

building, whatever its precise function, was Severan.¹ The detachment of *vigiles* was reorganized and their barracks enlarged by the incorporation of a row of shops on the west side into the main building; on a statue base Septimius is described as 'restitutor castrorum Ostiensium'.²

These restorations in the utilitarian premises of Ostia were accompanied by an extension of amenities. The monumental inscription which records the dedication at the very outset of the reign of the enlarged theatre by Septimius Severus and his son Caracalla is misleading if the main work was begun and nearly completed under Commodus; but a new set of baths was added in the Severan period on the line of the town walls west of the Porta Marina.³ The accessibility of the sea coast south of Ostia was improved by the building of the new Via Severiana from the mouth of the Tiber to Terracina.

It is perhaps significant that the builders of Ostia should set up a statue in their guild house to Septimius Severus and inscribe on the base the roll of all their members.⁴ If the area of the imperial harbours were systematically excavated we should perhaps see more clearly the impact of Septimius Severus, though the most conspicuous *horrea* which had long been regarded as Severan are now shown by their brickstamps to date from Marcus Aurelius.⁵ Septimius Severus paid special attention to the corn supply and is said to have left a seven years' reserve at his death.⁶

The Severan successors of Septimius have left little recognizable mark on Ostia, but one striking new building may date from this period. The round temple which adjoins the Basilica to the west is the latest of the great buildings of Ostia within the excavated area. It is built on a monumental scale, and was preceded by a handsome court fronting on the Decumanus. It was richly decorated with marble, and strikes a completely new note in Ostian temple construction. The scale of the building in a period when prosperity was receding suggests imperial subsidy and influence. The date is controversial but the brickwork shows it to be later than Septimius Severus and the base of a statue of the wife of Gordian III found within the temple suggests that it is earlier than 244.⁷ The reign of Alexander Severus (222-35), to

¹ Paschetto, 355; L. Canina, 'Sulla stazione delle navi di Ostia', *Diss. pont. acc. Rom. di arch.* 8 (1838) 273, was probably right in inferring the shape of the building from the lie of the ground, but he had no detailed evidence for his schematic plan.

² S 4387.

³ Bloch, *Bolli Laterizi*, 277.

⁴ S 4569.

⁵ Bloch, *op. cit.* 279.

⁶ SHA, *Sep. Sev.* 8. 5.

⁷ S 4399.

which the temple has been most recently dated,¹ would be an appropriate context for he has left his mark on the building history of Rome; but Gordian himself, whose father may have lived in Ostia, is perhaps the more probable benefactor.²

The Severan improvements at Ostia pale into insignificance when compared with the rebuilding under Trajan and Hadrian, and there are other signs of growing strain. The financial office of quaestor seems to assume increased importance in the second half of the second century, suggesting that finance needed closer attention. No Severan example survives of a man holding the duovirate more than once, though this had been a marked feature of government in the first century; the expenses of office were outweighing the social advantages. Ostia still provides a large number of Roman knights, but the senatorial advance of old Ostian families such as the Fabii and Egrilii does not seem to be repeated. The Ostian guilds attract fewer Roman senators as patrons. The confidence created by the strong rule of Septimius Severus was short-lived.

¹ Becatti, *Mitrei*, 21. C. C. Briggs, 'The Pantheon of Ostia', *MAAR* 8 (1930) 168, suggested a date not earlier than Constantine on the strength of resemblances to Diocletian's palace at Split. Brickwork and architectural decoration are inconsistent with such a late date.

² R. Bianchi Bandinelli, *Boll. d'Arte*, 39 (1954) 200, argues persuasively that a very handsome sarcophagus found recently at Acilia, in Ostian territory, was designed for the father of Gordian III and illustrates his son's designation as Caesar, or more probably as Augustus. It may be significant that no less than three bases have been found at Ostia which carried statues of Gordian's wife: S 4399 (in the Round Temple), S 4398 (in the Barracks of the Vigiles, set up not by the local detachment but in the name of all seven cohorts), Bloch, 21 (reused to line a pavement). Gordian himself is commemorated on a statue base in the Barracks of the Vigiles (S 4397), and a colossal head survives from a bust (B. M. Felletti Maj, *Museo Nazionale Romano, i Ritratti* (1953) n. 281).

S

THE DECLINE OF OSTIA

THIRD-CENTURY DISINTEGRATION

THE period that followed the Severan dynasty was nearly fatal to the Empire. Revolt or assassination became normal means to power, and emperors succeeded with bewildering rapidity. There was little continuity in policy, central authority was inadequate to check centrifugal forces; the resources of empire were frittered away. This half-century of imperial disintegration brought acute distress to Ostia.

To trace the third-century history of Ostia in its buildings is peculiarly difficult, for with the breakdown of centralized power the brick industry collapsed. By the Severan period the emperors had secured a virtual monopoly of production, and the emperors also by their building programmes had for long created the main demand. Emperors whose position was precarious were too preoccupied to be great builders in Rome, and the complex organization of the brick industry needed a skill and continuity in administration which was now lacking. With the drying up in the supply of new bricks we lose the criterion of the dated brickstamp which established the chronology of the buildings of the second century, and it is doubtful whether a closer study of later walls will ever provide a certain typological sequence. The facing that normally replaced brick in this period is perhaps best described as brick and block; it combines bricks, which are often taken from older buildings, with tufa blocks. Normally rows of brick and of tufa blocks alternate: sometimes there are two rows or more of tufa to one of brick: occasionally, and perhaps this is an early sign, tufa courses appear in a predominantly brick surface. This style can be seen occasionally in subsidiary walls in the second century, perhaps even in the first. It is only in the third century that it is generally employed; but it lasts on into the fourth century, interrupted by a short phase of brick revival. We can distinguish good and bad work of this type, but not yet with confidence early and late.¹ In reviewing this phase of Ostia's development it is wiser to begin with other evidence.

¹ See Appendix IX, p. 544.

A comparison between the epigraphic evidence of the second and third centuries is revealing. There is a striking contrast between the rich harvest of public inscriptions from the second century and the lean crop from the third. Since in general the chances of survival increase with the lateness of the inscription the contrast is a fair indication of a decline in prosperity. This inference is strengthened by the increasing use of old material. Even a commemorative tablet set up by the whole town, 'universi cives Ostienses', in honour of the emperor Gallienus in 262 was inscribed on the back of a similar inscription set up officially, 'decreto colonorum', to Septimius Severus.¹

The deterioration in the health of local government which probably began towards the end of the second century is sharply accentuated in the third. Ostia had in the early Empire received special attention from the imperial government, but the city had been controlled by her own magistrates and council, and local office was highly prized. In the third century imperial control becomes more direct and explicit. Honorary dedications had been set up earlier to the *praefectus annonae*, the official at Rome who controlled the corn supply and to the procurator who served at Ostia under him. It is not until after the middle of the third century that we find a *praefectus annonae* who is *curator* of the town, appointed by the central government to regulate the town's management directly.² In the late Empire this official's authority is paramount and permanent. Most of the old families that had served Ostia well for two centuries and perhaps more cannot be traced beyond the Severan period. We have no evidence in the late Empire of private bequests that benefited the city.

This change in the character and spirit of local government is not confined to Ostia; it is a reflection of wider and deeper tendencies that are seen throughout the Empire. *Curatores* had been appointed by the imperial government to manage the affairs of other Italian cities even before the end of the first century; centralized control of local government had increased throughout the second century, and was accompanied by a growing reluctance to undertake the financial responsibilities of local office. Such symptoms are not apparent in the

¹ S 5334, 5330. A dedication to Salonina, wife of the emperor Gallienus (S 5335) reuses a dedication to an imperial freedman of the late second century (S 5375). The base of a statue of P. Flavius Priscus, duovir and town patron, set up near the middle of the third century, was reused before the death of Constantine to provide an altar to Hercules and the original inscription was only partly erased (Bloch, 29).

² p. 186.

first half of the second century at Ostia, because the city had never been more prosperous. They emerge when the local profits of trade decline.

The decline in prosperity was almost certainly accompanied by a decline in population. When the large bakery east of the House of Diana, which had ample housing accommodation above its working premises, was destroyed by fire soon after the middle of the third century, it was not rebuilt. The ruins were left where they had fallen and a path was built over them.¹ The House of the Paintings also seems to have been abandoned shortly afterwards,² and another large block, which can no longer be identified, was reported by Visconti in the nineteenth century to have been similarly abandoned after a fire.³ The explanation must surely be that there was now too much accommodation in Ostia. It was no longer possible to fill the big blocks that had been built against a much more prosperous background. The profits of trade had swollen Ostia's population: when trade declined Ostia was not a good place to make money though, as we shall see later, it could still be congenially spent there. The decline in prosperity is due primarily to the general shrinkage of trade, partly to special causes that deepened the crisis.

That Rome imported much less from overseas in the third century than the second is certain though the decline cannot be even approximately measured. The loss of life through the plague, brought back from the east by the army of Lucius Verus and recurring under Commodus, may be exaggerated in our sources, but it was heavy enough to reduce for some time the population and therefore the demand for corn, imported oil, wine, and other goods substantially. The marble trade which had grown to extravagant proportions in the second century must virtually have collapsed, because the main demand had come from the lavish building programmes of the emperors, and the post-Severan emperors of the third century built very little indeed. Ostia's difficulties were sharpened by a shift of emphasis to the imperial harbours.

THE GROWTH OF PORTUS

There is no reason to believe that the old Tiber harbour had been abandoned when Trajan's new basin gave complete security to shipping.

¹ NS 1915, 249.

² MA 26 (1920) 338.

³ *Bull. arch. crist.* 1870, 77. Similarly when the House of the Sun was burnt down, probably in the fourth century, the ruins were not cleared away, but concealed by a new wall along the street front: Becatti, *Topografia*, 162.

The larger merchantmen would naturally go to the new harbour, but while smaller trading vessels could negotiate the sand-bar at the river mouth without difficulty, as they could when Dionysius of Halicarnassus wrote, many of them will have preferred to avoid the congestion of the crowded imperial harbours and to berth at the river bank. But the cutting of a canal to link the new harbours with the Tiber, by providing two outlets for the river, slowed down the current. The sanding-up at the river mouth is likely as a result to have been accentuated.

More serious was the development of the harbour area. How much living accommodation was provided near the Claudian harbour we cannot know, but it is clear that at least a small nucleus must have lived on the spot to guard the warehouses and attend to emergency needs in the harbour. Traces of them survive in a small group of tombs that was discovered near the south-east corner of Trajan's basin.¹ Most of these tombs were destroyed to give place later to a large granary, but one was deliberately preserved and incorporated in the new building; it had been built for the freedman of a Flavian emperor, a *tabularius*, engaged on checking cargoes.² It has been suggested above that the majority of the harbour workers continued to live in Ostia and walk each day to their work. The centre of gravity, however, gradually shifted.

The best evidence for the growth of population by the harbours during the second century comes from the cemetery that developed southwards towards Ostia from Trajan's canal. From the seventeenth to the nineteenth centuries individual tombs and their inscriptions were recovered from the neighbourhood of the church of S. Ippolito. In 1925 agricultural operations revealed that these tombs were part of a large cemetery stretching for some 400 metres southwards from the canal.³ More than a hundred tombs were excavated, some of them in excellent state of preservation, and a much larger number still lie buried. Most of the excavated tombs date from the first half of the second century.

In one case we can trace a transfer from the old centre to the new. C. Torquatus C. f. Quir(ina) Novellus built a tomb for his wife

¹ NS 1925, 72.

² S 4483.

³ G. Calza, *La Necropoli del porto di Roma nell' isola sacra* (Rome, 1940). Inscriptions collected, H. Thylander, *Inscriptions du port d'Ostia* (Lund, 1952). Their chronology and the development of the cemetery discussed, Thylander, *Étude sur l'épigraphie latine* (Lund, 1952), ch. 1.

Valeria Chelido at Ostia.¹ After her death he seems to have moved to the harbour, for, when he died at the age of seventy-six, his ashes and those of his son were laid to rest in the harbour cemetery.² Similar movement may be inferred from other names on inscriptions from these tombs. The majority of them are common in Ostia and probably represent younger generations of Ostian families or their freedmen. It is also significant that local trades are represented in this cemetery before the death of Antoninus Pius. Terra-cotta reliefs on the face of tombs include a maker and seller of tools, a water-seller, marble-workers, a doctor and midwife.³ Those who lived by the harbours did not have to go to the old town for essential services.

That the harbour settlement was fast becoming a self-contained community is confirmed by other evidence. Most revealing is an incidental reference in Galen's discussion of the limits of Hippocrates' medical experience. He is discussing dislocated shoulders. Hippocrates only saw the commonest form; abnormal forms of dislocation are very rare. He himself has seen five cases, one as a student in Smyrna, four only at Rome, though all Roman doctors bring him their special cases. He adds that no cases in his time have been known at 'the harbour or the city near the harbour which they call Ostia'. He can vouch for this, for 'all the doctors in those places are my friends, and both are populous centres'.⁴ Already, in the second half of the second century, a man at Rome can think of the harbour before Ostia and regard them as independent centres.

When the Claudian harbour was built its official title was 'portus Augusti Ostiensis', but Pliny the elder called it 'portus Ostiensis'⁵ and this usage is confirmed by the title of a Claudian freedman, 'proc(urator) portus Ostiensis'.⁶ No trace of this usage is found after the building of Trajan's harbour. The standard description thereafter on inscriptions is *portus uterque*,⁷ occasionally set out more explicitly, *portus Augusti et Traiani felicitis*.⁸ But by the end of the second century men already spoke simply of 'Portus', and they meant not only the harbour itself but the settlement around it. A similar mark of growing independence is the adoption of the cognomen *Portuensis*, balancing *Ostiensis*, which remains common in the old town.

¹ Thylander, A 249.

² Ibid., A 249, 250.

³ Calza, op. cit. 249-57.

⁴ Galen (Kuhn), xviii. 348.

⁵ Pliny, *NH* ix. 14; xvi. 202.

⁶ 163. It is possible, as suggested above (p. 56), that this was the original title under Claudius.

⁷ 125, 170.

⁸ 408.

The harbour settlement had also its own temples, many of them dating from the second century; by the Severan period the Serapeum, reflecting the close association with the Egyptian corn fleet, was attracting handsome benefactions.¹ Harbour guilds were also established. In some trades the two centres combined. The bakers were *pistores coloniae Ostiensium et portus utriusque*,² the tanners were *pelliones Ostienses et Portuenses*.³ But already before the end of the second century the shipbuilders were divided. There were *fabri navales Portuenses*⁴ as well as *fabri navales Ostienses*.

In the early fourth century the mature status of the settlement was publicly recognized. Between 337 and 341 a statue was set up near the harbours to a *praefectus annonae* by the council and people of Portus, 'ordo et populus (civitatis) Fl(aviae) Constantinianae Portuenses'.⁵ Constantine had made the harbour settlement an independent community. A more precise date has been inferred from ecclesiastical evidence. At a Council held in Rome in 313 the bishop of Ostia was present, but there was no representative from Portus.⁶ The Council of Arles in the following year was attended by the bishop of Portus as well as by priests from Ostia.⁷ The conclusion that Portus received its charter between these two dates is, however, not compelling. The Council at Rome was not a large gathering and the bishops of Centumcellae, Aquileia, and Arpi, who were present at Arles, were not included. It cannot therefore be safely inferred that Portus had no bishop in 313. And, even if the bishopric of Portus was first instituted at this time, it would not necessarily date the granting of a charter. Civil and ecclesiastical administration did not always coincide.

It is better to leave the date of the change open but, whenever it occurred, it marked the end rather than the beginning of a process. In economic importance Ostia had already been eclipsed by Portus. As the total volume of overseas trade declined it was natural that the Ostian warehouses which had been only a supplementary reserve should be increasingly neglected. No new *horrea* from the third century have yet been found, and there are no traces of large-scale repairs in the old. Probably the third century saw a sharper drift of workers from the old town to the imperial harbours. Business was still transacted by wholesale merchants and shippers in the Piazzale delle Corporazioni

¹ For the cults of Portus, p. 384.

³ S 4549².

⁶ Duchesne, *Histoire ancienne de l'église*, ii⁴ (1910) 110.

² 101, 15.

⁵ 13.

⁷ Ibid. 213.

⁴ 169.

where some of the latest mosaics are certainly not earlier than the third century, and perhaps in the Forum Vinarium, but the goods unloaded by the river bank were probably confined to Ostia's own reduced needs. When men wrote or spoke of 'Portus' or 'Portus Romae' they no longer thought of Ostia.

LATE EMPIRE FASHIONS

There is no important new building or reconstruction at Ostia in areas once vital to her trade, east of the Forum between the Decumanus and river and west of the Forum between the river and the Via della Foce; but that it was not a period of complete stagnation is shown by two passages in the imperial biographies. The emperor Tacitus presented to the colony 100 twenty-foot marble columns of Giallo Antico from Numidia;¹ Aurelian had a new Forum built to take his name.² Aurelian's Forum was by the sea coast; it is probable that Tacitus' columns were also used on this side of the town; no traces of them have been found in the excavated area. These chance references provide an important clue. They suggest that tendencies which were fully developed in the fourth century go back to the third. The centre of gravity was shifting away from the river to the sea coast.

Minucius Felix, in the Severan period, referred to Ostia as a most attractive town, 'amoenissima civitas'.³ The epithet is not one that Cicero would have applied to the Ostia of his day. Republican Ostia had looked to the river and its trade and had expanded first on this side. When the Sullan walls were built they stood well back from the sea. It was probably not until the early Empire that the seaward side of the town claimed serious attention and perhaps not until the prosperity period that it was fully developed. It was in this area that an impressive set of baths was built near the Porta Marina in the early second century and a smaller set was added later farther to the west.⁴ It was from buildings near the old coastline that excavators exploiting the ruins for the art collections of the nobility in the late eighteenth century reaped their richest rewards in sculpture and inscriptions, the greater part of them going back to the second century.

Minucius Felix gives an attractive picture of the sea-front in his day. In his dialogue a group of friends come down from Rome to Ostia in September. Early in the morning they make their way through the

¹ SHA, *Tacitus*, 10. 5.

² SHA, *Aurelian*, 45. 2.

³ Minucius Felix, *Octavius*, 2.

⁴ p. 417.

town to the shore and then stroll at leisure along the sand southwards. Returning to the point from which they started they sit down on a breakwater and settle to a serious discussion of Christianity. Small boats are drawn up on the sand near by, and children play ducks and drakes in the sea.¹

There were two sides to Ostia's life. With the busy trading of a harbour town was combined the more leisurely life of a seaside resort. For that reason the sharp decline of trade though serious was not fatal. Provided that amenities were maintained Ostia with a reduced population could still be an attractive town to live in. From the third century onwards the theatre and the baths are more important than the warehouses.

This new Ostia is fully developed in the fourth century, but we can see the transition in the third. In contrast with the lack of utilitarian building in the areas devoted mainly to trade we find, during the late period, a positive mania for public fountains or nymphaea; many of them probably date from the third century. Changing tastes are also seen in architecture. Until the middle of the second century curving lines were extremely rare in Ostian buildings except where they were functionally required, as in the theatre. Houses, shops, and warehouses were built in straightforward rectangular form. The Forum Baths, from the end of Antoninus Pius' reign, are the first known large building to break with the rectangular tradition in the curving ends of their southward-facing hot rooms. There followed the semicircular Severan 'emporium' at the west end of the town, and the round temple west of the Basilica. This change of taste is reflected also in private buildings. It becomes the fashion to reconstruct the most important room of the private house with an apsidal end as in the House of Fortuna Annonaria. The freedmen *Augustales*, as we might expect, are among the first to follow the new fashion. In most cases the building of these apses involves encroachment on other buildings, which would have been difficult when land values were high. But in the third century shopkeepers were having a lean time and the large house-blocks were not fully occupied. Only the men who are still rich enough to have independent houses can afford to expand.

INTERNAL STRAINS

The third century was a period of transition. As trade declined, the adjustment must have been painful to the workers at the Tiber docks

¹ See also Appendix iv, p. 490.

who no longer had sufficient employment, to shopkeepers competing for a much reduced demand, and to builders who had more labour available than was needed. Against this depressing background two new religions competed for men's allegiance. The rise of Christianity in Ostia is still very obscure. Ostian Christians there surely must have been during the Antonine period, but the absence of surviving evidence before the end of the century suggests that the Christian community was small and weak. In the third century Ostia has her Christian bishop and later tradition recalls an Ostian martyrdom shortly after the middle of the century. But to the literary tradition archaeology adds little. A considerable number of Christian lamps earlier than the fourth century have been found at scattered points and a small number of Christian tombs. Two small buildings on the north side of the Decumanus east of the Forum have been identified as Christian meeting places, but the evidence is slight, and late. So far as our evidence goes at present Christianity had not made a strong impression on Ostia before the middle of the third century.¹

The evidence for Mithraism on the other hand is widespread and unmistakable. The earliest dated Mithraic inscription is from 162; the main development of the cult comes in the late second and in the third century. No less than fifteen Mithraea have been found at Ostia, and, though the shrines are small, the total number of adherents implied and their distribution throughout the town shows that Mithraism was in the third century a vital element in the town's religious life. But the worshippers seem mainly to have come from the lower classes and from freedman stock; there is no sign of the patronage of the local governing class. It was not on behalf of Mithraism that the aristocracy was to resist when the challenge of Christianity was more clearly and officially formulated.

When the imperial harbours became '*civitas Flavia Constantiniana*' the main shift of population from Ostia had probably been completed and the most painful phase of adjustment was over. Moreover, the strong rule of Diocletian at the end of the third century, and later of Constantine, restored a measure of imperial stability and of public confidence. For Ostia, it is true, the general benefits of Constantine's rule were probably less appreciated than in other towns of Italy. For it was Constantine who had given independence to the harbour settlement and it was probably this newly recognized town that received the

¹ p. 388.

main benefit of imperial subsidies, though there is no reason to discredit the record that Constantine endowed a Christian basilica at Ostia.¹ Moreover, Ostian sympathies before the decisive battle at the Milvian bridge may have rested with Constantine's rival Maxentius; for in 312 Maxentius, when Aquileia was threatened, had transferred its mint to Ostia.² Ostia was probably selected for the purpose not only because it was near Rome but because with the town's decline there were ample premises available, and suitable labour to supplement the skilled craftsmen who would be transferred to the new site.³ The imperial mint, besides giving much-needed employment, added to the town's prestige. Early in the reign of Constantine it was closed.

If we confined our attention to a selection of private houses and to inscriptions we might imagine that a real prosperity had returned to Ostia in the fourth century. At various points in the large area most recently excavated can be seen houses that show a striking display of apparent wealth. They include old houses that have survived from the late Republic and been readapted to new tastes, second-century houses, such as the house of Fortuna Annonaria, and houses adapted later from shops and commercial premises, such as the House of Psyche and Eros. These houses, though differing widely in origin and plan, have clearly marked common features. They make lavish use of marble to pave floors and to line walls; they have elaborate fountains or nymphaea; unlike the insulae, they have their own heating systems for selected rooms.⁴

These signs of wealth seem at first sight from the inscriptions to be accompanied by a revival in public prosperity; for, in contrast with the dearth of public inscriptions from the third century, the number of Ostian inscriptions recording the emperors of the fourth century is strikingly large, and many of them are associated with building work. We should not, however, take the fulsome language of these inscriptions too seriously. Trajan, who had added Dacia to the Roman Empire, was commemorated by his official titles alone: Valentinianus, Theodosius, and Arcadius, ruling in uneasy partnership while the frontiers weakened and Germans and Goths broke into the provinces, are 'victores ac triumphatores semper Augusti'.⁵ They are honoured

¹ p. 395.

² Maurice, *Numismatique Constantinienne*, 263.

³ Wilson, *BSR* 14 (1938) 161.

⁴ Becatti, *Casa Ostiense del tardo impero* (Rome, 1949). Below, p. 258.

⁵ S 4410.

'[pro felicitate ac beatitudine clement[iaque tempo]rum', though the economy of the Empire was breaking down. This is the official language of the day, and such honours are dictated by imperial officials. The initiative for expressing the town's wishes no longer comes from the council, but from the *praefectus annonae*. The contrast of the times is seen not only in the empty vanity of the language, but in the deterioration of the craftsman's work. He was not attempting to express the spirit of a new age in a new style but doing his best to turn out a good piece of work. The irregularity of his lines, the crowding and lack of form of his letters, are a measure of the decline in standards from the days of Trajan and Hadrian.

Ostian sculpture of the day wins more respect. The life-size portrait statue of a fourth-century dignitary has a striking individuality and dignity;¹ and the late imperial portraits have an impressive strength. But if we wish to obtain a more balanced view of the fourth century at Ostia we must return to the excavations. From them it is clear that the sense of planning which informed the rebuilding or most of the rebuilding in the first half of the second century has been lost. Architects and builders no longer care to harmonize their new buildings with their surroundings.

At the west end of the excavated area on the north side of the Via della Foce can be seen a small set of baths built throughout in brick.² A Hadrianic stamp was found in the construction but that should deceive no one. These baths replace shops which formed the southern end of a line built not earlier than the third century and probably under Diocletian. The predominance of short lengths of brick in the baths shows without doubt that this is late work, reusing old material. These baths back on to the Via della Foce, but no attempt is made to conform to the line of the street. Similarly on the west side of the Cardo to the south of the Forum a handsome nymphaeum was built, probably in the fourth century.³ Its walls and floor are lined with marble and three niches are reserved for sculpture; but it projects in front of the buildings on either side and destroys what had been a graceful curve. At the northern end of the *Semita dei Cippi* a large semicircular *exedra* of inferior and late workmanship was built; it crossed the street and blocked its outlet on the *Decumanus*.

¹ R. Calza, *BC* 69 (1941) 113; *Museo*, 55.

² Becatti, *Topografia*, 155; brickstamps, Bloch, *Topografia*, 219 (i. 19.5).

³ Becatti, *Topografia*, 158. Below, Pl. XIII b.

Several inscriptions speak of restorations to public baths during the fourth century and it is clear from what remains that efforts were made to maintain the amenities of the town; but the character of the restorations shows only too clearly the poverty of the times. When marble paving has to be restored gaps are filled by inscriptions from cemeteries or public places.¹ Where mosaics have been worn away no attempt is made to preserve the design; odd pieces of marble are reused for the purpose.² When, towards the end of the century, the central entrance to the theatre from the Decumanus was remodelled, statue bases were dragged from the public gardens to the north and clamped together as a substitute for new walling.³ Indeed, the reuse of old material is one of the chief characteristics of the fourth century. Statue bases are cut down to provide thresholds; walls are even repaired with fragments of reliefs. Many of the fragments of the town Fasti have been found lining the pavements of private homes: a new latrine, built probably in the fourth or early fifth century, at the south end of the Forum, uses for its marble seats inscribed stones rifled from cemeteries. Heavy penalties had been imposed for the violation of tombs. These sanctions no longer held.

A late-fourth-century inscription records the transfer of a statue to the Forum from a site that was no longer fit for it, 'ex sordentibus locis';⁴ parts of the town were apparently falling into decay. Already in the third century, as we have seen, the ruins of large blocks had been left where they fell. The active rebuilding in the houses of the rich is not matched in the large insulae. In this contrast we can see the collapse of the middle class. It had grown rich on the profits of trade; there was no longer an active trade to sustain it. The colours, however, should not be made too sombre. Rich men still found it sufficiently attractive to live in Ostia.

Some of the well-furnished houses of this period were probably occupied by imperial officials. The *praefectus annonae*, who exercised direct control over the town, perhaps lived in Ostia for part of the year, and some of the rich traders and travellers whose main business was at Portus may well have preferred to stay in Ostia away from the noise

¹ Good examples can still be seen in the west wing of the Baths of Mithras. Many inscriptions were also recovered from the pavement of the main hall of the Forum Baths, Wickert, *S* (2), p. 845.

² e.g. The Neptune mosaic in the Baths of Neptune, *NS* 1910, 9.

³ pp. 424 f.

⁴ *S* 4721. The approximate date is inferred from the script.

and bustle of the harbour. That is perhaps why Augustine with his mother Monica lodged at an Ostian home while waiting to return to his native Africa.¹ But the majority of these houses will have belonged to the local aristocracy or to rich men who chose to live, perhaps not for the whole year, at Ostia. Ownership stamps on water-pipes show that Roman senators were among them, or at least owned properties in Ostia.² The collapse of the middle class had produced a gap between rich and poor as wide as in the late Republic and early Empire, when the government of the town was controlled by comparatively few families and the spreading houses of the rich contrasted so strongly with the cramped quarters of the poor. But in that earlier period the rich had the responsibility of office and the feeling that the future of Ostia lay largely in their hands; the honours of office were repaid by public benefaction. In the fourth century this feeling of responsibility had long been sapped; it was the imperial officials in whose hands the maintenance of the city lay.

The total absence of fourth-century inscriptions recording the public careers of local magistrates and the activities of the guilds is a sign of the times. From the Theodosian Code we can see that throughout the Empire the duties of office outweigh the privileges; *munera* loom larger than *honores*. A long series of imperial enactments is needed to prevent town councillors escaping from their responsibilities. Men no longer boast publicly of the number of offices they have held; their main anxiety is to hold as few as possible. 'Decurio splendidissimae coloniae Ostiensium' is the language of the second century not of the fourth. The guilds were no longer free institutions; men were tied to their work and essential trades became hereditary.

The earlier growth of prosperity in Ostia had strengthened a common loyalty and pride; disintegration produced cleavages. There was certainly tension between Christians and pagans, and we shall find reason to believe that the local aristocracy was dominantly pagan, perhaps until the end of the fourth century. Religious differences may have widened the gulf between the rich and the poor.

The nature of the evidence and, in particular, the difficulty of dating late building work has compelled us to speak of the general character of the fourth century. In a sense this is misleading. The shortage of

¹ Augustine, *Confessiones*, ix. 10. 23: 'illuc apud Ostia Tiberina, ubi remoti a turbis, post longi itineris laborem instaurabamus nos navigationi'.

² p. 212.

evidence does not reduce the length of time and in no period of a hundred years can we expect a steady rhythm of development or decay. If we were better informed we should see a more complex picture. In religion at least there were special periods of stress. The pagan reaction of Julian must have led to more open conflict at Ostia between pagan and Christian, and we hear in fact, in a Christian source that may be of some value, of the persecution of Ostian Christians. Later, when official policy became less tolerant towards pagan cults, the Christians doubtless had their revenge.

In what from a distance seems a period of steady economic decline there may have been temporary revivals. Already in 1910 Vaglieri drew attention to what seemed to be one such revival towards the end of the fourth century;¹ subsequent study has confirmed his judgement. No fourth-century official has left a more conspicuous mark on Ostia and Portus than Vincentius Ragonius Celsus, though he was *praefectus annonae* for less than four years. The measurers of Portus set up a statue in his honour in August 389 when he had laid down his office, and on the base they paid a handsome tribute to his qualities, particularly his fairness as a judge.² A similar tribute was paid on a second base, which commemorated his adoption as patron by Ostia or Portus: 'hinc denique factum est ut ordo noster consensu totius civitatis, ut meruit, patronum sibi perpetuum libenter optaret'.³

An inscription from Portus records new building or rebuilding under his authority;⁴ further records survive from Ostia. He set up on behalf of Ostia a statue to the city of Rome.⁵ He supervised restorations of the Forum Baths⁶ and, probably, of the theatre.⁷ A further building inscription refers to his immediate predecessor in office:⁸ a little earlier, under Valens, Gratianus, and Valentinianus (375–8), the Maritime Baths were restored.⁹ The survival of so many records from such a short period, contrasted with the small number preserved from the previous fifty years, is significant. But the building activity of this revival does not mark a return to old standards.

The statue of Roma was set up at the south-east corner of the theatre, on the Decumanus. The base had once carried a statue of a second-

¹ Vaglieri, *NS* 1910, 106.

² *CIL* vi. 1759.

³ 173.

⁴ 138.

⁵ *S* 4716.

⁶ 139, *S* 4717, 4718.

⁷ For the restoration, p. 424. A clue to the date may be seen in the base reused for the statue of Roma set up by Celsus outside the theatre. It was probably taken from the Piazzale delle Corporazioni at the same time as other bases used in the theatre reconstruction.

⁸ *S* 4410.

⁹ 137.

century Ostian magistrate, and his inscription was not even erased.¹ Probably the base was taken from the Piazzale delle Corporazioni when other statues in the series were used to remodel the central corridor of the theatre. The restoration of the Forum Baths was less shoddy, but the tall arches that emphasize the newly created north entrance almost completely block what had once been two shops; they were probably no longer in use. The architectural decoration on the block of marble which carries a building inscription of Celsus' predecessor is of fair quality, but it is not contemporary. The formless and thinly cut inscription does not conceal a series of holes, which show where the bronze letters of the original inscription were once fixed.² This, like so much in the late Empire, is reused material.

During the fourth century Ostia was an attractive residential town for those who could afford the amenities of a comfortable life. From the beginning of the fifth century conditions became increasingly insecure, for, when invasion threatened, there was little hope of protection. The Sullan walls had been built for defence; the gates were flanked by strong towers. But the security of the early Empire seemed to make fortifications redundant. Before Augustus died a large building, possibly a tomb, had been constructed against the wall immediately to the south of the Porta Romana, destroying its defensive function. Later, at various points, other buildings abutted on the wall. The Sullan tower on the west side of the Porta Laurentina was converted for religious use in the first or early second century;³ in the second century a Mithraeum was built against the Sullan tower which, on the east side of the town, was intended to guard the Tiber.⁴ In the trial pits that were sunk to trace the line of the walls some later work could be seen, but it is virtually certain that in the fifth century when the crisis came the walls could offer no serious defence.

In 410 Alaric with his Goths, Huns, and Alans sacked Rome. He had first captured Portus, but Ostia he could afford to ignore, and her life was not seriously disturbed. Restorations of two public buildings are recorded in the early fifth century⁵ and some of the restorations in the larger houses of the wealthy are probably roughly contemporary. But fifth-century Ostia was a decaying city.

¹ S. 4621.

² NS 1913, 175; S 4410.

³ Calza, *Mem. pont.* 6 (1943) 197.

⁴ Calza, NS 1924, 69; Becatti, *Mithei*, 39.

⁵ S 4719 (Macellum); 4720 (? Curia).

In the temporary lull that followed Alaric's death Rutilius, writing of his return from Rome to his native Gaul, dismisses Ostia briefly:

tum demum ad naves gradior qua fronte bicorni
dividuus Tiberis dexteriora secat.
laevus inaccessis fluviis vitatur arenis.
hospitis Aeneae gloria sola manet.¹

Little remained but the barren pride of having once welcomed the legendary Aeneas. The silting up of the Tiber mouth had now become acute. Ostia was no longer of consequence to Rome.

Coastal raids decisively quickened the process of disintegration. In 455 the Vandals under Gaeseric attacked Italy. They sacked Portus and a record of their passage survived on the island between the two branches of the Tiber:

Vandalica rabies hanc ussit martyris aulam
quam Petrus antistes cultu meliore novata(m).²

The Vandals had crossed Trajan's canal and burnt the church of St. Hippolytus; it is unlikely that they ignored Ostia, an easy prey. Conditions in the impoverished community rapidly grew worse, but for 400 more years Roman Ostia was still inhabited. It was probably in the late fifth century that the public water supply broke down. It is unlikely that the aqueduct was cut by invaders; the will and organization were no longer adequate to maintain it. Once again the population relied on wells; old wells were reopened, new ones sunk. In a very late well in the *Semita dei Cippi* the well-head is formed of wine jars; another, in the middle of the *Decumanus* opposite the theatre, reuses old brick; in both the workmanship is crude. No less crude is the work where old buildings are readapted to provide living quarters for the much reduced population. Probably many of the buildings that they occupied had already partially collapsed. Doorways were blocked up, corridors partitioned to make homes in the ruins.³ And when they died many of these Ostians were buried at scattered points within the town.⁴ It was an impoverished society, left to its own resources, growing enough food to sustain itself and no more.

While Ostia relapsed, Portus maintained a vigorous life; for Portus remained vital to Rome so long as Rome depended on imports.

¹ Rutilius, *De reditu*, i. 179.

² Cantarelli, *BC* 24 (1896) 67.

³ *MA* 26 (1920) 335-8; Paschetto, 90, fig. 18.

⁴ e.g. *NS* 1909, 199 and 201.

Though it was occupied and sacked by Goths and Vandals it recovered. Towards the end of the fifth century or early in the sixth Cassiodorus recorded that the harbour was full of shipping: 'illic enim copiosus navium prospectatur adventus: illic veligerum mare peregrinos populos cum divina provinciarum merce transmittit.'¹ The picture drawn by Cassiodorus of the duties of the *comes portus*, who had replaced the procurator in charge of the harbours during the fourth century, is too rosy. He implies a steady flow of supplies and abundant shipping. Sidonius Apollinaris in a letter of 488, when he was *praefectus urbis*, suggests that the position was often precarious.² A friend had recommended to him the *praefectus annonae*. Sidonius is more concerned that the corn-supply prefect, his subordinate, should help him out of a crisis. 'I am afraid that the theatre crowd will raise the cry of famine and blame me for the shortage. In fact I am preparing to send him down at once to the harbour, because I have just heard that five ships from Brundisium with cargoes of wheat and honey have reached the Tiber mouth.'³

In his account of the war against the Goths, Procopius provides material for comparison between the two centres. In 573 the Gothic leader Vitigis found that he could not reduce Rome so long as Belisarius was able to introduce food by land and river. Like Marius before him he realized that to blockade Rome successfully he must possess Rome's harbour. But it is not against Ostia that he marches: his objective is Portus. There the harbour is full of river craft and the town strongly fortified. Ostia is little more than a memory, 'once of great account, but now completely defenceless'.⁴

Portus had strong walls, and it is clear from what remains of them today that they were long kept in repair; Procopius even believes that Belisarius could have held the town with 300 men. Ostia's walls had long since passed out of use. But when Portus was occupied by an enemy, entry by the river's natural mouth was the only hope of vessels bound for Rome. That Belisarius made an effort to hold and use Ostia shows that the river was not yet completely unnegotiable. But the town's newly won importance was short-lived; the war over, she was again neglected and relapsed into decay.

¹ Cassiodorus, *Variar.* vii. 9.

² Sid. Apoll., *Ep.* i. 10.

³ 'ostia Tiberina tetigisse'. The phrase, normally applied to the natural mouth of the river, is used of Trajan's canal in the late Empire. Cf. Prudentius, *Contra Symmachum*, ii. 937, referring to corn supplies from Africa: 'respice, num Libyci desistat ruris arator | frumentis onerare rates et ad Ostia Thybris | mittere triticeos in pastum plebis acervos', Symmachus (Seeck), x. 9. 7.

⁴ Procopius, *De bello Goth.* i. 26. 7-13.

The rise of the Saracens in Africa hastened the end. Sweeping down on the western coast in the ninth century they found Ostia an easy prey. It is probable that in this last phase the surviving population withdrew from the coast and made some attempt to defend itself at the eastern end of the town. In his excavations near the Porta Romana in the nineteenth century Visconti was struck by the widespread evidence of insubstantial building that seemed to be very late.¹ Between the Decumanus and the Tiber in this area he noted at several points a late wall of very poor workmanship designed for defence.² Perhaps a wall that still survives immediately to the south of the tombs of the Via dei Sepolcri was part of this system; its level is significantly high. A massive sarcophagus was found on the Via dei Sepolcri with a hole in the back through which the cover had been levered off by a raider hoping for treasure.³

An attempt was now made by the Pope to give protection. Gregory IV (827–44), ‘fearing that the people entrusted to him by God and the blessed apostle Peter who lived in the towns of Portus and Ostia might suffer tribulation and depredation from the impious Saracens, sighed deeply in his heart and began to think wisely how he might help Ostia and be able to free her’. Roman Ostia was in ruins; Gregory built a new town with high walls and deep ditch and strengthened it with artillery.⁴ The long dispute whether Gregoriopolis, as the new town was first called, was to be found within or without the old city is now of academic interest only, for recent excavations have shown conclusively that the fifteenth-century walls that can now be seen in the centre of modern Ostia follow the line of and use as foundations the original walls of the ninth century. This site was probably chosen because it was here that a church had been built to commemorate Aurea, who was martyred for her Christian faith in the third century. The size of the new settlement shows the level to which the population of Ostia had sunk. Gregory’s walls enclose an area not quite as large as the settlement of the fourth century B.C.; both were little more than a stronghold of defence.

But without continuous support from Rome the settlement could not defend itself. When in the middle of the ninth century the Saracens

¹ *Ann. Inst.* 29 (1857) 309.

² *Ibid.* 312. Visconti attributed these defences to Gregoriopolis, now known to have been built outside the Roman town.

³ *Ibid.* 298. The sarcophagus was found at a much higher level than the street paving.

⁴ *Lib. Pont.* ii. 81.

came again, the inhabitants shut the gates and fled. The Saracens occupied the site and made it a base for plundering expeditions as far as Portus. And by now not even Portus resisted; the Saracens found it deserted. Under Nicholas I (858-67) the fortifications of Ostia were restored, and new gates and towers built,¹ but there can have been little vitality in the town. By the later Middle Ages Ostia's story has gone full circle, and we are reminded of the settlement of Ancus Marcius. The imperial harbour has in its turn become silted up and is no longer used: such ships as come upstream to Rome enter precariously by the Tiber mouth. The old salt-beds are being exploited, now by the Pope;² agriculture and salt are again the main basis of Ostian life. But even for these occupations conditions are much worse. The plain to the east, which at its lowest point is below sea-level, was always in danger of flood. Even in the early Empire it was marshland; by the Middle Ages a large lake had developed, and there were fish in it. The effective working of the salt-beds depended on the canal that brought the seawater in and helped to drain the marsh; fishing interests required the maintenance of the lake and the blocking of the canal. Litigation was continuous and ineffectual, for authority was not sufficiently strong to control. The breakdown of effective drainage added malaria to the hardships of the population and further reduced its number.

By the twelfth century there was only a handful of people living in Ostia. A revival can be seen in the fifteenth century when the present walls and church were built and Baccio Pontelli designed for Cardinal Giuliano della Rovere the imposing castle that dominates the modern village. This castle was intended to guard the Tiber passage to Rome against raiders, but the change of the Tiber's bed in the great flood of 1557 left the river fort nearly half a mile from the river, and robbed it of its most important function. But even had the river continued to flow along its old channel there could be no real security at Ostia until the causes of malaria were eliminated. It was not until the second half of the nineteenth century that systematic steps were taken, at first by the Pope, and later by the new Italian government, to drain the *stagno di Ostia* and restore the land to agriculture; and then only after a protracted debate by experts. It is strange, now that the origin of malaria is known, to read the protests of serious men who opposed all drainage plans on the ground that the disease came from the land and would become more active if the water were carried away.

¹ *Lib. Pont.* ii. 164.

² C. Fea, *Storia delle saline* (Roma, 1823).

6

EXPLOITATION AND EXCAVATION

THE Roman town, abandoned as a living-centre in the ninth century, had already suffered heavily. Vandals and Saracens began the looting: it passed later into more respectable, but no less destructive, hands. A Papal Bull of 1191 records a place which is called 'the lime kilns' not far from Ostia—'non longe ab eadem Hostiensi civitate . . . in loco, qui vocatur calcaria';¹ the marble of Ostia was being converted into lime. Many traces of medieval lime-kilns can be seen among the ruins, where the marble lining of walls and floors and marble statues were reduced by fire to provide lime for the builder. The best-preserved of them all has led the excavators to name from it the street on which it stands, the Via della Calcara, on the east side of the Insula of Serapis. The brickwork of this large kiln is still intact and shows the marks of the intense heat to which it was submitted and traces of the lime which it produced. The collection of marble for the kilns must at the time have been attractively easy, for the ruins were not yet completely covered by earth. When Richard Cœur de Lion landed at the Tiber mouth he found 'immense ruins of ancient walls' and proceeding southward along the coast he could still follow the track of the Via Severiana for twenty-four miles through woods still full of deer and boars.²

But the marble and travertine of Ostia could also serve a more constructive use. The site was a happy hunting ground for the fleets of Pisa in the eleventh and twelfth centuries, and near the south-west angle of the transept of Pisa's cathedral, built towards the end of the eleventh century, can still be seen a dedication to the *genius* of the colony of Ostia brought back with other building material on one of these raids.³ If one climbs up into the gallery of the Baptistry at Florence, one can still read opposite the main entrance an inscription on a statue base set up by the *fabri tignuarii* of Ostia in honour of the emperor Lucius Verus.⁴ The inscribed surface faces inwards; the back

¹ *Bullar. Vatic.* i, col. 75. ² *MGH* 27 (1885) 114. ³ 9.

⁴ 105. The normal form, *tignarii*, is rarely found at Ostia.

of the base was cut off to provide a flat surface which was used as a bed for the mosaic decoration: it was probably through Pisa that the stone reached Florence. Ostia may also have provided material for the cathedral of Amalfi, for the Amalfi fleet helped to defeat the Saracens near the Tiber mouth, and an Ostian inscription can still be seen in the font of a near-by church.¹ In the early fourteenth century Ostian marble was used in the building of the cathedral of Orvieto.² From the fifteenth century the site was more systematically exploited for the buildings of Rome.

The Renaissance brought a further change. The newly awakened interest in classical art and civilization made Ostia an invaluable hunting ground for the connoisseur and with the fifteenth century begins the collecting and preserving of inscriptions by men of wealth and learning. Ligorio copied inscriptions at Ostia and Portus, and added to the number from his own fertile imagination. Poggio Bracciolini, in a brief account of a visit to the ruins with Cosimo di Medici, describes his disappointment at finding no inscriptions in the Capitolium,³ and the catalogue of Lorenzo the Magnificent's famous collection of antiques included objects from Ostia.⁴ Statues were especially eagerly sought out, and by the eighteenth century the demand had spread over Europe. The treasures of Ostia penetrated to England, France, Portugal, Spain, and Russia, to find a place in the private collections of the nobility, from which most of them have passed to national museums. The historian must regret these random raids on ancient sites, which concerned themselves only with movable treasures, and broke their way through walls without leaving any records of the buildings they unearthed; but men like the Scottish painter Gavin Hamilton are picturesque figures, and the excitement with which they worked and their genuine appreciation of what they found almost atone for the harm which they have done. One of Hamilton's letters to Lord Townsend, written in 1774, gives us the best impression of this phase of Ostian history:⁵

Being desirous of trying my fortune somewhere near the sea, I agreed with Cardinal Serbelloni, then Bishop of that place, who granted me liberty to make some trials in that immense field of antiquity. I got as near the Sea as possible, judging it the most probable place to find objects of taste. We

¹ 430. ² L. Fumi, *Il Duomo di Orvieto* (1851), 46 n. xlv.

³ Poggio Bracciolini, *Lettere* (ed. Thom. de Tonellis), i. 207.

⁴ E. Müntz, *Les Collections des Médicis au XV^e siècle* (Paris, 1888), 57, 70, 76.

⁵ *JHS* 21 (1901) 314.

opened ground on a spot now called Porta Marina. From the figure of the ruins they proved to be the remains of publick *Thermae Maritimae*, and from the inscriptions which were found of an unusual size, it seems those Baths had been restored by different Emperors down to Constantin. I gave a very elegant one of the time of Trajan to Carlo Albagine, but what gave me greatest hopes was to find some marks of my friend Hadrian, the great protectour of fine arts and in particular that of Sculptour. I did not remain long in suspense, for the first Statue that was brought to light was the fine Antinous in the character of Abundance, perhaps the finest of that subject in the world. Mr. Bary tells me it is arrived safe at his house in England, and where I hope by this time you have had the pleasure to consider it. Near this Statue was found a very indifferent one of an Esculapius, and a large Statue of his daughter Hygea, very entire, and of a great deal of merit; this Statue was sold with some other pieces of good sculptour to the Langrave of Hesse Cassel. We found next a most excellent Torso under the knees, of which there is a duplicate at the Capitol. . . . Little more of consequence was found at Porta Marina, as I found that others had been there before me, so we proceeded to another Ruin on the sea shore, which from some fragments found above ground gave great hopes. A Bath was first discovered with the pavement of Verd antique and a fine Torso of a young man of which most of the other parts were found much broke, excepting the Head. . . . Your small Venus holding a mirror is another of the precious ornaments of this Bath; four of the Labours of Hercules were found at some little distance from this place, which being very entire, and with their proper emblems, now add to the lustre of the Pope's Museum, to which I may add that tasty Tripod of Apollo, found near where we discovered your Mother of Venus and Muse, which, as they are in every respect two of my happiest discoveries, I am very happy that they should fall into so good hands as your own, especially as they make part of those select pieces of art which I hope will in time establish a good taste in England.

The profits from excavation must have been considerable to tempt such men as Hamilton to Ostia, for there was a serious risk of malaria in the summer and little that was attractive in the village or landscape. An English lady's account of her travels in the Roman Campagna, published in 1805, presents a gloomy picture.¹ 'The air is particularly unhealthy and the town is chiefly inhabited by galley slaves who work in the salt mines', for 'the salt mines are a constant source of advantage to the apostolic chamber.' She comments on the excellent water melons and other fruits, which alone recall the reputation of Roman Ostia, and in her description of Isola Sacra we find a quaint distorted echo of

¹ Charlotte Hanbury, *Description of Latium* (London, 1805), 100.

Claudius' whale hunt in the harbour. 'A ferry boat, directed by a chain, crosses over an arm of the Tiber to the Isola Sagra, an island formed by the mud, sand, and other casual ingredients, deposited by the stream. Some authors pretend that it originated from an immense whale, intercepted there in the time of Claudius.' But the island which had once been described as 'a garden of Venus' was now a dreary waste of marsh and coarse grass, providing pasture for buffaloes, 'extremely savage when at liberty'.

The striking contrast with the present day and the fine period flavour of the sentiments justify the quotation of her passing reflections.

All is now changed, and from this truly distressing scene the British traveller will naturally turn his thoughts with exultation to his native country, which at the time when Ostia flourished in wealth and activity, could boast of as little naval glory as that of modern Rome. Yet let him remember that triumphant fleets and victorious armies were often hailed by the once numerous inhabitants of this celebrated coast, who, while they welcomed their returning defenders, never perhaps anticipated the reverse of fortune, of which it now affords so striking an example. Let him therefore, while reflecting on the revolution of Empire and vicissitudes of human affairs, forbear to despise a people once our master, but unite his prayers and efforts for the continuation of that energy and those advantages which distinguish the island of Great Britain and secure her independence, while they render her the mistress of the seas.

Had this traveller been more inquisitive she might have found more to remind her of Roman Ostia than the melons, for the opening of the nineteenth century had seen a new approach to the ruins. Further private exploitation had been forbidden, largely as a result of the influence of Carlo Fea, director general of antiquities, and official excavations were inaugurated by Petrini under the Pope's authority. The intention was to uncover as much as possible of the city, to publish plans and accounts of the buildings recovered, and to enrich the Papal Collections with statues and other works of art. Petrini dug at scattered points in Ostia from 1802 to 1804. He selected the most prominent mounds which had not already been ransacked and reaped a rich harvest.

Fea has left a good account of the site at this time,¹ but his proposals for publication were very inadequately carried out. Plans of the Capitolium and of the Round Temple and descriptions of some sculptures

¹ C. Fea, *Relazione di un viaggio ad Ostia* (Roma, 1802).

were included in a serial publication of the time,¹ but of two important buildings which were at least partially excavated by Petrini no account was given. It seems clear that he explored the Forum Baths and the Basilica. It was probably in the Basilica that the imperial portrait heads that can now be seen in the Sala a Croce Greca of the Vatican Galleries were discovered.²

The various excavations carried out between 1824 and 1834 marked a return to the attitude of the eighteenth century.³ They were designed to secure inscriptions and sculptures, and paid little attention to buildings: no systematic account was published, though Canina's contemporary description of Ostia is accompanied by a plan which preserves some useful information.⁴

The areas selected for exploitation were those that seemed likely to be the most rewarding, along the ancient coastline and among the tombs to the south of the town. Some of the inscriptions were left at Ostia, but the more important finds became the private property of Cardinal Pacca, who had financed the excavations. This collection has now been widely dispersed and some of the finer pieces have already passed through several hands. A magnificent sarcophagus found in 1825, depicting in high relief the story of Endymion, was sold at auction in London in 1913 and bought in 1947 by the Metropolitan Museum of Art in New York.⁵ It is not always so easy to trace the sculpture found in these years.

A great advance was marked by the excavations within the town area begun by Visconti in 1855 under the authority of Pope Pius IX.⁶ Visconti was anxious to trace the history of Ostia, and fuller accounts and better plans were published. But he worked under great difficulties. Paintings, sculpture, and mosaics were required for the Papal Collections, and he realized that the continuation of his work depended on results. In a report of July 1857, after giving a catalogue of recent finds,

¹ *Monumenti inediti per l'anno 1805*; Paschetto, 499–524.

² G. Lippold, *Die Skulpturen des Vaticanischen Museums*, iii. 1 (1936): n. 575 (Hadrian), 581 (Trajan), 583 (Marcus Aurelius), 595 (Antoninus Pius), all in the Sala a Croce Greca.

³ Paschetto, 525–35.

⁴ L. Canina, *Sulla stazione delle navi di Ostia* (Roma, 1838).

⁵ F. Matz, *Metropolitan Museum of Art Bulletin*, Jan. 1957, 123.

⁶ Paschetto, 537–59. The excavations were carried out by P. E. Visconti; reports were published by his nephew, C. L. Visconti, the first in *Ann. Inst.* 29 (1857) 281. Paschetto has also drawn on contemporary reports in the *Giornale di Roma*. The excavators' library at Ostia includes copies of Visconti's letters to the minister, which add a little further detail (cited as Visconti, *Letters*).

he was careful to point out that 'these objects, valued at the lowest price, must be worth not less than 5,000 *scudi Romani*, acquired this year at a cost of less than 700 *scudi*, without counting the buildings'.¹ He was also expected to supply material for building in Rome; in April 1864 he reported with special pleasure 'four granite blocks, two of them more than six palms long, useful for the new work to be carried out by the authority of his Holiness in the Piazza di S. Pietro'.² To maintain regular supplies he too dug at scattered points and rarely completed the excavation of the buildings he found. The systematic exploration of the area near the Porta Romana was abandoned for richer prizes in the west. The 'Imperial Palace' was only partly uncovered. In the area of Cybele, one of his richest discoveries, much remained for later excavators.

Sometimes the collector in him suppressed the historian. In digging at the eastern end of the town he found a large number of very late walls, and, according to his published account, he proposed, in opening an area to the west, to test whether such late occupation was general or limited to the east. But in his western dig he came almost at once on the 'Imperial Palace', rich in sculpture and mosaics. These were enthusiastically described; of the historical problem which he had set out to investigate nothing more was said in print.

Visconti also had continuous trouble with the local inhabitants.

It is an excellent idea to leave on the site the marble and decoration that are found beside the traces of walls. But this noble purpose that would allow us to see the customs and monuments of peoples who lived so many centuries ago is frustrated by the stupidity and ignorance of the peasants and shepherds in the district. One is moved to anger when one sees the destruction by such worthless people of records which will never again throw light on history and instruct posterity.³

Statues and architectural fragments were wantonly damaged; thefts were common. Two fine composite capitals disappeared soon after discovery; they were found later two miles away. Orders had to be given to stop all loaded carts leaving the site; the local boatman was sharply warned.

But Visconti did at least succeed in forming an Ostian museum and the published accounts of inscriptions and buildings laid the foundation for a serious study of the town. Ostia was also included in the grand

¹ Visconti, *Letters*, 14.

² *Ibid.* 85.

³ *Ibid.* 23.

tour and kings, generals, and nobles were among the distinguished foreigners who came to see the excavations; once again carriages became a common sight on the road from Rome to Ostia.

An English lady's account makes a genial contrast with the social background and the effortless journey of the modern tourist in electric train or car.

Seven years ago there was much talk in Rome of the recent excavations at Ostia, the ancient port of the Eternal City, situated at the mouth of the Tiber; and a large merry party agreed to go and explore in a carriage and pair, just as a family of freedmen in the days of old may have packed up their little luxuries before moving from Rome to the seaside. This modern party was composed of elements well known to the Anglo-Saxons of the Piazza di Spagna. There was the white-haired American clergyman, and his only son, travelling that the youth might receive that European culture so highly esteemed by the Bostonians. There was the artist, twenty years of whose life had been passed in the sunny studio overlooking the long lines of the Quirinal gardens; he whose groups of gay children from the mountains, driving their goats, and playing on their slender flutes, commanded a sure market among wealthy lovers of Italy. . . .

Then there was that singular woman, the daughter of an English squire, the pale severe lines of whose face must have been so beautiful in youth, she who now lived up three storeys in a shabby house near the Tarpeian Rock, devoted to the copying in miniature of ancient frescoes and mosaics. To these were to be added in that large roomy carriage two English ladies, living at Frascati, who were to be in town by eight o'clock to join the excursion.¹

The writer missed this trip, but made the journey later 'starting from Rome at nine o'clock of an April morning, in a small one-horse carriage, with only one companion, taking with us a cold leg of kid, six hard-boiled eggs, a great piece of plain cake, and a bottle of wine'. In her naïve account of the ruins there is an interesting reference to the destruction of tombs on Isola Sacra.² 'It is greatly to be deplored that valuable relics of bygone times, which ought to have proved a clue to important discoveries were, about ten years since, reinterred by the short-sighted cupidity of the owners of the land, who relentlessly destroyed these invaluable monuments and filled up the excavations with a view to converting it to pasture land.' It was part of this cemetery that was excavated, with spectacular results, between the two world wars.

The Papal excavations, which enriched the Vatican and Lateran galleries, came to an end in 1870 when the new Italian government was

¹ Bessie R. Parkes, *The Gentleman's Magazine*, Oct. 1866, 441.

² *Ibid.* 454.

established and Ostia came under its control. Excavation was continued intermittently and important new areas were uncovered including the Hadrianic rebuilding north of the Forum, the theatre, and the Barracks of the Vigiles; but the published reports were tantalizingly brief. The long-established practice of digging at scattered points was not yet abandoned. There was no long-term plan to co-ordinate successive campaigns.

A completely new policy lay behind the digging which was begun in 1907. The work was now to be continuous, with the intention of uncovering the whole town systematically. Lower levels were to be examined to trace the early stages of the town's development; more attention was to be paid to the preservation of the ruins, which had been badly neglected. This policy was inaugurated by Dante Vaglieri and impressive results had already been won when he died in 1912. The tombs outside the Porta Romana, which Visconti had explored, were cleared again and re-examined more thoroughly to the lowest level. The buildings along the north side of the Decumanus from the Porta Romana were uncovered to link up with the Barracks of the Vigiles. To the barracks were added the Baths of Neptune and the block of shops and apartments on the Via della Fontana. A more balanced picture of the town was emerging.

Ostian studies were given a new impetus by the publication, in the year of Vaglieri's death, of the first comprehensive study of the town and its history. Fea, Nibby, Canina, and Fisch had paved the way in the nineteenth century by short accounts of the ruins, flavoured with references to the literary sources. In 1887 Dessau had edited in the fourteenth volume of the *Corpus* all the Ostian inscriptions then known. Individual problems had been discussed in learned journals. Paschetto was the first to combine literary, epigraphic, and archaeological records in a detailed historical survey. He had followed Vaglieri's work closely and filled many gaps left by contemporary reports. He had also carefully sifted such scattered evidence as remained of the sites and results of early excavations. Though much can now be added and some changes have to be made, Paschetto's book was a remarkable achievement and remains invaluable.

But Ostia as we see it today will, for the present generation at least, always be most closely associated with the name of Guido Calza. Calza came to Ostia as a young man in 1912. Later, for twenty years, he directed the course of excavation. Until 1938 the work proceeded at a

steady but slow pace, restricted by a lean budget. The excavation of the north side of the eastern Decumanus was extended westwards from the theatre to the Forum and a little beyond. The Forum and some of the buildings in its neighbourhood were cleared. Sufficient new inscriptions had been found to justify a supplementary volume of the *Corpus* in 1930, and the unexpected discovery of the walls of the fourth-century Castrum in the centre of the town had compelled rethinking on the origin of Ostia. Roughly a third of the town could now be seen, but, though the line of the southern walls had been established, the southern and western areas were still covered with earth and grass.

In 1938 a more drastic change in policy was made when it was decided to clear the greater part of the site in preparation for an international exhibition to be held at Rome in 1942. The area to be excavated was defined, and, in spite of the war, the objectives were reached. Excavation was extended southwards to the Porta Laurentina and to the Porta Marina, westwards along both sides of the Via della Foce, and along the southern side of the eastern Decumanus. Within five years the excavated area had been more than doubled. The new campaign filled out the main lines of the town plan. The picture of Ostia in the middle Empire became more diversified and vivid; and an unexpected display of private wealth in houses of the late Empire was seen to accompany the general economic decline. New buildings, inscriptions, and sculptures widened our understanding of Ostia's social, religious, and economic life.

The pressure of this intensified campaign, the anxieties of the war, and the uncertainties that followed, imposed too great a strain: Calza died in 1946. But his main work had been completed. It remained for his successors to explore the lower levels of the excavated area in search of Ostia's history during the Republic and early Empire.

Before he died Calza had begun his record for publication, and his chapters are included in the first of a series of volumes designed to present a full picture of Ostia in the light of the new excavations. The first volume lays the essential foundation. It contains a history of the site, a detailed analysis of the town's development, and a chronological survey of construction styles. The various categories of building and objects—including temples, baths, houses, mosaics—will be more fully described in succeeding volumes. Not until these volumes and the rich crop of new inscriptions have been published can the detailed evidence of the 1938–42 excavations be fully assimilated.

TOWN PLAN AND TOWN DEVELOPMENT

THE SETTING

THE Via Ostiensis, the main highway to Ostia, left the republican walls of Rome at the Porta Trigemina, wound round the foot of the Aventine and passed through the Aurelian wall close to the pyramid tomb of Caius Cestius by the gate now known as Porta San Paolo. From that point it followed with little variation the straight line of the modern slow road to Ostia Marina, its direction contrasting with the winding course of the Tiber, close on its right. Having passed through the cemetery which flanked it on both sides after it had left the Aurelian wall, the road came in the fourth century to the Basilica of St. Paul: a little beyond on the right was Vicus Alexandrinus, a small river port with docks. This was the last settlement to be met, but the land on either side of the road was not deserted. There were olive groves and gardens where the buildings of the 1942 exhibition now dominate the skyline¹ and villas near the road whose lands were farmed for profit. M. Stlaccius Coranus, who in the course of a long public career commanded a cavalry squadron in Britain, was once one of the landowners on the route; his funerary stone still stands by the roadside.²

At frequent intervals the road passed over watercourses flowing into the Tiber, and remains of several of the bridges can still be seen under their modern successors.³ Of the milestones one only has survived. It is preserved in the courtyard of the Lateran Museum and its inscription can still in part be read.⁴ The archaic style and lettering indicate an early date, perhaps in the third century B.C. It is the earliest known monument from the road.

¹ NS 1887, 115.

² ILS 2730.

³ The best examples surviving are at Magliana (M. E. Blake, *Ancient Construction in Italy*, 212 with pl. xxi, fig. 2) and just east of Acilia (Ponte della Refolta). A bridge near Risaro, on which the Roman road could still be seen, was destroyed in 1942, Pl. VI c. A brief account of the Via Ostiensis, with select bibliography, M. F. Squarciapino, *Il Museo della Via Ostiensis (Itinerari dei musei e monumenti d'Italia, 1955)*. A fuller account, G. Tomassetti, *Archivio della Soc. Rom. di Storia Patria*, 1894-7.

⁴ CIL 1². 22.

This stone marked the eleventh mile on the road. It was hereabouts that the younger Pliny left the Via Ostiensis if he chose this route rather than the Via Laurentina to go to his villa by the coast.¹ Pliny's road probably started where now stand the farm buildings of Malafede, and

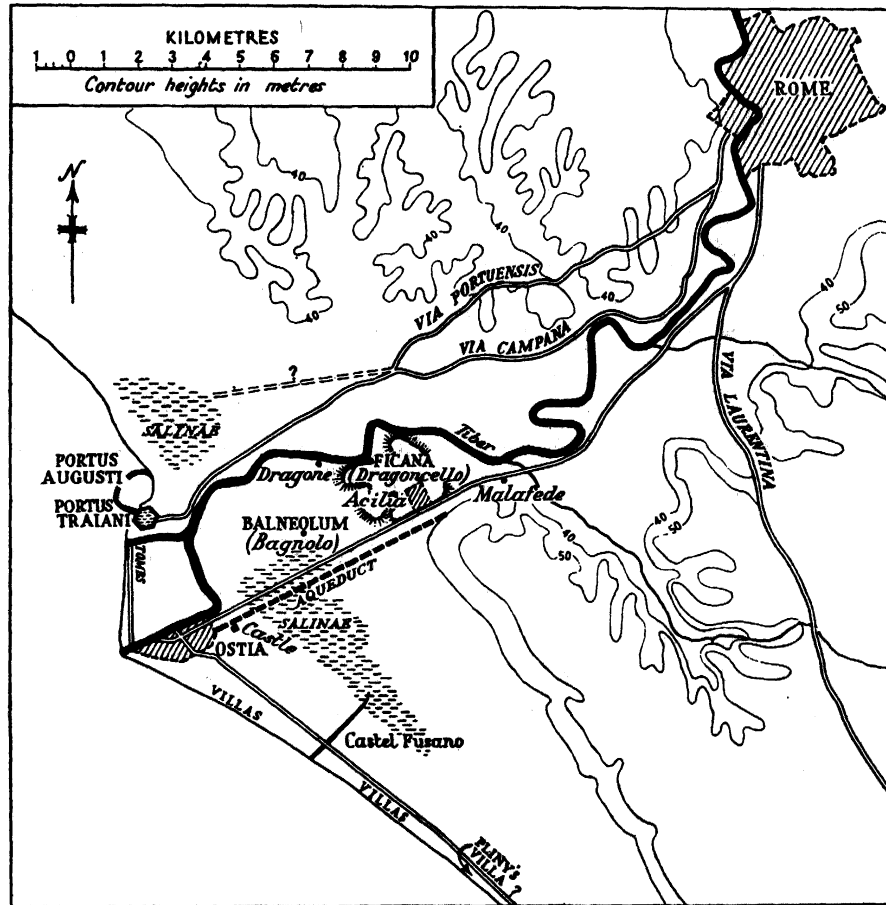


FIG. 1. From Rome to Ostia.

followed the line of the modern Via di Malafede; the remains of Roman villas can still be seen as it approaches the wooded estate of Castel Porziano. In Pliny's day the road passed through woods and open fields, where sheep, horses, and oxen were brought down from the hills for winter and spring grazing.²

Up to this point the Via Ostiensis could avoid hills and follow a level course. Shortly afterwards it climbed a small slope, dipped again, and

¹ Pliny, *Ep.* ii. 17. 2.

² *Ibid.* 17. 3.

then climbed to the highest point on its route to pass over a ridge of hills that stretches from the Tiber some three miles to the south. On this high land, known as Monti San Paolo, the little town of Acilia has now been built, the name given by Vaglieri to commemorate the distinguished senatorial family of the Acilii who were closely associated with Ostia and who are recorded in an inscription found near by.¹ Acilia commands good views. To the east Rome can be clearly seen; to the west the sea, though more than two miles farther distant than in Roman days, still shimmers in the distance.

Near Acilia clear traces of the Roman road can be seen. On the Rome-ward side, at the foot of the hill which leads up to the town it passes over a small watercourse running between high banks. Beneath the modern Ponte della Refolta the solid tufa structure of the Roman single-arched bridge remains substantially as it was built in the Republic. Originally it was incorporated in a viaduct carried on eleven² arches to maintain the level of the road, but only the bridge now remains. Towards the top of the hill, on the left of the modern road, is another small Roman bridge, almost perfectly preserved. Between the two bridges a stretch of the old road, grass-covered but clearly recognizable, can be followed. Beyond the second bridge, substantial remains of a retaining wall of well-coursed tufa blocks marks the line of the road along the shoulder of the hill.³

This high ground was also the source of Ostia's water supply in the Empire. The only trace of the aqueduct that can now be seen is a series of brick piers which meet the Sullan city wall south of Porta Romana, but in the sixteenth century its line could be followed over the plain beside the Via Ostiensis.⁴ Its early course was cut through the hills and was discovered in 1912 when the road was being remodelled.⁵

¹ 74: 'Thiasus Acili Glabrion(is) inperatu aram fecit dominae.'

² Nibby, *Viaggio antiquario ad Ostia* (1829), 22.

³ For the second bridge, Pl. VI b. On my last visit (1957) the scene had considerably changed. This bridge had been converted into a cellar; the traces of the Roman road were less recognizable.

⁴ *Topografia*, 32, fig. 5. Remains of aqueduct piers, BC 20 (1892) 293.

⁵ Two 'wells' (0.90 m. wide, 15 m. deep) were found, 71 m. apart: they were covered with slabs of travertine and had footholds in the side. These were inspection shafts and the interval between them corresponds with the standard of 240 Roman feet prescribed by Vitruvius (viii. 6. 3). At its lowest point the aqueduct channel (*specus*) was 20 m. below the surface. The 'wells' are misunderstood in NS 1913, 9; a better description in BC 40 (1912) 261. The fullest account I have seen (with a cross-section of the *specus*) in *La Tribuna*, 13 Dec. 1912. On the evidence of this report the Ostian aqueduct started near Km. 14.

After climbing the Acilia ridge the road gently descended into the coastal plain and it is probable that the slopes were thickly wooded on both sides.¹ The plain itself was very low-lying, liable to flood in winter and probably at its lowest points still marshy in summer. Livy in his record of 209 B.C. speaks of a 'lacus Ostiae';² and, after the great fire of A.D. 64, Nero proposed to send burnt rubble from Rome to fill up 'the Ostian marshes'.³ These may also have been the marshes in which the *haruspices* advised that the remains of Rome's Capitoline Temple, burnt down in the civil war of A.D. 69, should be buried.⁴ As it approached Ostia therefore the road had to be raised on a low causeway; some of the oak piles which supported it have been discovered and preserved.⁵

The most conspicuous silhouette for the traveller crossing the Ostian plain in imperial days was the Hadrianic Capitolium at the north end of the Forum. Today the eye naturally focuses on the fifteenth-century castle which dominates the modern village. The castle roof provides a good view of the setting of Roman Ostia. A group of pines on the horizon to the north-west marks the site of Trajan's harbour, two miles distant. To the south the view is closed by a straight line of woodland extending to the sea. These woods of pine, interspersed with oak and ilex, were planted in the early eighteenth century, but the view was probably not very different in Roman days, for the coastal district was wooded.⁶ A little beyond the present northern edge of woodland ran the canal which fed sea-water to the salt-beds. Farther south was Laurentine territory.

To the west from the castle roof one sees the excavated area of Ostia, and hillocks covering ruins still buried. A mile away, at the extreme end of the ruins, on the Tiber bank can be seen Tor Boacciana, a ruined tower that reflects much of Ostia's history. At its core is a Roman building. It derives its name from the Bovazzani, who owned the surrounding land in the thirteenth century and converted the building with Roman material; later, in 1420, it was completely reconstructed by order of the Pope to defend the river. It marks the western end of Roman Ostia.⁷

¹ Woods are shown here on the earliest maps.

² Livy xxvii. 11. 2: 'Tacta de caelo . . . et Ostiae lacus': *lacus*, the more difficult reading, is to be preferred to the variants *locus* and *lucus*.

³ Tac. *Ann.* xv. 43. 4.

⁴ Tac. *Hist.* iv. 53: 'haruspices monuere ut reliquiae prioris delubri in paludes aveherentur.'

⁵ Calza, *Topografia*, 65 and fig. 18.

⁶ Pliny, *Ep.* ii. 17. 26; Varro, *RR* iii. 13. 2.

⁷ Paschetto, 104.

But two factors in particular have radically altered the prospect. Fourth-century Ostia was built in the angle between the Tiber and the sea: today the sea is more than two miles distant, for the silt piled up at the river mouth and sand driven ashore by current and wind have advanced the coastline. It is, however, still possible to trace roughly from the line of the ruins how the ancient coast ran, at least in the late Empire. From Tor Boacciana it followed the line of the modern road from Fiumicino. Shortly beyond the Baths of Porta Marina it curved southwards and a series of low mounds, stretching to Castel Fusano, still mark the sites of coastal villas.

The river also has changed its course. In early sixteenth-century maps it is shown as a straight line from Tor Boacciana, parallel to the line of the Decumanus. A little to the east of the Porta Romana it makes a large bend crossing the line of the Via Ostiensis and returning in front of the castle which was built to dominate it. But, after a particularly heavy flood in 1557, the river abandoned its bed. The meander moved downstream to the centre of Ostia's river front and the old bed became a marshy depression, *fiume morto*, until it was filled with earth and rubble in the nineteenth century. Its line can still be traced on air photographs and can in part be followed on the ground.

Boundary stones set up on the right bank by the river commissioners in the Julio-Claudian period show that the line of the river within the town area was at least approximately the same in the Roman period as later,¹ but its course to the east of the Porta Romana is not yet resolved. In the Middle Ages the river curve crossed the line of the Via Ostiensis. Calza inferred that in the Roman period the curve was much less pronounced and that the river then flowed to the north without crossing the line of the road. He assumed that in the neglect of the post-Roman period the left bank of the curve was continuously eroded until it moved some 40 metres southwards.² Chance discoveries in 1957 showed that some modification is needed. What was assumed to be the Roman river bed east of the Porta Romana was found to be occupied by buildings and a further boundary stone was found in a position which implies, superficially at least, that the Roman course of the river was much closer to the medieval than had been expected. Until the new evidence has been sifted and wider soundings made, the precise course of the Tiber in this area during the Roman period must remain uncertain. *

¹ S 4704 (NS 1921, 259); two further *cippi* found more recently, G. Barbieri, *Topografia*, 62 n. 2.

² NS 1921, 262; cf. Paschetto, 9-17.

THE CASTRUM

The Ostia that we see today is the enlarged city of the Empire. We can, however, trace the outline of its development from the fourth-century settlement. The original walls of the Castrum were largely destroyed when the town had outgrown them, but parts were incorporated in later buildings and their line can be traced. On the east side a considerable length can still be seen on the Via dei Molini, used as the back wall for shops:¹ some courses are incorporated in the south wall of the Piccolo Mercato; similar blocks can be seen on the west side, and on the south a small stretch survives below the south-east corner of the Forum Baths. The reused remnants of the ancient walls were not preserved for their historical association, but because they were useful and saved material. Other blocks were broken up and used for concrete filling, as when the level of the Decumanus was raised by the eastern gate of the Castrum and new buildings were erected on the north side.

In the centre of the eastern and western sides of the Castrum the foundation of gates can still be seen under the imperial Decumanus. Traces of a third gate of similar style were found at the central point of the southern wall under the temple of Rome and Augustus: a fourth gate probably lies under the Hadrianic Capitolium.² The basic structure of the colony was a rectangle divided into four parts by two main streets crossing at right angles. The east-west street, the Decumanus Maximus, was the continuation of the road from Rome; the street which crossed it in the centre, the Cardo Maximus, led from the Castrum northwards to the river, and southwards towards Laurentine territory.

For a settlement that was intended for defence, walls were vulnerable unless an open space was kept clear on both sides. The outer and inner limits of this *pomerium* were probably marked by later streets. The line of the outer *pomerium* is best seen in the Via dei Molini to the east, and in the Via del Tempio Rotondo to the south. Evidence for the inner *pomerium* is to be seen in the street behind and south of the Basilica, in the Via delle Domus Repubblicane and in the Via del Larario. These *pomerium* streets, as we may call them, survive now only in part, but in most cases one can see why their full lines were not preserved. The area within the inner *pomerium*, first divided by Decumanus and Cardo, will have been further subdivided into smaller blocks by subsidiary streets

¹ Pl. VII a.² G. Calza, *Topografia*, 69.

running parallel to the main arteries; but how far the imperial streets within the Castrum followed the line of the original plan only further excavation can disclose.

It is doubtful whether fourth-century Ostia had a Forum. It would be most natural to look for it by the intersection of Decumanus and Cardo where the later Forum was subsequently developed. For in such matters societies are conservative. They enlarge or reduce their central squares but do not readily displace them. Calza's explorations, however, showed that what became the free area of the imperial Forum, south of the Decumanus, was once fully occupied by republican buildings.¹

The land on which the colony was established was dangerously low-lying and may have been subject to serious flooding in the winter from the river. This danger was reduced as the building level was raised, but the earliest buildings are at the level of the sand. Drainage presented a more difficult problem than later when, from the higher level, a network of drains could be led to the river. The earliest drains significantly lead southward away from the river.²

PRE-SULLAN EXPANSION

In the early first century B.C., and probably in the period of Sulla's dominance, new walls were built round Ostia enclosing an area of roughly 160 acres, nearly thirty times as large as that of the Castrum.³ The history of Ostian building between the establishment of the Castrum and the building of these new walls is extremely difficult to decipher and there is not yet sufficient evidence to provide more than a very general outline and to pose the main questions which it may one day be possible to answer.

The limitations of the evidence should first be stressed. Roughly two-thirds of the area enclosed by the Sullan walls have now been excavated, but the city uncovered is the city of the second century A.D. as modified in the late Empire and, to a much smaller degree, in the early Middle Ages. Some buildings of the mature Empire preserve and adapt earlier buildings, but in general the building history of the Republic and early Empire can only be retraced by excavation below the later level. Such excavation is not practicable where deeper digging would involve the destruction of mosaics, marble pavements, or other valuable material; nor, without unlimited resources, is it possible, except over a very long

¹ Ibid. 71.

² Ibid. 73 f.

³ p. 34.

period indeed, to explore all the parts that are accessible. Procedure must be by sample tests, and the firmness of the conclusions will depend on the number and scale of the tests made, and on their distribution.

It has been already possible to explore in some detail long stretches of the main streets and the buildings that lined them; behind the buildings on the streets exploration has been much more limited. Moreover, certain crucial areas of the town are still covered. On the north excavation has not reached the river bank; on the south there are still large areas to be dug near the line of the walls, and in the west the line of ruins ends some 300 yards from where the river entered the sea in the second century A.D., though two groups of second-century buildings excavated in the nineteenth century can still be partly seen in the western area. Broadly speaking the periphery of the town is, with the exception of a few limited areas, completely unexplored; the sample investigation of republican levels has been more thorough in the centre and in the east of the excavations than in the west.

The main questions which we should like to answer are these: How soon and how fast did the fourth-century colony extend beyond its walls? How far does the building development suggest a carefully considered town plan? When the Sullan walls were built was their line virtually dictated by the area that was already built up or did they provide deliberately for an extension of the built-up area, large or small? Was the building of the new walls accompanied by a new or revised town plan? None of these questions can yet be answered with certainty. Between the Castrum walls and the new walls whose approximate date can be accepted with some confidence, we have no building on which the argument can be securely hinged. The best we can do is to survey the materials that are used and apply what is known of construction methods at Rome to the scanty remains that are found at pre-Sullan levels at Ostia.

The earliest traces of buildings within the Castrum show two types of construction. The walls under the Forum are built with small blocks of tufa, carefully cut and carefully coursed, without mortar.¹ Similar walls can be seen at the lowest level on the west side of the Via del Larario. Other early walls from the lowest level in part survive in large blocks of tufa, carefully fitted without mortar, *opus quadratum*. The first type of construction passed out of use when builders had fully grasped the potentialities of mortar; *opus quadratum* had a much longer

¹ Calza, *Topografia*, 71 with tav. xvii-xxi.

life and was still used in the early Empire for special purposes. The earliest work in this style, however, can be distinguished by the building level and the type of tufa used. The earliest walls in *opus quadratum* were built in soft tufa, similar to Roman capellacio; it is grey-green or sometimes reddish in colour, flakes easily, and wears badly. It was probably used first because, lying near the surface, it was easy to quarry; it was also easy to work. It was later superseded by harder and darker tufas.

The decisive change in construction comes with the introduction of concrete. At some point Roman builders discovered that a mixture of lime and the local volcanic ash provided a binder of immense strength; by pouring this mortar over an aggregate of random blocks of tufa or whatever other material was available they could produce a solid mass, capable of withstanding considerable pressure. It was logical to apply this discovery to the building of their walls. The concrete core carried the weight; for the sake of appearance a face was added, at first of tufa blocks, later of fired bricks. The facing blocks of tufa were originally large and irregular, but the size was gradually reduced and the shape of the blocks became more regular. In the final phase the blocks were regular squares, laid in a network pattern, *opus reticulatum*; the earlier phases are classified as *opus incertum* and *opus quasi-reticulatum*. This method of building—simple, effective, and flexible—became the dominant style of construction for permanent buildings, though *opus quadratum* was still used for the platform of temples, for piers, and occasionally for important walls.

Until recently it was generally thought that concrete construction was not introduced to Rome until near the end of the second century B.C. But Gatti's identification, from a fragment of the marble plan of Rome, of substantial walls that survive between the Aventine and Tiber with the Porticus Aemilia compels a revision.¹ The Porticus Aemilia was built in 191 and restored in 174 B.C.; the walls that survive show a mature use of concrete construction faced with *opus incertum*. These walls cannot reasonably be attributed to a later radical restoration of which no record survives. We must conclude that Roman builders were already familiar with the principles of concrete construction early in the second century B.C.; the experimental period should be sought in the third century.²

¹ G. Gatti, *BC* 62 (1934) 123.

² Lugli, *La Tecnica edilizia romana*, 375; M. E. Blake, *Ancient Roman Construction in Italy*, 324 ff.

There is an indication that it was not until the second century that the new style reached Ostia. This is primarily an inference from a series of walls that can be seen on the west side of the Via dei Molini (the external *pomerium* on the east). These walls run out at right angles from the Castrum wall, forming a line of deep rooms, perhaps shops: they are constructed of large well-coursed blocks of soft tufa, and their level approximates to that of the Castrum wall.¹ If concrete technique had been developed at Ostia, such walls would more naturally have been in concrete faced with *opus incertum*. On the other hand, these walls cannot be earlier than the early second century, for they destroy the defensive value of the Castrum wall.² While Hannibal was in Italy Ostia needed strong defences, for raids could be expected; any walls that interfered with these defences would have been destroyed.

These walls seem to be the earliest permanent construction outside the area of the Castrum and on historical grounds it is reasonable to believe that the first main expansion of Ostia came in the period of increasing Roman prosperity that followed the defeat of Carthage. Such extra accommodation as was needed during the war against Hannibal was probably provided by temporary constructions near the river.

The first stage of expansion was probably the conversion of the inner and outer *pomerium* into streets flanked by buildings. Along some of these lines blocks of the early tufas are indeed found, though not enough remain to determine the nature of the buildings that they supported. Most of this evidence has been recovered only by excavating below the imperial level. In two cases, however, substantial remains of these early buildings were incorporated in later work. The walls that run out from the east wall of the Castrum have been mentioned; a substantial section of wall, built in the same style from soft tufa, was also retained in a building on the east side of the Via del Larario (the western inner *pomerium*).³

Pre-Sullan walls show that the main arteries of the later town were established before the new walls were built. The line that the Decumanus was to take to the east was predetermined, for the Via Ostiensis already ran to the Castrum on this side. The other main streets make a more unexpected pattern. The Cardo, after passing through the southern

¹ NS 1914, 244; Pl. VII a.

² Becatti, *Topografia*, 98, dates these walls to the third century from their level and absence of foundations: neither feature would be inconsistent with an early second-century date.

³ NS 1923, 183.

wall of the Castrum, instead of continuing the straight line followed within the Castrum, turns to the south-east. The Decumanus, instead of proceeding westward on its course, turns south-west. Where it changes course a third important street, the Via della Foce, runs north-west towards the river mouth. What dictated this departure from what we have come to regard as the standard Roman rectangular plan?

Becatti has offered an attractive solution of this problem. Emphasizing that Roman settlements were normally connected with a road system, he suggests that the siting of the Castrum was governed by two pre-existing routes leading to the mouth of the river; one track led from Laurentine territory, the other from Rome. The Castrum was built near the point where they crossed, using the track from Rome as its main axis—the Decumanus Maximus—and diverting the Laurentine track round the walls.¹

Van Essen has pointed out an important objection to this theory. If these two tracks were both leading to the river mouth why did they cross and not converge? Why should the track from Rome be leading to a point to the south? An early track from Rome would either have followed the river closely or led directly to the mouth. The straight line of the eastern Decumanus outside the Castrum is the result rather than the cause of its line within the Castrum. Van Essen sees the reflection of the original track from Rome in certain unexpected lines that survive in imperial streets and buildings, notably the Via dei Misuratori and the *horrea* at the west end of the Via della Foce. These lines, he thinks, are the legacy of the original track; early property rights ensured their survival at certain points.² This modification is an improvement of Becatti's theory, but it is open to a more serious objection.

Van Essen names these early tracks the Via Salaria Sabina and the Via Salaria Laurens. If he were right in assuming that the salt-beds were at the mouth of the river his theory would be very tempting; but the firm sands in this area were not suited to the production of salt. The original *salinae* should be placed where they are found later, to the east of modern Ostia, at the edge of the Ostian marshes, on land that was below sea-level. If this is right we should not expect a well-worn track from Rome to the river mouth.

¹ Becatti, *Topografia*, 93. Air photograph, Pl. II.

² C. C. Van Essen, 'A propos du plan de la ville d'Ostie', *Hommages à Waldemar Deonna* (Collection Latomus, vol. 28, Bruxelles, 1957), 509–13. Apart from the Via dei Misuratori (Reg. i. 7 and 8), evidence for the early track from Rome is seen in i. 3. 6; i. 4. 5; i. 19 and 20.

Bradford has emphasized that the western Decumanus and the Via della Foce make identical angles with the main axis in the form of a regular Y, and suggests that this represents deliberate orientation, though he does not discount the possibility that the design was influenced by a Laurentine track.¹ An alternative possibility is that the line of the Cardo Maximus south of the Castrum represents the natural and quickest route to the good farming land of Piana Bella.²

While it is clear that the line of the main streets which were to serve the town throughout its history were established before the Sullan walls were built, it has not yet been possible to make sufficient soundings to know how far the secondary streets go back to this early period. The streets on the lines of the inner and outer *pomerium* were certainly formed early and some of them were continued beyond the lines of the Castrum. Thus the Via dei Molini, which represents the outer *pomerium* on the east, was extended in the Semita dei Cippi southwards to meet the Cardo. Similarly the Via della Fortuna Annonaria seems to be a continuation of the outer *pomerium* street south of the Castrum. To the north of the Castrum the outer *pomerium* street, which has been submerged by Hadrianic building, seems to have been continued westwards in a street that was suppressed much earlier, when the sacred area was formed round the temple of Hercules.³

There may also be traces in the later town of much more irregular development during this early phase; for it is difficult otherwise to account for the very odd lines of the area south of the Decumanus opposite the theatre, between the Via degli Augustali and the Via del Sabazeo.⁴ We should expect to see here the rectangular planning of the area to the west and of the area on the opposite north side of the Decumanus, a series of streets at right angles to the Decumanus, joined by streets parallel with the Decumanus. Instead we find a series of awkward kinks in the walls and a tendency towards oblique lines converging in a south-easterly direction in a secondary gate in the walls. It is difficult to believe that this is the result of deliberate planning. The shift of direction in the west wall of the Horrea of Hortensius results in a series of rooms of very uneven size, some of them awkwardly small. The Horrea of Artemis to the west, following the same line with its

¹ J. Bradford, *Ancient Landscapes*, 240.

² The Cardo links directly with the westernmost of five parallel roads across the southern plain (pp. 473 f.).

³ Becatti, *Topografia*, 106.

⁴ Pl. II.

eastern wall, is left with an equally awkward shape. The very narrow second-century A.D. insulae beyond the *horrea* to the west do not look like deliberate planning. These irregularities are most easily explained if they result from uncontrolled private building at an early date, which preceded any attempt to form a coherent street plan for the area.

Most of the second-century walls that have been found seem to come from shops and houses, limited to one or two stories. The streets were not yet relieved by porticoes and some of them at least were very narrow. Traces of a large public building of obscure plan were found on the south side of the Decumanus in what was later to be the Forum,¹ but it seems that in the second century the main emphasis was on utilitarian building to meet an expansion of trade and population.

It is significant that the earliest temples to have survived are later than the Sullan walls, with the possible exception of the temple of Hercules and its two neighbours which might be a little earlier. Since, apart from the Hercules group, seven temples were built on or near the Decumanus before the end of the first century B.C. the contrast is very striking. At Rome many early republican temples retained their form and position long into the Empire: the fact that no temple earlier than the close of the second century has been found at Ostia strongly suggests that the early temples were modest in scale and light in structure. Fragments of painted architectural terra-cottas were found at a pre-Sullan level;² they may have decorated temples built mainly of timber.

Signs of more elaborate architecture and greater prosperity can probably be seen towards the end of the pre-Sullan period. The most outstanding evidence is a group of large houses, based on atrium and peristyle, datable by their *opus incertum* walls to the late second or early first century.³ The house of Jupiter the Thunderer, on the west side of the southern *Cardo*, immediately beyond the Forum, remained a private house until the late Empire. Its peristyle was converted to other use, but the atrium, though adapted to changing tastes, retained its essential form. Of another similar house on the north side of the east end of the *Via della Fortuna Annonaria* a substantial wall and the outline of the peristyle survive through a later transformation of the building.⁴ Remains of a third such house, of approximately the same date, are

¹ Calza, *Topografia*, 71.

³ Becatti, *Topografia*, 107.

² Ibid. 75, tav. xxii; for their date, p. 479.

⁴ Pl. XII a.

incorporated in the Mithraeum of the Painted Walls, on the south side of the Via della Foce. The building of houses with atrium and peristyle was continued through the first century B.C. and into the Julio-Claudian period near the centre of the city, and especially along the eastern side of the western Decumanus.

It may also be possible to identify a warehouse or granary of approximately the same period, the earliest of the *horrea* known to us. On the west side of the Via del Sabazeo, which runs south from the Decumanus some 300 metres west of the Porta Romana, can still be seen the so-called Sabazeum which Vaglieri excavated in 1909.¹ It is clear that the transformation of the room into a shrine is late. The original side walls are faced with *opus incertum* and this room was originally one of a series. The Sabazeum is closed at the east end by a Hadrianic wall in brick and reticulate which runs most of the length of the west side of the Via del Sabazeo: this seems to be a blind wall merely shutting off the buildings to the west. At the points where they meet this wall, traces of pre-Sullan walls can be seen parallel to the side walls of the Sabazeum. This line of deep narrow rooms seems to form part of a single building. West of the Sabazeum there is a corridor and beyond it, though the area is still covered, can be seen traces of further walls in *opus incertum*. It is probable that all these *opus incertum* walls formed part of a large building designed for the bulk storage of goods. It may be significant that the area to the west was later occupied by warehouses.

The temple of Hercules should also perhaps be dated to this phase that shortly precedes the building of the walls. It cannot be earlier than the closing years of the second century B.C. because it uses travertine for its frontal steps and for the two lowest courses of its surrounding stylobate.² The small tufa blocks used in the facing of the cella walls form a less regular pattern than the facing of the Sullan walls, and they are of soft granular tufa, whereas the new walls seem to have established the dominance of the harder tufas. Moreover, the temple is strictly oriented east-west, which sets it at an awkward angle to the Via della Foce and there seems to be no attempt to give the area an architectural framework to disguise the contrast of alignment, perhaps a sign of early date. A close contemporary of the temple of Hercules is the small tetrastyle temple near by to the north-east, which has a podium of very

¹ NS 1909, 20.

² For the introduction of travertine, Tenney Frank, *Roman Buildings of the Republic*, 32; Lugli, *op. cit.* 319-22.

similar profile and uses the same tufa for the facing of its cella. The third temple of the area is rather later, because it intrudes on the lowest step surrounding the temple of Hercules. It follows the line of the Via della Foce and may imply a later attempt to disguise the disharmony of the area.

If we are right in attributing these signs of a more ambitious architecture to a period shortly before the building of the new town walls we may perhaps see in them a reflection of the increased wealth and importance that came to Ostia from the Gracchan law providing for the distribution of cheap corn in Rome and from the wars at the end of the century against Jugurtha and against the Teutoni and Cimbri. To Rome these wars brought military and political crisis, but to Ostia armies fighting in Africa and Gaul meant good business.

Though the general lines of Ostian expansion in the second century can be traced along the main arteries, the extent of the expansion and the density of building remain very obscure. It is probable that expansion proceeded faster in the east than in the west. The area between the eastern Decumanus and the river, which was declared public by the Roman praetor Caninius, extends beyond the later line of the Sullan walls: this whole north-east quarter was presumably important to shippers and traders. The south-eastern district was nearest to the best agricultural land, and one would expect the men who worked in the plain south of Ostia to live there.

In the west the area between the Via della Foce and the river had a natural importance for traders and is likely to have been developed first. The south-western quarter of the town, towards the sea, was the least important in the town's economy and its development was probably much slower. There seems to have been no street running westwards from the western Decumanus until the Via degli Aurighi was opened in the early Empire.¹ Some such street was essential to the satisfactory development of the seaward side of the town. It is a reasonable inference that little importance was attached to the district in the Republic.

The problem of Ostia's westward expansion is complicated by the uncertainty of the line of the sea-shore throughout the Roman period. The line in the late Empire can be traced from the ruins; Tor Boacciana marks approximately the river mouth in the Severan period. If the average rate of coastal advance since attested were applied to the Roman period, the river mouth should have been not far from the Porta

¹ Becatti, *Topografia*, 109.

Romana in the fourth century B.C.¹ The siting of the Castrum shows that such calculations are valueless.

Our evidence suggests rather that there was no substantial change during the Roman period. The line of buildings nearest the sea includes some that are not later than the first half of the second century A.D.; the natural inference is that there was no marked advance of the coastline for the next 300 years. There is even a little evidence that the sea was actually making inroads on the buildings after they had fallen in ruins.² If the sea had been steadily receding we should expect to find some record in literature. No Roman writer mentions it. The pleistocene sands on which the Castrum and the town that developed from it were built provided throughout the Roman period a stable coastline.³

How far and how fast Ostia expanded along the line of the Via della Foce is still uncertain. Meanwhile a negative point should be established. Immediately beyond the so-called imperial palace in the west of the town, near the river bank, a series of deep narrow vaulted rooms have been identified as republican docks.⁴ An inscription of the second century A.D. records the restoration of a 'navale a L. Coilio aedificatum'⁵ and the circumstantial evidence for the association of these rooms with the inscription seemed strong: the archaic form of the name suggested a republican date. From early accounts it seemed that these vaulted rooms ran to the river, and were used to house ships. In 1952 the low level of the river, which normally floods these bramble-covered ruins, gave opportunity for a closer examination. The walls are of mature reticulate, crowned by six courses of bricks from which the barrel-vaults spring. The date is very probably Augustan, and certainly cannot be earlier. Nor did these rooms house ships, for a small-scale excavation showed that they did not extend as far as the river and that on the river side the entrances to the rooms were no larger than standard doorways. This building, probably designed for the storage of goods, provides no evidence for the westward extension of the town in the Republic.

¹ The evidence for the rate of post-Roman coastal advance is tabulated by Le Gall, *Le Tibre*, 22-25.

² Bricks and stones worn smooth by the sea, west of the Piazza del Prospetto. The coastal Via Severiana needed protection from the sea under Maximinus (in 238): 'litus vicinum viae Severianae, adsiduis maris adluentibus fluctibus ad labem ruinae labefactum, aggeribus marini operis a fundamentis, ut periculum commeantibus abesset, extrui curarunt' (*ILS* 489).

³ p. 10.

⁴ Paschetto, 346; Carcopino, *Mélanges*, 31 (1911) 214.

⁵ 2.

Further excavation should throw more light on the westward expansion of Ostia; another important problem may be more difficult to resolve. If we accept only the evidence of permanent walls, there seem to be a large number of areas within the pre-Sullan town that were not occupied. In spite of widespread tests no republican walls were found under the public gardens north of the theatre, nor under the Grandi Horrea. No traces of pre-Sullan occupation were found under the Basilica; the earliest building on what would seem to be an important site at the north end of the western Decumanus, seems to date only from the end of the first century B.C.¹ On the southern Cardo, apart from the House of Jupiter the Thunderer, no second- or early first-century walls have been found.

If all construction at Ostia during the second century was in permanent material, pre-Sullan Ostia was not continuously built up and was probably a very small town. There are, however, indications, direct and indirect, that perishable materials were used on a substantial scale. The direct evidence is meagre. When Paribeni in 1914 excavated the four republican temples on a common platform west of the theatre he concluded that these late republican tufa temples had been preceded on the same site by earlier temples of sun-dried brick resting on light stone walls.² The material below the later podium which led him to this conclusion comprised a large quantity of clay and a scattered deposit of coins and pottery, including fragments of Rhodian amphorae. When recently these foundations were re-examined it was concluded that Paribeni's foundation walls were in fact contemporary with the tufa temples and had possibly served to provide a level surface for the podium. Becatti has also emphasized that the pottery found at the lower level reflects trade rather than cult.³ All conclusions therefore based on the conception that four small temples had been built early in the second century more than 100 metres east of the Castrum must be abandoned. There remain, however, the pottery and the clay. Though there were no temples here the evidence strongly suggests some type of crude brick construction. The only other indication of such construction comes from a still earlier report. In 1912 Vaglieri found at the level of the sand near the Porta Romana a great quantity of clay, roof-tiles, and traces of a timber support; this material he took to be the remains

¹ Becatti, *Topografia*, 110.

² R. Paribeni, *MA* 23 (1914) 443.

³ Becatti, *Topografia*, 105.

of two large huts.¹ It is unfortunate that his account is not more precise and detailed and that no photographs are available, but his report is adequate evidence for timber and clay construction.

It is legitimate also to argue from the analogy of Rome. There the use of sun-dried bricks, *opus latericium*, was widespread until the end of the Republic.² Most of Ostia's soil, unlike the clays round Rome, was predominantly sandy and unsuited to the making of bricks, but the heavier alluvial soil deposited by Tiber floods could have been used, as it was later used for fired bricks. Another early style of construction mentioned by Vitruvius, *opus craticium*, was based primarily on timber.³ The framework was provided by stout beams; the walls were composed of wattle and daub or rubble. This style suited Ostian conditions better, for the district was well wooded. Timber probably remained in use as a main construction material even after concrete had been introduced. Its early importance in Rome is reflected in the terminology of the building trade. Stories remain *contignationes*, even when concrete vaults are common; the builder who is working almost exclusively in brick and tufa is still called the craftsman who shapes the beams, *faber tignarius*.

It is reasonable to infer that light structures in sun-dried brick or timber were common in pre-Sullan Ostia. They could be seen near the centre of the town, but were probably thickest on the outskirts. They included temples as well as commercial premises. The last century of the Republic saw their gradual replacement by more permanent construction.

LATE REPUBLIC AND EARLY EMPIRE

The Sullan walls have not yet been fully excavated, but Calza traced their line by a series of trial pits. The area that they enclose is not a regular rectangle, like the *Castrum*, but the main axis remains east-west. The factors determining the roughly trapezoidal shape are the river and the coastline. In the south-west the wall runs roughly parallel to the coast. Where the coast curves southwards the wall turns to run parallel to the river for 870 metres. From this point it reaches the *Decumanus* in three shorter stretches; north of the *Decumanus* it runs direct to the river.⁴

¹ Vaglieri, NS 1911, 207 f., 259; 1912, 162, 203.

² M. E. Blake, *Ancient Roman Construction in Italy*, 280.

³ Vitruvius ii. 8. 20.

⁴ Calza, *Topografia*, 79; BC 53 (1925) 232.

There were three main gates in the walls—the *Porta Romana*, where the *Decumanus* merged into the *Via Ostiensis*, the *Porta Laurentina* where the southern *Cardo* passed through the wall towards Laurentine territory, and the *Porta Marina* where the western *Decumanus* led to the sea-shore. Between these gates there were secondary gates or posterns of which the clearest example, demanded by street plan and discernible on an air photograph, comes where the *Via del Sabazeo* meets the wall. The main gates were flanked by strong squared towers, and small circular towers were added at the four angles in the walls.¹ A further squared tower was built north of the *Porta Romana* to command the river.²

There remain two problems to be resolved. The line of the wall was traced for 300 metres west of the *Porta Marina*, but its further course could not be discovered. It may have turned towards the river at this point, or proceeded farther towards *Tor Boacciana*, which is 380 metres distant. Until the line is established we shall not know how far the buildings at the west end of the town represent an expansion beyond the Sullan walls. It is also not yet completely certain whether the wall was carried along the river bank, but from Calza's exploration it seems that the riverside was not defended. A continuous wall would have interfered with trade; the fleet should have been able to protect the town from any attack by the river.

The new walls were not accompanied by important modifications of the town plan. The main arteries had already been established. The original form of the *Castrum* had dictated the rectangular street plan of the centre: the irregularity of the south-east side of the town had been due to uncontrolled development and was not corrected. It is, however, possible that the Forum was now laid out to provide a more imposing centre for the town. At some point the republican buildings south of the *Decumanus* were destroyed and the area left free. This step had been taken at the latest when the early Julio-Claudian temple of Rome and Augustus was built at the south end of the Forum, for that temple presupposes an open area in front. If our dating of the *P. Lucilius Gamala* concerned is correct, a Forum already existed under Augustus.³ The building of the new walls provides an appropriate context.⁴

¹ Calza, *Topografia*, 86.

² *Ibid.* 83.

³ *I*³⁴: 'idem tribunal in foro marmoreum fecit.' For the date, Appendix V, p. 493.

⁴ The destruction of the early buildings under the Forum was not immediately followed by the creation of a Forum. At a higher level substantial concrete foundations were

The new buildings of the period between Sulla and Augustus brought interesting improvements in Ostian architecture. The development along the main street fronts of porticoes carried on tufa piers is probably to be dated to the late Republic. Compared with their imperial successors they were small in scale and the earliest served individual buildings rather than large blocks, but they gave a more lively and varied appearance to the streets. There is also evidence of more ambitious architectural compositions. The four Republican temples west of the theatre are small and unpretentious in their decoration; but together they form a coherent group. They were built to a common design on a common platform and surrounded by a large sacred area, enclosed on three sides by a portico, and open to the Decumanus on the south.¹ The original facing of the walls of these temples and of the portico resembles closely the workmanship of the Sullan walls and should be roughly contemporary. It is doubtful whether such a composite plan had been attempted before.

In the second half of the century a large area north of the Decumanus and immediately west of the Porta Romana was also developed to a common plan, which can still be seen in two blocks. The larger block to the west, the so-called Magazzini Repubblicani, has been readapted many times, but its original pattern can be recovered.² A portico supported by tufa piers surrounded rows of shops in reticulate; in the centre of the block, thicker walls supporting an upper floor suggest a building used for industrial purposes. This block is separated from its neighbour to the east by a street: the smaller eastern block repeats the pattern of portico and shops. These two blocks alone survive from the original plan, but sufficient elements were found to show that it extended westwards to two further blocks.³

It may be significant that both the group of republican temples and the blocks near the Porta Romana were built on land declared public by the Roman praetor. On this land between the eastern Decumanus and the river the orderliness of the planning, now and later, is in striking contrast with the irregularity and compromise in many other

found. There was no trace of any superstructure and it has been inferred that the building did not proceed beyond the foundation stage. No firm evidence is available for the date of these foundations, which I have assumed to be pre-Sullan. Becatti argues that the Forum was not created until the temple of Rome and Augustus was built, under Tiberius (*Topografia*, 115; fig. 21).

¹ R. Paribeni, *MA* 23 (1914) 441-84.

² Wilson, *BSR* 13 (1935) 77.

³ Becatti, *Topografia*, 112.

quarters of the town. It may have been much more difficult to acquire large areas for coherent development where the land was private property.

The building of large houses with atrium and peristyle was continued during this period near the centre of the town. On the southern *Cardo* the House of the Mosaic Niche was built next to the House of Jupiter the Thunderer; and, like its neighbour, it was to remain a private house into the late Empire. A much larger house, on the western *Decumanus*, rebuilt during this period, was suppressed in the second century to make way for the *Vicolo di Dioniso* and the new buildings that this small street was designed to serve; but the rebuilding preserves the main form and dimensions of the earlier house.¹ This was the first of a line of such houses which was to spread along the east side of the western *Decumanus*.

Under Augustus important additions were made to the public buildings of the town. The development of the area reserved by Caninius was continued by the building of the theatre with its large colonnaded portico and public gardens. Radical changes were also made in the Forum, where, towards the end of the first century B.C., two temples were built on the north side of the *Decumanus*.² The larger (27×13·75 metres) replaced what was probably a secular public building; its smaller western neighbour may have replaced an earlier temple on the same site. In front of the larger temple are six squared holes lined with reticulate: they may have carried supports for an awning over part of the Forum.³ In the angle between the western *Decumanus* and the *Via della Foce* the public market, the *Macellum*, was restored.⁴

Augustan building does not seem to have involved important modifications in the town plan, but it may have prepared the way for the development of the seaward district. The earliest known buildings outside the *Porta Marina* are two handsome public funerary monuments. One, to the south-east, commemorated C. Cartilius Poplicola, eight times *duovir*; the other, on the west side of the continuation of the *Decumanus* beyond the gate, remains anonymous for no inscription has been found. Both monuments probably date from the early years

¹ *Ibid.* 108. Below, p. 253.

² *Ibid.* 104. For the identification of these temples, p. 352.

³ As suggested by Becatti, *Topografia*, 112.

⁴ Bloch, 67. Though no republican elements can now be seen. *Topografia*, 118, must be mistaken in attributing the original building to the first half of the first century A.D.

of Augustus' principate,¹ and it was probably under Augustus or soon afterwards that the Via degli Aurighi was built, running westwards from the western Decumanus, and providing for the more systematic development of the south-western quarter of the town.²

The increase in the number of public buildings and the replacement of old buildings by new continued through the Julio-Claudian period. Shortly after the death of Augustus a temple of Rome and Augustus was built at the south end of the Forum, directly facing the larger of the two temples at the northern end. The temple cella was approached not from the front, but by stairs from the two sides, possibly, as Becatti has suggested, because the front of the temple was used as a platform for orators or judges.³ The temple was completely dressed in marble and the quality of its architectural decoration can stand comparison with Augustan work in Rome, from which it probably derives.⁴ This was the most elegant building yet seen in Ostia and it improved considerably the monumental character of the Forum. A little later a small temple of Bona Dea was built outside the Porta Marina.⁵

Two large granaries survive from the Julio-Claudian period. The Grandi Horrea of the mid-century added to the rectangular regularity of the area north of the eastern Decumanus.⁶ The Horrea of Hortensius, perhaps a little earlier, were built on the south side of the eastern Decumanus, but the entrance lies opposite a street running from the Decumanus to the river.⁷ The significance of these new *horrea* is uncertain, because no earlier buildings of the kind survive with which to compare them, but, though their plan may not be new, they probably exceeded their predecessors in scale and capacity.

The building of an aqueduct in the early Julio-Claudian period encouraged the development of public baths, which must have been severely restricted while they relied on wells. Remains of a handsome establishment of the mid-century were found under the Via dei Vigili,⁸ another set of baths, partly excavated, remained in use in the south-

¹ Poplicola's monument can be approximately dated by the style of the relief, the lettering of the inscription, and comparison with Poplicola's other inscriptions. The other monument is assumed to be roughly contemporary owing to its liberal use of travertine. For a detailed discussion of the date, *Scavi di Ostia*, iii (1) 169 ff.

² Becatti, *Topografia*, 109.

³ *Ibid.* 115.

⁴ Pl. xxxix a.

⁵ Calza, *NS* 1942, 152.

⁷ Becatti, *Topografia*, 117 f.

⁶ *NS* 1921, 360.

⁸ *NS* 1912, 204.

eastern district,¹ and the original nucleus of the Baths of Invidiosus, which were largely rebuilt in the first half of the second century, also seems to be Julio-Claudian.

THE ARCHITECTURAL REVOLUTION

So far as we can see, though individual buildings were replaced, there was no radical rebuilding of Ostia in the Julio-Claudian and early Flavian period. By the end of the second century Ostia had been transformed. Complete districts had been rebuilt, housing conditions had been revolutionized by the building of tall apartment blocks. New standards in scale and decoration had been applied to public buildings, and throughout the new building the level was sharply raised.

Reasons have already been given for regarding Domitian's principate as the first stage in the more radical transformation of Ostia.² The most important permanent contributions to the town's development were the 'Curia' and the Basilica, facing one another across the Decumanus on the west side of the Forum. The Basilica has suffered more heavily than any other public building in Ostia as a quarry for building material. Travertine foundation blocks as well as columns have been robbed; of the decorative elements very little has survived.³ But the ground plan is clearly visible, showing an impressive scale, and the floor was covered by rectangular panels of Giallo Antico and Italian marble. Opposite the Basilica the 'Curia' had a handsome porch carried on six columns, the hall within had marble lining to its walls and floor.⁴ These two buildings increased the dignity of the town centre. But it is with Trajan and his two successors that the rebuilding of Ostia is primarily associated.

Work of Trajan's principate can be seen in many quarters of the town; it is most conspicuous in the west. Between the Via della Foce and the river, westwards from the Via degli Horrea Epagathiana, the brickwork is predominantly Trajanic. In this quarter the Baths of Buticosus, the large Horrea of the Measurers, the radical reconstruction of the temple of Hercules and the buildings that lie to the north of this temple all date from this period.⁵ The large isolated group of ruins at the far western end of the town by Tor Boacciana, excavated in the nineteenth century, and now partly overgrown, has Trajanic brickstamps.⁶

¹ Reg. v. 10. 3.

⁴ NS 1923, 185.

² p. 64.

⁵ Bloch, *Topografia*, 218 f.

³ Becatti, *BC* 71 (1943-5) 31.

⁶ *Ibid.* 226.

On the south side of the Via della Foce, opposite the Horrea of the Measurers, the large building which occupied the site where the Insula of Serapis was built under Hadrian and which was partly incorporated in the later building is Trajanic;¹ roughly contemporary is a row of shops on the western side of the building and beyond them a modest but well-planned housing estate, the Casette-tipo. Farther west, beyond the Serapeum, large *horrea*, not yet excavated, were probably originally built under Trajan. On the eastern side of the Insula of Serapis, between the Via della Calcara and the western Decumanus, the rebuilding was less radical; but substantial restorations were made under Trajan and some new buildings added, including small *horrea* on the Via degli Aurighi.²

In other quarters of the town Trajanic work is rarer, but it includes a handsomely built group of store-rooms on the Semita dei Cippi³ and at least one further set of baths, the Baths of the Six Columns on the western Decumanus.⁴ More important in the development of the town were the much larger baths south-east of the Porta Marina, by the sea-coast. They have not yet been systematically excavated, but there is reason to believe that they were at least begun under Trajan, and built at the emperor's expense.⁵ Meanwhile at the eastern end of the town there seems to have been little new building.

When Trajan died Ostia was still in a transitional stage. In the west the new brick architecture was making rapid headway. Old temples were being reconstructed in brick and marble to match the growing prosperity of the town. New baths, small and large, had been built. But a visitor from Rome walking from the Porta Romana along the Decumanus to the Forum would have found the eastern half of Ostia old-fashioned. Along the line of the eastern Decumanus the buildings were still mainly Julio-Claudian or earlier; there was more reticulate than brick to be seen. The Forum had been enhanced by the new Basilica, but so long as the two late republican temples on the north side of the Decumanus retained their place the area would remain too

¹ Bloch, *Bolli laterizi*, 202; Pl. xl d.

² Bloch, *Topografia*, 222 (iii. 2. 6).

³ No brickstamps recorded. Becatti (*Topografia*, 134) dates to Hadrian. The width of the bricks (averaging 3.7 cm.) and the dominance of brick in the combination of brick with reticulate favour a Trajanic date. The large bakery near by was also probably originally built under Trajan and there are further traces of Trajanic work on both sides of this street, incorporated in later building.

⁴ Bloch, *Topografia*, 226 (iv. 5. 11).

⁵ p. 407.

restricted to allow an imposing centre to the town. The new domestic architecture was providing apartment blocks for an increasing population, but the independent atrium house still held its own near the centre, particularly along the western Decumanus.

Hadrian's principate marks the decisive stage in Ostia's transformation. More than half the buildings that can now be seen date from this period and they are spread throughout the town. The piecemeal development of individual blocks was accompanied by the replanning of large areas. The two main streets assumed a new dignity, emphasized by continuous porticoes in brick; the Forum became a more fitting centre by the remodelling of its northern end. The building of tall apartment blocks was continued on a more intensive scale, and before their advance most of the independent atrium houses were swept away. Public baths increased in number and scale. New temples were built. Hadrianic work at Ostia is seen at its best in two large areas that were completely replanned. The first stretches from the Forum to the river and from the *Cardo Maximus* to the *Via degli Horrea Epagathiana*. The consistency of the brickstamps and the uniformity in the style of construction show that this area was rebuilt to a single master plan.¹ Only two of the new buildings incorporated earlier walls. The south wall of the *Piccolo Mercato* uses a stretch of the northern wall of the *Castrum*; the building to its west uses in its eastern wall an older wall of tufa blocks. All else was destroyed.

The northern stretch of the *Cardo Maximus* was an important highway. Emperors and other distinguished visitors coming to Ostia by river from Rome or arriving from overseas would naturally land at the quayside where the *Cardo* reached the river, and so proceed to the Forum. The street was now widened and made more impressive by continuous porticoes in brick on either side. Off the porticoes opened shops, with apartments above them, approached independently by solid stairs from the street. A narrow archway across the *Cardo* closed the northern entrance of the Forum to wheeled traffic.

The subsidiary streets in this newly planned area were similarly lined with shops, carrying apartments above them. Behind them were utilitarian buildings serving the needs of trade. The function of the *Piccolo Mercato* is uncertain.² Its series of twenty-seven large rooms surrounding an open court were probably used for the storage of goods. The

¹ Carcopino, *Mélanges*, 30 (1910) 397; Bloch, *Bolli laterizi*, 87.

² Paschetto, 310.

construction of ramps rather than stairs to the first floor suggests that the rooms on this floor also were used for storage. The building to the west is very similar in plan, but the raised floors of its rooms show that it was used for the storage of corn. On the opposite side of the street to the south is an entrance framed by brick pilasters; above it are inset a modius and a measurer's rod in terra-cotta.¹ The building into which this entrance leads has been largely lost by the erosion of the river, but the emblems of the corn measurers suggest another granary.

With the replanning of this large area was logically connected the transformation of the Forum. The republican temples at the north end would have been dwarfed by the new tall brick buildings. They were now destroyed and replaced by a single temple standing back from the Decumanus. To dominate the new buildings this temple, the Capitolium, was raised on a high platform, giving it a total height from the ground of some seventy feet. In front of the Capitolium a sacred area was reserved, extending the free area of the Forum; it was lined on either side by colonnades. Further changes were made south of the Decumanus, probably later in the reign. Two monumental arches, built on either side of the temple of Rome and Augustus, closed the Forum at its southern end; new porticoes framed it on east and west.

The brickstamps of the area north of the Forum show that this Hadrianic plan, including the Capitolium, was carried out at the beginning of the reign. The second comprehensive plan was developed in Hadrian's last years, and was probably not completed when he died. In the first plan brick and reticulate were used in combination except in the Capitolium, an all-brick construction. The second was carried out entirely in brick, and this remained the standard practice for the remainder of the century. The association of reticulate with brick in wall facing had probably been a measure of economy. It is likely that the tremendous expansion of the brick industry under Hadrian had lowered the cost of bricks enough to make brick facing cheaper than reticulate.

The area that was replanned towards the end of Hadrian's reign lies to the east of the theatre. It stretches southwards from the Decumanus, eastwards from the Via delle Corporazioni.² Its northern limit is probably marked by the Via della Fullonica and it extended at least a block eastwards from the Via dei Vigiles.³ At the heart of the plan are two

¹ Paschetto, 314.

² Bloch, *Bolli laterizi*, 222.

³ This area is only partly excavated.

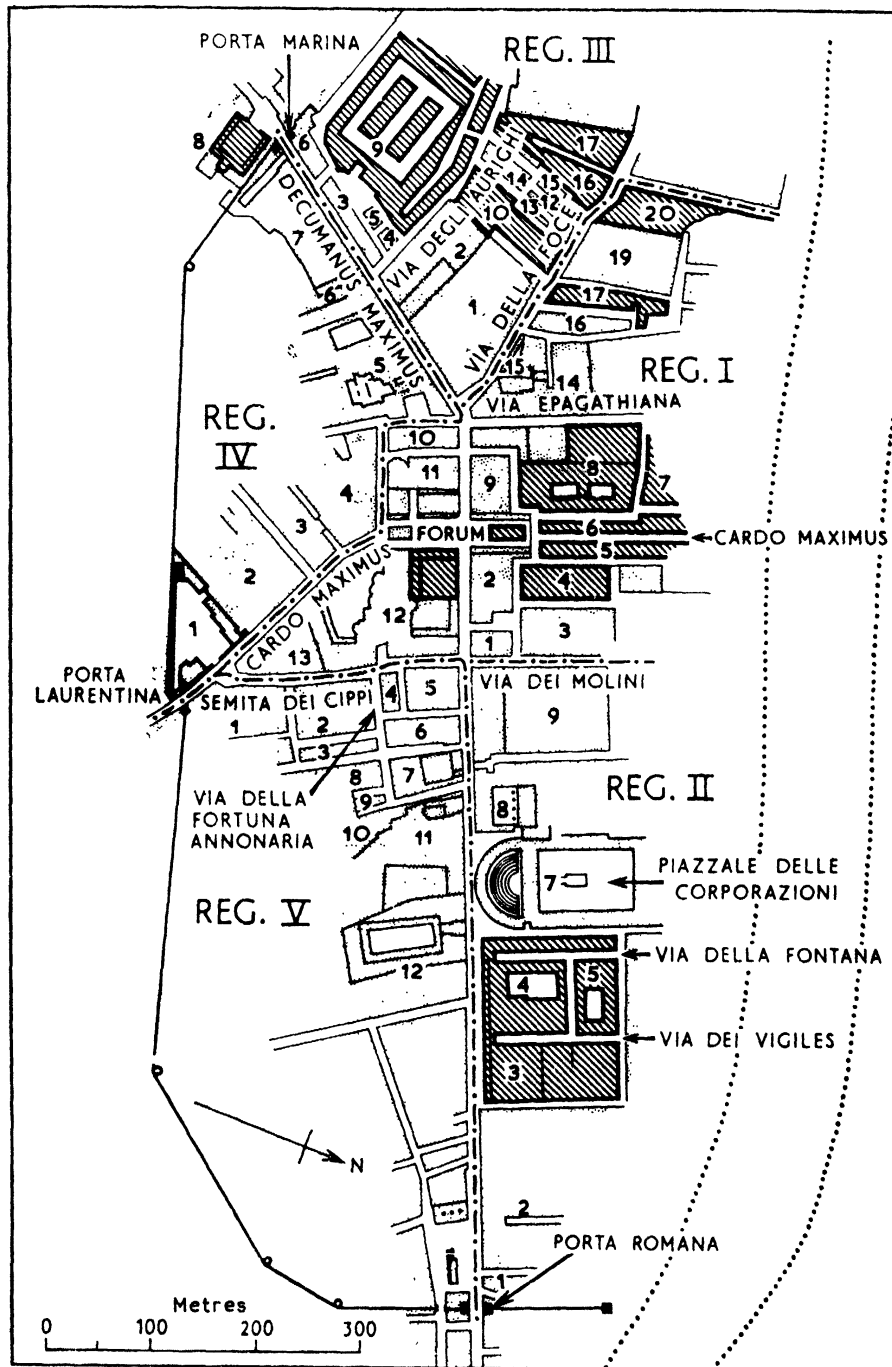


FIG. 2. Hadrianic building. I. 4: House of the Paintings, &c. I. 5 and 6: Shops and apartments. I. 7: Granary. I. 8: Piccolo Mercato and granary. I. 12: House of the Triclinia. I. 17: Baths of Mithras, shops &c. I. 20: Partly excavated *horrea* or market. II. 4: Baths of Neptune. II. 5: Barracks of Vigiles. II. 6: Shops and apartments. III. 9: Garden Houses. III. 10: Insulae of Serapis and of the Charioteers. III. 16: Baths of Trinacria. III. 17: Temple of Serapis, *horrea*, &c. IV. 1: Cybele and her associates. Forum: Capitolium.

large public buildings. Behind a frontage of shops on the Decumanus were built the Baths of Neptune, financed by Hadrian and completed by a further grant from his successor Antoninus Pius.¹ To the north, separated by a street from the baths, were built barracks for a detachment of the *vigiles* from Rome. To the west of these two buildings was a narrow block of shops and apartments: to the east a row of apartments on the Via dei Vigili, and behind them buildings probably serving commercial purposes. Along the Decumanus, as earlier on the Cardo, a continuous brick portico gave added dignity to the street.

Since the baths were financed by the emperor and the barracks were built for the imperial fire service it is probable that the replanning of the area which included them was initiated by or on behalf of the emperor. The replanning of the area north of the Forum may also have derived from imperial initiative, for the best use of the land near the river was a matter which concerned Rome no less than Ostia. This might in part account for the comprehensiveness of the two plans. Meanwhile, the Ostian builders were extremely busy in other parts of the town.

Under Hadrian the rebuilding of the district north of the Via della Foce and westwards from the Via degli Horrea Epagathiana was continued. To the many Trajanic buildings were added the Baths of Mithras and the rest of the block of which they form part,² and, at the far end of the excavated area, on the north side of the Via della Foce, a long building only partially excavated, with massive vaults.³ Its full dimensions cannot yet be seen, but it bears a striking resemblance to Trajan's closed market above his Forum at Rome. On the south side of the Via della Foce the Insula of Serapis, one of the largest apartment blocks of the town, was built round an open court distinguished by the exceptional height of the brick piers of its surrounding portico. It was balanced to the south by the Insula of the Charioteers which repeats the same basic plan. Between the two blocks a set of baths was installed for the convenience of the tenants, perhaps also open to the public. The Insula of the Charioteers may not have been built until the principate of Antoninus Pius but the two blocks seem to be designed as parts of a single composition.⁴

¹ 98. For the identification, p. 409.

² Bloch, *Topografia*, 219 (i. 17. 2).

³ Becatti, *Topografia*, 138.

⁴ Bloch, *Bolli laterizi*, 202 f. The brickstamps of the Insula of Serapis are homogeneous (apart from a small Trajanic enclave) and point to a mid-Hadrianic date. A considerable number of stamps from the early years of Antoninus Pius were found among the ruins of the Insula of the Charioteers. Bloch concludes that there was an interval of at least ten

In the same district, west of the Casette-tipo, another new Hadrianic quarter was built, on either side of the Via della Trinacria which runs southward from the Via della Foce.¹ On the east side are public baths; on the west shops, houses, and the temple of Serapis. The Fasti record the building of the temple in A.D. 127; the building is identified by inscriptions and by brickstamps of the years 123-6.²

Along the eastern side of the western Decumanus the series of atrium and peristyle houses which had been built in the late Republic and early Principate had mostly been destroyed by the end of Hadrian's reign to be replaced by taller buildings that made more economic use of the space. Even the rich were moving into apartments as we can see in the residential area that was developed under Hadrian south of the *Cardo degli Aurighi*. This quarter of the town, far removed from the busy traffic of the riverside and within easy reach of the sea, must have been one of the most attractive for men of means. The enterprising owners who were responsible for the development invested in apartments and not in independent homes.

The architect of the development plan had a large, irregular, roughly trapezoidal area at his disposal; he reduced it to order with considerable skill.³ At the centre of his composition were two long apartment blocks, each divided on the ground floor into four symmetrical flats. Independent stairs led to upper floors where the same plan was presumably repeated. These flats had no shops on their frontage but looked out on to gardens. Flats and gardens formed an inner rectangle, which was reconciled with the irregular shape of the building area in the varying depths of the buildings that surrounded the gardens. On the eastern side further apartment blocks were built, offering attractive residences. The House of the Muses at the north-east corner has twelve elegant rooms on its ground floor, and the House of the Dioscuri at the south-east corner, when later remodelled, was the most imposing house in the town. In this large architectural composition all the individual apartments are large; paintings and mosaics show careful workmanship.

years between the building of the two blocks. This is not certain. The two blocks, together with the baths between them, seem to form a coherent plan. Substantial modifications were made to the western wing of the *Insula of the Charioteers* not long after its completion. The Antonine stamps might come from these modifications. The blocks described, *Calza, Palladio*, 5 (1941) 8.

¹ Becatti, *Topografia*, 138.

² Bloch, *Topografia*, 225 (iii. 17. 4). A fuller discussion by Bloch will be published in *AJA* 1959.

³ Pl. II e.

The owners undoubtedly expected high rents, but when population and prosperity decreased such properties may have become a liability.

Hadrian's principate also saw further modernization near the centre of the town. The brick-built 'Curia', opposite the Basilica, had replaced a reticulate building that was probably Augustan,¹ and must have presented a sharp contrast with its more old-fashioned neighbours in the block. These were one by one pulled down and replaced by Hadrianic buildings, but the irregular lines of the old building lots were retained.² The balancing block on the east side of the Forum was similarly rebuilt. Here the work may have begun under Trajan, but most of the buildings in the block are Hadrianic.³ Opposite, on the south side of the Decumanus, next to the Forum, the large House of the Triclinia, built round an open courtyard, has early Hadrianic brickstamps.⁴ Towards the middle of the reign the rebuilding of the area north of the Forum was extended by a block of apartments and commercial premises to the east.⁵

On the south side of the eastern Decumanus, east of the *Semita dei Cippi*, the long narrow block of apartments and shops which includes the House of Themistokles⁶ was built under Hadrian, but no attempt was made to impose a new and more satisfactory plan on this area.⁷ A more drastic treatment could have considerably improved the town.

Important changes were also made under Hadrian by the *Porta Marina* and the *Porta Laurentina*. Outside the *Porta Marina* and east of the gate is a large open square surrounded by a portico with an *exedra* at the eastern end; the brickwork associated here with reticulate is typically Hadrianic. On the sea-front itself fragments of columns remain from another small Hadrianic square, the *Piazza del Prospetto*. To the public funerary monument of C. Cartilius Poplicola was added a *loggia* in brick.⁸ These improvements by the sea-coast, together with the new public baths near by, remind us that Ostia was not exclusively a trading city, but was making the most of the natural attractions of the sea.

By the *Porta Laurentina* a large triangular area was reserved for the cult of Cybele.⁹ In front of her small temple was the ceremonial field of the Great Mother, where bulls were sacrificed in her honour. Within

¹ Becatti, *Topografia*, 105.

² NS 1923, 177.

³ NS 1916, 399.

⁴ Bloch *Topografia*, 217 (i. 12. 1).

⁵ *Ibid.* 216 (i. 4. 2-4).

⁶ Reg. v. 11, 2.

⁷ p. 122.

⁸ Bloch, *Topografia*, 227 (iv. 9. 1).

⁹ p. 357. The date is not certain.

the area were also temples of Attis and Bellona and the headquarters of the guilds which administered the cults. The ample provision of open spaces by these two gates compensated in some degree for the intensive development of the rest of the town.

As population increased and the value of land rose the temptation to leave open spaces in the busier parts of the town was easily resisted. When the four temples on a common platform west of the theatre were built in the late Republic they were surrounded by a large open area enclosed on three sides by a colonnade. In the early Principate, buildings, probably shops, had invaded a large part of the free area. Similarly there had once been a considerable open space between the Via di Diana and the Decumanus, the Piazza dei Lari;¹ in Hadrian's principate buildings encroached on every side. The public gardens, however, behind the theatre were retained, a welcome oasis in an increasingly congested town.

By the time of Hadrian's death Ostia had become a modern city. Her wide main streets with their continuous porticoes and tall apartment blocks could stand comparison with those of Rome. Her new Capitolium provided a fitting architectural focus to the centre of the town. Her amenities had been improved by the sharp increase in the number of her public baths and the increasing emphasis on the seaward side of the town. The main lines of development had been laid down. There were, however, still many buildings which could be usefully replaced.

The street plan was to remain virtually unchanged for the rest of the Roman period. It does not present a tidy mathematical picture. The chequer-board pattern which we expect to find in Roman towns can be seen in the centre of the town, where it is inherited from the fourth-century Castrum, and in the area east of the Forum, between Decumanus and river, which had been reserved as public land in the Gracchan period. The opposite side of the Decumanus still preserved its oblique lines and awkward shapes, deriving from uncontrolled development in the pre-Sullan period. In the west of the town the main arteries, the Via della Foce and the western Decumanus, were deliberately planned. Practical needs dictated the development north of the Via della Foce: the main streets run at right angles to the river. South of the Via della Foce development had been more irregular. In some districts on this side Trajan and Hadrian imposed order, but the large area between the

¹ NS 1916, 411.

Via della Calcara and the western Decumanus remained a formless conglomeration of buildings.

The commercial activity of Ostia was mainly concentrated in the north of the town, between the eastern Decumanus and river and, in the west, between the Via della Foce and river. It is in these areas that most of the buildings for storing corn and other bulky goods are found, and the barracks of the *vigiles*, who were responsible for fighting fires. But utilitarian premises were not as concentrated as in a modern dock quarter. Public baths, shops, and apartments were liberally dispersed among the *horrea*: the important traders' exchange in the Piazzale delle Corporazioni was associated with the theatre.

The southern half of the town was more restricted, but the complete separation of residential from commercial and industrial areas was not the Roman pattern. In Ostia shops lined almost all the streets and even large independent houses were not ashamed to use their street fronts for the purpose. Industry was confined to small establishments and normally the producer sold his goods in the shop where they were made. There may have been social distinctions between different districts, but they are not very apparent. In the south-west district developed under Hadrian, the so-called Garden Houses, the apartments seem to be fairly homogeneous and designed for men of means, but normally rich and poor seem to be content to live close together, and no district that can reasonably be called a slum has yet been found.

Trade, religion, and recreation all profited from the great building activity under Trajan and Hadrian; but the tall apartment blocks were its most striking feature. They successfully solved the problem of accommodating a rapidly expanding population without a lowering of living standards, and their plain brick surfaces, relieved by rows of well-proportioned windows, provided an effective contrast to the marble of temples and other public buildings.

The concentration of a large population in a restricted area might have brought conditions as unhealthy as those which accompanied the first urban developments of the industrial revolution in Britain if due attention had not been paid to the prosaic problems of sanitation. In 1842 a Commission appointed to consider ways and means of improving the health of London included in their report a detailed description, with plans, of the sanitary arrangements in the Roman Colosseum and the amphitheatre of Verona.¹ This they did, not because the Roman

¹ Metropolitan Sanitary Commission (*First Report*, 1847) 135-9.

system was of interest to the antiquarian, but because it had much to teach the architects and builders of their day. Had they been able to study and report on the domestic architecture of Ostia they would have done even more useful service. For throughout the new building the necessity of good drainage was never neglected. In the tall buildings large pipes were provided to carry down the waste from the upper floors; small drains led from the blocks to the main drains under the streets, which ran in a gentle slope to the river. This system of drainage no doubt ruined the bathing prospects of the river, but a river port was no place for swimming and the sea was near at hand. The river current was swift enough to carry the refuse away. Wheeling flocks of seagulls must have been a familiar sight at the river's mouth.

The distribution of public latrines is, at first sight, less generous than might be expected. Of the three clear examples that survive one only can be dated as early as the second century; it is near the river on the east side of the Via della Fortuna, which runs parallel to and west of the northern *Cardo*. The handsome establishment behind the builders' guild house near the Forum replaces two Hadrianic shops and was probably installed when the Forum Baths were restored in the late fourth century.¹ The third was built behind a nymphaeum at the south end of the Forum. Inscribed tombstones are used for seats; the workmanship is very shoddy; it probably dates from the fifth century. This apparent scarcity of facilities in the hey-day of the Empire can, however, be understood if the latrines of public baths were also available. Most of them were placed near the street; they were probably used by the general public as well as by the users of the baths. The lack of privacy in these 'comfort stations' does not appeal to modern taste, but we can respect the provision of running water which carried the refuse away into main drains. Even less privacy was given to urinals. Large *dolia* were sunk in the ground beside streets, or stood in passage-ways or near the entrance of shops.

Water could not have been freely provided for latrines in the Republic when the town relied on wells, but in the early Empire an aqueduct had been built. A line of brick piers, perhaps of Severan date, shows where the aqueduct met the town wall, some 120 metres south of the Porta Romana. The water was carried from a distributing centre by the wall across the Piazza della Vittoria and along the *Decumanus* in a massive lead pipe. This can be seen at various points along the north

¹ Pl. IX b.

side of the street with the stamp which confirms public control 'colonnorum coloniae Ostiense'.¹ Smaller pipes carried the supply into public buildings and into public cisterns on the streets, from which tenants of many of the large blocks drew their water. Some houses also had their own supply and the pipes that led to them were stamped with the owner's name. The consumption of water must have risen sharply in the second century, especially with the increase in the number of public baths, and the capacity of the aqueduct was overstrained. To supplement supplies in the baths water-wheels were installed to fill the cisterns from the subsoil;² in many private houses wells were still retained.

Hadrian's death seems to mark the end of large-scale replanning; new building continues under Antoninus Pius, but on a less extensive scale. The Hadrianic rebuilding of the area which includes the Baths of Neptune and the Barracks of the Vigiles was completed, and perhaps developed eastwards. A continuous portico in brick had been built along the Decumanus frontage of the new Hadrianic blocks. To balance it a similar portico was built on the opposite side of the street from the Via del Sabazeo to the Piazza della Vittoria. This portico has brick-stamps of Antoninus Pius' reign.³

The dignity of the town centre was increased by the building of a new set of public baths south-east of the Forum. They were the largest and most richly appointed in the town and the curving line of their southward-facing rooms contrasted attractively with the straightforward rectilinear planning that had hitherto dominated Ostian architecture. Associated with the plan of the baths was a small triangular palaestra on the south side, surrounded by a colonnade. The free area of the Forum, even after the Hadrianic remodelling, was small for Ostia's increasing population. The addition of further open space near by, however small, was valuable.

The Forum Baths and other buildings of this reign make it one of the most interesting periods in the architectural history of Ostia. The curving line is again prominent in the Schola del Traiano on the western Decumanus, probably a guild headquarters, built near the middle of the century.⁴ Through an apsidal hall on the street one passes to a long open courtyard or garden with a nymphaeum running down the

¹ S 5309².

² The clearest traces of such water-wheels can be seen in the Baths of Mithras and in the Forum Baths; few sets of Ostian baths are without them.

³ Bloch, *Topografia*, 227 (v. 14 and 15).

⁴ Becatti, *Topografia*, 146.

whole length in the centre and a series of rooms at the far end. The shape of the hall and the length of the nymphaeum are highly original features. The House of Diana, roughly contemporary, makes more economic use of the space available than any other large building in Ostia.¹ The Horrea Epagathiana et Epaphroditiana combine utility and elegance to a remarkable degree.² The so-called 'Imperial Palace' includes baths, courts, and apartments on a scale not previously seen in Ostia.³ Some of the less ambitious blocks of apartments, such as the House of the Sun, were also probably built in this reign, but none are yet securely dated by brickstamps, and it is not easy to distinguish late Hadrianic construction from what immediately follows. The House of Fortuna Annonaria, built for a single family round a garden court, seems like a gracious protest against the new tall blocks.⁴

Under the emperors who followed in the second half of the century the rhythm of expansion slowed down. Typical lines of shops with apartments above them continued the familiar pattern, as on the Via del Tempio Rotondo, south-west of the Forum; at the angle of the Via degli Horrea Epagathiana and Via della Foce; on the south side of the eastern Decumanus between the theatre and the Via degli Augustali, and the long line of the Caseggiato dell' Ercole on the western Decumanus.

More conspicuous and important were the changes in the area between the eastern Decumanus and the river. Even after the rebuilding under Hadrian and Antoninus Pius much remained here from the early Principate. It was probably under Commodus that the Julio-Claudian Grandi Horrea were completely rebuilt, to provide increased storage capacity by a higher building;⁵ at approximately the same time another large granary was built to the east of the area replanned under Hadrian.⁶ The Augustan theatre, rebuilt to provide increased accommodation, was dedicated at the beginning of Septimius Severus' reign.⁷

Two new temples were built during this period, and both were probably associated with guilds. The earlier, on the southern side of the eastern Decumanus near the theatre, cannot be identified. Inscriptions suggest that the second, on the western Decumanus, was built and maintained by the shipbuilders.⁸ The handsome social headquarters of

¹ NS 1914, 244.

² NS 1940, 32.

³ Paschetto, 407; Becatti, *Topografia*, 147.

⁴ Becatti, *Case Ostiensi del tardo impero*, 23.

⁵ NS 1921, 381.

⁶ Becatti, *Topografia*, 143.

⁷ 114.

⁸ p 327.

the *seviri Augustales*, on the eastern Decumanus, probably dates from the reign of Marcus Aurelius.¹

THE SEVERAN PERIOD AND AFTER

The work of the early Severan period seems to be mainly confined to restorations, in *horrea*, baths, and in the Barracks of the Vigiles. The only new building of note so far known is a richly furnished set of baths on the line of the Sullan walls west of Porta Marina;² but we should probably add the semicircular 'emporium' reported at the west end of the town.³ It is a surprise, after what seems to be a period of comparative sterility, to find one of the boldest and most interesting buildings in the town being erected towards the end of the Severan period or soon after. This round temple, on the west side of the Basilica, had a handsome pronaos supported on ten columns, and a large fore-court; early reports show that it was richly dressed in marble.⁴ With it was rebuilt a small area to the west.

The Round Temple is the latest important building in the excavated area. The centre of gravity was by now shifting away from the river towards the sea coast. No new *horrea* can be seen and there are no signs of major late restorations in the old. But excavation has not yet extended to the western end of the town; it may be found that in the late Empire the shrinking volume of shipping was concentrated by the western quays.

The building of the late third and fourth centuries that can still be seen is more concerned with amenity than with the needs of trade. Public baths were kept in repair, and their number even increased. Fourth-century restorations can be seen in the Forum Baths and in the Baths of Neptune, and are recorded in an inscription from the Maritime Baths.⁵ Two new sets were added, one on the Via della Foce, the other behind the House of Jupiter the Thunderer. Both are predominantly curvilinear in plan, in keeping with late-Empire taste. Towards the end of the century the theatre was adapted for the presentation of spectacles on water.⁶ New public fountains and nymphaea were added.

Space was less precious within the city in the late Empire. The Piazza della Vittoria, the large open area at the entrance to the town

¹ Bloch, *Topografia*, 227 (v. 7. 2); below, p. 220.

² Paschetto, 304; for the date, Bloch, *Topografia*, 222 f. (iii. 8. 2).

³ p. 80.

⁴ Paschetto, 300.

⁵ 137.

⁶ p. 424.

inside the Porta Romana, is a late creation. Part of this area at least was once covered by buildings, and some of the walls that were destroyed were not earlier than the second century.¹ The dominant feature in this piazza is a long fountain against which is a strongly constructed wall, probably designed as a base for statues. Fountains and wall are faced with alternating courses of brick and tufa blocks. The workmanship is good; it probably dates from the third century.

Similarly an open square was cleared on the south side of the eastern Decumanus a little east of the Forum. When the Forum Baths were built the area between them and the Decumanus was occupied by a set of baths built under Hadrian.² These buildings were destroyed and the area left free. Colonnades framed the new square on east and west, and a brick portico provided its frontage on the Decumanus; in the centre of the square was set up a heroic statue. The shoddy character of the brickwork and the poorly assorted character of the old material reused suggest a date towards the end of the fourth century.

In domestic architecture the emphasis shifts back to the independent house. While the big apartment blocks show very little sign of late restoration and some were even allowed to fall into ruin, independent houses were maintained and new were built in the late third and through the fourth century.³ These late houses are widely distributed, but the south and south-west districts remained the most popular for men of means.

Though the main lines of Ostia's development can already be approximately traced, there remain serious gaps in our knowledge, and not all of them can be filled by further excavation. The outline of the early history of the town will never be more than tentative, owing to the limits imposed on excavation below the imperial level, and the possibly widespread use of perishable materials; but it should be possible to trace the main stages of expansion to the west and south-west which at present can only be guessed. The important area on the river bank in the eastern half of the town, which was probably the main dock area in the early and middle Republic, will have been largely destroyed by the river, but there has been little change in the river course west of the Forum, and the exploration of this area should answer important questions. The partly excavated market on the Via della Foce is perhaps

¹ NS 1910, 251, 374.

² Becatti, *Topografia*, 159; this area has not been thoroughly explored.

³ Becatti, *Case Ostiensi del tardo impero* (Roma, 1949).

the most impressive commercial building in the town, and farther to the west lies the semicircular 'emporium', which, according to early accounts, was a building of interesting design and large proportions. It may be found that, as the eastern end of the docks sank into neglect, the western end was kept in good repair. We may also expect to find a larger proportion of late construction along the line of the coast.

Of the south-eastern area of the town little is known. The earth cover is much lower here, suggesting that the buildings were lower, but it will be interesting to find out whether this was primarily a residential area, and whether the independent house held its own against the apartment block. The right bank of the river also remains unexplored; there are no reports of discoveries in this area, nor has account yet been taken of it. But even a casual stroll through the fields shows, as one might expect, that buildings lined the river on this side. Through a hole in the ground I have seen second-century walls still standing to a height of some 4 metres, and along the edges of fields are tell-tale piles of Roman brick and sherds of coarse pottery. But the built-up area on this side was not deep. The contour of the ground falls sharply some hundred metres from the river. Behind these buildings the land of Isola Sacra was probably reserved for market gardens.

8

PORTUS

THE history of the imperial harbours and the settlement that grew up around them cannot be studied in such detail as Ostia town because no part of the area has been systematically excavated. The scale of the harbours and of the ruins around them attracted antiquarians from the fifteenth century onwards. The earliest description preserved records the visit of Pius II in 1461;¹ the earliest plan is by Giuliano da Sangallo, between 1485 and 1514. But there is little precise detail in the early descriptions and the plans represent wishful thinking rather than a record of what could still be seen. None had greater influence than Ligorio's handsome reconstruction of 1554, but to make a convincing picture Ligorio drew heavily on his imagination. Some of his successors were considerably more restrained, but their plans are suspiciously schematic and none has stood the test of detailed investigation.² Not until the nineteenth century was the relative orientation of the harbours of Trajan and Claudius clearly shown; earlier plans set the two harbours on the same axis, though it is still clear on the ground that the outer harbour of Claudius lies to the north-west of the inner basin. The reproduction of the Claudian harbour on Nero's bronze coinage has also bedevilled crucial problems. It has clearly influenced both descriptions and plans, but, as will be seen, the nature and value of its evidence is far from clear.

There can never have been any serious doubt concerning the shape and size of Trajan's inner basin, but it is doubtful whether, even as early as the sixteenth century, an accurate plan could have been made of the Claudian harbour from what could be seen above ground. From the Renaissance onwards the history of the site of Portus runs for a long time parallel to that of Ostia. The ruins were exploited for building material and for the recovery of works of art. But the evidence for the excavations of the late eighteenth and early nineteenth century is even more meagre than at Ostia.

¹ The account quoted, A. Nibby, *Analisi de' dintorni di Roma*² (1848) 634.

² For the series of Portus maps, G. Lugli, 'Una pianta inedita del porto Ostiense', *Rend. Pont.* 23-24 (1947-9) 187.

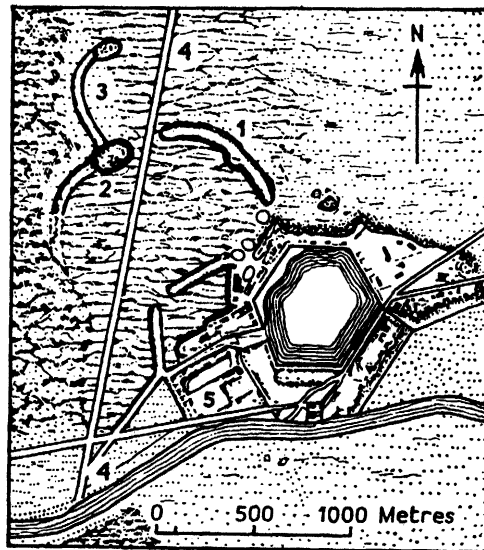


FIG. 3. Existing state, 1829, as seen by Canina. 1. Monte Giulio (right mole). 2. Monte dell' Arena (assumed to mark the site of the lighthouse). 3. Mole added in late Empire (p. 170). 4. Fronzino canal. 5. 'Darsena', basin for rowing-boats (p. 160).

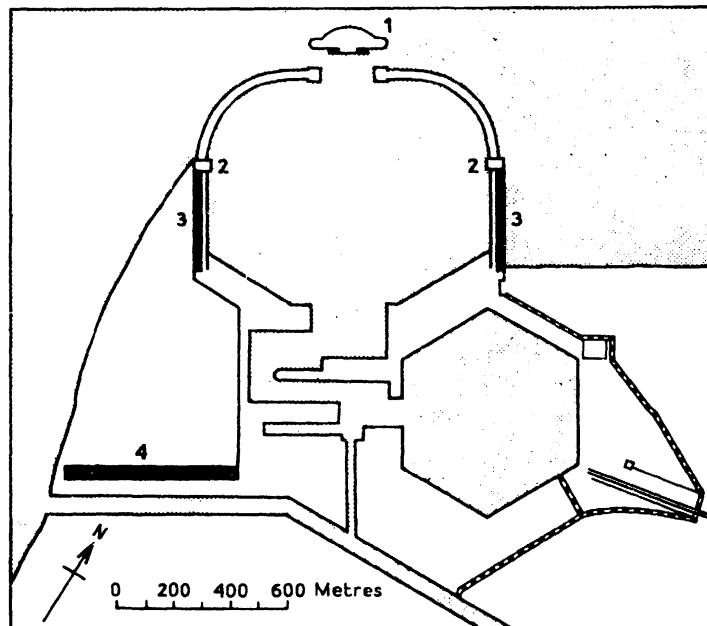


FIG. 4. Plan restored, 1858, by Texier, *Mémoire sur les ports antiques situés à l'embouchure du Tibre*. Details of buildings round Trajan's harbour (schematic) are omitted. 1. Island with lighthouse. 2. Balancing arches on moles (p. 159). 3. Texier assumes buildings on both moles up to the arches, but none on their seaward side. 4. Porticus Placidiana (p. 169). See also key to Fig. 3.

What little we know of them is due to Fea, who published in 1824 his valuable gleanings on the site,¹ and to Nibby, who in 1837 included

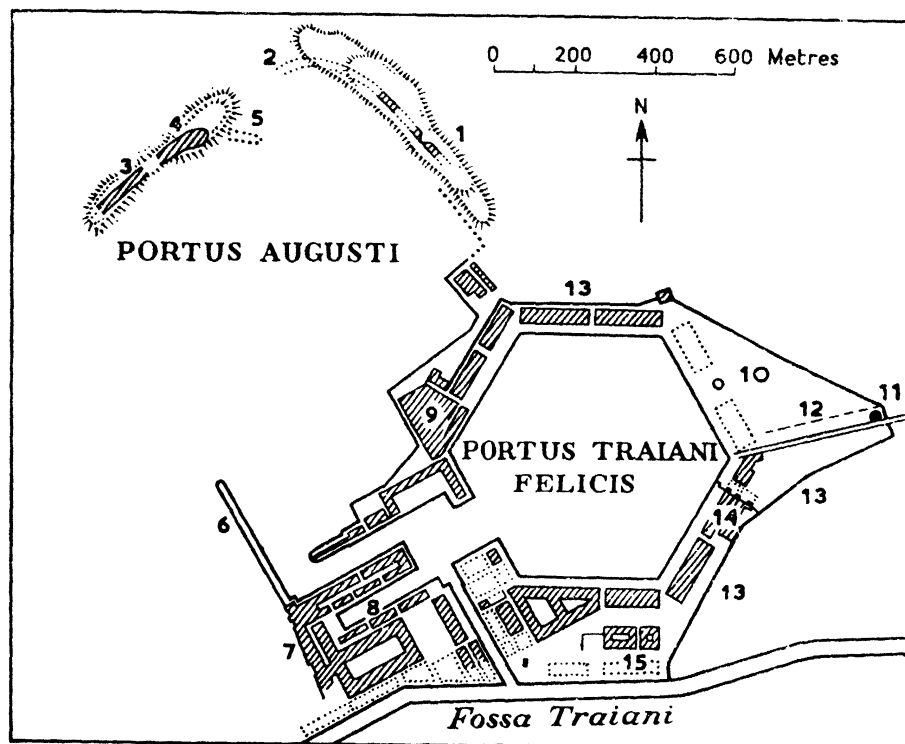


FIG. 5. Modern evidence. Adapted from the plan by Italo Gismondi (1935), reproduced in *Rend. Pont.* 23-24 (1947-9) 195; with additions. 1. Buildings partly excavated by Lugli on right mole (p. 158). 2. Turning-point of right mole towards entrance, traced by Carcopino (NS 1907, 735). 3. Parts of left mole, traced by Lugli (p. 155). 4. Widening of left mole from c. 50 ft. to c. 75 ft., revealed in 1957 (Pl. XIX). 5. Wall, c. 15 ft. wide, first discovered by Carcopino (NS 1907, 736) and thought to be a late addition, at an angle to the left mole. Revealed in 1957 to be the termination of the left mole, almost certainly Claudian (p. 157). It is faced with well-coursed tufa bricks, excellently preserved. 6. Late Empire mole (p. 170). 7. Claudian portico (p. 160). 8. Darsena. 9. 'Imperial Palace' (pp. 163-5). 10. Temple of Liber Pater. 11. Temple of 'Portumnus'. 12. Aqueduct. 13. 'Constantinian walls'. 14. Defensive cross-wall (p. 170). 15. Tower shown in Pl. XXI b.

with his history and description of the ruins valuable information concerning what had come to light in his day.² Later excavations also followed a different pattern from those at Ostia. When Visconti excavated at Ostia for the Pope between 1855 and 1869 accounts and plans were

¹ C. Fea, *Viaggio ad Ostia* (1802) 30-39.

² A. Nibby, *Della Via Portuense e dell' antica città di Porto* (Roma, 1827), incorporated in *Analisi de' dintorni di Roma*, here cited in the 1848 edition as 'Nibby'.

published and the study of the town's history was steadily advanced. When at Portus substantial excavations were undertaken between 1864 and 1867 the contemporary record is virtually confined to a list of sculpture found. Lanciani visiting the site shortly afterwards found the ruins covered again, and, though local workers could give him a general impression of what had been seen, the information was inadequate to provide the basis for a plan. These excavations are particularly tantalizing, because they uncovered a large area between the two harbours and could have resolved important problems in history and topography.

Lanciani's thorough investigation of the site, however, marked a great step forward. Besides checking earlier accounts he was able to collect important evidence that had accumulated since Nibby wrote. Lanciani had a keener eye than his predecessors for the changing styles of Roman construction, and he appreciated the importance of brick-stamps. His account, published in 1868 together with a more detailed plan of Trajan's harbour, for long remained the standard source of reference.¹

While from 1870 onwards Ostia was being excavated by the state, Portus remained in the possession of the Torlonia family, who had acquired the site in 1856. In the course of agricultural work parts of buildings were occasionally uncovered but no accounts were published. In 1907, however, Carcopino, then Director of the French School in Rome, was authorized to make a limited series of tests in the Claudian harbour. Of the three specific problems which concerned him, the easiest only was satisfactorily resolved. Carcopino traced the line of the right mole to its approximate end, and confirmed the position and rough width of the entrance at this point. His more difficult problems eluded him. He was not able to establish the relation between the lighthouse and the left mole, nor to follow the course of the left mole to its junction with the land. The trial pits to which he was restricted were too limited in scope to resolve the problems, but useful new evidence, positive and negative, was obtained.² New evidence was also won from Trajan's harbour when the basin, which had degenerated into a reed-fringed marsh, was cleaned out and restored to its original form in 1923. Calza was able to study the structure of the quayside before the

¹ R. Lanciani, 'Ricerche topografiche sulla città di Porto', *Ann. Inst.* 40 (1868) 144-95 (cited as 'Lanciani').

² Carcopino, *NS* 1907, 734.

basin was refilled, and to leave an illustrated record of what can no longer be seen. At the same time he was able to describe and plan a substantial part of a large granary and a group of tombs which had been uncovered when the hydraulic pump used for drawing water into the restored basin was installed.¹

Finally, in 1935 Lugli did for Portus what Paschetto had done for Ostia in 1912. In a volume handsomely illustrated by revised plans and photographs he collected the evidence available for a history of the site and described in considerably more detail than his predecessors the ruins that can be seen or of which some record has survived.² He also hoped to press to a conclusion Carcopino's investigation of the Claudian harbour, but once again, though valuable new evidence was secured, the scale of the digging was too restricted to provide decisive answers to the main questions.

The Claudian harbour was built some two miles north of the Tiber mouth, and the choice of site has been commonly criticized. The rate of coastal advance has been considerably more rapid to the north than to the south of the river, for the coastal current and prevailing winds sweep sand and silt northwards. By the eighth century, and perhaps earlier, the harbour was choked; today it is more than a mile inland. A harbour built to the south of the river, though exposed to the drift of sand, would not have been threatened by Tiber silt.

It has been suggested that Claudius deliberately avoided the more suitable area because he did not wish to expropriate the owners of coastal villas which stretched in a continuous line southwards from Ostia;³ but such scruples would not have been decisive when Rome's corn supply was at stake. Nor should we lightly condemn his engineers for overlooking what seems to us a decisive factor. If we are right in believing that the coastline was comparatively stable during the Roman period the danger to the new harbour from Tiber silt would have been much less apparent than it became later.⁴ The main positive advantage of the site chosen was that it provided the shortest and easiest communication with the Tiber; and there may already have been a small bay at this point on the coast.⁵

¹ Calza, 'Ricognizioni topografiche nel porto di Traiano', *NS* 1925, 54.

² G. Lugli and G. Filibeck, *Il Porto di Roma imperiale e l'agro Portuense* (Roma, 1935), a limited edition not available in England, cited as 'Lugli'.

³ Carcopino, *Ostie*, 9 f.

⁴ pp. 125 f.; Le Gall, *Le Tibre*, 129.

⁵ Lugli, 9.

The general shape of the Claudian harbour is recorded by Suetonius and Dio, and can be partly confirmed on the ground and from air photographs. Suetonius gives a summary description in his *Life of Claudius*:

He constructed a harbour at Ostia. Two encircling arms were built out to sea: at the entrance where the water was deep a break-water was added. In order to provide more secure foundations for this breakwater he first sank the ship which had brought the great obelisk from Egypt . . . above he set a very high tower on the model of the Alexandrian Pharos, so that ships could steer their course by its burning light at night.¹

Dio adds a little further detail:

First he excavated a not inconsiderable area of land; he built a retaining wall right round this excavated area and then let the sea come in. Next, in the sea itself he built great moles, one on each side, enclosing a large expanse of sea. He formed an island in the sea and built on it a tower with a beacon.²

A visit to the site still gives a vivid impression of the scale of Claudius' harbour. The modern road to Fiumicino runs close by Trajan's harbour. To the north of the road, less than a hundred metres distant, can be seen the hexagonal basin, once again filled with water; around it is an eighteenth-century classical landscape of open woodland and grass-covered ruins. When the road passes beyond this woodland the country is flat and comparatively featureless. But in the distance to the north-east a gently swelling rise can be seen, running in an unbroken stretch for roughly half a mile. This is Monte Giulio; it marks the line of the right mole. To the left of Monte Giulio, nearly a mile from the road, is an isolated hillock, rising up sharp from the ground. This is the sand-hill, Monte dell' Arena, growing good crops; it is generally assumed to hide what remains of the Claudian lighthouse. But from the road it is impossible to detect the line of the left mole; among the low undulations there is no single prominent contour. On the ground, however, its line can be followed westwards from Monte dell' Arena for some 500 metres, until it curves towards the land.³ Beyond that point it is lost.

Carcopino's report in 1907 presented an intelligible reconstruction of

¹ Suet. *Claud.* 20. 3; 'portum Ostiae extruxit circumducto dextra sinistraque brachio et ad introitum profundo iam solo mole obiecta; quam quo stabilius fundaret, navem ante demersit.'

² Dio lx. 11. 4.

³ J. Bradford, *Ancient Landscapes*, 253.

the main features of the harbour. Monte Giulio concealed the right mole. Between the end of the right mole and Monte dell' Arena was an entrance 120 metres wide. Monte dell' Arena marked the lighthouse and beyond it was a second entrance of approximately the same width. Nibby, however, had already reported that there was no room for such an entrance between the lighthouse and the left mole,¹ and he was confirmed when Lugli exposed a small stretch of the left mole almost immediately below Monte dell' Arena.²

Lugli concluded that the lighthouse was built, not on an island, but at the end of the left mole. For this view he found support in a passage from the elder Pliny, who should be a reliable eyewitness. In a catalogue of trees of spectacular size Pliny digresses from the fir which provided the mast to a brief description of the ship which was used for the foundations of the lighthouse: 'longitudo spatium obtinuit magna ex parte Ostiensis portus latere laevo. ibi namque demersa est.'³ Lugli takes this passage to mean that the ship occupied a large part of the left mole; but since the left mole was at least 800 metres long and the ship's length can hardly have exceeded 50 metres it is extremely difficult to refer 'latere laevo' to the left mole. Like so much in Pliny this passage is too obscure to carry decisive weight.⁴ Dio explicitly states that the lighthouse was on an island and Suetonius implies the same.

Nero's bronze coinage is also difficult to reconcile with Lugli's thesis.⁵ These coins show two curving moles, and the end of the left mole is occupied by a temple. Between the moles is a colossal imperial statue on a substantial base. The lighthouse itself is not represented, but a relief found by Trajan's harbour, now in the Torlonia Museum, which depicts some of the monuments of the two harbours, shows a colossal statue on the penultimate story of the lighthouse.⁶ It has not unreasonably been suggested that the artist of the coin design has chosen to emphasize the statue at the expense of its background. More important perhaps than this uncertain identification is the disposition of the ships in the design. Through all minor variations in the different dies two

¹ Nibby, 643.

² Lugli, 24.

³ Pliny, *NH* xvi. 202.

⁴ In his description of a whale-hunt in the harbour of Claudius Pliny (*NH* ix. 14) provides further ambiguous evidence. Nets were spread to prevent the whale's escape: 'praetendi iussit Caesar plagas multiplices inter ora portus.' This cannot mean 'between the entrances', which would be nonsense. 'At the entrances' seems to me the least unlikely meaning but *ora* might be a poetic plural, implying a single entrance. Cf. Florus, *Epit.* i. 33. 7: 'primusque Romanorum ducum victor ad Gades et Oceani ora pervenit.'

⁵ Pl. xviii a.

⁶ Pl. xx.

ships are seen in the same position; a merchantman in full sail is entering, a trireme is leaving the harbour: the colossal statue comes between them and they naturally suggest two entrances.

Nibby offered a plausible solution to reconcile the evidence of literary sources and of the coinage that the lighthouse was on an island with the archaeological demonstration which allowed no entrance between the Monte dell' Arena and the left mole. He suggested that in the late Empire the western entrance was increasingly threatened by the drift of sand and silt and was therefore closed.¹ He also noted a barely perceptible low ridge stretching for some 600 metres north-east of Monte dell' Arena and ending in a mound where he found scattered Roman material including fragments of marble decoration of a very late date.² This, he suggested, was a new lighthouse at the end of a new mole, built as a further protection against the sand, possibly in the time of Theodoric. Of this 'late mole' there is now no sign whatever and Lugli has discounted it; but Nibby was in good company when he visited Porto. Fea, Canina, and Rasi were with him and they discussed the main problems together. Canina showed the 'barely perceptible ridge' in his sketch of the existing state of the site.³

Nibby published his account in 1829. Nearly thirty years later the French engineer, Charles Texier, who had considerable experience both of harbours and of ancient construction, spent several days in an intensive study of the site.⁴ From the literary evidence he was convinced that the lighthouse was on an island in advance of the moles; he satisfied himself that he had identified its position in remains of massive masonry some 100 metres in front of the harbour entrance. 'There still remain on the ground fragments of marble with mouldings, but the marshy nature of the ground made any attempt at excavation impossible. All I could do was to establish the centre of the mass of masonry.'⁵

The problems raised by these conflicting accounts cannot be resolved in the library, nor by walking over the site. Only excavation can furnish the answers and there are at last strong grounds for hoping that

¹ Nibby, 643.

² Nibby, 640.

³ Lugli, 27. Canina shows this low ridge in the first edition of his plans (reproduced in Fig. 3, p. 150). He omits it in the plan of the Claudian harbour in his third edition. Lugli infers a change of mind. But in the first edition Canina was reproducing what he saw; in his third edition he was reconstructing the original form of the Claudian harbour. *

⁴ C. Texier, *Mémoire sur les ports antiques situés à l'embouchure du Tibre* (= vol. xv, *Revue générale de l'architecture et des travaux publics*) (Paris, 1858).

⁵ Texier, 31.

substantial excavations will be undertaken. The building of a new airport to the west of the Claudian harbour has involved subsidiary work on roads and drainage within the harbour and some tracts of the left mole near Monte dell' Arena have already been exposed. It is hoped that the main lines of both moles will now be traced and that the relation of moles to lighthouse will be established beyond doubt. *

It is more discreet therefore at this stage to formulate the main questions that require answers. Was the lighthouse built originally on an island or on the left mole? And, if it was on an island, was this island on the same line as the moles or, as at Centumcellae, on the seaward side of the moles? Recent work has narrowed but not resolved the problem. It can now be seen that a little to the west of Monte dell' Arena the left mole widens from roughly 50 to 75 feet.¹ How long it continues eastwards at this enlarged width is not yet clear, but at some point it narrows to a width of only some 15 feet and so continues to its end. The full length of the narrow end of the mole cannot yet be measured, but it is not less than 60 yards. There is nothing to suggest a late closing of an original entrance to the west of Monte dell' Arena and Nibby's attractive hypothesis should be abandoned. Either the lighthouse was near but not at the end of the left mole, where the width was enlarged, or, more probably, it was on an island. No trace of the massive platform that was expected under Monte dell' Arena has been found.

Until the precise relation of moles to lighthouse is established we cannot be certain which way the harbour faced. It is commonly assumed that the harbour faced north-west to avoid the dangerous south-west wind which often blows with gale force; but a passage in Ammianus Marcellinus, if it can be trusted, indicates that corn ships could enter harbour under full sail with a south-south-west wind behind them.²

The design of the right mole also remains in doubt. The left mole, which faced the main force of the storms and the drift of sand and silt, was built in a solid mass. Nero's coinage suggests that the right mole was carried on arches, following the practice adopted at Puteoli.³ This would have allowed sand and silt drifting into the harbour to be swept out instead of piling up against the mole. The interpretation of the coin

¹ Pl. xix.

² Amm. Marc. xix. 10. 4: 'dum Tertullus apud Ostia in aede sacrificat Castorum, tranquillitas mare mollivit, mutatoque in austrum placidum vento, velificatione plena portum naves ingressae, frumentis horrea refenserunt.'

³ Pl. xviii a.

design, however, is controversial and it is unprofitable to speculate when a clear answer can be expected soon from excavation.¹

The total area of the harbour must also remain uncertain until the full line of the left mole is traced; but Texier's figure of 160 acres is probably not far from the truth.² The maximum diameter was perhaps nearly 1,000 metres, and in high storms this large expanse of comparatively shallow water could have been dangerous to shipping.

The lighthouse is the only building connected with Claudius' harbour whose outline we clearly know.³ It was a spectacular building, the first of its kind in Italy, and it quickly caught the imagination. It is reproduced in mosaics and reliefs, on coins and on lamps: its rough outline is scratched on Ostian walls. It provided the model for the campanile of St. Paul's basilica and was used as a symbol on Christian and pagan sarcophagi. Though individual craftsmen introduced unorthodox variations there is sufficient agreement to confirm the main essentials. It rose in four stepped stories of decreasing height, the first three squared, the fourth, which carried the beacon, cylindrical. It had not the decorative grace of the Alexandrian Pharos, but its massive strength and good proportions made it an impressive building.

Nero's coins show three separate buildings on the left mole. At the seaward end is a small rectangular peristyle temple with a man in front of it sacrificing at an altar. The rest of the mole is occupied by two long buildings which may be porticoes. No buildings are depicted on the right mole, but there is an ample scatter of bricks and tufa on the surface of Monte Giulio, and Lugli in two of his trial trenches found walls of a late set of baths and of an earlier portico.⁴

It is tempting to associate another monument with the Claudian harbour. In the background of the Torlonia relief is a triumphal arch surmounted by an emperor in a chariot drawn by a team of elephants. The emperor is unbearded and should therefore be not later than Trajan. Domitian is the first emperor known to have set up an arch in Rome, surmounted by an elephant chariot.⁵ He may be the author of

¹ K. Lehmann-Hartleben, 'Die antiken Hafenanlagen des Mittelmeeres' (*Klio*, Beiheft 14 (1923) 18), interprets the arches of the coin design as *navalia*, berths for ships, but one would expect ships to berth at the landward end of the moles; and the designer would probably have shown a ship berthed.

² Texier, 32.

³ Lugli, 16-20; G. Stuhlfauth, 'Der Leuchtturm von Ostia', *RM* 53 (1938) 139.

⁴ Lugli, 24-26.

⁵ F. Matz, *Der Gott auf dem Elefantenwagen*, Ak. der Wiss. und der Lit., Mainz; Abhandlung der geistes. und sozialwiss. Klasse, 1952, n. 10, p. 31.

this arch at Portus and it might be one of a pair; for on a sarcophagus in the Vatican, which probably reflects some features of the Ostian harbours, two arches with elephant-drawn chariots on them are depicted.¹ Texier noted square foundations that would have been appropriate for such an arch at the point where Monte Giulio begins to curve and he claimed to have found corresponding foundations on the left mole exactly opposite, at a distance of 950 metres.²

On the landward side of Claudius' harbour, on the peninsula which separated it from Trajan's inner basin, were found at the end of the eighteenth century lead pipes stamped with the name of Messalina, wife of Claudius.³ The evidence suggests that Trajan or Hadrian later built here a palace;⁴ he had probably been anticipated by Claudius.

Claudius' new harbour to be fully effective needed communication by water with Rome. This, however, was a comparatively simple task since the Tiber was less than a mile distant. In a monumental inscription set up on a public building in 46 Claudius commemorated this side of his work: 'Ti. Claudius Drusi f. Caesar Aug. Germanicus pontif. max. trib. potest. VI cos. design. III imp. XII p.p. fossis ductis a Tiberi operis portus caussa emissisque in mare urbem inundationis periculo liberavit.'⁵ From this inscription it seems clear that Claudius dug more than one canal from the Tiber to the sea, to provide communications for his new harbour: today there is only one canal and it is generally attributed to Trajan.

This problem, which raised considerable controversy in the nineteenth century, has been carried much nearer to a solution by Lugli's review of the critical area.⁶ He points out that the Fiumicino canal runs in a roughly straight line from the Tiber parallel to the south bank of Trajan's harbour, but that, after passing Trajan's harbour, it changes direction. In this last stretch it runs parallel to the channel which communicated between the harbours of Claudius and Trajan, and to the so-called 'darsena', which lies between them. Lugli suggests that these three stretches of water are contemporary and Claudian, that Claudius built two canals, perhaps one for ships going upstream, the other for downstream traffic; and that these passed in a roughly straight line through what was later Trajan's harbour to join the Tiber nearly a

¹ Amelung, *Die Sculpt. des Vat. Mus.* ii. 49-62. Attributed to Ostia, K. Robert, *Hermes*, 1911, 249; but some details at least do not seem applicable. More probably a composite picture drawn from various harbours, Lehmann-Hartleben, *op. cit.* 232; Lugli, 42.

² Texier, 31. See Fig. 4, p. 150.

⁴ p. 163.

⁵ 85.

³ Fea, *Viaggio*, 39.

⁶ Lugli, 29 f.

mile above Capo Due Rami, where the two branches of the river now join. Trajan maintained the end of Claudius' southerly canal but, to have more space for his harbour, cut a new course from the Tiber and oriented his harbour on the new line. The seaward end of the northern canal was used for communication with his new harbour. Apart from these surviving stretches the Claudian canals were swallowed up in Trajan's new basin.

This general thesis, based on alignments, is strengthened by two further points. The so-called 'darsena', though its present walling is late, preserves traces of an earlier wall in a reticulate of large blocks typical of Claudian building. It seems highly probable that this long rectangular basin (45×24 metres), with a narrow entrance (9 metres) goes back to Claudius and was intended as a harbour for smaller boats, and in particular for the rowing-boats, *lenunculi*, used for auxiliary services in the harbour.¹ Philostorgius, a late Christian writer, refers to three harbours in his description of Portus;² the 'darsena' is included in his reckoning with the main harbours of Claudius and Trajan. It was in this area also between the two canals that substantial traces were found of a monumental portico that is distinctively Claudian. Though it has been largely concealed by incorporation in a later building, the rusticated drums of the travertine columns, recalling at once Porta Maggiore at Rome, proclaim its Claudian origin, as clearly as the new ephemeral letters in a Claudian inscription. Lugli puts forward the very attractive hypothesis that the inscription commemorating Claudius' canals was once set in this portico.³

The Claudian harbour was connected by road and river with Rome. Communication by road with Ostia was also essential and must have been provided when the harbour was built or very soon afterwards. This road ran straight across the island contained by the two branches of the river; it left Ostia near the river mouth, opposite Tor Boacciana, and ran in a direct line to a point on Trajan's canal roughly opposite the 'darsena'. A short stretch has been excavated where it passes through the Isola Sacra cemetery. It is considerably wider than the normal Roman road (10.5 metres) and is designed for transport and pedestrians. One side has typical paving blocks of *selce*, deeply rutted by heavy

¹ Lugli, 76.

² (τὸν Πόρτον) μέγιστον δὲ νεώριον ὅπως λιμένας τρισὶ περιγραφόμενον (*Die christlichen Schriftsteller der ersten drei Jahrhunderte*, 21 (Bidez, Leipzig, 1913) 141).

³ Lugli, 30 f., 116-18.

traffic; the other side is unpaved. In a late inscription this road is called 'Via Flavia' (Flavia). It was probably so named to honour Constantine, who gave Portus her independence under the title 'civitas Flavia Constantiniana', but Claudius or Nero must originally have been responsible for the road across the island.¹

There is little evidence for the growth of the harbour area before Trajan's new building. Many of the workers probably lived in Ostia and walked each day to their work; but essential services could not be maintained unless there was from the outset some residential population. A group of pre-Trajanic tombs has been found near the south-east corner of Trajan's basin² and the earliest tombs in the cemetery that flanked the road to Ostia may be earlier than Trajan.³ Both these cemeteries were separated from the harbour by Claudius' canals.

Claudius hoped that he had provided secure harbourage for the shipping that sustained Rome and that he had freed the city from the danger of flood. In 62, according to Tacitus, 200 ships were wrecked within the moles:⁴ in 69 Rome suffered one of the worst floods on record!⁵ The flooding of Rome cannot be attributed to the failure of Claudius' engineers: no canal below the city could save Rome from floods. But the heavy loss of shipping within the harbour is surprising. So far as can be seen the general dispositions of the harbour were sound: under the lee of one of the moles there should have been adequate shelter from whichever direction the wind blew. The expanse of water, however, was large and the centre of the harbour could often have been dangerous. The easiest explanation of the catastrophe is to assume that an unexpected storm broke very suddenly when the harbour was particularly crowded. That the work of Claudius' architects and engineers was not considered a failure is shown by the handsome bronze coinage of 64, or shortly afterwards, publicizing the harbour from the mints of Rome and Lugdunum.⁶

But the danger sharply exposed by the crisis of 62 was probably one

¹ See Note D, p. 473.

² NS 1925, 60.

³ Degrassi, *Gnomon*, 26 (1954) 104, suggests an earlier date for Thylander, A 60 (tomb 49), a Claudian freedman married to a Julia Heuresis. Tomb 50 (Thylander, A 64) may also be earlier. The first large tombs date from Trajan, but some of the small, scattered tombs (including 49 and 50) may have preceded them.

⁴ Tac. *Ann.* xv. 18. 3.

⁵ Tac. *Hist.* i. 86.

⁶ For the date of this coinage, C. H. V. Sutherland, *Coinage in Roman Imperial Policy*, 162-72.

of the reasons that led Trajan to add to Claudius' harbour a land-locked inner basin. Of Trajan's work there is no clear record in the literary sources, but a restricted issue of coins from his sixth consulship (112) or one of the following years reproduces the harbour with the title 'portus Traiani',¹ and this title is completed by inscriptions, 'portus Trajani felicitis'.² Trajan's main work was to excavate from the land a hexagonal basin in close relation to the outer harbour. It is possible that the position chosen for this basin was influenced by the development of building round Claudius' harbour and the economy in using in part the Claudian canals; the shape was a useful one for the distribution of shipping and warehouses. The entrance to the harbour was set in the centre of the south-west side. Claudius' northern canal was adapted to provide communication between the two harbours; his southern canal was redirected to run parallel to the south side of the new basin; the smaller canal linking the two Claudian canals was extended to the new line of the southern canal. Claudius' smaller harbour for small boats (the 'darsena') was retained.

The length of each side of the hexagonal basin was 357.77 metres, the maximum diameter 715.54 metres, and the total area 321.993 square metres.³ The function of the harbour was severely practical and this is reflected in the buildings that surrounded it. Early accounts agree that on all sides large *horrea* ran parallel to the banks; they dominate Lanciani's plan and substantial remains have been uncovered at various periods. They conform to a standard pattern, long series of deep rooms of equal size opening on to portico or covered gallery. Space being more restricted than at Ostia, less use seems to have been made of the open central court, with four series of rooms round the four sides: more often two rows of rooms were grouped back to back. These *horrea* had normally at least two floors, and in one case at least the access to the first floor was by ramp. This particular building, at the southern end of the south-east side, was used for the storage of corn, as the raised floors of the ground-floor rooms indicate:⁴ the ramp suggests that the first floor was also used for storage.

In the harbour retaining walls were set large blocks of travertine with a hole in the centre through which the mooring-rope could be tied. Their function is admirably illustrated by the harbour relief in the

¹ Pl. xviii b.

² 90, 408.

³ Measurements by Texier, recorded by Lanciani, 163.

⁴ NS 1925, 58.

Torlonia museum,¹ and similar mooring-blocks can still be seen at Terracina and Aquileia. Calza found the series regularly disposed along the south and south-west sides, twenty-four between the south-east corner and the 'darsena'.² They probably ran round the whole basin, except perhaps on part of the north-western side,³ and will have provided mooring facilities for rather more than a hundred ships. Numbered columns also have been found and reported round the basin:⁴ they probably indicated mooring-berths and will have been useful also for the efficient distribution of unloading gangs.

Six metres behind the quayside runs a strong wall, shutting off the *horrea* from the quay. Its construction is not uniform and Lugli has suggested that the original wall was only 3 metres high and that it was strengthened and raised under the Severi.⁵ Early accounts report five doorways in each side of this wall, and the width of a measured example was only 1.80 metres.⁶ Carts could not have passed through these entrances: all goods must have been carried by the unloading gangs from ship to warehouse. The purpose of this wall was probably to maintain a closer control on customs and cargoes. Only a more thorough examination could show whether it is Trajanic and an integral part of the original plan, or added later when imperial control of trade and shipping was being tightened.

The regular lines of the *horrea* round Trajan's basin were relieved by other buildings and monuments. The craftsman who designed Trajan's commemorative harbour coins was a very inferior artist whose work cannot stand comparison with the Neronian bronzes depicting the Claudian harbour; but he seems to have given special emphasis to the buildings on the north-west side of the harbour. It is here, on the peninsula between the two harbours, that nineteenth-century excavations produced a rich harvest of sculptures for the Torlonia Museum and discovered a series of richly furnished buildings.⁷ These buildings included a set of baths, maintained into the late Empire, a temple, a very small theatre, and an 'atrium' with a large series of rooms; the richness of the site is also reflected in the name that was given to it in the Renaissance,

¹ Pl. xx.

² NS 1925, 55; Lugli, 70.

³ They may not have been regularly disposed along the frontage of the 'Imperial Palace' on this side (pp. 164 f.).

⁴ NS 1925, 56; Lanciani, 164. These columns probably stood back from the basin; they were later enclosed in a wall. Illustrated, Canina, *Mon. di Roma*, vi, tav. 134.

⁵ Lugli, 68.

⁶ NS 1925, 57.

⁷ Fea, *Viaggio*, 39; Lanciani, 171; Texier, 40-49.

'palazzo delle cento colonne'. Lanciani noted that what seem to be the original walls, in brick with reticulate, were of particularly fine workmanship; their approximate date is confirmed by brickstamps recorded

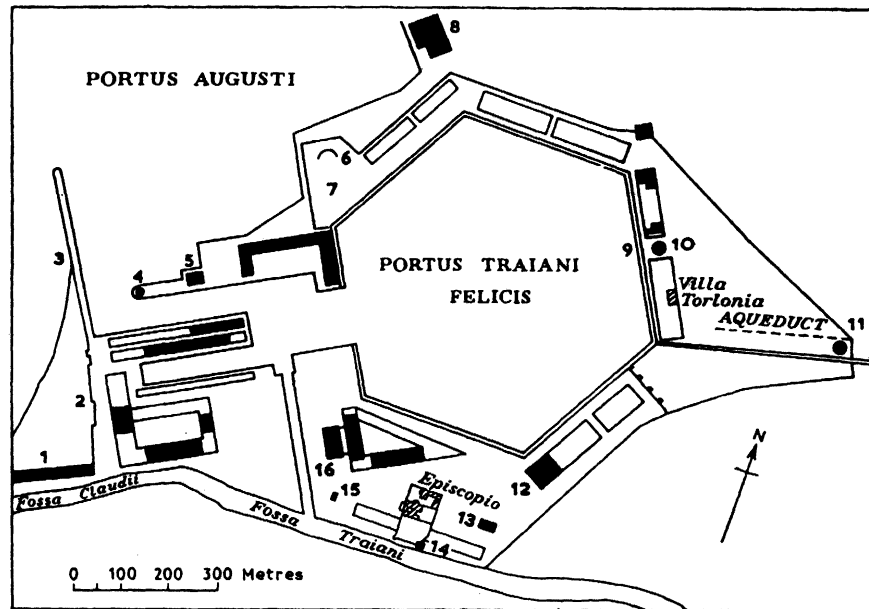


FIG. 6. Trajan's harbour. Blockings show buildings or parts of buildings for which there is reliable evidence. Other outlines show buildings reported or parts of buildings assumed. Post-Roman buildings are hatched. 1. Porticus Placidiana. 2. Porticus Claudii. 3. Late Empire mole. 4. Lighthouse. 5. Baths. 6. Theatre. 7. 'Imperial Palace'. 8. Baths, not included in the circuit of the walls. 9. Colossal statue of Trajan. 10. Temple of Liber Pater. 11. Temple of 'Portumnus'. 12. *Horrea*, partly excavated 1925, with Flavian tomb. 13. ? Barracks of Vigiles. 14. Tower (Pl. xxrb). 15. Unidentified temple. 16. ? Xenodochium of Pammachius.

by Lanciani from the last years of Trajan's principate.¹ Fragments of a dedication to Trajan were also found in this area; in it the new harbour is mentioned ('[port]us Traiani felix'), though the context is obscure. The inscription was set up when Trajan was cos. VI, between 112 and 117.² It may, like the coins, commemorate the completion of the harbour.

In the nineteenth century this group of buildings was known as the 'Imperial Palace'. Lugli suggests instead that it probably marks the area of a Forum, surrounded by baths, basilica, and other public buildings.³

¹ Bloch, *Bolli laterizi*, 100. Allowing for a short period between production and use, building may not have begun until the beginning of Hadrian's reign.

² 90.

³ Lugli, 98.

He considers that the peninsula between the two harbours, an area flanked by warehouses, was no suitable place for an imperial palace. Until the area is excavated afresh and the relative dispositions of the various groups of buildings established, caution is discreet, but on the present evidence the more romantic view seems to be nearer the truth. The site was an unrivalled one for seeing both harbours, and a good view of the shipping will have been the emperor's main concern when he visited the harbour. Nor is the site well suited for a civilian Forum. We should expect to find the Forum, if it existed, in one of the two areas where the main living-quarters developed, to the east and to the south of the harbour.

Confirmation of the identification of the area with Trajan's imperial palace may perhaps be found in a description of the boundaries of the diocese of Portus in 1019 which includes in a list of properties: *un palazzo detto Praegesta*.¹ The position of this property in the list suggests that it lay between the two harbours. The pipes already mentioned, bearing the name of Messalina, suggest that Trajan was rebuilding on a site previously used by Claudius for the same purpose. Both theatre and baths were probably attached to the 'Imperial Palace'. But though the buildings were planned for imperial visits they were also probably used by the imperial official, freedman, or equestrian procurator, who was responsible for the supervision of the harbour.

The Trajanic coins also show two tall columns surmounted by statues at either end of the side of the harbour facing the entrance, and possibly at other angles as well. A base, now in the Lateran Museum, probably belongs to this series. It records the restoration by Septimius Severus of a column broken by storm: 'L. Septimius Severus . . . columnam vii tempest[atis] confractam restitui[t].'² Other statues are seen in the Torlonia harbour relief, but only one of them can be clearly identified. That is a statue of Bacchus and it may have stood in or near the temple of Liber Pater, which was found in the centre of the north-east side of the harbour.³ This temple, identified by inscriptions, was a small circular peristyle building. It is not certain that its original construction is Trajanic, but it was built not later than Commodus⁴ and restored in the late Empire.

Trajan himself was handsomely commemorated. In the centre of the north side of his harbour were found a base and fragments of a colossal

¹ Nibby, 631.

² 113.

³ Lanciani, 181.

⁴ 30, a dedication to 'Liber pater Commodianus'.

statue of the emperor in military dress;¹ a life-sized bust was recovered by the harbour entrance.² These tributes he richly deserved. By increasing and substantially improving Rome's harbour capacity he had made it possible to maintain regular supplies to the capital and had removed a potential source of insecurity to the emperors that succeeded him. It remained only to ensure regular supplies by efficient administration.

Trajan's inner basin was primarily reserved for the unloading of ships. It is more difficult to say what was the function of the Claudian harbour in the new dispensation. Lugli believed that the left mole had already collapsed under the pressure of south-western gales and that this was the main reason for Trajan's new building.³ While I have not been able to check all the detailed arguments adduced by Lugli I find the general objections to this thesis overwhelming. If the left mole had collapsed the harbour would have had no protection from the south-west winds and would have been little better than an open roadstead. The collapse of the mole would also have allowed the drifting sand to spread across the harbour; and the logical defence against incoming sand was a mole to protect the entrance to Trajan's inner basin. Such a mole can in fact still be seen, running out for some 300 metres at right angles to the entry canal; but Lugli's investigations have shown almost beyond doubt that this mole is not earlier than the fourth century.⁴

The standard description of the harbours in Ostian inscriptions as 'portus uterque' and the continuation of a cult of the *Lares portus Augusti*⁵ would be anomalous if Claudius' harbour was no more than an entrance passage to the inner basin. Nor would this inner basin have been sufficiently large to harbour the shipping of peak periods. It is difficult to believe that Trajan, who was not easily deterred by difficulties, would have allowed a broken mole to threaten the security of Rome's shipping: indeed the scholiast on the passage of Juvenal quoted in an earlier chapter says that Trajan improved the Claudian harbour as well as adding his own: 'Traianus portum Augusti restauravit in melius et interius tutiorem nominis sui fecit.'⁶ It is easier to believe that the Claudian harbour was efficiently maintained and that ships continued to unload at the Claudian quays, particularly perhaps on its south-west side.⁷

¹ Fea, *Viaggio*, 35.

² Ibid. 36.

³ Lugli, 34.

⁴ Lugli, 79-81.

⁵ Thylander, A 19.

⁶ Schol. Juv. xii. 75.

⁷ The hero of Apuleius' fable disembarks in the outer harbour without entering Trajan's basin, Apuleius, *Met.* xi. 26: 'tutusque prosperitate ventorum ferentium Augusti portum celerrime (pervenio) ac dehinc carpento pervolavi'.

The improvements introduced by Trajan probably attracted an increasing number of settlers, but until the area is systematically excavated it will not be possible to tell how rapidly what under Constantine became the independent town of Portus developed. There has always been a tendency in descriptions of Portus to over-simplify chronology, and to divide buildings into Trajanic, Severan, and late Empire. The discovery of brickstamps of Marcus Aurelius' principate in large *horrea* that were assumed to be Severan is a salutary warning against such simplification.¹

The shape and extent of the town in the fourth century is clear from the line of walls that can still be traced. These walls run parallel to the north-west and north sides of Trajan's basin and then diverge to enclose a large triangle east of the harbour. They return to run parallel to the south-east side until they meet the canal. Two areas give scope for civilian development, the eastern triangle and the area between the south side of the harbour and the canal, where the bishop's palace now stands. At the apex of the eastern triangle was the main gate through which passed the Via Portuensis. This road continued in a straight line to the eastern angle of the harbour; an aqueduct ran beside it to the north. Of the buildings in this area, apart from the temple of Liber Pater, very little is known; but one building in part survives, close to the site of the gate. This is a circular peristyle temple, the brickwork and style of which suggests a date early in the third century.² The settlement had presumably already developed to this point. In the second of these two areas the buildings included a late basilica to which a *xenodochium*, a rest-house for pilgrims, was added³ and an unidentified temple.⁴ Lanciani also inferred from a number of inscriptions found on the site that the Barracks of the Vigiles lay to the east of the site of the bishop's palace.⁵

On the south bank of the canal there seems to have been a thin fringe of buildings, shops or warehouses, towards the west,⁶ but opposite the bishop's palace and to the east this bank seems to have been reserved as a dumping ground for marble. Melchiorri records that in 1839 more than fifty large blocks of marble were unearthed in this area, mainly Africano with a few blocks of Cipollino and of white

¹ Bloch, *Bolli laterizi*, 279.

² Lugli, 93; G. T. Rivoira, *Roman Architecture* (1925) 192.

³ Lugli, 106.

⁴ Lugli, 106; Lanciani, 181.

⁵ Lanciani, 183-8.

⁶ E. Gatti, *NS* 1911, 410. Walls of what may be a large warehouse have been recently revealed immediately north of the church of St. Hippolytus.

marble.¹ Further such blocks have been from time to time recovered, even as late as the winter of 1951. They are blocks rough cut from the quarry, some with consular date and quarry marks on them. They might lay there a long time: one was dated in A.D. 82, several others had second-century dates. It seems that the marble brought in from overseas and from the Luna quarries was not unloaded in Trajan's harbour but brought to the south bank of the canal to await shipment upstream to Rome or carriage to Ostia.

Close by was one of the main cemeteries of the harbour settlement, flanking the road to Ostia. A very substantial group of tombs, in excellent state of preservation, was excavated here between the two wars. Calza, who devoted a special book to a record of the excavation, believed that the opening up of this cemetery followed the building of the inner harbour; but the earliest tombs may be earlier than Trajan.² The cemetery was a large one, extending far beyond the limits of excavation; tombs had been found in the nineteenth century more than 100 metres to the north. A vague record has been preserved of another cemetery near Capo due Rami where the two branches of the Tiber join.³ Sufficient remains can be seen in the fields to show that tombs also lined both sides of the Via Portuensis as it proceeded in a direct line from the main gate to the river before turning east. In 1953 a large fragment of a figured sarcophagus in Greek marble lay in the grass of the river bank—but not for long!

The shape of the small town round Trajan's harbour is defined by its walls, but these walls represent a restriction. A large building or complex of buildings at the north-west angle was left outside the circuit⁴ and earlier buildings have been incorporated in the wall or destroyed to make way for it, in a manner reminiscent of Aurelian's walls at Rome. It is not certain when the walls of Portus were built. They are commonly attributed to Constantine, who gave independent status to Portus, but they may be earlier, or even later. They were needed continuously from the end of the fourth century and reveal many signs of strengthening and reconstruction.

In spite of the very fragmentary nature of the evidence it seems clear that the building history of Portus in the fourth and fifth century was very different from that of Ostia. While most of Ostia's warehouses were redundant, Rome still depended on the storage facilities of Portus

¹ G. Melchiorri, *Bull. Inst.* 12 (1840) 43; Lanciani, 180; Lugli, 105 f.

² p. 161 n. 3.

³ Nibby, 607 f.

⁴ Lugli, 90.

for her supplies, and the *horrea* were maintained. The temple of Liber Pater was restored in the fourth century,¹ but pagan temples were soon overshadowed by Christian churches. A Christian basilica was excavated to the west of the bishop's palace in the nineteenth century, and adjoining it was added an open court with fountain and a series of rooms around: this was the *xenodochium* or pilgrim's rest-house, presented by the patrician Pammachius and praised by St. Jerome.² There still stands to the south of the canal the medieval campanile which marks the site of the church of St. Hippolytus, the first recorded martyr of Portus.

The survey of the diocese of Portus in 1019 mentions churches of S. Maria, S. Lorenzo, S. Pietro, S. Gregorio, S. Teodoro, S. Vito;³ in 849 Leo IV had made gifts to a church of S. Ninfa.⁴ Most, if not all, of these churches will have been built in the fourth and fifth centuries. There is evidence also that public baths remained in use into the late Empire, and two of the sets that have been seen seem to be adapted from earlier buildings used for a different purpose.⁵

Though Portus was captured and sacked by Alaric in 408, the dependence of Rome on her harbours ensured a measure of revival when the invader was gone. Within a generation one of the town's most impressive public monuments was erected, the Porticus Placidiana, a colonnade which ran along the north bank of the canal as it approached the sea; it seems to have been some 200 metres long. Part of the inscription from the architrave survives, and the base of a statue set up by a *praefectus annonae*, 'ad ornatum porticus Placidianae'.⁶ This monument commemorates Placidia, mother of the emperor Valentinian III. It was built in or near 425 and is the last building known to us.

Nibby in his account of Portus emphasized the prevalence of late construction in the district between the south bank of Trajan's harbour and the canal. It was here that he saw a large area paved with great blocks of rough marble, probably taken from the dump on the south bank;⁷ it was here too that Calza saw remains of late buildings encroaching on the quayside, and other late walls which followed lines different from earlier constructions.⁸ It seems likely that in time of increasing stress

¹ Lanciani, 181, inferring the date from the poor workmanship.

² Lugli, 106. But see Addenda.

³ Nibby, 631.

⁴ Nibby, 628.

⁵ Lugli, 82, 90.

⁶ Lugli, 119; Lanciani, 182. Inscriptions 140 (statue base), 141 (architrave).

⁷ Nibby, 652.

⁸ Calza, NS 1925, 65.

the population concentrated here for more secure protection. There is indeed a strong wall with towers that runs from the 'Constantinian' wall to the harbour basin near the northern end of its south-east side. This would have served admirably for an inner defence of the south side of the harbour. But though Nibby may be mistaken in calling this cross-wall Severan,¹ its workmanship certainly looks much better than that of the 'Constantinian' walls. If, however, it is substantially earlier it is difficult to see its purpose.

But though it seems likely that there was still a considerable amount of building in the late Empire at Portus the general standard of the work has the same character as at Ostia. Old material is reused, ill-assorted columns from different buildings are brought together for new building; the elementary requirements of coherent planning are ignored.

Meanwhile difficulties developed in the outer harbour. The first hint is an inscription which was found when Trajan's basin was restored. It comes from the base of a statue set up to Lucius Crepereius Madalianus, *praefectus annonae*, by the council and people of Portus and records the offices he had held.² At an earlier stage in his career Madalianus had been 'consul(aris) molium fari at purgaturae'. The office is not attested elsewhere in inscriptions nor in literary sources; Calza is probably right in regarding it as a special appointment. At some time between 337 and 341, when Madalianus was appointed, a thorough overhaul of the Claudian harbour seems to have been required, involving moles, lighthouse, and dredging operations. Not long afterwards the representation of Portus on the Peutinger map shows what seems to be an inner mole with a lighthouse at the end.³ This may be identified with a line of wall that runs out for some 300 metres into the Claudian harbour at right angles to the communication canal. This line can be seen on the ground and is clear in an air photograph; at its seaward end is a modern building. The nature and approximate date of this line has been established by Lugli.⁴ It is a mole with mooring-blocks and a lighthouse probably stood at its end. It is of poor workmanship and seems to be not earlier than the fourth century. Its purpose is to protect the entrance to Trajan's harbour against sand. The natural inference is that the left mole had

¹ Nibby, 651. Lugli, 94, describes the brickwork as good and fairly regular, though some two-thirds of the bricks are taken from earlier buildings.

² 13. S 4449; Calza, NS 1925, 73.

³ Fig. 7. But the schematic design might merely be intended to represent the outer and inner harbour, K. Miller, *Die Peutingerische Tafel* (1887) 95.

⁴ Lugli, 79 f.

collapsed and that sand was being swept in. Madalianus may in his special office, or later as *praefectus annonae*, have been responsible for the new mole.

Had it been possible to maintain regular dredging operations the harbour might still have had a long life. But wars and raids sapped the

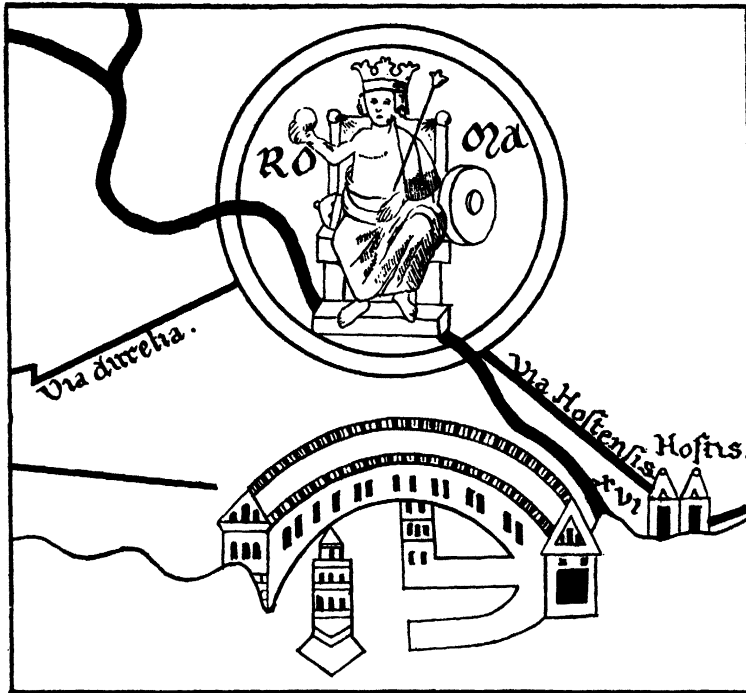


FIG. 7. Portus on the Peutinger map (c. A.D. 350).

resources of Rome and weakened the morale of Portus. The sand had probably won by the eighth century. It was easier to keep clear the mouth of the canal, and there is evidence that a ship passed out to sea as late as 1117. From the twelfth century even the canal was unnegotiable until it was reopened by Paul V in 1618.

THE CONSTITUTION

THE direct evidence for Ostia's form of government is confined to inscriptions. The *Fasti*, the town's official record, include with the Roman consuls and the main imperial events of the year the names of the chief local magistrates and outstanding local events.¹ Public careers are commemorated on statue bases and in tombs. Inscribed records of official acts show us a little of the machinery of government.

The picture provided by inscriptions is fragmentary. From them we can infer the order in which magistracies were held and the relative importance of various posts at various times. But without other evidence we should know little of the distribution of administration and responsibility between the organs of government. What we know, however, from Ostian inscriptions falls within the general pattern of local government imposed by Rome. We can therefore provide a fuller background from the surviving charters of other colonies and municipalities and from the legal codes. These combined forms of evidence enable us to trace the main developments in the constitution from the close of the Republic to the late Empire.

Our earliest document is a fragment of the *Fasti* which covers the years 49–45 B.C.; the last relevant inscription comes from the early fifth century. During this long period we can trace in outline the main changes in the forms and spirit of government; for the early and middle Republic we remain in the dark. The constitution as we first see it represents the revised model evolved by Rome for Italian colonies in the late Republic. Though the higher jurisdiction is reserved for Roman courts, the main responsibility for local affairs rests with the local authority. It was not always so.

Much has been written about the government of early Roman colonies; very little is known. The excavations at Ostia have done nothing to fill the gap, and detailed speculation is unprofitable, but it is reasonable to assume that early Ostia was more directly controlled from

¹ *Fasti*, edited by A. Degrassi, *Inscriptiones Italiae*, xiii. 173–241, cited as 'Degrassi'.

Rome than later. The Roman quaestor, first appointed to Ostia in 267 B.C., was primarily concerned with the provisioning of Rome, but he may also have had wider powers of jurisdiction. It was the Roman urban praetor, acting on the authority of the Roman senate, who ruled that a long stretch of land between the Decumanus and the river was public property. But routine administration must always have been a local responsibility and, since the main function of the fourth-century Castrum was to defend the coast, we should expect local officers to be responsible for leading the local levy against raiders.¹

In the revised constitution the chief magistrates were duovirs, supported by aediles. They may have been preceded at Ostia by praetors and aediles; for these titles are found during the Republic in other Roman colonies, and their presence in early Ostia would be the easiest explanation of their survival through the Empire in the priesthood of Vulcan. The cult of Vulcan was the most deep-rooted of Ostia's cults. The *pontifex Volcani* exercised a general control over all temples; he was assisted by *praetores* and *aediles sacris Volcani faciundis*. There is no true parallel to such priesthoods in other towns, and Henzen was probably right in inferring that the titles were inherited from Ostian magistracies when Ostia's constitution was adapted to the colonial pattern that we find throughout Italy from the late Republic.² The main objection to this interpretation is the number of Vulcan's priests. We should expect two praetors and two aediles; there were three praetors, and there may have been three aediles, though records survive of no more than two.³

Two explanations are possible. De Sanctis derived the apparent anomaly from the early threefold tribal division of Rome.⁴ The original Ostia had three praetors because, when it was founded in the regal period, Rome had three tribes. Alternatively it is possible, but less likely, that the original number was two, and only later increased. It may be significant that Vulcan's praetors and aediles are undifferentiated in the earliest inscriptions. The titles *praetor primus, secundus, tertius* are not known before the second century A.D.

A new constitution, embodied doubtless in a *lex coloniae*, had been granted to Ostia by the end of the Republic. It may have accompanied

¹ A. N. Sherwin-White, *Roman Citizenship*, 78.

² Henzen, *Ann. Inst.* 31 (1859) 197. Different interpretations discussed by L. R. Taylor, *The Cults of Ostia* (Bryn Mawr Monographs, xi, 1912) 17-19.

³ p. 338.

⁴ G. de Sanctis, *Storia dei Romani*, i. 383 f.

the building of the Sullan walls on Rome's initiative: both recognized the development of the small fourth-century Castrum into a substantial town. In its original form this constitution has a simple structure. Policy is controlled by the local council, executive authority is limited to two boards of magistrates, appointed for a year. The two aediles, who formed the junior magistracy, were responsible for the supervision of markets, the control of weights and measures, and the maintenance of the public services. To carry out the necessary work on drains, public latrines and, later, on the water supply, they had a body of slaves and freedmen belonging to the town. The senior magistrates were two duovirs who, like the consuls at Rome, gave their name to the year. They presided over meetings of council and people, administered justice except in cases which were in the reserved province of the Roman quaestor or had to be taken to Rome for decision. They are not in Ostian inscriptions entitled *duoviri iuri dicundo* as is the normal practice elsewhere, but the bare title *duoviri* without description is found, for example, also at Capua and Praeneste and there is no reason to believe that the chief magistrates of these towns were in an inferior position. The prestige of their office is reflected in the two lictors that attended them but, as can be seen from the public monument of C. Cartilius Poplicola, the rods that these attendants carried did not have the axe.¹ They were *bacilli* rather than *fascēs*; the duovirs could not pass sentence of death.

Every five years the duovirate carried the fuller title *duovir censoria potestate quinquennalis*.² In these years the duovirs had censorial authority; the local register of property was revised, public contracts were allocated, and the council may have been brought up to strength by the incorporation of new members. The censorial duovirate conferred special distinction. On the public monument of Poplicola it was recorded that he had held the duovirate eight times, including three times with censorial authority; the higher honour is separately recorded.³ It was normally in censorial years that emperors or members of their family accepted the compliment of office.⁴

¹ Cf. Cicero, *De lege agraria*, ii. 93 (speaking of the colony established at Capua in 83 B.C.): 'deinde anteibant lictores non cum bacillis, sed, ut hic praetoribus urbanis anteeunt, cum fascibus duobus.' Eight pairs of *bacilli* are depicted on Poplicola's funerary monument to represent his eight duovirates, *Scavi di Ostia*, iii (1), pl. xxx.

² An earlier form of the title, *duovir cens(or)* (or *censorius*), 4134, S 4710, Bloch, 61.

³ 'octiens duomvir ter cens. colonorum iudicio . . . factus est'.

⁴ 26-7, 447 (= S 4674-5), *Fasti*, A.D. 126.

The attribution of censorial powers and duties to the chief magistrates of the year at regular five-yearly intervals is not an original element in the constitution. In the first preserved fragment of the *Fasti*, which covers the period from 49 to 45 B.C., no *II viri c(ensoria) p(otestate) q(uinquennales)* are recorded, though the title appears regularly later and should have appeared in 45 B.C. if the institution had already been established.¹ In the *Fasti* of Venusia *II viri quinquennales* are first recorded in 29 B.C.² It was probably at approximately the same time that the procedure was adopted at Ostia. Previously the censorship may have been a separate office; it is perhaps more probable that censorial duties were not separately defined and rested with the duovirs. The concentration of the work at stated intervals in the hands of men especially elected for their authority and competence would increase efficiency.

In the year that Caesar crossed the Rubicon an *interregnum* is recorded in the Ostian *Fasti* and no duovirs for the year are given. In the crisis of the Civil War, when party feeling at Ostia may have been strong and divided, no regular magistrates were appointed; and, following republican practice at Rome, a series of *interreges* probably filled the gap.³ The term and the title are not found again, but we hear frequently later of *praefecti*, men appointed to take the place of the formally appointed chief magistrates. So when an emperor or a prince of the imperial house honoured Ostia by accepting the title of duovir the practical duties of the office were delegated to a distinguished Ostian.

In the record of A.D. 36 a rather different use of the office is seen. In that year T. Sextius Africanus and A. Egrilius Rufus entered office with censorial authority; but on or shortly before 17 July Rufus died and two *praefecti* were appointed. This was not the normal practice when one of the duovirs died in office, for in A.D. 30 when P. Paetinius had died, A. Hostilius Gratus was 'II vir pronuntiatus'. A special reason for the difference might be found in the censorial authority held in A.D. 36, for in Rome it was customary when one censor died for his colleague to resign; but a simpler explanation lies in the character of the surviving duovir. T. Sextius Africanus is probably the prominent senator who was to become consul in A.D. 59; his public career in Rome will have afforded him little time to carry out the routine duties of office in Ostia.⁴ In 126, also a censorial year, the emperor Hadrian held the title

¹ The first attested censorial year is A.D. 6 (*Fasti*). Later dates in the five-yearly cycle are confirmed by the *Fasti* in 16, 31, 36, &c.

² Degrassi, 254.

³ *Fasti*, 49 B.C., recording *interregnum*.

⁴ Degrassi, 219.

for the second time.¹ The name of his colleague is lost, but he was a patron of the colony. Two *praefecti* are listed for the year. Degrassi suggests that they held office each for six months in Hadrian's place;² it is perhaps more likely that Hadrian's colleague was also holding the title as an honour without duties and that two *praefecti* were appointed for the whole year.

The financial office of quaestor was not included in the standard pattern of local government imposed by Rome in the late Republic. The magistrates of municipia were *quattuorviri*, later defined as *quattuorviri aedilicia potestate* and *quattuorviri iuri dicundo*; colonies had normally at first two duovirs and two aediles only. The Fasti of Venusia show that the quaestorship was there instituted in 34 B.C.;³ the Ostian evidence is less secure. The earliest clear trace of the office is a fragmentary inscription dated not later than the principate of Tiberius;⁴ the rapid growth of Ostia in the last century of the Republic makes it probable that it had been instituted much earlier. Unlike the aedileship the quaestorship does not seem to have been an essential stage in the *cursus honorum*, for the office is omitted in several careers recorded in full, both in the first and second centuries.⁵ Its normal place is between the aedileship and duovirate; when Ostian prosperity declines it is often held after the duovirate, a mark of its increased importance.⁶

The function of the two quaestors was to administer the town chest, as the full title *quaestor aerarii* implies. They had to see that moneys owing to the town were paid and, under the authority of the council, to control expenditure. The chest that they administered was not well endowed. The town possessed certain properties,⁷ but their extent is

¹ [Imp. Caesar Hadr]ianus Traianus Aug. II[—]. There is a break on the stone after the second stroke; III or IIII are formally possible, but it seems unlikely that Hadrian accepted the title more than twice.

² Degrassi, 233, quotes as a parallel Interamna, A.D. 73 (op. cit. 267), but the two *praefecti* were there replacing Titus and Domitian.

³ Degrassi, 254.

⁴ Bloch, 61, a man honoured by Augustus: 'II vir cens. q. d' (or p or r)? The supplement q(uaestor) is probable rather than certain. An earlier record may survive in *CIL* 1², 2440 (with improved supplement in Degrassi, *Inscriptiones Latinae Liberae Reipublicae*, Florence, 1957, n. 204), a republican dedication to Liber Pater: 'No(merius) Ofalios No(vi) f(ilius) q(uaestor) pro sed et familia soua Leibero donum dat meret(o).' This dedication passed to Vienna from the collection of Cardinal Pacca, which was derived mainly from Ostia. The quaestor, however, is more probably the Roman quaestor stationed at Ostia. If he were a local official the family name would probably have survived in other Ostian inscriptions.

⁵ e.g. 332, 349, 415.

⁶ p. 185.

⁷ 141: 'cum respublica praedia sua venderet'.

unknown. The use by private individuals of the public water supply when the aqueduct had been built brought in a small revenue. Fines imposed by public authority went to the chest, and several funerary inscriptions record a penalty of 50,000 sesterces for the desecration of the tomb.¹ But it is probable that tombs were respected while prosperity lasted; when, in the period of decline, they were rifled and their material reused for restorations, it is doubtful whether penalties were enforced. Members of the council paid for their election and occasional windfalls came to the public chest from such rich men as Marcus Licinius Privatus, a freedman who made a bequest of 50,000 sesterces.² But no general rates, so far as we know, were levied on land or property. The financial system of local government was a fair-weather system, relying primarily on the public generosity of magistrates and patrons.

The public career of an Ostian was not limited to secular office. At Rome membership of one or more of the great priestly colleges was an integral part of the public career of leading statesmen. Cicero waited anxiously for the augurate; emperors, whatever other titles they refused, became *pontifex maximus*. So at Ostia a man who embarked on a career of office normally held an official priesthood. The charter given to the Caesarian colony of Urso in Spanish Baetica shows that the offices of *pontifex* and *augur* were a recognized element in the constitution of Roman colonies.³ Neither *augur* nor *pontifex* unqualified is found at Ostia; their place is taken by an official priesthood whose roots almost certainly go back to the early days of the colony.

The cult of Vulcan, Ostia's patron deity, maintained until the late Empire the predominant place in the public religious organization of the town. The *pontifex Volcani* corresponded in function and prestige to the *pontifex maximus* at Rome. His post was the most honourable that an Ostian could hold and marked the climax of a public career: unlike the magistracies it was held for life. C. Antius Crescens Calpurnianus, who is recorded as *pontifex Volcani* in 194, still holds office in 203;⁴ in 36 and 105 new appointments are recorded in the *Fasti*, and in each case the occasion is the death of the previous holder of the office.

The cult of Vulcan was also served by praetors and aediles, and both offices were graded. There seem to have been three *praetores sacris Volcani faciundis*, for several holders of this religious praetorship are styled

¹ e.g. 166, 307, 850.

² 15.

³ *Lex Ursonensis*, 66: 'ita uti qui optima lege optimo iure in quaque colon(ia) pontif(ices) augures sunt erunt.'

⁴ 325, 324.

pr(aetor) pr(imus);¹ another is *praet(or) II*;² and the P. Lucilius Gamala who lived under Marcus Aurelius is *pr(aetor) tert(ius)*.³ Fewer inscriptions recording the aedileship have survived, but M. Marius Primitivus, who lived under Antoninus Pius, is *aed(ilis) II sac(ris) V(olc.)*;⁴ there may also have been three aediles. Normally only one of these priest-hoods was held by a man; and there is no evidence that the praetorship carried more distinction than the aedileship, for the Augustan Gamala, one of the most distinguished Ostians of his day, is aedile.⁵ But Cn. Turpilius Turpilianus is both aedile and praetor⁶ and the late-second-century Gamala is 'aed(ilis) sacr(orum) Volcani, eiusdem *pr(aetor) tert(ius)*'.⁷ While the post of *pontifex Volcani* was the climax of a career reserved only for the most outstanding public men, the praetorship and aedileship were normally the prelude to office, as is shown by their position in recorded careers.

Although the cult of Vulcan retained its pre-eminence in the religious organization of Ostia into the fourth century the imperial cult assumed increasing importance as the Empire developed. The building of the temple of Rome and Augustus at the south end of the Forum in the early Julio-Claudian period marks the adoption by the town of a public and official cult presided over by a *flamen Romae et Augusti*. This priesthood, though carrying less distinction than the pontificate of Vulcan, was reserved for men of standing and is normally recorded late in careers: its occurrence in inscriptions is sufficiently rare to justify the assumption that it was held for life.⁸ To this central cult of Rome and the emperor was later added the cult of individual deified emperors. Vespasian is the first emperor known to us to have had a *flamen* at Ostia, but the absence of inscriptions recording priests of Augustus, Tiberius, and Claudius may be no more than coincidence. The holders of these priesthoods, like the praetors and aediles of Vulcan, were men at the outset of their public career.

The association of secular and religious office is illustrated in the only two careers recorded in full that have been preserved from the pre-Flavian period. The Augustan P. Lucilius Gamala was in turn aedile in the cult of Vulcan, co-opted decurion by decree of the decurions, *pontifex* of Vulcan, *duovir* with censorial authority.⁹ C. Fabius Agrippa was

¹ 306, II, 432.

² 341.

³ 2.

⁴ S 4553.

⁵ I.

⁶ 3.

⁷ 2. Cf. 390: 'P. Nonio Anterotiano . . . aedili *pr(aetori) sac(ris) Volk(ani)*'; aedili *pr(imo)* is, however, a possible supplement.

⁸ The assumption is strengthened by S 4674/5 (= 447): '[f]l(amini) *perpetuo Rom[ae] et Augusti*].'

⁹ I.

praetor in the cult of Vulcan, co-opted decurion by decree of the decurions, aedile, duovir.¹

When public men were honoured with statues or commemorative tablets their careers were normally set out in full. On tombstones an abbreviated formula is frequently found: 'omnibus honoribus functus in colonia Ostiensi.'² The full public career implied by the phrase need perhaps cover no more than a priesthood, the aedileship and duovirate; it could also include the quaestorship and further priesthoods. The occasional omission of 'omnibus' from the formula is probably significant. We know from the inscription on his statue base that Q. Plotius Romanus had been aedile, *flamen Romae et Augusti*, and *flamen divi Titi*.³ These offices are not recorded on his tombstone, where he is described simply as 'honoribus funct(us) in colonia Ostiensi'.⁴ He died before his parents; probably he had not yet reached the duovirate.

In addition to magistrates Ostia, like other towns, appointed patrons. The title *patronus* was the highest honour that the town could confer. No formal duties were attached to the position, but patrons were expected to further the interests of the town, especially in relations with the central authorities. The local council, therefore, with whom the election lay, looked primarily to Roman senators and knights, particularly to Ostians rising in the imperial service. A man whose career was limited to Ostia could not expect election; no patron is known among the P. Lucilii Gamalae in spite of their long series of local offices and benefactions. The choice was not restricted to fellow townsmen. Prominent Roman senators and equestrian officials who had personal or official associations with the town and who could be expected to give useful service were honoured in this way.

Next in dignity to patrons and magistrates were the *decuriones*, the members of the town council. This council was the mainspring of government, framing policy, and controlling the work of the executive. In Ostian inscriptions we cannot expect to learn more than a fraction of the councillors' business. We find them voting public statues or commemorative tablets to distinguished men and public funerals to benefactors. They grant authority for the setting up of statues on public land, as the letters *l.d.d.d.p.* on statue bases from the Piazzale delle Corporazioni declare: 'locus datus decurionum decreto publice'. We assume that all matters concerning the town's administration were

¹ 8.

³ 400.

² 294, 323a, 335, 354.

⁴ 401.

subject to the council's authority, and that the actions of the executive, apart from their routine duties, derived from council decrees, *decreta decurionum*.

For the qualifications governing entry to the council we have to rely on the general evidence concerning local government. Free birth was essential, unless a special exception was made in the town statute, as in Caesarian colonies which included a substantial admixture of freedmen. At Ostia the ex-slave could receive the honorary rank of a councillor, but not the full status.¹ The minimum age laid down by imperial regulation was twenty-five,² but this regulation was not always observed. In the second century P. Celerius Amandus had entered the council before he died at the age of eighteen;³ M. Cornelius Epagathianus, also a councillor, was only twelve when he died;⁴ the Antonine Gamala was admitted when he was a boy.⁵ This dangerous symptom is found in many other towns, nor at Ostia is it limited to the period of decline; when Amandus was made a councillor the town was at the height of her prosperity. It was an unwise tribute to a family's public generosity. Of a census qualification for entry to the senate we have no evidence, but it is unlikely that Ostia was an exception to what seems to have been a general rule.⁶

The sole method of entry into the council recorded on Ostian inscriptions is by co-option; the new member is 'decurionum decreto adlectus decurio'.⁷ We should expect ex-magistrates to be entitled to membership, and duovirs to have the power of enrolment in censorial years; but for these methods of entry there is no evidence. The Augustan Gamala was aedile before he became a councillor, but his entry to the council is by the council's decree, 'aedili, d(ecurionum) d(ecreto) allecto gratis decurioni'.⁸ This Gamala was admitted *gratis*; normally an honorarium had to be paid. The same privilege was accorded to another Gamala, probably of the Julio-Claudian period;⁹ in both cases it was perhaps a tribute to the benefactions of a long-established Ostian family. In the only other case known it was the reward for public generosity;

¹ 15.

² The minimum age before Augustus was 30, *Tab. Her.* 89; cf. Pliny, *Ep.* x. 79. 1. The Flavian charter of Spanish Malaca specifies a minimum age of 25 for councillors and magistrates (*Lex Mal.* 54). Cf. *Dig.* l. 4. 8: 'ad rem publicam administrandam ante vicensimum quintum annum . . . admitti minores non oportet.'

³ 321.

⁴ 341.

⁵ 2.

⁶ Pliny, *Ep.* i. 19. 2: 'esse autem tibi centum milium censum satis indicat, quod apud nos decurio es.'

⁷ e.g. 321, 8, 362.

⁸ 1.

⁹ 3.