

The Constantinian Bishop's church at Ostia: preliminary report on the 1998 season

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References in the sources

In the biography of Pope Silvester in the *Liber Pontificalis* we read the following entry:¹

Eodem tempore fecit Constantinus Augustus basilicam in civitate Hostia, iuxta portum urbis Romae, beatorum apostolorum Petri et Pauli et Iohannis Baptistae, ubi et dona obtulit haec.

Then the emperor Constantine built in the city of Ostia close to Portus Romanus the basilica of the blessed apostles Peter and Paul and of John the Baptist, where he presented the following gifts.

After this sentence there follows a list of donations, liturgical equipment, and also different properties, dwelling houses as well as economic goods, which in the majority of cases were situated in the region of Ostia and Portus.² From the proceeds of these — an annual total of 1118 *solidi* — the Basilica should have been maintained. Moreover, as the *Liber Pontificalis* observes, a certain Gallicanus too donated various items of equipment and estates of which the revenues — this time making annually 869 *solidi* and 1 *tremissus* — likewise should serve for the upkeep of the church.³ Obviously it concerns an important imperial dedication whose annual upkeep entailed a not inconsiderable financial expenditure.

Most probably this is the church of the Bishop of Ostia. That follows because the church possessed a baptismal installation: the *Liber Pontificalis* lists under the liturgical equipment a *pelvis ex argento ad baptismum* weighing 10 lbs, a silver basin which served for baptisms. Besides, the fact that the church was dedicated to the Apostles and to John the Baptist is a secure indication that it was here that the Bishop performed baptisms.

Lastly, the Constantinian cathedral of Ostia is known from one further source. It is mentioned in the *Acts of Saint Gallicanus*, the very Gallicanus who makes his appearance in the *Life of Silvester* as the joint benefactor.⁴ Flavius Gallicanus assumed the consular garb in the year 330 and he must then (in any case, so the story goes) have established himself in Ostia before he moved to Egypt under Julian the Apostate and suffered martyrdom as a hermit under the same emperor.⁵ While still in Ostia he founded a church which is described in the *Acta S. Gallicani* in the following words:⁶

Hic primus in ostiensi urbe extruxit ecclesiam et dedicavit officia clericorum. Huic se sanctus levita Laurentius revelavit, adhortans eum, ut in eius nomine ecclesiam fabricaret in porta, quae nunc usque Laurentia nuncupatur.

This passage is instructive in several ways. For one, in contrast to the *Liber Pontificalis*, the weight is shifted entirely to the person of Gallicanus; while in the *Vita Silvestri* he appears only as a secondary donor of properties, here in his own (saint's) legends he is the sole builder of the church. Secondly, this text is important because it provides a topographical statement:

- 1 *Le Liber Pontificalis. Texte, introduction et commentaire* (ed. L. Duchesne) I (Paris 1886) 183, 18-19. The translation is that of R. Davis, *The Book of Pontiffs (Liber Pontificalis)* (Liverpool 1989) 24.
- 2 *Lib. Pont.* I, 184, 1-13.
- 3 *Lib. Pont.* I, 184, 14-22.
- 4 *Acta Sanctorum*, June, VII, p. 33 f. P.-A. Février, "Ostie et Porto à la fin de l'antiquité. Topographie et vie sociale," *MEFRA* 70 (1958) 295-330, esp. 300 f.
- 5 On the person of Gallicanus see H. Grégoire and P. Orgels, "S. Gallicanus, consul et martyr dans la passion des Ss. Jean et Paul, et sa vision 'constantinienne' du Crucifié," *BullAcadRoyBelgique* 42 (1956) 125 ff.; also A. H. M. Jones, J. R. Martindale, J. Morris, *Prosopography of the Later Roman Empire* 1 (Cambridge 1971) 382 f. s.v. Gallicanus I.
- 6 *Acta Sanctorum*, June, VII, p. 34 para 7.

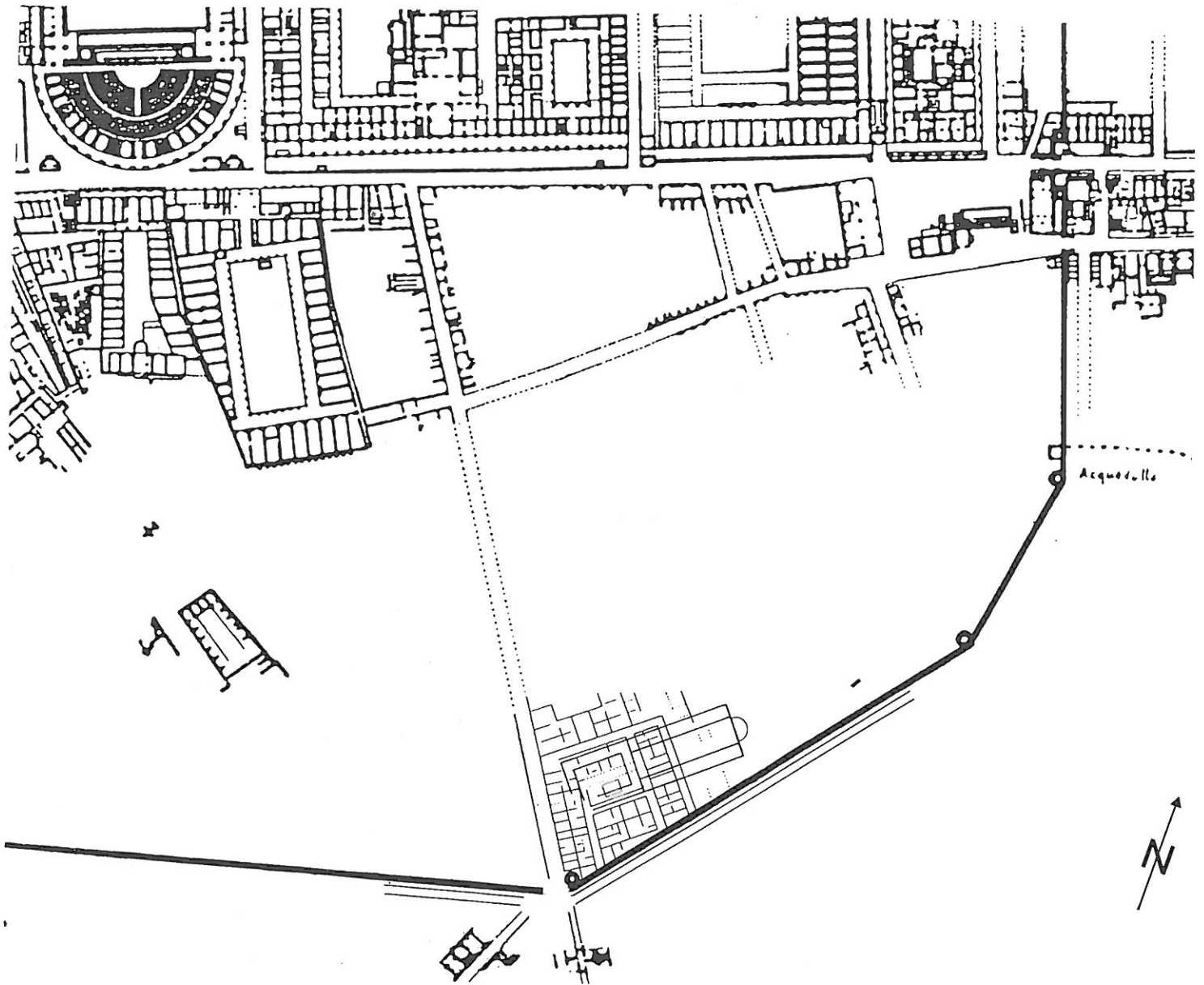


Fig. 1. Plan of SE quarter of Ostia (*regio V*) showing basilica and underlying *insula* detected by geophysical survey and aerial photography.

the building is at the gate which is called 'Laurentia', thus in the neighbourhood of a city gate through which led the road to Laurentum.⁷

Attempts to locate and identify the church

Every attempt by the older investigators to locate the church was inconclusive. G. Calza still attempted to bring the building on the street from the Castrum to the Porta Marina (III, 1,3-4) into connection with the Constantinian dedication, but he was rightly criticized for this proposal.⁸ Even less likely is it that one of the cemetery basilicas lying outside the walls is

7 G. Calza, *RendPontAcc* 16 (1940) 63 ff.; id., *RendPontAcc* 18 (1941-42) 1315 ff. The history of evidence and the bibliography are collected by T. Heres, "Alcuni appunti sulla "Basilica Cristiana" (III, 1, 4) di Ostia Antica," *MedRom* 42 (1980) 87-99, esp. 91 f., and by R. Meiggs, *Roman Ostia* (2nd ed., Oxford 1985) 397-99.

8 Pianabella: L. Paroli and S. Coccia, "Ostia Antica, loc. Pianabella," *BollArch* 1-2 (1990) 214-17; iid.,



Fig. 2. Results of magnetometry.

identical with the Basilica mentioned in the *Vita Silvestri*. The three known plans, the Basilicas of Pianabella, S. Aurea, and S. Ercolano, are too small and date, so far as can be ascertained, to the post-Constantinian period.⁹ The same goes for the two previously known smaller churches lying *intra muros*, the chapel in the Mithras baths and the certainly early mediaeval chapel at the theatre.¹⁰ The church at Portus does not enter into consideration because the corresponding entry in the *Liber Pontificalis* explicitly speaks of Ostia as the city close by the actual harbour of Rome (*portus*).

The geophysical survey conducted in 1996 by the German Archaeological Institute (Rome) in those parts of Ostia which have not been excavated seems finally to have provided the answer to the question of the location of the Constantinian bishop's church.¹¹ The use of magnetometry

"La Basilica di Pianabella di Ostia Antica nelle sue relazioni con il paesaggio fra tardoantico ed altomedioevo," *ArchLaz* 10 (QuadAEI 19, 1990), 177-81; L. Paroli, "Ostia nella tarda antichità e nell'Alto Medioevo," in L. Paroli and P. Delogu (edd.), *La storia economica di Roma nell'alto medioevo alla luce dei recenti scavi archeologici* (Florence 1993) 153-75. S. Aurea: S. Episcopio, "Saggi di scavo presso S. Aurea ad Ostia," *ArchLaz* 3 (QuadAEI 4, 1980) 228-32. S. Ercolano: P. Pergola, "Lo scavo di S. Ercolano ad Ostia Antica: relazione preliminare delle campagne 1988 e 1989," *ArchLaz* 10 (QuadAEI 19, 1990) 173-76.

⁹ Chapel in the Mithras baths: G. Calza, *RendPontAcc* 25-26 (1949/51) 129 ff.; Meiggs (supra n.7) 396 f. Chapel at the Theatre: G. Calza, *Scavi di Ostia I. Topografia generale* (Rome 1953) 162.

¹⁰ A location at Portus was proposed by L. Paschetto, *Ostia colonia romana, storia e monumenti* (Rome 1912) 86 f. *Contra*: Meiggs (supra n.7) 195 f.

¹¹ M. Heinzelmann, H. Becker, K. Eder, M. Stephani, "Vorbericht zu einer geophysikalischen Prospektionskampagne in Ostia Antica," *RömMitt* 104 (1997) 537-48.

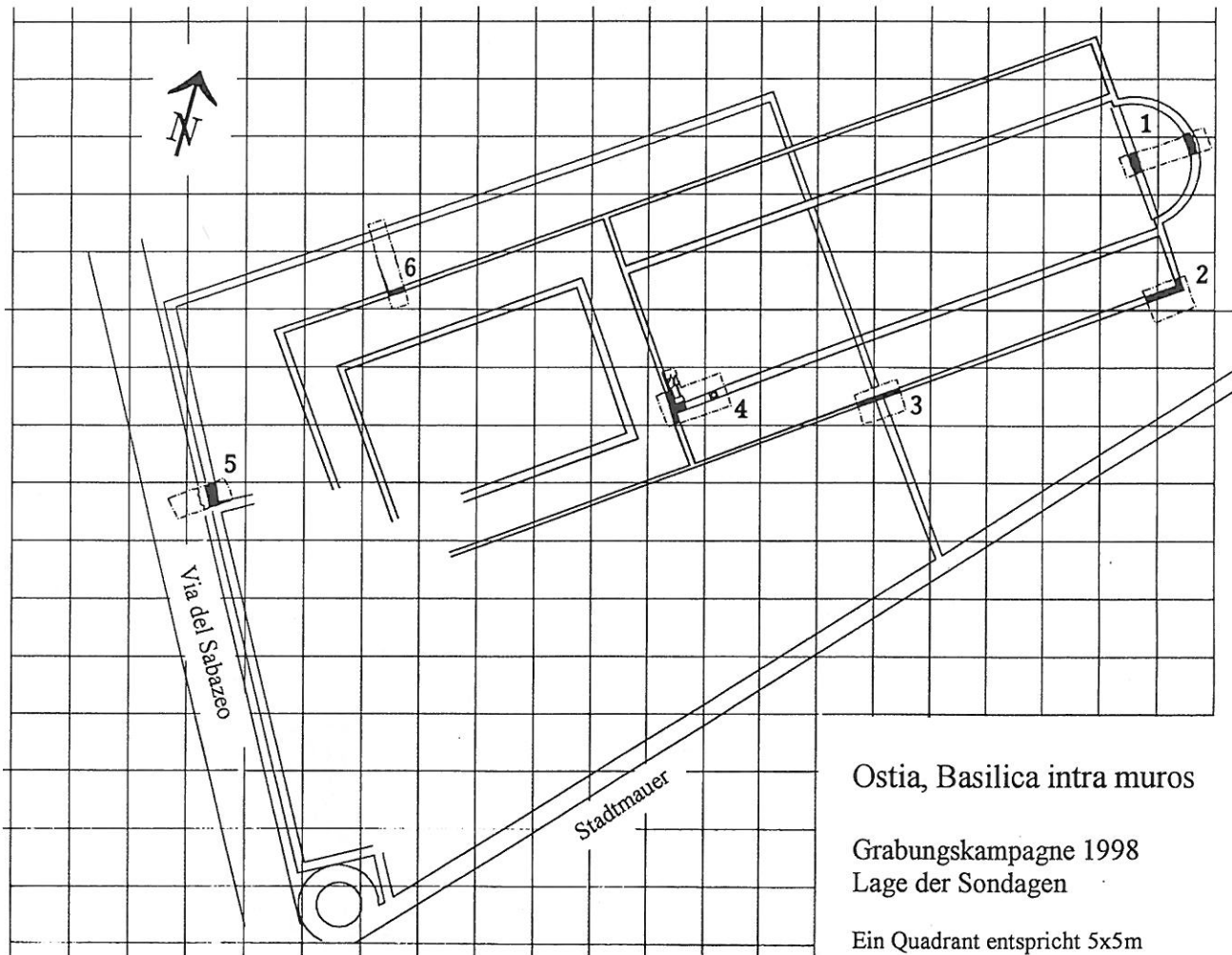


Fig. 3. Outline of ecclesiastical structures and location of trenches; each quadrant measures 5 x 5 m.

in this survey revealed in the southeast part of the town, between the so-called Via del Sabazeo and the city wall, the clear plan of a three-aisled basilica as well as (especially in the area of the atrium of the Basilica) the outlines of an *insula* complex of probably older date (drawn on fig. 1) which had been built over by the church (fig. 2). The plan of this church, which surpasses by far all other known churches at Ostia in its dimensions, can only be that dedicated jointly by the emperor Constantine and Gallicanus. The topographical statements in the *Acta* of Saint Gallicanus coincide with the position of the basilica, for it is found in the immediate neighbourhood of a city gate through which one could leave Ostia in the direction of Laurentum.

Thanks to the kind permission of the Archaeological Superintendency of Ostia, in the autumn of 1998 the DAI Rom conducted a campaign of excavation in the course of which a total of 6 trenches were opened in the area of the church and the building which preceded it (fig. 3). A first trench was placed on the central axis of the building running through the apse and the chord of the apse; a second trench was opened at the SE corner of the building; a third trench was laid out at the intersection of the church with the earlier building, and a fourth was placed at the west end of the nave where the main façade wall connected to the nave. A fifth trench was also laid out on the axis of the building so that it cut the street and the western end of the preceding building. A sixth trench, on the other hand, cut through the north side of the atrium and the older building connected to it at that point. The purpose of the *sondages* was to gather information about the building history and the plan of the church and to secure dating



Fig. 4. Column base and mosaic exposed in trench 4 dug at west end of nave/south aisle. Looking W. Note in left lower corner remains of collapsed south wall.

evidence, as well as to clarify the relationship of the church complex to the preceding building. The topographical relief was a decisive factor in the choice of the points where *sondages* were made. Because the area between the Via del Sabazeo and the city wall shows a noticeable depression, it was above all on the south side and in the area of the atrium that we expected to find remains of the superstructure of walls because they would be concealed beneath the higher sections of ground.

Shortly after the start of the excavation our suspicions were confirmed that only slight remains of the superstructure of walls were preserved. Only in the trenches dug on the south exterior wall and on the southern supporting wall was the floor level as well as some layers of the superstructure encountered. The somewhat deeper trenches on the NE and E sides of the building were entirely concerned with foundations of the building.

The plan

Through the total of 6 *sondages* which were conducted in the area of the basilica and its predecessor it was possible to define the dimensions of the three-aisled building as follows. The external dimensions of the nave of the church, including the apse, came to 51.45 m in length and 23.20 m in width. The N-S extent of the atrium corresponds to that of the church. A careful examination of the aerial photograph shows that the atrium was slightly rectangular. The width of the central nave measures (in round figures) 11.40 m, the side aisles 4.80 m, and its length amounted to 45.35 m. The apse is slightly less wide than the central nave, its diameter measuring c.8.80 m. Accordingly the front wall of the apse on both sides must have been 1.30 m across. The thickness of the south and north exterior walls amounts to 0.45 m, and that of the west wall to 0.48-0.50 m. On the other hand, the foundation wall of the south colonnade and the wall of the apse at 0.70 m is noticeably broader. The thickness of the outer walls of the atrium is only 0.40 m.

The most important information about the plan of the basilica comes from trench 4 (fig. 4). As we expected, there came to light here the western façade of the nave and the beginning of the south support wall of the nave. Moreover, a column base remained *in situ* on a straight line with a projecting spur wall (0.85 m in length). Thus it was possible to calculate exactly the kind of supports, the intercolumniation, and the number of columns — 14 on each side.

A more precise reconstruction of the structure of the church is not possible because only slight clues are presently available. However, there can be no question but that the plan should be reconstructed as a basilical schema with a stepped cross-section (fig. 5). The theoretically possible reconstruction as a continuous sloping roof over the nave and side aisle should be rejected because of the comparatively thick dividing walls (0.70 m as opposed to 0.45 for the outer walls), which would have supported window openings. In any case the building must have been over 14 m high, according to which the steeper proportions would be perfectly conceivable.

The organisation of the atrium forecourt is still to be clarified. In trench 6 only the 0.40 m wide northern external wall came to light, which corresponds to the rather narrow exterior wall of the church.

The siting and construction of the church

If we consider the evidence of the magnetometry, we can gain an impression of a close relationship between the earlier building and the atrium of the church. The structure of the church possesses the same orientation as the Roman *insula*, and the forecourt of the atrium of the church seems to conform to the inner courtyard of the *insula*. Thus it is normal to expect that the church complex (above all in its western part) would have re-used the walls of a pre-existing construction and that, where it met the atrium, it inserted itself into the nest, as it were, of an existing courtyard.

The trenches on the Via del Sabazeo, at the west wall of the nave and on the south exterior wall of the church, produced a completely different picture. In these three trenches walls of the preceding building appeared, and in all cases an identical picture was produced: the older construction had been demolished and the area levelled before construction of the church began (fig. 6). In trench 3, where the south exterior wall of the church cut a wall of the *insula*, it was shown that the latter had already been cleared away down to a level of about 2.80 m above sea level before the construction of the church (fig. 7). At that elevation generally begin first the foundation levels of the church. A similar picture was presented by trench 4 at the west end of the church: here it was shown that the western wall closing the nave was erected on an older stretch of wall which likewise belonged to the *insula*. Apparently (for the find can hardly be interpreted in a different way) the course of the older foundation wall had been marked in order for it to be re-used as the foundation for the west wall of the church, which, together with the front wall of the apse, required a particular strengthening as being the highest wall

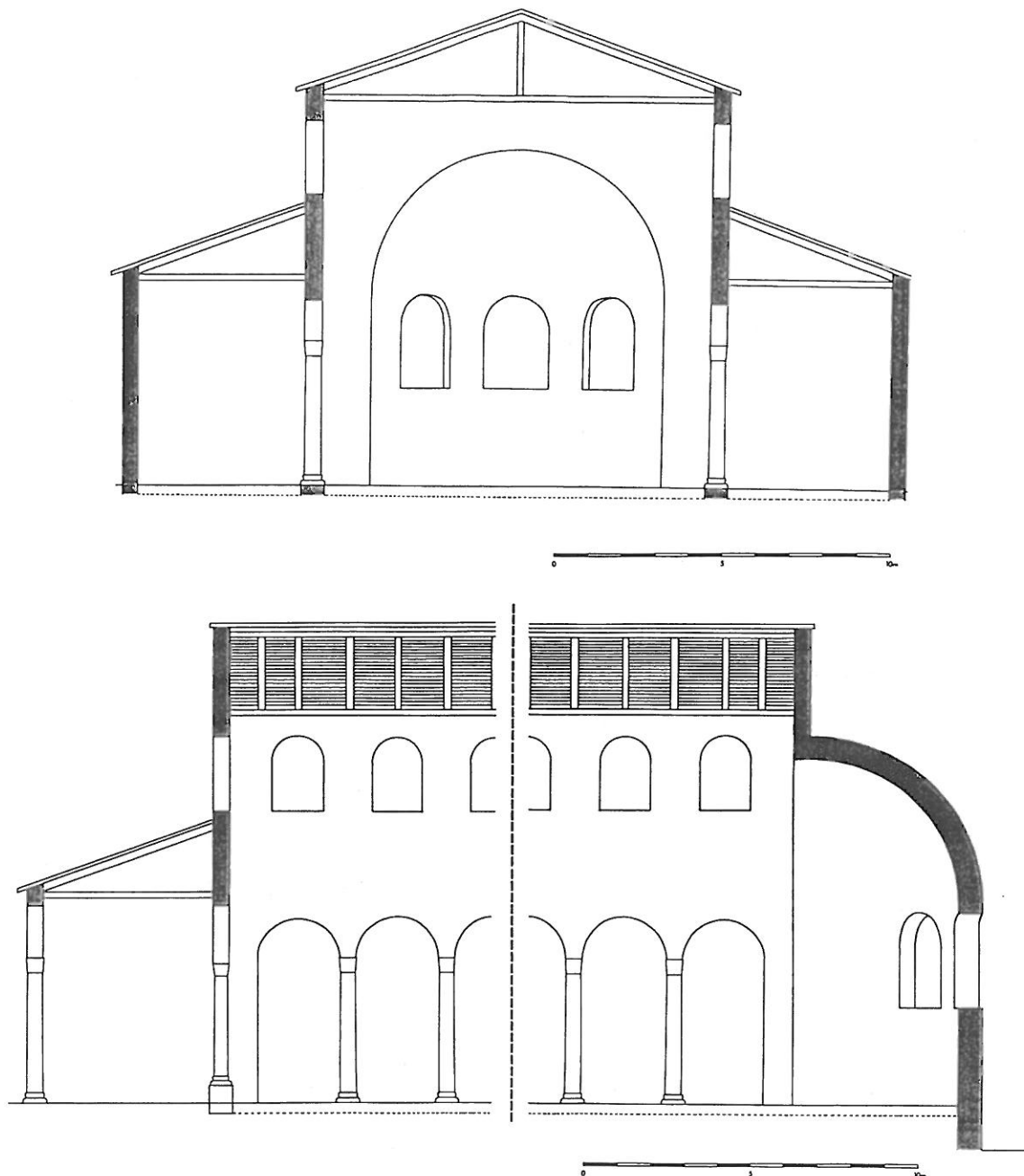


Fig. 5. Reconstructed sections through the Basilica.

section of the church. Also the building between the atrium forecourt and the Via del Sabazeo, which the magnetometry revealed so clearly, was already destroyed at the moment of the erection of the church. Only the foundation walls were preserved, removed down to the level of the street in order to insert a flat pavement in this part of the building complex. On top of the truncated walls there is now a thick layer of mortar on which the impressions of flat paving slabs are preserved. It appears that connecting to the street a small open square was created, from which one entered the atrium of the church.

Thus, the church did not hide itself in older structures and make use of existing walls and rooms; rather, Constantine's architect extensively replanned the area in order to erect the church building at a substantially higher level, which would have been conspicuous in the landscape of the town.

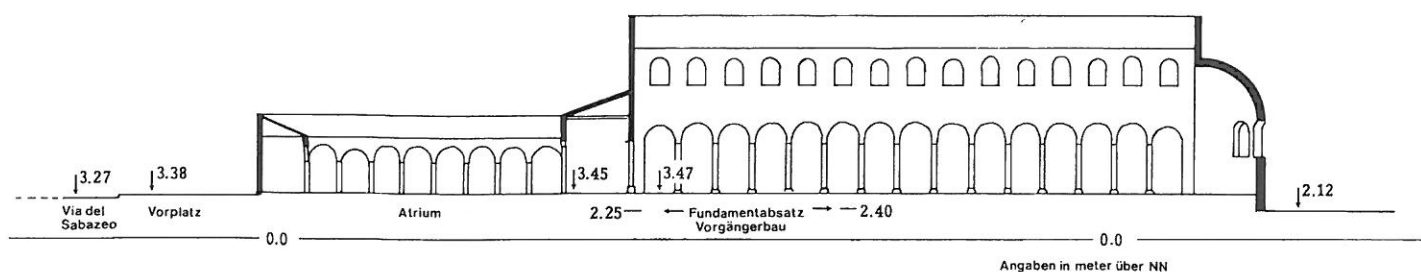


Fig. 6. Long profile (cross section) from street (Via del Sabazeo) through Atrium and Basilica.

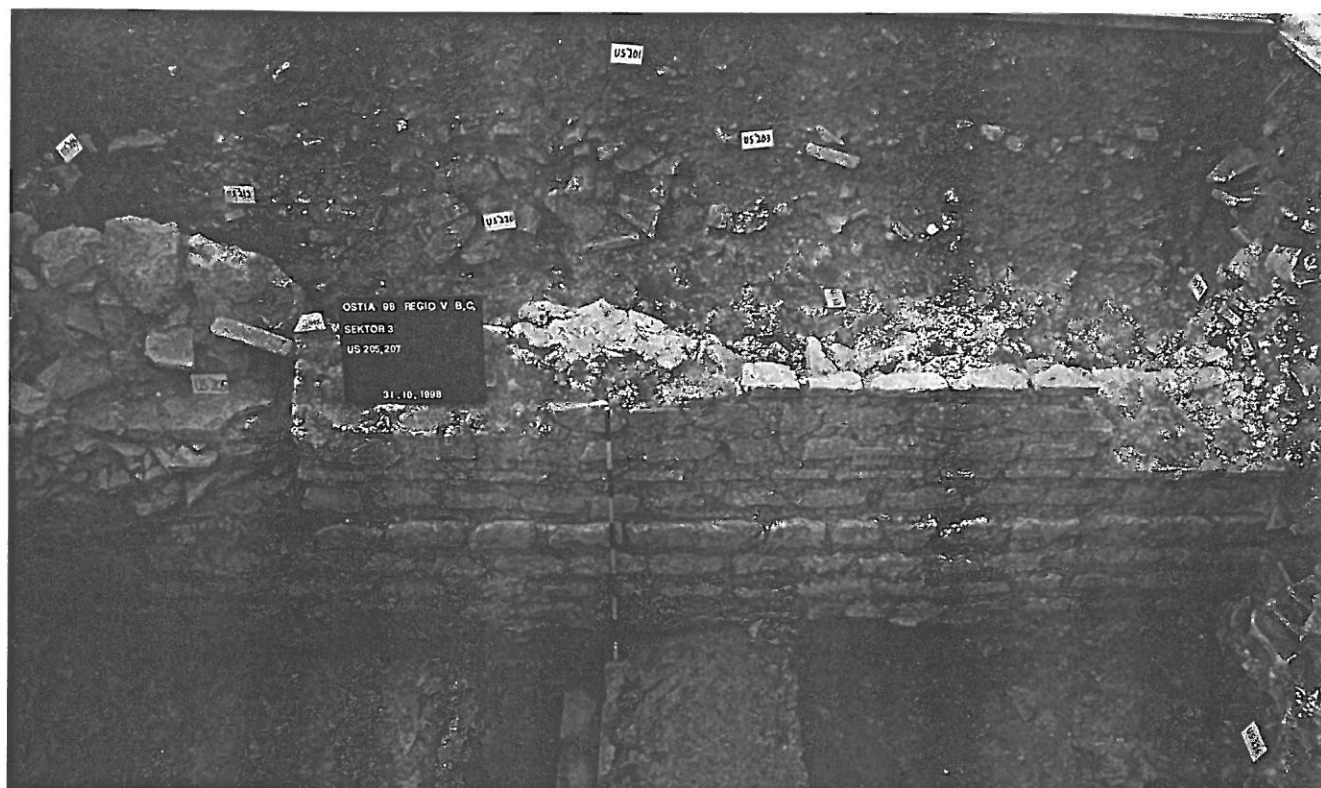


Fig. 7. Detail of trench 3 with south entrance.

Dating

In trench 2, from the foundation trenches of the church sufficient ceramic material was gathered to permit a chronological attribution of the building. A provisional evaluation of the ceramic finds by Archer Martin shows that they belong predominantly (98%) in the 3rd c.;¹² the few pieces which date to a later period had already begun production at the beginning of

12 The latest piece is a rim sherd of Hayes 48A (African Sigillata C1) datable to about 220-270 (J. W. Hayes, *Late Roman pottery* [London 1972] 65 ff.; EAA, *Atlante delle forme ceramiche I. Ceramica fine romana nel bacino mediterraneo* [Rome 1981] 60 f. [henceforth *Atlante I*]). There are also fragments of Spanish amphora Almagro 51C (D. P. S. Peacock and D. F. Williams, *Amphorae and the Roman economy* [London 1986] 132 f.; M. Sciallano and P. Sibella, "Amphores, comment les identifier?" [Aix-en-Provence 1991] 70), and two Africana I amphoras (Peacock and Williams 153 f.; Sciallano and Sibella 80) and Africana IIA (Peacock and Williams 155 ff; Sciallano and Sibella 81), as well as a rim, base and several handle fragments of the Aegean amphora Kapitän II (Peacock and Williams 193 ff.; Sciallano and Sibella 99).

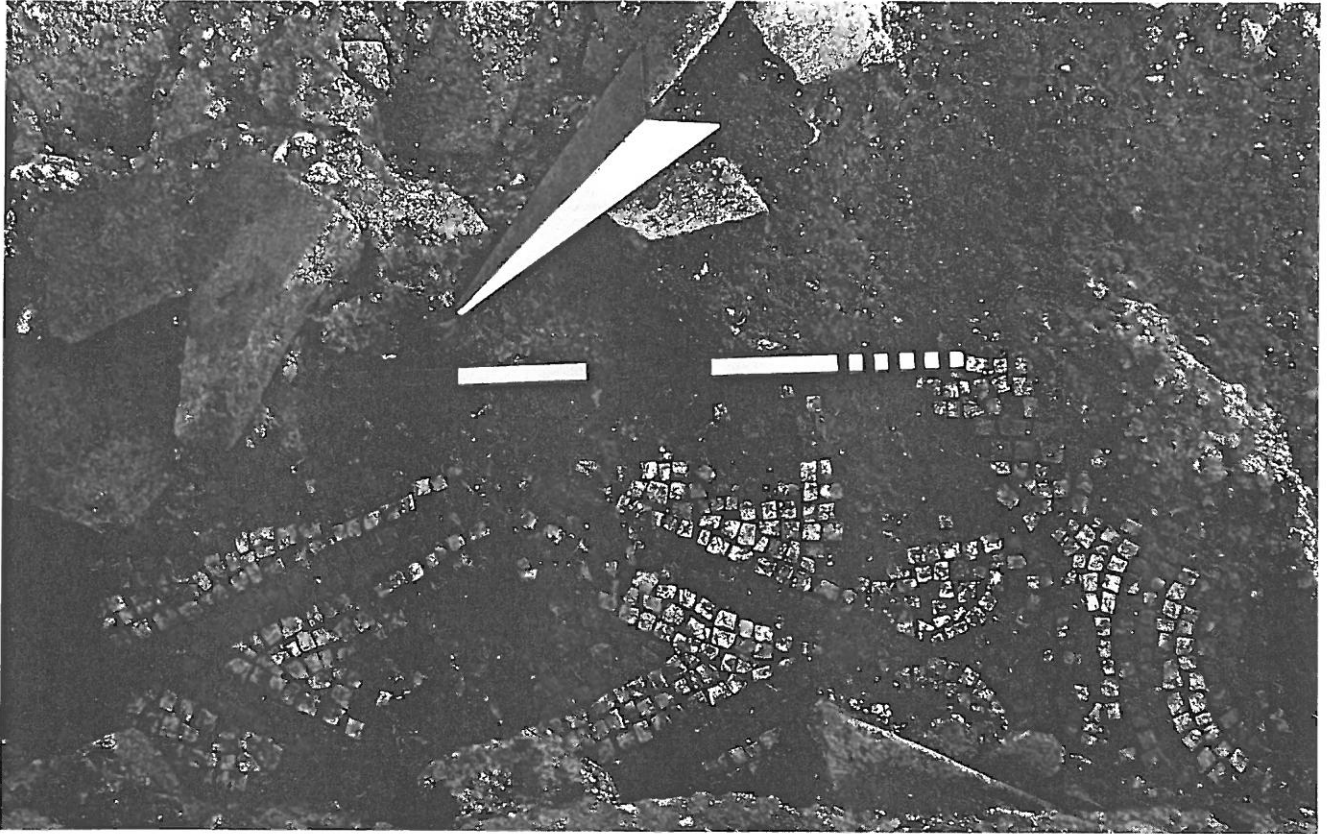


Fig. 8. Detail of black and white mosaic in trench 4 near W end of Basilica.

the 4th c.¹³ Therefore the pottery confirms the Constantinian dating of the church.

Floor levels

The superstructure of the walls was erected on the foundations with a small setback. This step is seen in trench 4 in the interior of the building at a height of 3.23 m above sea level, and in trench 3, on the south exterior wall at 3.15 m above sea level. In this trench confirmation of the foundation steps in trench 4 was provided by the (subsequently walled-over) travertine threshold block of the south portal, which lies at 3.22 m above sea level. At this level must have rested a first pavement — or at least have been planned. From this first floor nothing remains, but inside the church in trench 3 and also in trench 2 there was evidence at a level at about 3.15 m above sea level for a bedding of a floor, which would then have lain a few centimeters higher and would closely correspond with the offset of the foundations in trench 4 and with the travertine doorstep of the south entrance.

In trench 4, on the other hand, some slight traces of a mosaic pavement were preserved (fig. 8). This was a black and white mosaic which was probably purely ornamental; in the preserved section it shows a succession of circles, scales and rhomboid motifs. This floor admittedly is at a level of 3.47 m asl, so that it can not be brought into connection with the travertine threshold of the south entrance. Accordingly it must be a floor covering which was first introduced here in a second phase. In favour of this assumption is the raising of the threshold of the south portal, which corresponds with the height of the mosaic floor (fig. 7). In support of the thesis

¹³ It is a question above all of a rim sherd of African amphora Keay XXVA, which was produced during the 4th and first half of the 5th c. (S. J. Keay, *Late Roman amphorae in the western Mediterranean* [BAR S196, Oxford 1984] 184 f., 193 f.); a rim sherd of Keay XXV, variant G, with the same dating (*ibid.* 186, 195), and a handle fragment of a Calabrian amphora, Keay LII (Sciallano and Sibella 106).

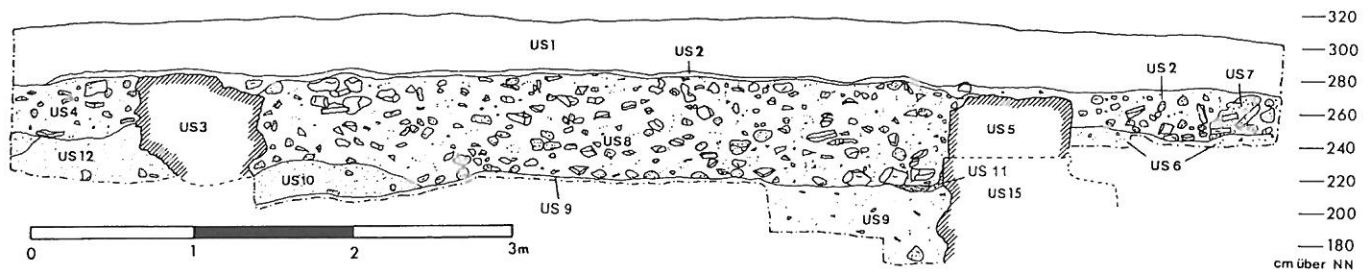


Fig. 9. Trench 1. Section of apse, looking N.

of a raising of the floor level are also the finds made in the area of the entrance from the atrium to the central nave, at the western terminating wall of the nave, where in a second building phase evidently an entrance was raised. Presumably at the time of raising the level of the threshold in the south portal, it was necessary to raise the entrance on the west side, and the southwest mosaic was laid as a result of these building changes.

Nevertheless, whatever the reasons responsible for it, we possess for this raising of the floor a fixed dating indication: in the thin layer beneath the final closing up of the door, on the interior of the church, there was found a coin from the reign of Valentinian III (430-437).¹⁴ Consequently the raising of the floor must have taken place some time before.

As far as the atrium is concerned, it was possible to define the floor level of the entrance in two places. On the south side of the north exterior wall of the atrium there ran a projecting brick course at an elevation of 3.43 m asl which evidently marked the level of the floor. To it corresponds the discovery in trench 4, again at the point where the south wall of the nave joins the west wall of the nave. On the west side of the exterior wall we found a similarly projecting layer of bricks at an elevation of 3.40 m. Evidently the floor of the entrance to the atrium, of whatever kind it may have been, lies a few centimeters above this level. That shows that this floor level lay above the first pavement of the church, so that one stepped down from the atrium into the church. After they first raised the floor level of the church, both floor levels were found at roughly the same height.

Later building activities in the area of the apse

The building history of the church did not come to an end with the raising of the pavement and the walling up of the south portal. In the area of the apse further building measures must have occurred which in any event are to be dated to the post-Constantinian period. In trench 1, which was placed on the axis of the church in the apse, the foundations of the chord of the apse and of the apse proper came to light — as we expected, since they stood out so clearly on the plan produced by magnetometry. While the poured foundations along the chord of the apse were made of broken pieces of tuff, cemented together with mortar, the foundations of the apse proper were made up of a wide poured foundation on which a comparatively narrow brick wall was placed (fig. 9). Between these two foundations there was only a wide, compact fill layer with an extremely high proportion of ceramics. This layer rested against the brick wall of the foundation of the apse and is therefore later than it in relative terms. The foundation of the chord of the apse, on the other hand, cut this layer and must be later again. It is interesting to note that among the finds of this layer, which went back to the 3rd c., there were a few pieces of pottery which are to be dated to the early Mediaeval period.

Apparently it was at the earliest in the late 6th c. that building activities were undertaken in the area of the apse, and two possibilities may be considered. On the one hand, it is possible to suppose that in the post-Constantinian period, for reasons which cannot be recovered, the fill layer in the area of the apse was removed and then re-installed, in the course of which a few pieces of more recent pottery became mixed into the rubbish. The installation of an apse podium could have been the reason for such a building project. On the other hand, it is possible

14 *RIC X* (1994) 377 no. 2126.

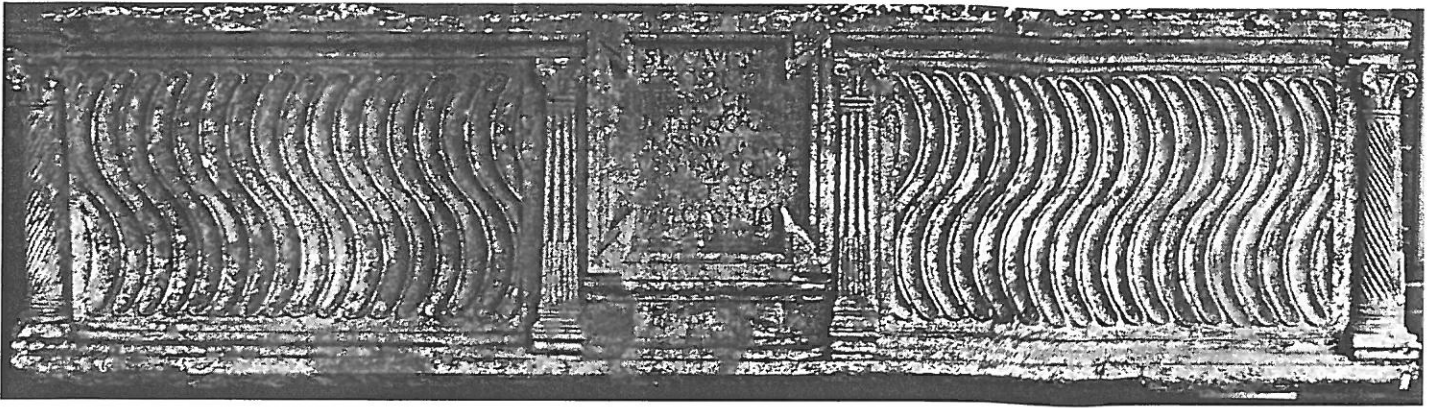


Fig. 10. Strigillated sarcophagus found in trench 4 at the west end of the Basilica.

to suppose that the apse of the church was substantially rebuilt. In that case the brick wall resting on the broad poured foundation of the apse is not definitely an element of the Constantinian building but could be dated later, even early Mediaeval. In favour of that are the notable deviations with respect to building technique — all other walls, whether in the foundation or in the superstructure were in *opus vittatum* or only built of tuff, if at times the technique of the foundations was varied according to the anticipated static load. However, the striking divergence between the width of the poured foundation and the narrowness of the wall resting on top argues against their contemporaneity: possibly, then, on top of an older (Constantinian) poured foundation a new apse wall was constructed in the early Mediaeval period. This presupposes that the older apse had been destroyed, or at least heavily damaged, and that a reconstruction became necessary.

Burials in the interior of the church

Among the most remarkable finds are two burials which came to light in the corner between the western end wall of the central nave and the spur wall on the line of the southern row of columns. They comprised two adjacent sarcophagus burials which had been inserted into the floor; because of them the floor had been removed and later must have been repaired. At a particular moment when the mosaic floor of the second phase had already been laid, this floor was cut through to make a shaft into which the sarcophagus provided with a lid was lowered. The floor was repaired with a layer of fine mortar which probably served as the bedding for a flagged floor.

Unfortunately, both these burials had suffered from modern grave robbing. While of the sarcophagus between the west wall of the nave and the spur wall only the lid was shattered in order to open it up, the sarcophagus immediately adjacent was smashed in order to remove the relief on the front. In both sarcophagi it is a question of re-used pieces. The one which survives is a strigillated sarcophagus of the Severan period, and its inscription refers to a *sevir Augustalis* (fig. 10).

Later settlement activity and destruction of the church

Two *sondages* provided extensive evidence for late-antique settlement of this part of *regio V*. In trench 3 part of a later *Grubenhäuser* attached to the exterior of the southern side aisle of the basilica was brought to light. After the side entrance of the church had already been abandoned, it was dug into the ground outside the church up to 0.60 m below the contemporary level. (Because, however, the outer border of the *Grubenhäuser* lay outside our trench, at this point no statements about its maximum extent and its architectural form can be made.) In any event, in uncovering it we found a completely collapsed tile roof which evidently had been attached to the church wall as a simple lean-to roof. The collapsed roof sealed a phase of use and occupation that rested upon a simple earth floor, which was covered by a thick layer of ash. Upon this we found a larger number of different vessels as well as a total of 26 coins, which date the structure to the late 6th or possibly even the early 7th c. This discovery shows that at

a certain moment when the church, at least in its eastern section, was still in use, some simple domestic structures that were probably quite devoid of any ecclesiastical usage had been attached to its exterior.

A similar find was made in trench 6. On the inner side of the north wall of the atrium we found the remains of two hearths. The atrium wall itself seems in this area to have been at least partly pulled down. To the hearths belong a simple trampled clay floor which replaced the floor of the atrium which had originally been at this level. Hence the atrium seems to have been abandoned from a certain period, the walls had been at least partly pulled down, and the floor had been robbed. From this moment at the latest it seems that upkeep of the church complex as a whole was no longer possible, for which reason evidently it was abandoned step by step, beginning in the west, where already some rather simple domestic structures were installed.

These finds of a domestic nature of the late 5th to 7th c. are, in spite of their having been truncated, of considerable importance for the development of Ostia at the moment of transition from Late Antiquity to the Early Middle Ages, since our knowledge of this period up to now rested on only a few finds.¹⁵ They offer a further indication that after the evidently far-reaching crisis of the 5th c. the town was not completely abandoned but remained settled at least into the 7th c. — even if in essence it was rather unassuming. The previously cohesive structure of the town would have dissolved thereafter and it would have reverted to larger uninhabited areas.

If the church, as indicated above, witnessed some important efforts at reconstruction still in the early Mediaeval period, by the Carolingian period at the latest it was no longer functioning and had been left to decay. In trench 4 we found rather large parts of the south exterior wall which had fallen into the interior of the church. Beneath it the already repaired mosaic floor had been robbed in large part, and on the inner side of the wall tumble which remained *in situ* there were no remains of its original wall decoration, whether in the form of a simple plaster or a marble encrustation. Hence the building seems to have been left for a certain period of time without any covering and to have been systematically robbed, until finally the remaining walls collapsed. In fact we found in this destruction layer numerous fist-sized marble off-cuts which perhaps point to an intentional destruction of the marble decoration for purposes of producing lime. According to the evaluation of the pottery the destruction layer is to be dated to the late 8th/early 9th c.¹⁶

This date coincides with the historical tradition. In the years 827-844 Gregory IV had erected the *borgo Gregoriopolis* (named after the pope), in place of the settlement destroyed by the Saracens, in the territory of the ancient city. Henceforth it would serve as a bulwark against further attacks from the sea. Possibly the new construction of the *borgo* explains the systematic spoliation and removal of materials from the nearby ruins of the former Bishop's church of Ostia.

Deutsches Archäologisches Institut Rom

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15 Cf. for a summary L. Paroli 1993 (supra n.8) 153 ff.

16 Dating evidence comes especially from several fragments of closed vessels of blue-glazed "forum ware" (see L. Paroli, "La ceramica invetriata tardo-antica e medievale nell'Italia centro-meridionale," in L. Paroli (ed.), *La ceramica invetriata tardo-antica e altomedievale in Italia* [1990] 44 f.), the production of which begins in the late 8th c., in the Carolingian period.