-antica.org/dict/topics/excavations/excavations12.htm.
- Jones, A.H.M., J.R. Martindale, and J. Morris. 1971. Prosopography of the Later Roman Empire. Vol. 1, A.D. 260–395. Cambridge: Cambridge University Press.
- Kockel, V. 1999. "Ausgrabungen der Universitaet Augsburg im sog: Macellum von Ostia." Meded 58:22–4.
- Kockel, V., and S. Ortisi. 2000. "Ostia: Sogenanntes Macellum (IV 5,2). Vorbericht ueber die Ausgrabungen der Universitaet Augsburg 1997/1998." RM 107:351–64.
- Lavan, L. 2001. "Provincial Capitals of Late Antiquity." Ph.D. diss., University of Nottingham.
 - —. 2003. "The Political Topography of the Late Antique City." In *Theory and Practice in Late Antique Archaeology*, edited by L. Lavan and W. Bowden, 314–40. Late Antique Archaeology 1. Leiden and Boston: Brill.
- ——. 2006a. "Street Space in Late Antiquity." Proceedings of the 21st International Congress of Byzantine Studies: London 21–26 August 2006. Vol. 2, Abstracts of Panel Papers, edited by E. Jeffreys, 68–9. Aldershot, England: Ashgate Publishing.
- ———. 2006b. "Fora and Agorai in Mediterranean Cities: Fourth and Fifth Centuries A.D." In *Social and Political Life in Late Antiquity*, edited by W. Bowden, C. Machado, and A. Gutteridge, 195–249. Late Antique Archaeology 3. Leiden and Boston: Brill.
- 2008. "The Streets of Sagalassos in Late Antiquity." In La rue dans l'antiquité: Définition, aménagement et devenir de l'Orient méditerranéen à la Gaule. Actes du colloque de Poitiers, 7–9 septembre 2006, edited by P. Ballet, N. Dieudonné-Glad, and C. Saliou, 201–14. Rennes: Presses Universitaires de Rennes.
- ——. 2012. "From Polis to Emporion? Retail and Regulation in the Late Antique City." In *Trade and Markets in Byzantium*, edited by C. Morrisson, 333–77. Dumbarton Oaks Byzantine Symposia and Colloquia. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- ——. Forthcoming. "The Agorai of Sagalassos: An Interpretive Study."
- Lavan, L., and M. Mulryan, eds. 2011. The Archaeology of Late Antique "Paganism." Late Antique Archaeology 7. Leiden and Boston: Brill.
- Lazzarini, M.L. 1983. "Iscrizione greca nelle 'Terme del Foro' di Ostia." *RendLinc* 38:301–11.
- Lewin, A. 1995. "Il mondo dei ginnasi nell'epoca tardoantica." In Atti dell'Accademia romanistica costantiniana:

- X Convegno internazionale in onore di Arnaldo Biscardi, 623-28. Naples: Edizioni Scientifiche Italiane.
- Liebeschuetz, J.H.W.G. 1972. Antioch: City and Imperial Administration in the Later Roman Empire. Oxford: Clarendon Press.
- Mango, C. 2000. "The Triumphal Way of Constantinople and the Golden Gate." DOP 54:173-88.
- Mannucci, V. 1980. "Restauro di un complesso archeologico: Le terme di Porta Marina ad Ostia." Archeologia laziale 3:129-32.
- Mar, R. 1991. "La formazione dello spazio urbano nella città di Ostia." RM 98:81-109.
- Marini, F. 1998. "La grande escavazione ostiense di Papa Pio VII." RivIstArch 53:61-110.
- Meiggs, R. 1960. Roman Ostia. Oxford: Clarendon Press. Meneghini, R., A. Corsaro, A. Delfino, and I. De Luca. 2010. "Nuovi dati archeologici per la storia del Foro di Cesare tra la fine del IV e il V secolo." Paper read at "410—The Sack of Rome: The Event, Its Context and Its Impact," 4-6 November 2010, Rome.
- Mertens, J., ed. 1995. Herdonia: Scoperta di una città. Bari: Edipuglia.
- Moschetta, E. 1980. Juvanum. Chieti: Ente Provinciale per il Turismo.
- Mundell Mango, M. 2001. "The Porticoed Streets of Constantinople." In Byzantine Constantinople: Monuments, Topography and Everyday Life, edited by N. Necipoğlu, 29–50. Leiden: Brill.
- Myrup Christiansen, T. 2010. "The Display of Statues in the Late Antique Cities of the Eastern Mediterranean: Reflections on Memory, Meaning, and Aesthetics." In Debating Urbanism Within and Beyond the Walls, edited by D. Sami and G. Speed, 265-87. Leicester Archaeology Monographs 17. Leicester: University of Leicester, School of Archaeology and Ancient History.
- Naumann, R. 1976. "Neue Beobachtungen am Theodosiusbogen und Forum Tauri in Istanbul." IstMitt 26:117-41.
- Neuerburg, N. 1965. L'architettura delle fontane e dei ninfei nell'Italia antica. MemNap 5. Naples: G. Macchiaroli.
- Ortisi, S. 1999. "Das sog. Macellum von Ostia: Aufhoehungen der spaeten Republik und fruehen Kaiserzeit vor dem Westtor des castrum." Meded 58:71-3.
- Paroli, L. 1993. "Ostia nella tarda antichità e nell'alto medioevo." In La Storia economica di Roma nell'alto Medioevo alla luce dei recenti scavi archeologici: Atti del seminario, Roma 2-3 aprile 1992, edited by L. Paroli and P. Delogu, 153-75. Biblioteca di archeologia medievale 10. Florence: All'Insegna del Giglio.
- Paschetto, L. 1912. Ostia, colonia romana: Storia e monumenti. Dissertazioni della Pontificia accademia romana di archeologia, ser. 2, vol. 10(2). Rome: Tipografia Poliglotta Vaticana.
- Pensabene, P. 1973. I capitelli. Scavi di Ostia 7. Rome: Istituto Poligrafico dello Stato.
- . 2007. Ostiensium marmorum decus et decor: Studi architettonici, decorativi e archeometrici. StMisc 33. Rome: L'Erma di Breitschneider.
- Piérart, M. 1981. "Rapport sur les travaux de l'École française en Grèce en 1980." BCH 105:891-917.
- Piérart, M., and G. Touchais. 1996. Argos: Une ville grecque de 6000 ans. Paris: Paris-Méditerranée.
- Popović, V. 1971. "A Survey of the Topography and Urban Organisation of Sirmium in the Late Empire." In Sirmium. Vol. 1, Archaeological Investigations in Syrmian Pannonia/Arheološka istraživanja u Sremu, edited by V. Popović, 119–34. CEFR 29. Belgrade: Archaeological

- Institute of Belgrade.
- Poulter, A.G. 1999. "The Transition to Late Antiquity on the Lower Danube: An Interim Report (1996-8)." Ant J 79:145-85.
- 2007. "The Transition to Late Antiquity on the Lower Danube: The City, a Fort and the Countryside.' In The Transition to Late Antiquity on the Danube and Beyond, edited by A.G. Poulter, 51-97. ProcBritAc 141. Oxford: Oxford University Press for the British Academy.
- Ricciardi, M.A., and V.S.M. Scrinari. 1996. La civiltà dell'acqua in Ostia antica. Vol. 2. Rome: Fratelli Palombi.
- Roueché, C. 1989. Aphrodisias in Late Antiquity: The Late Roman and Byzantine Inscriptions Including Texts from the Excavations at Aphrodisias Conducted by Kenan T. Erim. JRS Monograph 5. London: Society for the Promotion of Roman Studies.
- Santangeli Valenzani, R. 2007. "Public and Private Building Activity in Late Antique Rome." In Technology in Transition: A.D. 300-650, edited by L. Lavan, E. Zanini, and A. Sarantis, 435-49. Late Antique Archaeology 4. Leiden and Boston: Brill.
- Schmölder, A. 2010. "Nymphäumsräume: Neue Treffpunkte in der spätantiken Stadt." In Die antike Stadt im Umbruch: Kolloquium in Darmstadt, 19. bis 20. Mai 2006, edited by N. Burkhardt and R.H.W. Stichel, 109-19. Wiesbaden: Reichert.
- Scranton, R.L. 1957. Mediaeval Architecture in the Central Area of Corinth. Corinth 16. Princeton: American School of Classical Studies at Athens.
- Smith, R.R.R. 1996. "Archaeological Research at Aphrodisias in Caria 1989–1992." In Aphrodisias Papers. Vol. 3, The Setting and Quarries, Mythological and Other Sculptural Decoration, Architectural Development, Portico of Tiberius, and Tetrapylon, edited C. Roueché and R.R.R. Smith, 10–72. IRA Suppl. 20. Ann Arbor: Journal of Roman Archaeology.
- Soprintendenza Speciale per i Beni Archeologici di Roma-Sede di Ostia Antica. 1939-1940. "Giornale di Scavo 26." Unpublished field notebook. Rome: Soprintendenza Speciale per i Beni Archeologici di Roma-Sede di Ostia Antica.
- 1941-1950. "Giornale di Scavi 29." Unpublished field notebook. Rome: Soprintendenza Speciale per i Beni Archeologici di Roma-Sede di Ostia Antica.
- Strutt, K. 2005. "Ostia Antica Geophysical Survey Report: $Report\,11/2005."\,Unpublished\,report.\,Rome: The\,Brit$ ish School at Rome.
- Stucchi, S. 1965. L'Agorà di Cirene. Vol. 1, I lati nord ed est della platea inferiore. Monografie di archeologia Libica 7. Rome: L'Erma di Bretschneider.
- Thompson, A. 1988. "The Palace of the Giants." In Late Antiquity: A.D. 267-700, by A. Frantz, 95-116. Agora 24. Princeton: American School of Classical Studies at
- Vaglieri, D. 1910a. "Scoperte di antichità cristiane ad Ostia." NuovB 16:57-62.
- . 1910b. "Ostia: Scoperta della cinta urbana e di una
- chiesetta medievale." *NSc*:134–39. von Gerkan, A. 1942. "Die christliche Anlage in Ostia." RömQSchr 47:15-23.
- Ward-Perkins, B. 1984. From Classical Antiquity to the Middle Ages: Urban Public Building in Northern and Central Italy, AD 300-850. Oxford Historical Monographs. Oxford: Oxford University Press.
- . 1997. "Continuitists, Catastrophists, and the Towns of Post-Roman Northern Italy." PBSR 65:157-76.