

## The afterlife of the *Porticus Aemilia*

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A Raphaëlle-Anne,  
 compagna di viaggio e di scoperta

*I resti della Porticus Aemilia hanno caratterizzato nei secoli, insieme al Monte Testaccio e alle Mura Aureliane, il paesaggio della pianura subaventina, racchiuso tra le vie Florio, Branca, Rubattino e Vespucci.*

*Tra il 2011 e il 2013, all'interno di un progetto di ricerca e valorizzazione coordinato dalla Soprintendenza, sono state effettuate tre campagne di scavo. Le indagini, in collaborazione con il KNIR, hanno permesso di acquisire nuovi dati sulla vita e le modificazioni dell'edificio nel corso dei secoli.*

*Secondo le fonti letterarie (Liv. 35.10.12; Liv. 41.27.8) nel 193 a.C. gli edili curuli M. Aemilius Lepidus e L. Aemilius Paulus promossero nell'area libera della Piana Subaventina, la realizzazione di un nuovo porto fluviale (Emporium) e di una grande costruzione ad esso connessa, la Porticus Aemilia; i lavori per l'edificazione di tale struttura si conclusero probabilmente attorno al 174 a.C. ad opera dei censori Q. Fulvius Flaccus e A. Postumius Albinus. Tradizionalmente identificato come edificio di stoccaggio, la Porticus è stata oggetto negli anni di altre proposte interpretative e funzionali, fra cui quella di struttura connessa ai controlli fiscali sugli approvvigionamenti e quella di darsena militare sul Tevere (Navalia).*

*Lo scavo non ha incontrato i livelli repubblicani, probabilmente asportati in antico, ma ha potuto documentare l'architettura dell'edificio originari. La Porticus Aemilia venne interessata da ristrutturazioni, tra la fine del I d.C.-inizio del II sec. d.C. e il III d.C., volte a suddividere le navate in vani più piccoli, destinati probabilmente allo stoccaggio o ad attività manifatturiere. Tra la fine del IV d.C. e il VI d.C., la piana subaventina subì un processo di "ruralizzazione" e gli edifici furono progressivamente abbandonati. Anche la Porticus Aemilia subì lo stesso destino, come testimoniano i crolli rinvenuti nel corso degli scavi e le sepolture in anfora addossate alla struttura. Durante il lungo periodo di abbandono l'edificio, ridotto a rudere, si integrava nel paesaggio medievale e rinascimentale della piana, costituito prima da spazi rurali adibiti a orti e giardini suburbani e poi da vigneti e frutteti. Tra la fine del 1800 e il 1900, quando l'area subì un nuovo processo di edificazione con la costruzione del quartiere popolare, i resti della Porticus accolsero nel tempo una vetreria, di cui resta traccia nei molti reperti rinvenuti durante gli scavi, ma anche un deposito di acque minerali e persino una carrozzeria, cadendo nell'incuria e nel degrado fino al recente recupero. È parte del Museo Diffuso del Rione Testaccio, che comprende anche il Mercato di Testaccio e l'Emporium.*

### Introduction

Between 2011 and 2013 a series of excavations were carried out in selected areas between some of the standing remains of the so-called *Porticus Aemilia*, in the Roman neighborhood of Testaccio. The excavations took place in the context of a collaborative project of the Soprintendenza Speciale Archeologia BelleArti e Paesaggio di Roma and the Royal Netherlands Institute in Rome, with the aim of investigating both the spatial configuration of this monumental building as well as its history of occupation. While few data could be gathered on the early, Republican phase of the building, the excavations were especially informative on the Imperial phases, revealing amongst others, the remains of a *cella* of a *horreum*.

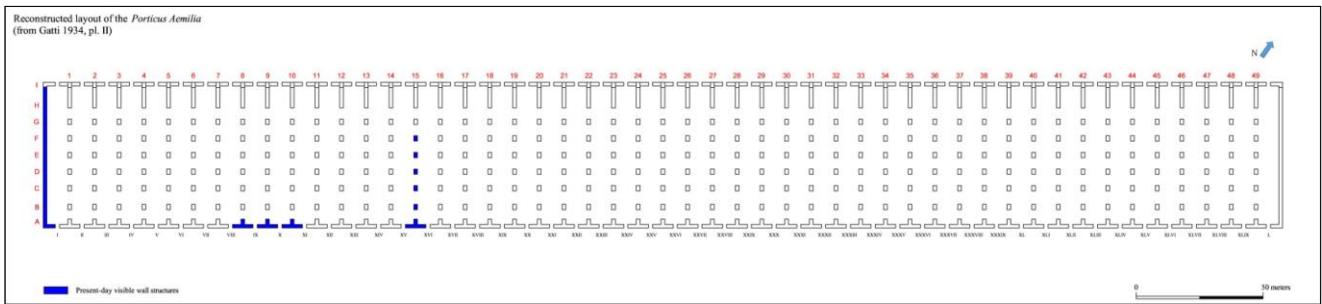


Fig. 1. Layout of the *Porticus Aemilia* with the numbering of the aisles and pillars (Graphics layout V. De Leonardis).

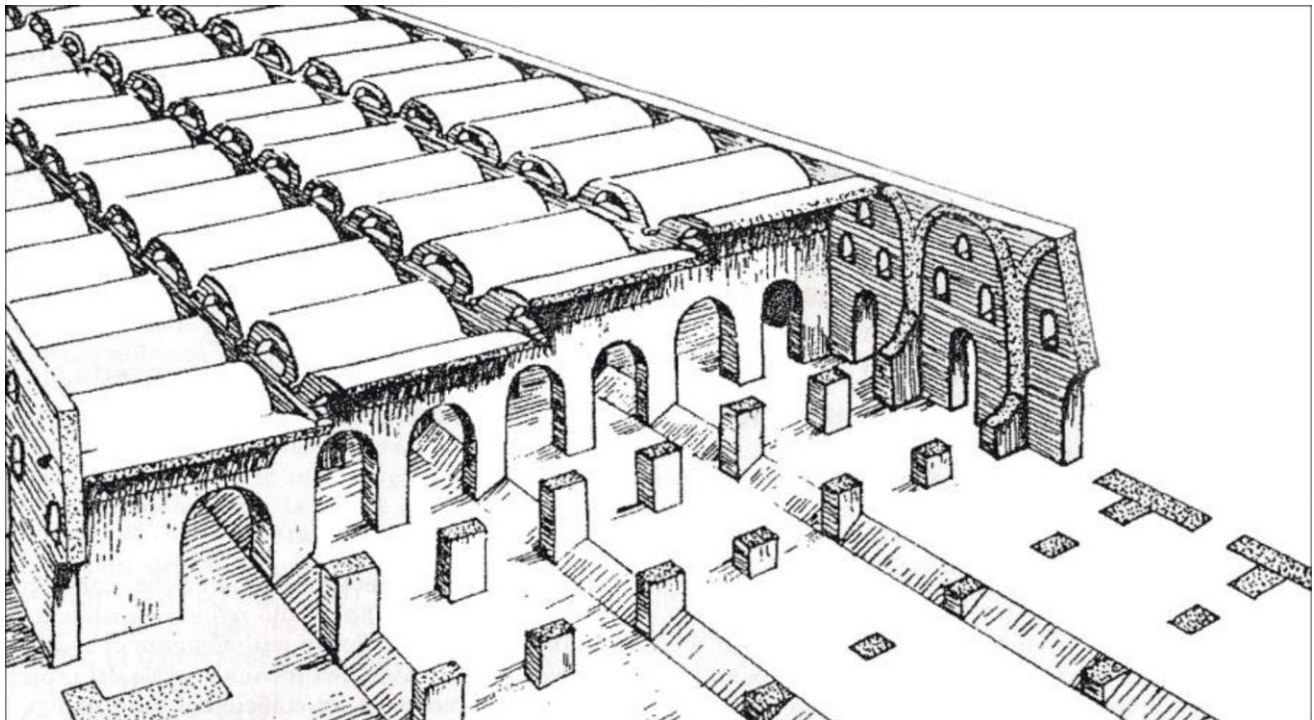


Fig. 2. Axonometric view of the *Porticus Aemilia* da G. Gatti 1934 (Rodríguez Almeida 1984, p. 31, fig. 4).

The building commonly identified as *Porticus Aemilia* is named after the *aediles* Marcus Aemilius Lepidus and Lucius Aemilius Paulus, who, according to Livy, in 193 B.C. started construction works on a *Porticus* outside *Porta Trigemina*, in relation to the new harbor (*Emporium*) in the later Testaccio area. Its construction was probably finished in 174 BC by the censors *Quintus Fulvius Flaccus* and *Aulus Postumius Albinus*<sup>1</sup>.

Following the commonly accepted reconstruction of the building by Guglielmo Gatti (based in particular on linking on-site observations to relevant fragments of the Severan marble plan, the *Forma Urbis*), we can say the building measured approximately 487 x 60 m and included 50 aisles, 8,30 m wide, descending towards the Tiber. The aisles were separated by arches, on continuous foundations across the short axis of the building (fig. 1). The enormous structure is thought to have been covered by a barrel vault. It was built largely with irregular tufa blocks in the *opus incertum* technique, attesting indeed to its Republican origins (fig. 2). Traditionally is thought that restoration works in *opus mixtum* with bricks and tufa blockswere were realized during imperial era,

<sup>1</sup> "Aeditas insignis eo anno fuit M. Aemilii Lepidi et L. Aemilii Pauli; multos pecuarios damnarunt; ex ea pecunia clipea inaurata in fastigio lovis aedis posuerunt, porticum unam extra portam Trigeminam, emporio ad Tiberim adiecto, alteram ab porta Fontinali ad Martis aram, qua in Campum iter esset, perduxerunt" (Livy, XXXV, 10.11-12). Livy also recalls renovations by censors Quintus Fulvius Flaccus and Aulus Postumius Albinus in 174 B.C.: "Et extra portam Trigeminam emporium lapide straverunt stipitibusque saepserunt et porticum Aemiliam reficiendam curarunt, gradibusque ascensum ab Tiberi in emporium fecerunt" (Livy, XLI, 27.7-8).

in particular during the Trajan's period, probably in order to make the large aisles more functional by dividing them into smaller spaces<sup>2</sup>.

Gatti's identification of this edifice as Livy's *Porticus Aemilia*<sup>3</sup>, with the supposed function of a warehouse, was recently questioned. Virlovet argued in favour of the identification of the building with the original *Porticus Aemilia* and suggest a function as center of *frumentationes* at least for a part of the building, as happen in the case of the *Makra Stoa* at Pireus<sup>4</sup>. Aguilera Martin propose to recognize in the *Porticus Aemilia* an official establishment for the examination of merchandise coming into the *emporium*<sup>5</sup>.

Tuck, and more recently Tucci, identified the structure as the *Navalia*, or shipsheds, of the Urbs, refusing the identification of the enormous building with the *Porticus Aemilia*. This new identification is based on two main elements. The first element is linked to the construction and the plan of the building: the architecture of the *Navalia*, with large aisles covered by barrel vault, seems close to the structures of the *Porticus Aemilia*<sup>6</sup>, rather than that of the ancient *Porticus* buildings, normally a porticate or quadriporticate square as the *Porticus Octaviae*, among the others, seems different. In fact, the building's architecture is innovative and different compared with others structures normally identified as *Porticus*. Here we can find greek influences coming from the buildings none as shipsheds but also as *Portica* or commercial structures too. P. Gros in 1996 proposed the similitude with a porticate bigger than usually (with seven corridors rather than two corridors), where columns were substituted by pilasters, suggesting some resemblance with the *macella*<sup>7</sup>. The second main element is the new reading of the letters inscribed on the *Forma Urbis* fragment 23, [...]LIA, namely [NAVA]LIA instead of [PORTICUS AEMI]LIA<sup>8</sup>. We could not prove either of these hypotheses by our excavations, at least with regard to the building's original use. No Republican floor-levels neither filling strata were identified during the excavations. As we will demonstrate in the present report, our explorations provide information on various post-Republican phases of abandonment, collapse, rebuilding and restructuring, all of which may have contributed to the obliteration of the Republican layers. The Imperial period is especially relevant in this argument, since earlier layers may have been systematically removed in an effort to restructure thoroughly both the exterior and the interior of the building. In this article we focus in particular on this later history of occupation. In documenting and discussing the excavation data, however, the numbering of the walls, aisles and pillars follows the plan of the original building as reconstructed by Gatti and as shown in fig. 1.

### *The original building*

Only a few segments of the walls of the ancient building have been preserved above ground level. The excavations concentrated on two of these; both of them are still standing up to a height of some five meters in garden-like open spaces within an almost-square block of multi-story apartment buildings delineated by the Via Rubattino, the Via Vespucci, the Via Florio and the Via Branca respectively<sup>9</sup>. One of these segments is part of the transverse wall no. 15, dividing aisles XV and XVI (Area A), the other one is a segment of the rear wall (Area B) (fig. 3).

<sup>2</sup> GATTI 1934. By analyzing the excavation data gathered during the district's construction, Gatti was also able to retrace the whole map of the building, thereby producing an essential framework for all researchers who wish to examine this area. Gatti's identification was probably inspired by Lanciani.

<sup>3</sup> GATTI 1934, particularly on the base of the interpretation of the plan of the buildings and the letters appearing on the fragment 23 of the *Forma Urbis*.

<sup>4</sup> VIRLOUVET 1995: 113-114.

<sup>5</sup> AGUILERA 2002: 71.

<sup>6</sup> Recently a building was discovered in *Portus* identified as *Navalia* with a layout close to the *Porticus Aemilia*, organised in 10 aisles 12 m. wide, rather than *Porticus* had 50 aisle, 8,30 m. wide. It is not impossible to locate ships inside our building but the aisle are very narrow: KEAY 2015: 306-307; KEAY *et al.* 2012.

<sup>7</sup> GROS 1996: 465-466.

<sup>8</sup> COZZA, TUCCI 2006: 175-1; TUCCI 2008: 18-24; D'ALESSIO 2008; TUCCI 2012: 575-91; for the different reading of the letters [...]LIA found on fragment 23 of the *Forma Urbis*, namely [NAVA]LIA instead of [PORTICUS AEMI]LIA. *Contra* see ARATA, FELICI 2011: 127-53. Yet another interpretation can be found in TUCK 2000: 175-82, who argues to identify the letters with [CORNE]LIA. *Contra* see COARELLI 2007: 41-46. BRUNO 2012.

<sup>9</sup> Another standing wall segment can be found inside the courtyard of the Istituto Scolastico C. Cattaneo. It constitutes part of the western side wall of the ancient building.



Fig. 3. Map with the collocation of the excavation areas illustrated in the present article. Graphics layout S. Della Giustina.

Wall segment 15 closely corresponds to Gatti's reconstructions of the transverse walls as being built in *opus incertum* and consisting of seven arcades built on aligned pillars<sup>10</sup>. The arcades differ in size: starting from the back wall, the first one is 3.70 m wide, the second one 5.30 m and the other three 4.55 m<sup>11</sup>. The rear wall segment, too, was built in the *opus incertum* style and it displays three openings, two at the top and one below. The top openings are relatively small and are likely to have functioned as windows, while the function of the one below is not yet determined.

The structure faced the Tiber with a difference in level of about 8 metres from the bottom, at the beginning of the foundation level, resulting in a 16% gradient. This inclination was absorbed by the vaulted roofing with a reduction in height for every two arches and in the foundations by a lowering at each arch.

Excavation trenches were dug on either side of both wall segments: the rear wall and segment 15. As stated above, these did not reveal any Republican stratigraphy. Only the continuous foundations were found of both the rear and transverse walls of the original building. The foundations are also made in *opus incertum*; those of the rear wall reach a width of 2.30 m, some 0.90 m thicker than the upper parts of the rear wall. The foundations of the transverse wall instead have the same width as the upper walls (1.42 m) (fig. 4a, b). They show a descending pattern towards the Tiber with drops that are level with those of the pillars. Between corridors A and B, B and C, C and D a ca 60 cm drop can be observed<sup>12</sup>. This difference in level may be due to the inclination of the natural surface towards the Tiber. Accordingly, the original floor level may have started just above the offset of the rear wall's foundations, to descend towards the Tiber with the same gradient as the drops of the transverse wall's foundations<sup>13</sup>. Most probably, the same goes for the ceiling system; within aisle XVI, between pillars E15 and E16, the collapsed remains of a vault made with rectangular blocks of tufa (45x12

<sup>10</sup> GATTI 1934: 135. See COZZA, TUCCI 2006: 180-81.

<sup>11</sup> The partially collapsed arcade found between pillars 16C and 16B allowed a measurement of tuff ashlar forming the arched lintel: 57 cm long, 10 cm wide toward the intrados and 11.5 cm wide near the extrados.

<sup>12</sup> Respectively 62 cm, 50 and 58 cm.

<sup>13</sup> Guglielmo Gatti agrees on that: *Evidently, indeed, the Porticus's plane must correspond to the pillar's grade plane, the presence of which would be otherwise unjustified* (GATTI 1934: 140, note 60). See also GATTI 1934, plate IV and RODRIGUEZ ALMEIDA 1984, image 4. In no excavation campaign were found traces of the original floors.

Fig. 4. a) Segment of the foundation along the back wall at southeast b) Detail of the foundations along the partition wall number 15.

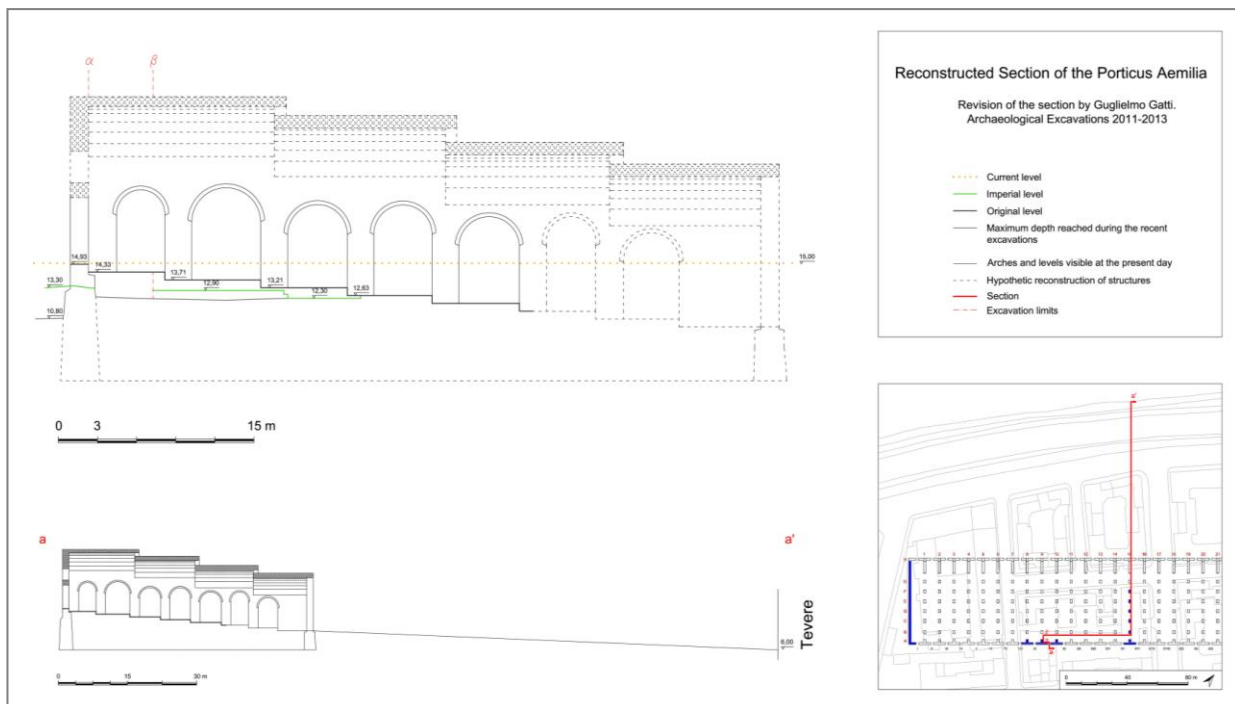


Fig. 5. Reconstructed section of the Porticus Aemilia. Graphics layout S. Della Giustina.

cm) were brought to light. Their position seems to confirm the vaults’ descending pattern towards the river<sup>14</sup> (fig. 5).

Since no traces of the Republican flooring have been conserved it is difficult to see by what architectural means the difference in level was resolved. The stepped foundations probably exclude any sloping surface but perhaps between one archway and another there were short ramps or steps. Moreover the emptying and lowering operations carried out on the structure prevent any further information about its original use being discovered.

The stepped foundations, the absence of any trace of Republican flooring and the 16% slope seem difficult to reconcile with the pres-



<sup>14</sup> The differences in level between vaults therefore seem to correspond to those between pillars. See GATTI 1934: 139 and image 4.

ence of military shipsheds (*Navalia*), as shown in fig. 5. Ancient naval dockyards normally do not have gradients above 8% because of the work involved in hauling up the ships. On the other hand, greater level differences, resolved by means of steps and short ramps, were present inside warehousing and storage structures<sup>15</sup>.

### The interior

Although the basic structure of the original building seems to have survived throughout the ages, the excavations suggest that significant structural modifications were carried out in various phases. The most thorough of these modifications can be attributed to the Imperial period and testifies to a re-organization of the area that may be due to the building's shifting functions.

No later than the 1st c. A.D. – when the original building was already in an apparent state of neglect – the original floor level within aisle XVI was removed. As a result, the foundations were uncovered and were visible in elevation. Subsequently, the floor level was raised and the arcades between aisles XV and XVI were closed with brick walls, thus closing off the aisles from each other. Moreover, in aisle XVI other brick walls were added between pillars 15D and 16D, thus subdividing the aisle into two separate rooms, A and B (fig. 6).

All walls of Room A were covered with whitish plaster about three cm thick, with a polished surface with waterproof quality, due to the cohesion and the consistency of the plaster<sup>16</sup>. The plaster was found on the newly-added walls as well as on the Republican pillars and even on the barrel vaults, now duly provided with bipedal bricks and *cocciopesto* to reinforce and impermeabilize them. Clearly, the restructuring was done quite thoroughly and involved restoration work of essential parts of the old building. Even a new floor was added, made of good quality *cocciopesto*. This new floor had a quarter-round curb along its south-western border that abutted the stonework and avoided the penetration of water. All of this attests to the precision of the whole operation.

The same goes for Room B, south of Room A, which was likewise created by restructuring the interior space of the original building. Room B is reached from Room A by walking up two steps, about 30 cm tall and covered with bipedal bricks<sup>17</sup>. Room B also displayed a *cocciopesto* floor, in this case, however, lying on sets of *suspensurae* (fig. 7) connected to the walls in *opus latericium* that close the wide space between the pillars. Although the floor and underlying system of *suspensurae* had been severely damaged in some points and in others had even been removed, it is clear from the excavations that this system covered the whole room. From the analysis of the *suspensurae* walls it has become clear that Room B had two construction phases: the *cocciopesto* floor belongs to the second one. The presence of *suspensurae*<sup>18</sup>, the type of entrance and the room's plan suggest an interpretation as a wheat storage *cella*. The finds of carbonized emmer wheat (*Triticum dicoccum*) and barley (*Hordeum vulgare*) confirm this idea<sup>19</sup>. If Room B can, indeed, be interpreted as an authentic storage *cella*, Room A may have had a connecting function.

The excavation of the foundation trenches of the entrance to Room B and of the levels underneath the system of *suspensurae* dates the construction of this complex in the last quarter of the 1st c. A.D. and the early 2nd c. A.D.

Rooms A and B, described above, were used at least up to the 5th c. and presumably collapsed between the 6th and 7th c. A.D. The collapse layers of vaults and walls were completely *in situ* at the moment of the excavation. It probably began from pillar 16E and involved thereafter the vault and the side walls. In Room B, the collapse of the building was succeeded by the creation of large pits that were dug right through the layers of collapse and the floor, and also damaged the exterior of the walls<sup>20</sup>.

Once the ancient building had collapsed, its rooms were not abandoned forever. Indeed, in room A's north-eastern sector we found a small rectangular hut, cut into the collapse, such as a sunken-floored room,

<sup>15</sup> For example the shipsheds of Apollonia have a 4° slope that means a gradient of 7%: Sintès 2010: 94.

<sup>16</sup> Iron nails (*claves muscarii*) were also found *in situ*.

<sup>17</sup> Traces of a hinge suggest that the rooms used to be divided by a door.

<sup>18</sup> Such a floor facilitates the preservation of dry wheat (MATTINGLY, ALDRETE 2000: 147). Ostia's *horrea* with *suspensurae* include: *Grandi Horrea* (Reg. II. Is. IX.7), *Horrea Antoniniani* (Reg. II. Is. II.7) and *Horrea* Reg. I Is. VIII.2. The latter are characterised by small 30-cm-wide transepts placed at a distance of 30 cm from one another (RICKMAN 1971: 28). Keay notes that the presence of *suspensurae* identifies a room as a wheat storage space (KEAY 2010: 13). See also Trajan's warehouses in *Portus* (BUKOWIECKI *et al.* 2011, BOETTO *et al.* 2010), cellars re-built under Commodus and those converted in the Severan age in Ostia's *Grandi Horrea* (MONTEIX 2011; RICKMAN 1971: 43-53).

<sup>19</sup> The archaeo-botanic analyses were conducted by D. Lentjes.

<sup>20</sup> Before and after the collapse, spoliation activities of the architectural material probably took place.



Fig. 6. (above) Layout of sondage A with Room A and Room B. Drawings by B. Taddei, M. Mimmo, S. Marrotta. (under) Picture of Room A and the entrance to Room B. Graphics layout S. Della Giustina.

that was built with part of the collapsed remains (fig. 8). The sunken-floored room was delineated by dry-stone walls preserved up to a height of three to four courses. A rounded hole in the E corner was probably used to hold a post supporting the roof. Unfortunately, this structure could not be dated with any precision but its stratigraphical position indicates a date close after the collapse of the Roman room<sup>21</sup>.

<sup>21</sup> For the excavation of the interiors see also BURGERS *et al.* 2015, BURGERS *et al.* 2014a e b. Sunken-floored buildings are common during 7<sup>th</sup>-8<sup>th</sup> century, normally remains of this kind of structures is an oval or rectangular hollow: HAMEROW 2002: 31-34.



Fig. 7. Photo of sondage A4: Room B with the suspensurae and the cocchiopesto seen from above.

Fig. 8. Photo of the "sunken-floored building" in the collapsed Room A.

Fig. 9. General view of sondage B at the end of the excavation campaign 2011.



### The exterior

We found the remains of two adjacent rooms – I and II (fig. 9) – outside the *Porticus* and leaning against the rear wall of the Republican building, both added in the Imperial period. These rooms were probably part of a sequence of rooms adjoining the rear wall of the *Porticus*<sup>22</sup>.

Room I is a rectangular space that is 2.70 m wide, with one wall consisting of the *opus incertum* rear wall of the *Porticus Aemilia*. The other walls of Room I were made of red tiles, covered with white plaster. Room I has a rather asymmetric *opus spicatum* floor, which was partially damaged as a result of an earlier excavation carried out in the mid-20th c.<sup>23</sup>. Room II is about 2.80 m wide and has only been partially excavated. It shares its north-eastern wall with Room I and its north-western wall with the rear wall of the Republican building. The south-eastern wall is built in *opus mixtum* style. We have not reached a floor level in Room II.

Both rooms open out to a street with a paving made up of reused marble, basalt and travertine blocks. This paving is only partially preserved. Below it, a lead *fistula*-system was discovered, consisting of three surprisingly intact segments, two of which were still connected to each other. Given

<sup>22</sup> A similar room was found by Lanciani next to transversal wall 3, see BUONOCORE 2000: 226, f.293.

<sup>23</sup> A short communication published in *BCom* 1985, 388 reads that in February 1955, "in an exploratory trench made in the *Porticus*'s ruins area between Via Rubattino and Via Florio two walls were encountered, one of which would close access to the *Porticus* from the south-eastern side. The other one ran perpendicular to it. Between the two walls, at a depth of about 1.50 m, lied a herringbone floor. 0.80 m below it, a narrow masonry tunnel (0.24 tall, 0.20 wide) was interrupted by the wall that ran perpendicular to the *Porticus*. A number of objects were found in the trench, including a bronze ring with a figurate seal, approximately a hundred small bronze coins (probably dating back to the 4th c. A.D., partially well preserved) and two amphorae handles with stamps". [if the original was in italian it would be better to quote it] Moreover, page 268 of the Record of Finds XII, kept in the Archivio Storico della Sovraintendenza ai Beni Culturali di Roma Capitale, reads that on February 5th, 1955, "during the diggings, the threshold of the Arch of Aemilius was brought to light at a depth of about 2.50 m". The find of a calendar's fragment which could be dated to 1955 inside the pit, together with evidence concerning types and levels of structures brought to light during the excavation as well as the find of coins and a large travertine threshold (not *in situ*) make it possible to identify with certainty the surveyed cut with the above-mentioned exploratory trench, no (photo)graphic documentation of which survived.





Fig. 10. Layout of sondage B with the two Rooms (I e II) and the remains of the road (A) and the water system with the fistula (B), the small fountain (C) and the sewer (D). Drawings by D. Amesano, C. Botturi, D. Cesana. Graphics layout S. Della Giustina.

the consuls' names embossed on the lead pipes – Tertullian and Clemens – the *fistula* dates to 195 A.D.<sup>24</sup>. A small rectangular fountain, perhaps directly fed by the *fistula*, empties onto the street. It is made of bricks, internally coated with *cocciopesto* and externally covered with red-plastered mortar. The tank contains angular pilasters, a small curb on all sides, an adduction hole internally coated with lead and a draining hole close to the tank's bottom. The outtake hole is directly connected to a sewer “a cappuccina” with a triangular shape, a covering of tiles and a floor made out of bipedal bricks. The sewer received water not only from the *fistula* system, but also from Room I, as is indicated by a hole in the room's floor which was directly linked to the sewer (fig. 10).

The rooms, the water system – consisting of a sewer, a *fistula* and a fountain – and the street make up a coherent system which dates back to the late 2nd-early 3rd c. A.D.<sup>25</sup>.

The stratigraphy of this area suggests that afterwards, a number of significant activities took place here. Room I underwent several structural modifications between the 4th and the beginning 5th c. A.D., involving among others the raising of its floor level, a small NW-SE-oriented partition in Room I and the addition of a large NE-SW-oriented concrete central structure in the same room. Today, unfortunately, these modifications are difficult to read. Their nature, however, might suggest that these compartments used to house workshops for craftsmen, as is suggested by a packed layer containing an high number of iron residues.

Another modification regards the restoration of the lead *fistula* running parallel to the two rooms. It consisted of the substitution of the central segment, which, as a result, is not connected to either the northern or the southern segment and displays a different stamp. The original stamp was easily readable and datable, whereas this last one is still in the process of being deciphered. Perhaps at the time of the *fistula*'s restoration the tile-built sewer was also reorganized. It is now closed with a large travertine covering and large recycled stones arranged in a semicircle.

<sup>24</sup> *Tertullo e^t Clemente co(n)s(ulibus), succ(ura) (= sub cura) Aemil[i] ----?] proc(uratoris) Aug(usti), off(icinator) Iunius Celadus [---?]*. Thanks to David Nonnis for his help in reading the stamp.

<sup>25</sup> For the excavation of the exterior see also BURGERS *et al.* 2014a e b.



Fig. 11. (above) Layout of sondage B with the positions of the burials. Graphics layout S. Della Giustina. (under) Child burial in *Spatheion* (S2).



Fig. 12. Female burial. Pit covered with amphora's sherds (S3).



Finally, almost three centuries later the imperial transformations this system must have been out of use, considering that the area had become part of a small necropolis; two *enchytrismos* burials and one pit grave burial were found within the rooms on the outside of the rear wall of the Republican building. One was located in a small semi-circular pit in Room I's southern corner and consisted of a *Spatheion* amphora (= Keay 26, unidentifiable variety) without a neck, its opening covered with two amphora fragments. It contained an almost intact skeleton of a child in supine position, which was still anatomically connected. This burial was placed in a thick layer of amphora fragments, which also covered three African cylindrical vases in vertical position. The latter had been damaged by the burial pit itself (fig. 11).

The second burial was that of a woman whose corpse was placed in a pit in the ground, covered with fragments of African and Eastern amphorae (fig. 12). The skeleton was in supine position, the skull lying on a tile which presumably served as a bolster. Even though the skeleton was in bad condition – especially its upper half – it was possible to establish that the woman had been 35 to 40 years old at the time of her death. This tomb, too, was located next to the same room's SE wall.

A third burial was found in Room II, consisting of two large juxtaposed amphorae: one without the neck and the other without the base. The space between these vases was filled with bricks and with the

base of the biggest one, probably purposely broken. This one is also was been identified with an African storage amphora, similar to the pieces founded in some sites of Tunisia dating to fifth-seventh century A.D.<sup>26</sup> (figg. 13-14).

Only a few fragments of the skeleton were found. Thus, it was impossible to determine either the individual's sex or age at the time of death. No funerary objects were found in either tomb. Based on their stratigraphic position, however, the tombs can be attributed to a different moments, starting from the beginning of the 5th and lasting in the 6th c. A.D.

<sup>26</sup> CONTINO, D'ALESSANDRO 2014a: 328, 330.



Fig. 13. Third burial, lying on the rear wall of the Porticus (S1).

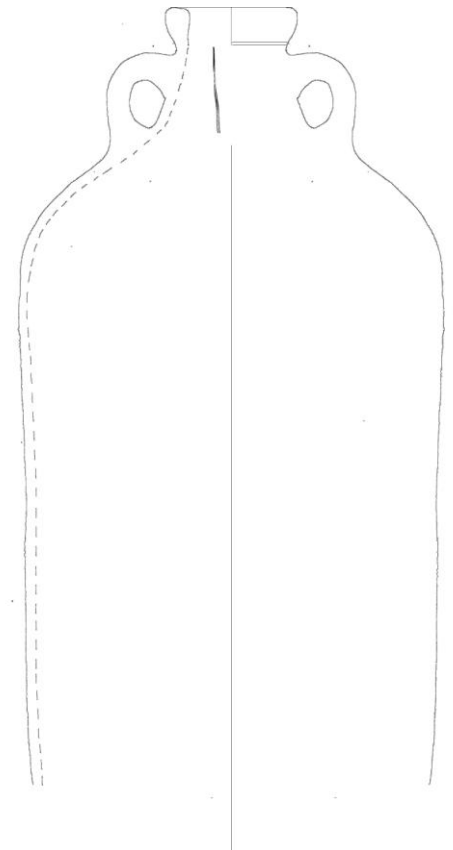


Fig. 14. Storage Amphora. (Draw by A. Contino, L. D'Alessandro; scale 1:8).

### Finds analysis

#### Imperial Age

While no stratigraphic information is available for the phase of construction of the original building, the major restructuring operations could be amply documented to the Imperial period, thanks to the relative abundance of datable pottery in the various layers (figg. 15-16). In the strata related to the restructuring, amphora sherds were most numerous, comprising between 85 and 99% of the pottery found. A prevalence of eastern specimens is documented; for instance, Cretan, Cypriot and Eastern Aegean items were found predominantly in the excavations of the exterior of the building, while in the interior (notably within aisle XVII) late Rhodian (Camulodunum 184) (fig. 17) and Syrian-Palestinian amphorae (Kingsholm 117, Majcharek Form 1, Schoene XV, unidentified amphora) (fig. 18). All of this is also consistent with what was already observed with respect to the excavations of Testaccio's new market area, revealing a similarly high rate of eastern amphorae, and generally in Rome<sup>27</sup>.

Most interesting is the high presence of Syrian-Palestinian amphorae, not documented in this percentage before in Rome, except the flavian contexts of the *Forum Transtorium*<sup>28</sup>, linked to the *macellum* activities, and the foundation levels of the *horreum* at Nuovo Mercato Testaccio<sup>29</sup>. It seems interesting that the new data on the Syrian-Palestinian amphorae coming from commercial and storage contexts whereas the previous data coming from consumption sites, suggesting the importance to collect more informations from the commercial district that may give back a clear imagine of the imports in the *Urbs*.

<sup>27</sup> CONTINO, D'ALESSANDRO 2014b. About the New Market of Testaccio see COLETTI, LORENZETTI 2010: 155-164; CASARAMONA *et al.* 2010: 113-122. For the excavation see SEBASTIANI, SERLORENZI 2008; SEBASTIANI, SERLORENZI 2011; GALLONE ZOTTIS 2011. About some Roman contexts: from flavian age, when the Rodi and Crete wine are particularly exported, the Egean-eastern amphorae are the 20,1% of the incoming in Rome, quite similar to the Italic ones (28,79%), the most attested.: Rizzo 2003: 160, 169-170.

<sup>28</sup> PANELLA 1992: 185-186, in particular 196-197; DE CAPRARIIS *et al.* 1988: 305-320.

<sup>29</sup> COLETTI, LORENZETTI, 2010: 155-164.

IMPERIALE										
TIPO	N. FRR SIGNIFICATIVI				TIPO	N. FRR SIGNIFICATIVI				
	NAV. XV	XVI Cella coa suspenso	ESTERNO MURO PORTICUS	NAVATA X		NAV. XV	XVI Cella coa suspenso	ESTERNO MURO PORTICUS	NAVATA X	
AFRICA PROCONSOLARE, MAURITANIA CAESARIENSE E TRIPOLITANIA	DRESSEL 26	1	3		EGEO-ORIENTALI	CAMULUDUNUM 184	1	353		
	AFRICANA IOSTIA 59			1		AGORA' F 65-66	1	5	1	
	AFRICANA IOSTIA 23					KNOSSOS 19		9		
	OSTIA 53/23					SCHOENE XIII				
	AFRICANA I			19		1	AGORA' M 54		14	
	AFRICANA II	2	2	12		AGORA' M 213				
	AFRICANA II A			4		CRETESE 1		1	26	
	AFRICANA II B					CRETESE 4		1	15	
	AFRICANA II C					DRESSEL 2-4				
	AFRICANA II D			1		MAU 27-28			12	
	AFRICANA III					MAU 38				
	KEY 25					KINGSHOLM 117		151	1	
	KEY 26					DRESSEL 24				
	KEY 25/26			1		KAPITAN 1			26	
	KEY 27					KAPITAN 2			12	
	KEY 34					LRA 2				
	KEY 35					LRA3				
	KEY 57					LRA4				
	KEY 59					LRA5				
	KEY 61					LRA7				
	KEY 62					SCHOENE XV		37		
	CILINDRICHE GRANDI DIMENSIONI					NON ID.			6	
	TIPO GLOBULARE									
	DRESSEL 2-4					ITALICHE E CALABRO- SICULE	DRESSEL 6		1	
AFRICANA GENERICA	2	3	9	DRESSEL 2-4			107	7		
				ANFORA DI SPELLO						
DRESSEL 30			10	ANFORA DI FORLIMPOPOLI					1	
OSTIA IV, 172				MID ROMAN 1			7	3		
MAU 35	1		12	AGORA' M 254 (ITALICA?)						
TRIPOLITANA I				KEY 52						
TRIPOLITANA II		1	1	CRYPTA BALBI 2						
TRIPOLITANA III			2							
TRIPOLITANA I-III			26	GALLI CHE	GALLICA 4			1	10	1
NON ID			1		GALLICA				3	
BETICA	DRESSEL 20	1	4	6	PUN ICR E EBU SIT ANE				2	
	HALTERN 70									
	DRESSEL 7-11			5						
	DRESSEL 2-4					NON ID		55	46	1
	BETICA DA GARUM			2						
<b>TOTALE</b>								295	4	

Fig. 15. Synthesis of the identified pottery typologies for the Imperial Age.

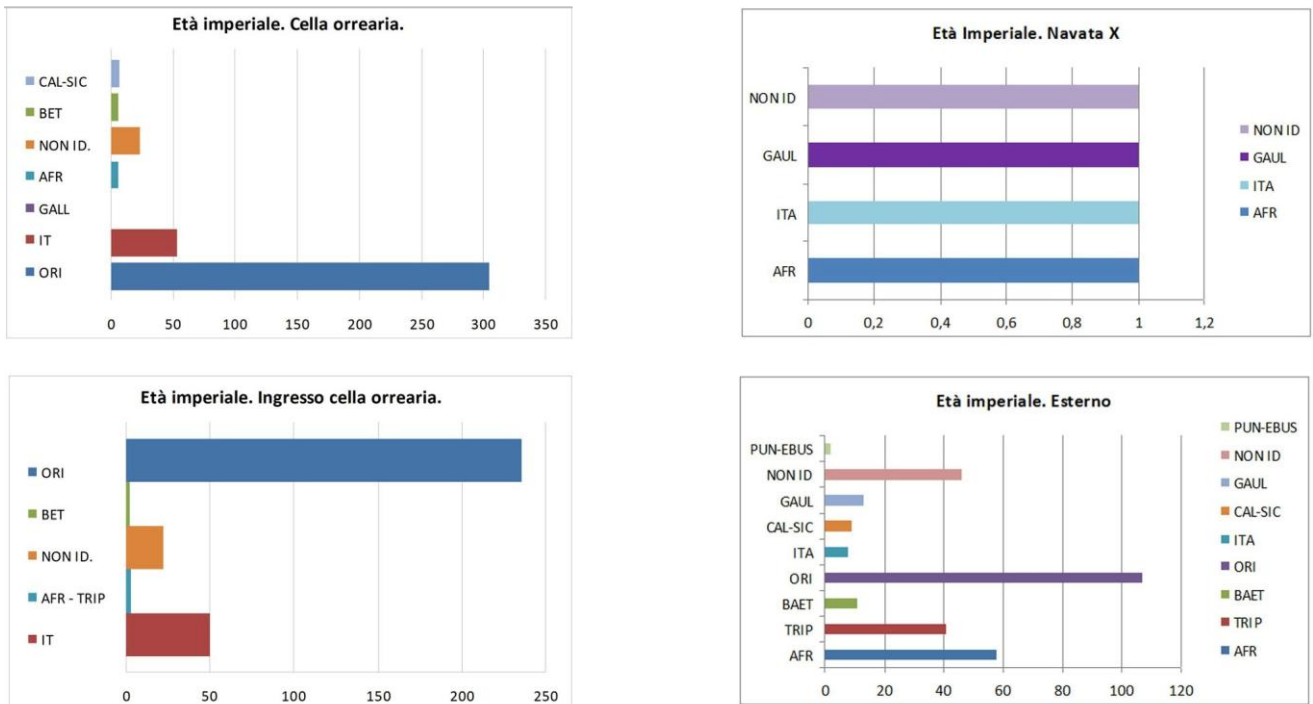


Fig. 16. Graphics of different amphora's production attested. Imperial age.

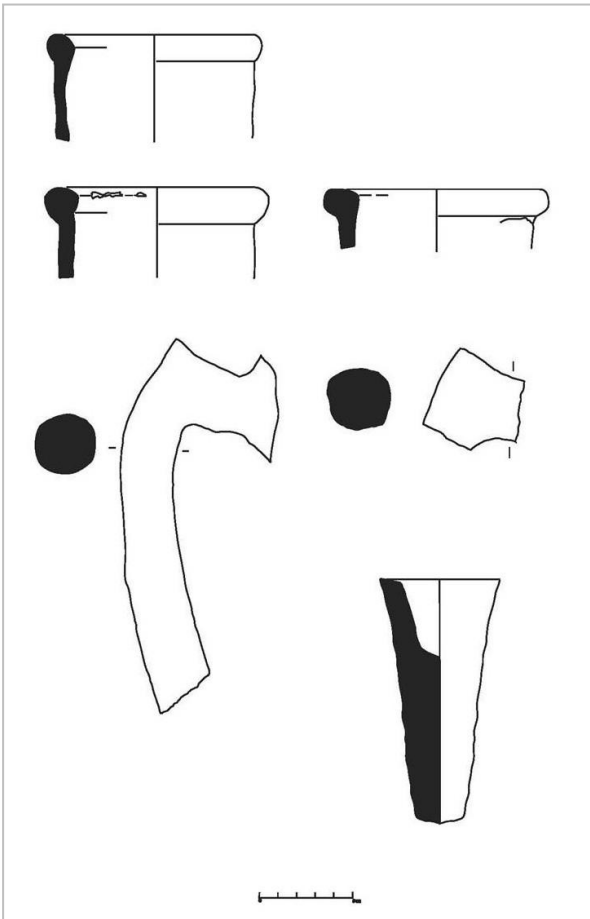


Fig. 17. Late Rhodian wine Amphora, Camulodunum 184 type. (Draw by A. Contino, L. D'Alessandro)

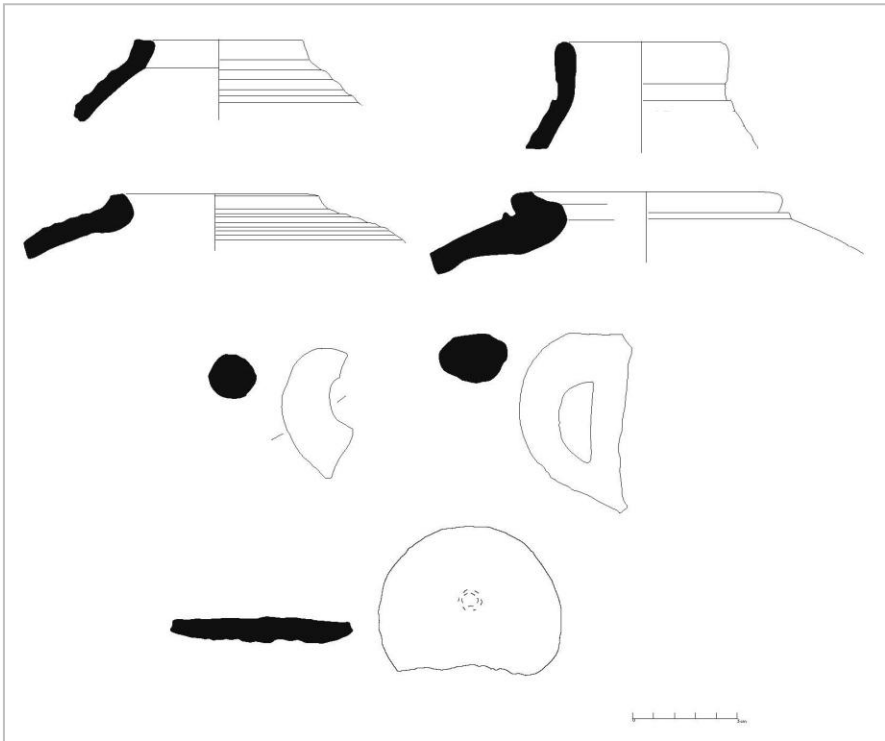


Fig. 18. Syro-Palestinian wine (?) Amphora, Kingsholm 117 and similis. (Draw by A. Contino, L. D'Alessandro)

Otherwise it is evident the very low attestation or absence of the Dressel 20 amphora, the most attested at the Monte Testaccio. This is not shocking and it is necessary to underline the particular situation of the Mount. It is a public dump for oil's free distributions, imported from *Baetica* and then from *Africa*. This particular situation justify the high number of the presence and the total preminence of Dressel 20 amphorae at the Mount. On the contrary the recent excavations on the subaventine plane show different percentage of presence of a various spectrum of amphorae types, testifying the variety of the goods imported in the *Urbs*<sup>30</sup>.

With regard of the exterior the analysys of the data coming from the last excavation campaign still ongoing, enable us to date the construction of the rooms to the end of second century A.D.-beginning of third century<sup>31</sup>.

With regard to the construction of the *horreum* in the interior aisle XVI, a dating can be suggested on the basis of the stratigraphic information related to its foundation trench (between rooms A and B) and to the levels below the *suspensurae*; these indicate a date between the last quarter of the 1st c. A.D. and the early 2nd c. A.D., based in particular on the fine wares found, including a Dragendorff 27c southern Gallic sigillata bowl (A.D. 80-120), Loeschke IV-V (A.D. 14-117), VIII B (similar to Bailey's 1203-1205a, A.D. 50-90), IX-X (similar to Bailey's 1159-99, A.D. 70-220), VIII (similar to Q1235, last third of the 1st c. A.D.) lamps, and a Hayes 5A African *sigillata* plate (Flavian period).

### Late antique period

Amphoras also constitute the largest part of the ceramic debris in the late antique layers; for these phases, instead of a dominance of Aegean wares, we documented a prevalence of African vases, though varying in accordance with the different types (figg. 19-20). Other noteworthy ceramic productions include in particular Tripolitan and Calabrian-Sicilian containers (Mid-Roman 1; Keay LII)<sup>32</sup>.

This change in amphora types is consistent with the general shift in import and supply systems characterizing Rome between the Imperial and late antique periods<sup>33</sup>, when Italic, Baetican and Gallic productions were substituted by African goods and the wine production crisis of north-central Italy during the Vth century determined the institution of the *titulus canonicus vinarius* from the *Bruttium* and Sicily.

The numbers variously suggest a dating of contexts between the late 3rd and the early 7<sup>th</sup> c. for the interior of the building, whereas in the external area activity seems to cease in the mid-5th/beginning of the 6th c. A.D. Overall, these data are consistent with findings in the late antique levels of Portus (excavation of the first defensive wall<sup>34</sup>; contexts of the Basilica<sup>35</sup>). Here, too, amphorae prevailed over other pottery and most specimens were also imported, especially from Africa<sup>36</sup>. Another comparison can be made with the recent discoveries under via Marmorata<sup>37</sup>.

Almost all fine and common pottery was identified as African. As for African *sigillata* pottery, types Hayes 14, Hayes 16, Hayes 17, Hayes 50, Hayes 61, Hayes 85, Hayes 91 C-D and early Hayes 91 (= Bonifay 48) were found; as for common pottery, Puppit 1 jug and Uzita 3 bowl; as for African kitchenware, Hayes 182, Hayes 183, Hayes 184, Hayes 196, and Hayes 197; finally, Atlante X and VIII lamps were also attested<sup>38</sup>.

<sup>30</sup> About Rome: Rizzo 2003; About Nuovo Mercato Testaccio: COLETTI, LORENZETTI 2010: 155-164; CASARAMONA *et al.* 2010: 113-122; D'ALESSANDRO 2013; About *Porticus Aemilia*: CONTINO, D'ALESSANDRO 2014a; about the Mount Testaccio: BLAZQUEZ, REMESAL 2010 with previous bibliography.

<sup>31</sup> On the contrary the data of the second campaign allow a preliminary dating of the mid. third century A.D.: CONTINO, D'ALESSANDRO 2014a: 326.

<sup>32</sup> Less attested amphorae of Italic, Baetican, and Gallic origin.

<sup>33</sup> PANELLA 1993: 613-97; CASALINI, CRESPI 2010: 101-111.

<sup>34</sup> DI SANTO 2011: 147-189.

<sup>35</sup> DI GIUSEPPE 2011: 191-110.

<sup>36</sup> Excavations of the first defensive wall show that here African amphorae were prevalent from the early 5th c. A.D. However, between the third quarter and the end of that century, they were outnumbered by Eastern vases for transport.

<sup>37</sup> BERTOLDI 2011: 148-170.

<sup>38</sup> For further informations on the pottery analysys see: CONTINO, D'ALESSANDRO 2014a: 323-333; CONTINO D'ALESSANDRO 2014b: 141-149.



## Conclusions

The recent excavations on the so-called *Porticus Aemilia*, carried out jointly by the Soprintendenza Speciale Archeologia Belle Arti e Paesaggio di Roma and the Royal Netherlands Institute in Rome, have provided important new insights, in particular for the Imperial and later phases of reuse of the original building, starting from the late 1st – early 2nd c. A.D.

In the Republican age, from the beginning of 2nd c. B.C., the Subaventine plain came in for a big public infrastructural project to enlarge the commercial and storage capacity of the *Urbs*, characterised by the “imprint” of the *gens Aemilia*<sup>39</sup>, due to the inscreasing of the population, continuous till Trajan age, that prevue the new portual area (*emporium*), a wide area behind it to handling the goods and stuff (*saeptum*) and a potential multi-functional building with function of cheking and temporary stockage of the goods (c.d. *Porticus Aemilia*). It was a unique commercial and harbour complex, functionally and physically linked. During the Imperial age the direct link between *Porticus Aemilia* and *Emporium* was interrupted as testify the new *opus latericum* building built in the area of the ancient *Saeptum*, recognizable on the *Forma Urbis* slabs and attested in the episodical finds<sup>40</sup>. The *Porticus Aemilia*, separated from the harbour, probably changed its function and became a multipurpose building linked to the storage and manufacturing activities of the commercial district. These changes are testified by the retooling action of the aisles that suggests different use in different spaces, as demonstrate the excavation in aisles XV (manufacturing activities) and XVI (storage *cellae*)<sup>41</sup>.

The stratigraphic evidence indicates that by then the building was no longer seen as a joint, homogeneous structure, but rather was used as an space for new buildings that altered its original layout once and for all, in accordance with new demands<sup>42</sup>. We may perhaps suggest a big polyvalent area with a flexible management as proposed before for the *horrea Galbana* with the systeme of *locatio-conductio*<sup>43</sup>.

Shortly afterwards, in the area excavated outside the rear wall of the Republican building, the floor level was raised and a series of rooms were constructed (Room I), aligned along a street which was provided with relevant waterworks, including a fountain, a *fistula* and a sewer<sup>44</sup>.

These interventions ought to be read within the wider framework of the reorganization the urban space of the port area. Indeed, in the 2<sup>nd</sup> c. A.D., the banks of the Tiber next to the *Emporium* and the whole area at the foot of the Aventine hill were restructured<sup>45</sup>. The need to reorganize the area is closely related to the significant demographic growth of the *Urbs* and to the topographical interruption between the harbour and its ancient complex. To satisfy the demands of this population growth more storage space was constructed. Buildings for storage could be created either from scratch in open spaces, as the horreum of Nuovo Mercato Testaccio, or, as in the case of so-called *Porticus Aemilia*, within already existing buildings.

All the restoration and retooling acitivity recognizable in Testaccio, including the *Emporium*, the *Porticus Aemilia* and the *horrea*, perfect fit with at least two moments of re-organization including the harbour and the urban maritime area (*Portus* and Ostia), due to Trajan and after to the Severian<sup>46</sup>.

The late antique levels identified both inside and outside the *Porticus Aemilia* show characteristics that are rather consistent with data already gathered in the wider area along the foot of the Aventine hill. Possibly, this area was partially abandoned when the construction of the Aurelian Wall began. Throughout the area artificial fills dating to this period and elevated floor levels can be observed, both probably aimed at coping with the floods of the Tiber. Building materials were also taken as *spolia* and portions of buildings – some of which could be best described as ruins – were reused, in one case by a sunken-floored building. Some abandoned parts were even turned into burial sites. The latter phenomenon occurred throughout the Tiber plain at the foot

<sup>39</sup> Sull'origine dell'intervento e il suo rapporto con la politica della famiglia degli Scipioni in merito alla realizzazione di un sistema portuale integrato tra Roma, Ostia e Pozzuoli vedi anche: De Caprariis, Zevi 2000: 249-314 con bibliografia precedente.

<sup>40</sup> BRUNO 2012 (atlante integrare); SEBASTIANI *et al.* in print.

<sup>41</sup> For the systeme prot, river bank, porticus aemilia see also SEBASTIANI *et al.* in print.

<sup>42</sup> GATTI 1934: 141. Further similar structural changes, some of which date back to the 2nd c. A.D., can be observed in other aisles of the building, together with *suspensurae*, as shown by a recent scrutiny of archive documents concerning the whole *Porticus Aemilia* area (DE LEONARDIS, DELLA RICCA 2014).

<sup>43</sup> VIRLOUVET 2011: 7-22; CARRE 2011: 23-39.

<sup>44</sup> Below these elevations, inside room 1, a thick deposit of yellow silt was found. This dates back to the 1st c. A.D. and obliterated a fragment of *cocciopesto* floor.

<sup>45</sup> See GATTI 1936: 55-82; RODRÍGUEZ ALMEIDA 1984: 73-81; AGÜLERA MARTÍN 2002: 60-65.

<sup>46</sup> BOETTO 2012, KEAY 2012a with previous bibliography.



of the Aventine hill, as is demonstrated by excavations in the Emporium, the new Testaccio market, and the Via Marmorata area. These burial sites can be dated between the beginning of the 5th and the 7th c. A.D.<sup>47</sup>.

With the progressive decreasing of the redistributive and storage functions and with the subsequent abandonment of the structures the area loses its original purpose and throughout the course of centuries it becomes progressively suburban, maintaining this character until the threshold of the 20<sup>th</sup> century.

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<sup>47</sup> MENEGHINI 1985: 88-95; FESTUCCIA, PAGANO, VERDE 2008: 156-159; CAPODIFERRO, QUARANTA 2011: 60-65.

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