

5 | The ‘sacred sewer’: tradition and religion in the Cloaca Maxima

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For over two thousand years, historians have marvelled at the Cloaca Maxima. From Livy and Frontinus to Cassiodorus, and from sixteenth-century guidebooks to twentieth-century classical studies, Rome’s largest and oldest sewer has fascinated both scholars of ancient construction techniques and historians of urban life. Most of this literature underscores the Cloaca’s architectural significance or its feculence, or both.¹ In the same breath, Livy mentions the filth that ran through it and the engineering prowess of those who first built it, while Pliny praises its engineering precisely because it withstood torrents of filthy flood waters for centuries.² Enlightenment critics lauded the Cloaca as the archetype of beneficial public architecture as opposed to vainglorious pomp: deliberately inverting received hierarchies of decorum, the rationalist Francesco Milizia, writing in 1787, conceived his history of Roman buildings ‘from the Cloaca Maxima to the Sacristy of St Peter’s: from the best to the worst’.³ More recent scholarship has still highlighted the architectural impressiveness or the polluted function of the drain, and stresses the sewer’s role in Roman ‘politics of cleanliness’, and as an architectural signifier of civic ambition under Rome’s early rulers.⁴

Far less attention has been paid to the persisting cultural significance of the Cloaca Maxima for Roman viewers, including the seemingly paradoxical possibility that this unglamorous, workaday drain was not just a prized monument of functionality and engineering but one that was somehow sacrosanct. Scholars have long noted that the Cloaca originated as a

My sincere thanks to the organizers and participants of the 2007 conference for their feedback, and especially to Mark Bradley for all his work on this volume and encouragement on the topic. I am grateful to Penelope Davies and Jeffrey Collins for their feedback on various drafts and to the anonymous readers for their comments.

¹ On the Cloaca Maxima as a marvel of Roman engineering: Lanciani (1890) 95–6; Holland (1961) 349–50; Reimers (1989) 137–8 and (1991) 111–14; Edwards (1996) 106; Bradley (2006); Hopkins (2007) 1–4. On the Cloaca as a sewage system: Platner and Ashby (1929a); Scobie (1986) 418–20; Gowers (1995); Villoresi (2006) 2–26.

² Livy 1.56; Pliny, *Naturalis historia* 36.24.103–107. It was praised as late as the sixth century by Cassiodorus: *Variae* 3.30.

³ I thank Jeffrey Collins for this reference: Milizia (1787) 205. The Cloaca Maxima is discussed in detail also at pp. 17–19.

⁴ Bradley (2006); Hopkins (2007) 1–4.

canalized natural stream, and since Romans believed moving water to be holy, some have argued that the waters of the Cloaca maintained this religious aura.⁵ In a similar way, the Cloaca's status as one of the city's oldest structures garnered continuous praise from Roman authors, who invested it with an historical prestige that seems to have reinforced its hallowedness.⁶ Meanwhile, anthropologist Mary Douglas has complicated modern dichotomies of purity and pollution by studying how non-Western or non-modern peoples either accommodated or actively synthesized the two.⁷ Overall, these perspectives have led a handful of scholars to propose that ancient Romans perceived this hidden watercourse in ways dramatically different from how sewers are understood in modern Western cultures: not just as a praiseworthy public utility, but as a living testament to Rome's origins and a monumentalized marker of a hallowed stream. In this chapter, I assess this reinterpretation from an archaeological perspective, suggesting through a close examination of the remains both of the Cloaca itself and of associated monuments that Romans did indeed see something sacred in their sewer.

From stream to sewer: the Cloaca Maxima in context

As the city of Rome and its population grew during the Republic, the need arose for substantial drainage systems, *cloacae*, to keep streets and buildings as free from flood waters and refuse as possible (figure 5.1). Unlike modern septic sewers, which collect every kind of foul material, Rome's ancient urban drains were flushed with natural run-off and excess from fountains, carrying only the occasional debris that collected in the city's streets and perhaps domestic kitchens. They probably did not receive human waste from public or private latrines.⁸ In fact, the translation of *cloaca* to mean 'sewer' is imprecise; the Latin word seems rather to have roots tied to the verb *cluere*, which meant 'to cleanse with running water'.⁹ Thus, while the waters of the *cloacae* were certainly unclean, they were more similar to a refuse drain than a sewer *per se*. From the early Republic, drains of this sort

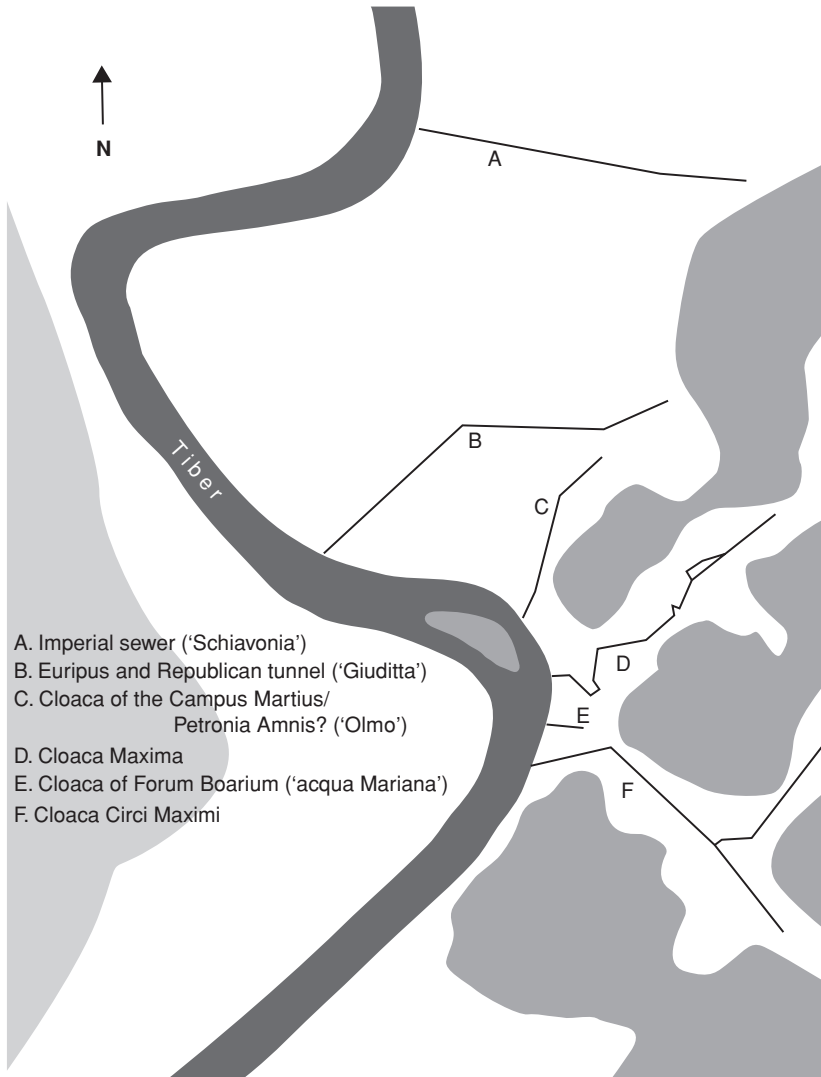
⁵ E.g. Holland (1961) 33, 349–50. On the sanctity of moving water in general: Edlund-Berry (2006).

⁶ See below.

⁷ Douglas (1966) esp. 161–2. This chapter aims to reassess the Cloaca Maxima with this open mind.

⁸ Though it cannot be entirely ruled out. Bodily waste was famously used for laundering clothes and (by way of carts that collected solid waste) for fertilizer: Scobie (1986) 408–18.

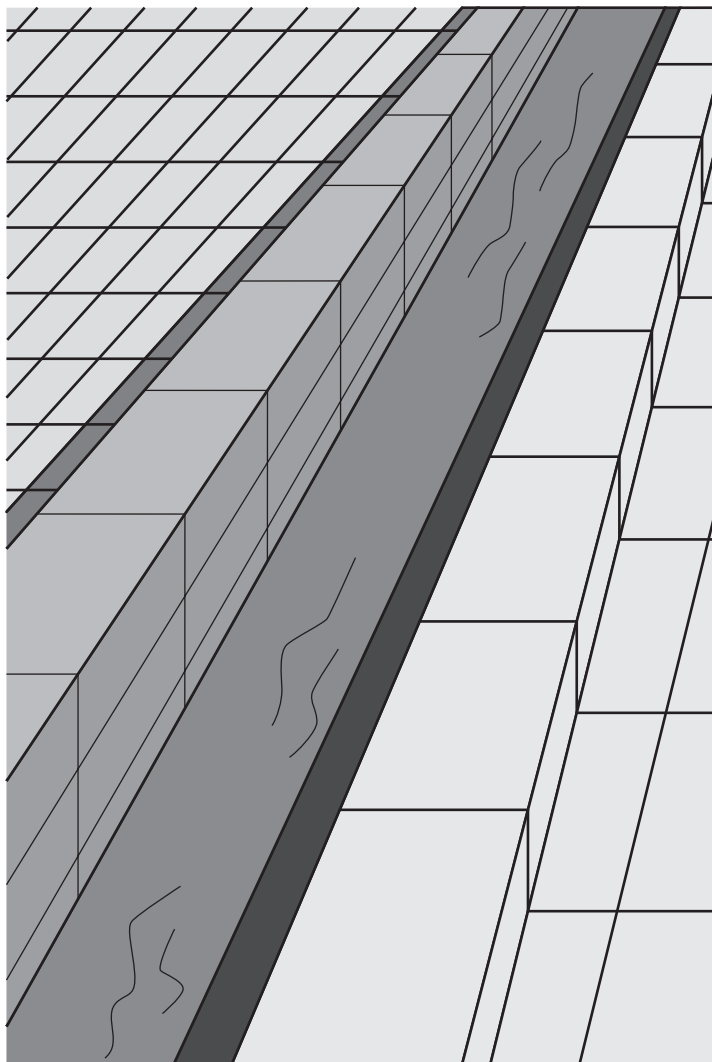
⁹ See below, n. 62 for further discussion of this.



5.1 The *cloacae* of ancient Rome. John Hopkins, after C. Moccheggiani Carpano.

removed filth from around the centre of Rome; the Cloaca Circi Maximi drained the area of the Circus Maximus and later seems to have connected to culverts for the Colosseum and perhaps the Baths of Caracalla.¹⁰ In the Campus Martius, two mid-Republican *cloacae* ran from the future site of the Pantheon and from the north slope of the Capitoline to the Tiber. Under the Empire, a tract was constructed from the Pincian Hill to the Tiber,

¹⁰ Moccheggiani Carpano (1984) 169, 73–6.

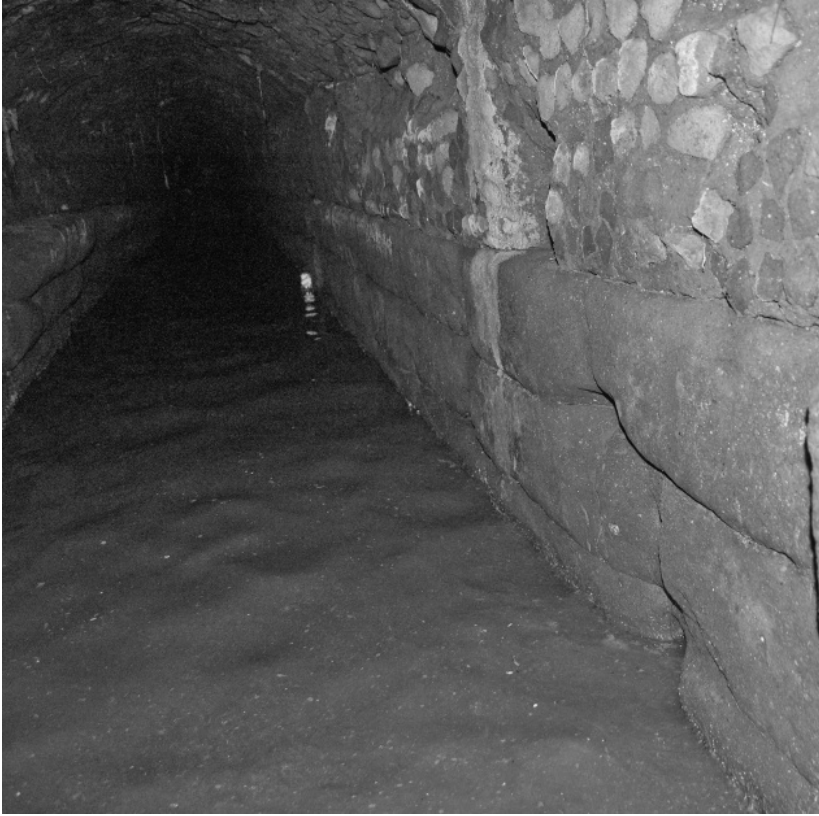


5.2 Cloaca Maxima before vaulting. Reconstruction: John Hopkins.

draining the northern Campus.¹¹ These four systems are just a few of the many subterranean channels that drained the ancient city, criss-crossing the valleys and slopes of the hills.

The focus of this essay is the *Cloaca Maxima*, the oldest of the *cloacae* and by far the most monumental. Its inception seems connected with a purposeful reclamation of the Forum valley in the seventh century, when

¹¹ Moccheggiani Carpano (1984) 169–70; Bauer (1989) 46.

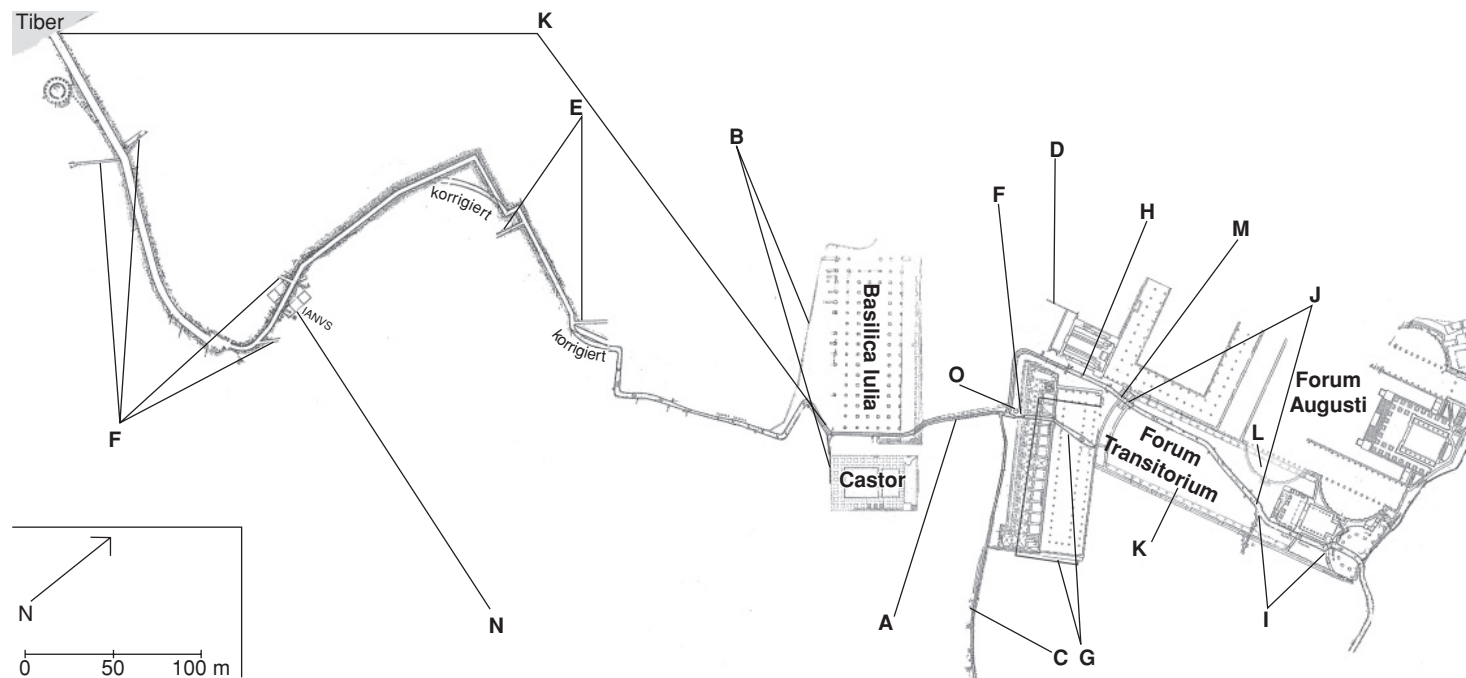


5.3 Cloaca Maxima. Earliest tract (in cappellaccio) with later concrete vault. Photo: John Hopkins.

some form of canal was employed to collect and direct a freshwater stream that ran through the area.¹² At what time Romans began polluting the stream is uncertain, but for a while at least, it remained a natural stream, not a sewer. Some time in the fifth century the Maxima was monumentalized in stone (figures 5.1–5.3, 5.4: A), and contemporaneously or soon thereafter Romans drained still marshy areas around the temples of Saturn and Castor with the earliest known conduits to feed into it (figure 5.4: B).¹³ In the middle

¹² Hopkins (2007) 8 and Hopkins (2010) 50–6, appendix; cf. Ammerman (1990) 636.

¹³ The date is a correction to Hopkins (2007) 8–11. In recent explorations of the Maxima I was able to confirm that the tops of these earliest walls of the Maxima are higher in elevation than a pavement of the Forum that is commonly dated c. 450. This indicates that the remains of the extant stone Cloaca Maxima should date to 450 or later; a problem in absolute dating for this structure, however, is that it is not possible to excavate through the portion of the Forum under which runs the Maxima. It is therefore not possible to get an exact correspondence between the walls of the Maxima in one area and the elevation of the different Forum pavements in that



5.4 Map of the Cloaca Maxima. John Hopkins, after H. Bauer.

Republic, they added a large duct alongside the Via Sacra (figure 5.4: C) and from the middle to late Republic new shafts joined these, draining the Tullianum (figure 5.4: D), the slopes of the Palatine and Capitoline hills (figure 5.4: E) and the Velabrum and Forum Boarium (figure 5.4: F).¹⁴ Augustus and Domitian overhauled much of the system, and as each emperor built the imperial fora, he constructed new drains to direct waste to the Maxima.¹⁵ The result of the continuous extensions and repairs to the sewer is a monumental subterranean drainage network exhibiting a patchwork of Roman building techniques.

Louise Adams Holland was the first to suggest that the main conduit of the Maxima channelled sacred waters. For her, the telltale sign was its twisting path through the Forum Romanum, Velabrum and Forum Boarium; indeed, the meandering channel contrasts so sharply with the decidedly straight courses of Rome's other *cloacae* that it would seem at first glance to betray poor engineering (figures 5.1, 5.4).¹⁶ The numerous elbows restrict water flow and cause back-ups, just as swift-moving waters slam into the sharp turns and destabilize walls, rendering such a circuitous course tectonically unsound. Yet the engineering involved in the expansive vaults of the Cloaca, alongside the hydraulic expertise witnessed in other civic and imperial water-management systems, bears witness to Romans' expertise in this line of construction, making it unlikely that they would create, much less maintain, potentially deleterious bends in the course of the Cloaca Maxima without a specific imperative. Rather, it seems the Maxima meandered because it followed a predetermined path that Romans would not or could not change. Holland understood that this was probably a waterway, noting that the stream running through the middle of the Forum in Rome's earliest days would not have disappeared when Romans began inhabiting the valley. She suggested instead that the Maxima was used to channel it, and recent research into the origins of the Forum and the Maxima itself seem to confirm this.¹⁷

same area. One must therefore compare elevations from excavations in different parts of the Forum. In this case, the lowest elevation for the c. 450 pavement is nearly equal to the elevation of the top of the cappellaccio walls of the Maxima. Hopkins (2010) appendix. For additions, cf. Platner and Ashby (1929a); Bauer (1989) 48–9; Richardson (1992a); Hopkins (2007).

¹⁴ Picozzi (1975) 3–6; Bauer (1989) 49–51.

¹⁵ Lanciani (1890) 96–8; Ashby (1901) 138; Hülsen (1902) 36–7; Platner and Ashby (1929a); Blake and Van Deman (1947) 60, 159, 341; Picozzi (1975); Moccheggiani Carpano (1984) 165; Bauer (1989) 47–9 and (1993) 288–9.

¹⁶ Holland (1961) 349–50; Cressedi (1984); Bauer (1989) Abb. 19. cf. Lanciani (1897) 29.

¹⁷ See above, n. 14.

Subsequent scholars have largely accepted this view, but without addressing the critical fact that in the second century, one area of the Maxima, which I discuss below, began to cause problems; despite this, Romans maintained its course for centuries. If the channel were nothing but a sewer, and the stream's waters simply a means to flush it, why did Romans keep repairing a problematic and circuitous tunnel when they could have rebuilt one that was much straighter and more functional? Holland argues they did so because the stream it originally channelled was sacred.¹⁸ She refers to Servius and Varro, who state that streams, rivers, brooks and springs were holy, 'in the augural sense "living [moving] water"', and that special regulations had long been in order regarding such 'living water'.¹⁹ Recently, Ingrid Edlund-Berry has recalled the pervasive power of moving water in ancient Roman sources and argues it held a much stronger role in religious practice and consciousness than previously thought.²⁰ The Maxima was by no means the only sacred stream in the city.²¹ Two important examples of living water are the Petronia Amnis in the Campus Martius, which formed the northern boundary of the city, and the Circus brook, which formed the southern. Both required a transgressor's propitiation, and in spite of problems they caused, Romans maintained both of their natural courses.²² Holland argues that Republican and early imperial Romans revered the waters that the Maxima channelled in precisely the same way they revered the Petronia Amnis and other sacred streams: as living water.²³

But perhaps it was not religion alone that dictated Romans' reverence of the Cloaca Maxima. Its archaic origin seems also to have led Romans to venerate it as a symbol of their great and ancient past. Among others, Ann Vasaly and Catherine Edwards argue that monuments and places in the city of Rome had an especially strong power to channel memory and evoke history.²⁴ In Cicero's *De finibus*, Piso remarks, 'Places have so great a power of suggestion that the technical art of memory is with good reason

¹⁸ Holland (1961) 33, 349–50.

¹⁹ Servius, *Ad Aeneidem* 2.719; Varro, *De lingua Latina* 5.123. Cf. Holland (1961) 18 n. 39, 19 n. 42, 95–6.

²⁰ Edlund-Berry (2006) 162–3. ²¹ Holland (1961) 8–20, 9–49, appendix C.

²² Holland (1961) 33 n. 18; Domaszewski (1975) 217 n. 2. Cf. Justinian, *Digesta* 43.13; Tacitus, *Annales* 1.79.

²³ Holland (1961) 6, 19, 21–2; Domaszewski (1975) 217–18. Cf. Cicero, *De natura deorum* 3.52 (though Holland translates *propinquorum fluminum* as 'streams of the neighbourhoods', instead of 'of neighbouring streams', and suggests the Spinon and Nodinus must therefore refer to the streams of the Forum and Circus valleys; cf. Loeb translation); Festus L.146.17, 284, 485; Servius, *Ad Aeneidem* 2.719.

²⁴ Vasaly (1993) 29–33; Edwards (1996) 2, 29.

based upon them' (*tanta vis admonitionis inest in locis; ut non sine causa ex iis memoriae ducta sit disciplina*).²⁵ Writing in a city outfitted with the Tabularium, Pompey's Theatre and Portico, Caesar's Forum, a newly monumentalized Capitoline Temple and a multitude of extensive aqueducts, Livy remembers the archaic Cloaca Maxima as a 'monument for which the new magnificence of these days could scarcely produce a match'.²⁶ Dionysius of Halicarnassus places the earliest manifestation of the Cloaca among Romans' greatest achievements, and writing of a city that had seen Nero's Golden House, Augustus' Forum, early work on the Colosseum and countless other wonders, Pliny praises the power and grandeur of the 700-year-old Cloaca.²⁷ Edwards suggests these authors and others praise the Maxima because it was built without foreign (especially Greek) inspiration or tectonics.²⁸

I suggest that the historical symbolism of the structure also compelled Romans to praise it. The Cloaca was one of the earliest monuments Romans built and by the Empire was one of few from that period that remained and functioned. What is more, by the late Republic, historians tied its waters to the cleansing of soldiers after the Sabine War and the formation of boundaries between tribes in the early city, two of the most momentous historical traditions in the formation of Roman culture.²⁹ In the late Republic and early Empire, Romans celebrated their origins to an unprecedented degree.³⁰ Cicero, Livy, Virgil and others looked to Rome's earliest history as a time of virtuous men and great achievements, and Augustus spent much of his career alluding to early Roman history through an extensive propagandistic programme.³¹ As a monument that contemporary authors regarded as among the greatest achievements of early Roman architects, and as a structure that still served the city, the Cloaca Maxima would have been a symbol of these origins, and in addition to channelling sacred living water, the structure would have aroused the memory of Rome's earliest history.

²⁵ Cicero, *De finibus* 5.2. Cf. Vasaly (1993) 29–33; Edwards (1996) 29. ²⁶ Livy 1.56.2.

²⁷ Dionysius of Halicarnassus 3.67.5; Pliny, *Naturalis historia* 36.104–9.

²⁸ Edwards (1996) 106.

²⁹ Pliny, *Naturalis historia* 15.119–120, 122 and cf. Coarelli (1983) 79–89.

³⁰ Gowing (2005) esp. 18.

³¹ For example: Zanker (1990); Galinsky (1992) 457–75 and (1996); Ingholt (1969) 177–87; Kleiner (1978) 753–85 and (2005) 197–233; Martin (1982); Kellum (1985); Holliday (1990) 542–57; Reeder (1992) 265–307; Pollini (1995) 262–82; Favro (1996) and (2005) 234–63; Davies (2000) 1–19, 41–74; Clarke (2005) 264–80; Welch (2005); Rehak and Younger (2006).

Maintaining and marking the Maxima

If the Maxima was hallowed, it stands to reason that its architecture and perhaps its site would reveal traces of that reverence.

The first place to look is the structure itself. That Romans largely maintained its peculiar path is a first indication of its sanctity. In the early second century BC in the Forum, however, they parted from their persistent preservation of its site for the first and only time, when they built the Basilica Fulvia directly on top of the Cloaca Maxima (figure 5.4: G). As the basilica rose and fell during the second and first centuries BC it did an enormous amount of damage to the sewer. Christian Hülsen, Tenney Frank and Bauer note five different masonries crammed together under the *tabernae novae* alone, revealing constant reconstruction.³² The last of these dates to 34–33 BC, when Augustus or Agrippa completed a major overhaul of the Maxima from the Basilica Aemilia to the foot of the Quirinal.³³ After this, it was diverted around the north side of the Basilica Aemilia, and up the Argiletum to the Suburra (figure 5.4: H).

The date and impetus for this detour have caused intense scholarly debate and merit a fresh look. Heinrich Bauer and Edoardo Tortorici suggest that Domitian built the new tract during the construction of his Forum Transitorium and temple of Minerva.³⁴ They give no compelling reason for Domitian to have done this, as the Basilica Aemilia did not collapse into the Maxima during his reign or that of his immediate predecessors, and neither Frontinus nor any other author report damage to the system in the late first century AD.³⁵ Still, they insist the masonry of the new tract exhibits the fingerprints of Domitianic construction. Bauer identifies Domitianic lapis Albanus as the material used for a distinct section built to circumvent the temple of Minerva (figures 5.4: I, 5.5), and Tortorici adds that in the long stretch between the temple of Minerva and the north side of the Basilica Aemilia the channel was vaulted in Domitianic concrete (figures 5.4: J, 5.6).³⁶ A recent exploration of the canal confirms that lapis Albanus similar in dimensions to that used in the temple of Minerva was in fact the material

³² Ashby (1901) 138; Hülsen (1902) 38–57; Frank (1924b) 66–75; Bauer (1989) 49 and (1993) 288–9.

³³ Bauer (1989) 48–9 and (1993) 288–9; Morselli *et al.* (1989) 47.

³⁴ Bauer (1977) 310 and (1983) 48; Morselli *et al.* (1989) 47.

³⁵ The only feasible explanation would be that the colonnade of the new Forum Transitorium or the stalls outside the Templum Pacis were on top of the Maxima, but Bauer's own reconstructions (and those of many others) reveal that these are well to the southeast of the old tract of the Maxima.

³⁶ Bauer (1997) 310 and (1983) 48; Morselli *et al.* (1989) 47.



5.5 Cloaca Maxima. Domitianic tract east of temple of Minerva in lapis Albanus. Photo: John Hopkins.



5.6 Cloaca Maxima. Augustan tract under Forum Transitorium in lapis Gabinus with Domitianic concrete vault. Photo: John Hopkins.



5.7 Cloaca Maxima. Detail of Augustan tufo and Domitianic concrete under Forum Transitorium. Photo: John Hopkins.

of choice for the section by that temple, and the date of the vault seems certain, as it cuts an Augustan pavement at the corner of the Curia and uses Flavian *bipedales*.³⁷ Yet Rodolfo Lanciani and Claudio Moccheggiani Carpano both note that the Domitianic cocciopesto vault rests upon large cut-stone masonry walls built in the same lapis Gabinus that Augustus used in his Forum (figures 5.6, 5.7), not the lapis Albanus used in the section adjacent to the temple of Minerva.³⁸ The use of two different building techniques from two different periods for walls and vault creates a conundrum. It seems counterintuitive for Domitian's engineers to bring in workers and an apparatus to build walls in out-of-date lapis Gabinus masonry (especially when lapis Albanus was already on site for construction) and then to contract a separate team of workers with a different expertise to create a concrete vault; it is far more likely, given Domitian's penchant for concrete, that his engineers would have built the entire structure with cocciopesto.³⁹ What is more, the section of the diversion adjacent to the north and west

³⁷ I owe many thanks to Luca Antognoli and his crew for taking me through the Cloaca Maxima twice and allowing me to photograph and measure various sections. Morselli *et al.* (1989) 151–70.

³⁸ Lanciani (1890) 96; Moccheggiani Carpano (1984) 171. The stone exhibits the clear lines of stratification that are prominent in lapis Gabinus and absent in lapis Albanus; cf. Jackson and Marra (2006).

³⁹ For the use of cocciopesto this early: Lancaster (2005) 58, 65, 211–12.

sides of the Basilica Aemilia is both walled *and* vaulted in lapis Gabinus (figure 5.4: H), and at the point where the vault material changes from concrete to stone, the walls are continuous. Thus, builders used several techniques in the diversion: for the long stretch from the *western* side of the Basilica Aemilia to the temple of Minerva they employed lapis Gabinus walls, but part of this was vaulted in the same stone and part in concrete; then, for the dog-leg around the temple of Minerva, they used lapis Albanus throughout. The medley of construction materials has long baffled scholars, but new evidence provides an explanation.

Largely on the basis of his study of the Forum Transitorium, particularly the turn the Cloaca makes halfway up the open space (figure 5.4: K), Bauer assigns the entire project to Domitian. Bauer argues that engineers should have made the turn at the northern corner of the Basilica Aemilia, but that a massive temple to Janus occupying the west end of the forum forced the tract to remain straight until just past its east facade.⁴⁰ No other explanation then existed for the peculiar turn, and most scholars accepted that the diversion of the Maxima was contemporary with or postdated Bauer's putative Domitianic temple of Janus. Excavations in the 1990s revealed that no such temple existed, however, leaving no good explanation for the Maxima's curious curve in the middle of the Forum Transitorium.⁴¹ Ongoing excavations in the Forum of Augustus may provide a new reason. There archaeologists have found a different obstruction: two *exedrae* at the western end of the complex that match the extant *exedrae* at the eastern end (figure 5.4: L).⁴² The Maxima turns to the east just before the southern edge of the southwest *exedra*, and it seems likely that this is the structure that forced the change in the direction of the new tract of the Maxima.

If the monument that forced the curve in the new Maxima already existed under Augustus, the diversion itself may have been built long before Domitian's reign, and this would account for the changes in masonry. The Basilica Aemilia collapsed for a third time in 14 BC, when the Forum of Augustus was under way, and it saw yet another reconstruction c. AD 22; thus there are two possible occasions for Augustus or Tiberius to have created this new tract.⁴³ I suggest that Augustus chose to move the sewer around the Basilica Aemilia after the Basilica's third collapse and interruption of the

⁴⁰ Cf. Bauer (1977) 310 and (1983); Morselli *et al.* (1989) 47, 68.

⁴¹ Morselli *et al.* (1989) 53; Viscogliosi (2009) 202–9.

⁴² The excavations are as yet unpublished, but see Favro (2005) 254 for a reconstruction of the western *exedrae*.

⁴³ Though the Basilica Aemilia's early destruction c. 14 BC would predate the Forum of Augustus, Cassius Dio and others report that the Basilica remained under construction for some time. For the 14 BC reconstruction: Cassius Dio. 54.24; for the AD 22 reconstruction: Tacitus, *Annales* III.72.

Maxima's service in 14 BC. The new route ran around the new building, across the Argiletum and curved at the *exedra* of his Forum. Later, while building the Forum Transitorium, Domitian reconstructed the tract's vaulting, giving it the appearance it has today, and diverted only a small section around his temple of Minerva, using lapis Albanus since it was on hand for the construction of the temple and forum. He did not change the lapis Gabinus vault along the north or west of the Basilica Aemilia because his construction zone did not extend over those sections.

At first glance, Augustus' transposition of one section of the Maxima would seem to indicate a decreased concern for the waters it channelled, but closer investigation reveals that this change in course did not go unaddressed. Holland's discussion of the Forum stream focuses on the role that Janus played in mitigating religious rites involved in crossing living water.⁴⁴ Romans so often traversed the Forum that it would have been impractical to take the requisite auspices every time one needed to cross the waterway.⁴⁵ In order to appease the sacred power of the stream permanently, early Romans, by tradition Numa Pompilius, established a *templum* to Janus at the site of the Cloaca Maxima.⁴⁶ Filippo Coarelli has identified a late antique brick structure at the northwest corner of the Basilica Aemilia as the shrine of Janus in the Forum, and, following Holland, he suggests that as long as there had been a shrine to Janus it stood in this spot.⁴⁷ Originally, however, there was no shrine at all, since the temple of Janus was a *templum* in the strictest sense, that is, a sanctified area and not a building.⁴⁸ Given the proximity of the later sanctuary to the Cloaca Maxima, around which Holland suggests the *templum* was originally sited, Janus' early role as propitiator of the Forum stream seems possible. Holland goes on to suggest that two other temples of Janus cross the Maxima: one in the Forum Transitorium and one in the Velabrum (figures 5.4: M, 5.4: N).⁴⁹ It is the one in the Forum Transitorium that is most important for a religious reading of the Maxima and of its continued reverence even as its path was changed in the early Empire.

Excavations in the 1990s revealed the foundations of a *quadrifrons* directly crossing the Cloaca at the juncture of the Forum Romanum, Argiletum and

⁴⁴ Holland (1961) 26–39, 50–2, 65.

⁴⁵ For examples of frequent official needs to cross the forum: Holland (1961) 22 n. 8. One should also consider more common and unceremonious needs of getting from one side of the city to the other, which would be impossible anywhere between the Argiletum and Tiber without either taking auspices or the presence of such mitigation as Holland suggests.

⁴⁶ Livy 1.19.2. Cf. Holland (1961) 22–3. ⁴⁷ Coarelli (1983) 89–97; Holland (1961) 25.

⁴⁸ Holland (1961) 25; Coarelli (1983) 89–97. ⁴⁹ Holland (1961) 26–7; Coarelli (1983) 79–85.

Forum of Caesar, and the excavators maintain that this must be an arch of Janus, which Ovid, Statius and others mention.⁵⁰ Scholars have long known that the arch existed, but they were unsure of its precise location. These remains may belong to that arch, but in any case ancient sources are clear that somewhere on the Argiletum, very close to the *templum iani* in the Forum, there was a second arch sacred to the god. The proximity of two *templa* on the edge of the Forum Romanum has long confused scholars. Why two so close together, and if they were built to propitiate the sacred waters of the Maxima, why did Romans think two were needed there, but none at all for much longer stretches in other areas?⁵¹ A natural explanation would be that the second temple on the Argiletum – directly above the diversion – was built in response to the transposition of the stream and to mitigate the sacred powers of the waters that flowed through a new channel. This line of reasoning was not possible for Bauer or other scholars of the Maxima, because they thought Domitian created the diversion, long after Ovid had first referred to the sacred arch.⁵² But if the diversion was created in response to the collapse of the Basilica Aemilia in 14 BC, this would account not only for the multiple masonry styles, but also for the Augustan date of the second temple of Janus. By this logic, Augustus finally succumbed to the need to move the channel around the Basilica, but in appreciation of its sanctity, he built a *templum iani* over the new branch. The construction of the temple in tandem with the new branch of the Maxima would suggest a continued connection between Janus and the stream as well as the Maxima's continued religious significance through the first century and to some degree until the late empire, when the temples of Janus were refurbished for the last time.⁵³

A third temple of Janus is thought to have existed in the Velabrum, and Holland argued that it had a similar function. For centuries the colossal *quadrifrons* by S. Giorgio in Velabro was thought to be an arch dedicated to Janus, but it is now identified as the Arcus Divi Constantini (figure 5.4: N). Still, it seems to have supplanted an earlier structure, and Holland argues that this structure was probably dedicated to Janus and marked the locus where canals from the Forum Boarium enter the sacred stream

⁵⁰ The *quadrifrons* is undeniably Domitianic, but presumably they mean this is a reconstruction of an original by Augustus. The Augustan pavement in this particular area was destroyed completely by Domitian's Forum Transitorium. See Ovid, *Fasti* 1.258; Bauer (1977) 301 and (1983) 177; Morselli *et al.* (1989) 244–5, figs 132–7, 219–22, 146, tav. 1.

⁵¹ Cf. Holland (1961) 26 n. 65.

⁵² Perhaps supplanted by the Domitianic structure. On literary evidence for the *templum iani* in the Argiletum/Forum Transitorium: Ovid, *Fasti* 1.258; Martial 28; Statius, *Silvae* 4.1; Servius, *Ad Aeneidem* 7.604. On these passages cf. Holland (1961) 95, 102.

⁵³ Cf. Procopius, *De bello Gothico* 1.25.

of the Cloaca Maxima (figure 5.4: E).⁵⁴ A connection between the earlier remains and the Maxima is speculative, but textual sources that mention a *templum jani* in the area (and associated with the Maxima) would seem to suggest a widespread connection between shrines of that god and the stream channelled below.⁵⁵ Overall, the shrines directly above the Cloaca dedicated to Janus, whose traditional role was to mitigate the powers of sacred water, are the first examples of Romans showing a religious deference to their 'sewer' or at least the waters in it. The first *templum*, in the Forum, reveals an early and longstanding worship of the god and his powers at the site of the Cloaca, reaching as far back as Rome's proto-history and forward into the late Empire, when the shrine was reconstructed for the last time. The second *templum*, along the Argiletum, explains how Augustus could move the stream and still maintain its sacred nature, and the third, if indeed related to Janus, was a manifestation of the propitiation of its waters downstream, as it assumed the scourges of the surrounding valley.

Less than five metres from the late antique shrine of Janus in the Forum and immediately adjacent to the Cloaca Maxima, the temple of Venus Cloacina seems to have functioned as yet another sacred marker of the stream (figure 5.4: O). The extant structure dates only as far back as Sulla's dictatorship, but textual sources mention its use throughout the Republic and as early as the archaic period.⁵⁶ A *denarius* struck in 39 BC shows the temple's circular base interrupted by a short rectangular stair on the north and with a balustrade on top that encircles two sculptures, identified by Pliny as statues of Venus.⁵⁷ The sanctuary's proximity to the Cloaca is a clear physical connection between the two structures, and the homonymous and linguistic ties between Venus' epithet, Cloacina, and the word *cloaca* reveals an undeniable association.

Carel Van Essen was the first to question *why* Romans would associate the two.⁵⁸ He notes that the purifying and fertile qualities associated with water were commonly associated with Venus and that Venus Cloacina was a goddess of both fertility and purification whose powers were tied to the

⁵⁴ On the attribution of the arch in the Velabrum: Coarelli (1968) and (1988) 8, 12; Cressedi (1984) 276; Pensabene and Panella (1994–5) 29; on the Republican finds under the arch and their identification: Holland (1961) 38–9. Cf. Richter (1889) pl. 37 and Cressedi (1984) 276, fig. 3.

⁵⁵ Holland (1961) 38–9.

⁵⁶ For full citations of work on Venus Cloacina through the early 1980s: Vaglieri (1900) 61–2 and (1903) 97–9; Coarelli (1983) 84 nn. 19, 20 on the literary tradition; cf. Pliny, *Naturalis historia* 35.119–22; Livy 3.48.5; and later, St Augustine, *De civitate dei* 4.8; Lactantius, *Divinae institutiones* 1.20.11.

⁵⁷ Grueber (1910) 573, 7–8; Pliny, *Naturalis historia* 15.119. ⁵⁸ Van Essen (1956).

use of sacred moving water. Of course, in the Empire when the Maxima was covered and soiled, its waters would not have been used at the shrine, but the implication is that originally the Forum stream was used in purification rites at the temple. Pliny and Livy would seem to confirm exactly that. They state that after the Sabine War, soldiers purified themselves of the stain of battle at Venus' shrine and with the waters of the Forum stream.⁵⁹ As with other textual sources, the testimony should be used with caution when trying to imagine the early city; nevertheless, it offers a valuable insight into the Cloaca and its sanctity because it reveals that in the late Republic and early Empire, a religious connection between the shrine of the goddess and the waters of the stream housed in the Maxima persisted in Roman lore. The association may have continued into the Empire, as the goddess retained her capacity as a purification deity for brides who visited her to cleanse themselves and ensure fertility.⁶⁰

Linguistic study only reinforces the connection. In his work, Van Essen recalls ties between *cloaca*/Cloacina and the Latin *cluere*, to cleanse, and in further study, Pontus Reimers notes that the essential meaning of the word *cluere* suggests running water like that in a stream.⁶¹ Given the historical tradition linking the shrine with the moving water in the stream, the linguistic connection between the two and their conspicuous homonymous and proximal relationship, it is hard to imagine that Romans would not connect the structures in their minds and that the sanctity of the shrine and of waters associated with it would not reflect on the adjacent Maxima and its stream.

While these sacred spaces were distinct from the Maxima's own architecture, the last two markers of the great sewer were part of the structure itself and its sacred, historic function. Scholars have long believed that the Bocca della Verità is in fact an ancient drain cover for the Maxima (figure 5.8). In 1715, Crescimbeni suggested that the expense lavished on the fine sculpting and Phrygian marble, and the representation of a deity on the stone, did not fit the proposed function.⁶² Yet through the twentieth century and into the twenty-first, scholars have defended the identification.⁶³ The worn holes at the eyes, nostrils and mouth of the marble disk seem clearly to have

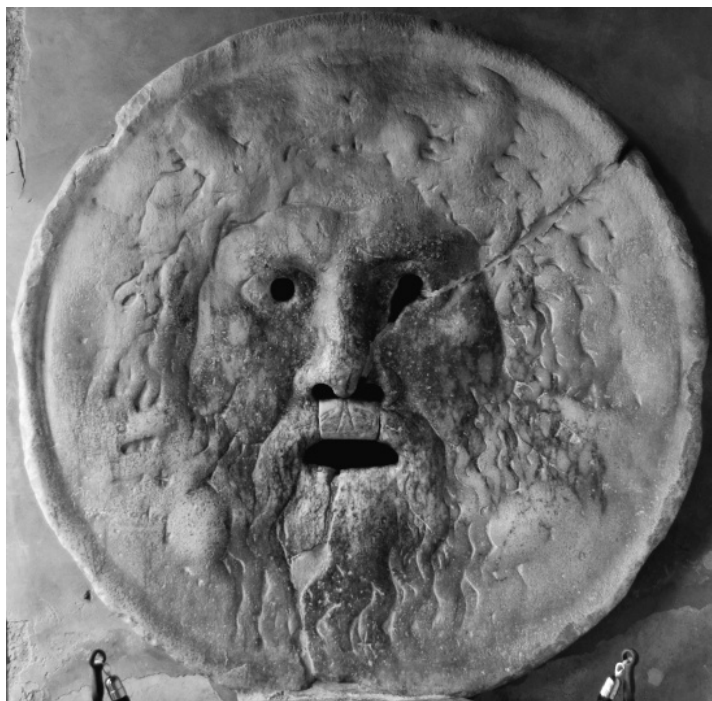
⁵⁹ Pliny, *Naturalis historia* 15.119–120, 122 and cf. Coarelli (1983) 85.

⁶⁰ Note Pliny's discussion of her function as well as St Augustine, *De civitate dei* 4.8; Minucius Felix, *Octavius* 25.8; Lactantius, *Divinae institutiones* 1.20.11.

⁶¹ Van Essen (1956) 139–44; Pliny, *Naturalis historia* 15.122. Cf. Reimers (1989) 137–8, n. 8.

⁶² Crescimbeni (1715).

⁶³ Barry (2011) 7–37. Barry gives an extensive discussion of possible locations, and does not assign any particular spot; curiously, he does not suggest the Cloaca Maxima as a possibility.



5.8 Bocca della Verità, here proposed as a drain cover for Cloaca Maxima with relief of Oceanus. Photo: John Hopkins.

facilitated drainage, as does its slight concavity. What is more, its size is roughly the same as a travertine drain cover found in a tributary to the Cloaca near the Round Temple in the Forum Boarium, and the uniform weathering of the sculpture suggests it was washed evenly and heavily by water draining into it.⁶⁴

Lanciani identifies the deity on the disk as Oceanus, with lobster claws protruding from his thick head of hair.⁶⁵ In the Empire, when the drain cover was almost certainly created, Oceanus had come to be synonymous with the power of the emperor, Caesar being the first to conquer a land across Ocean: Britain.⁶⁶ But the iconography here seems much more likely to suggest Ocean's primordial sacred powers, which mosaics and *paterae* throughout the empire recalled, and which can be traced back through

⁶⁴ Nash (1968) 261. This is based on my own measurement of the Bocca della Verità and personal correspondence with Mark Bradley.

⁶⁵ Lanciani (1891) 56. Most recently this identification has been confirmed by Fabio Barry: Barry (2011).

⁶⁶ Bajard (1998) 177–84; Williams (1999); Santoro Bianchi (2001) 88–92.



5.9 Mouth of Cloaca Maxima. Photo: John Hopkins.

Roman traditions to Hesiod and Homer.⁶⁷ In this mythology, Oceanus represented the most venerated of waters; Romans believed his powers were more ancient than Neptune's and his waters the only ones sacrilegious to navigate.⁶⁸ What is more, he was both the source of the world's water and its final destination, the perpetuator, and one theory suggests the face on the drain cover was meant to recall the eternal, cyclical power of the stream that passed below.⁶⁹ Though his image in this sculpture may only have recalled that water ran underfoot, his ties to primordial sacred streams such as the one channelled through the Maxima suggest more: that he marked the religious or mythological character of this water. For now, the Bocca della Verità is the only surviving example of such an opulent drain cover, and it may have been the only marker of its kind; regardless, Romans lavished great expense on an expertly sculpted marble relief whose purpose was to drain refuse into the Cloaca, and it is therefore yet another example of Romans highlighting the pathway of their sewer.⁷⁰

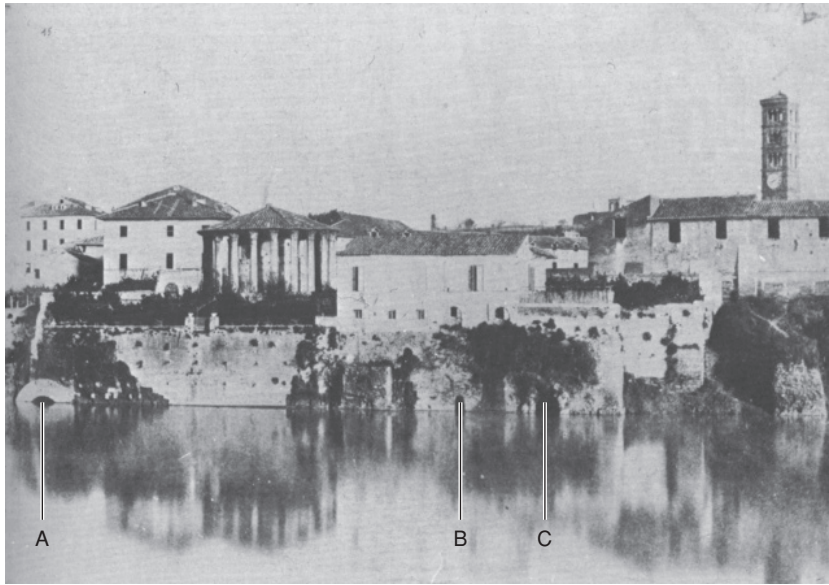
The last marker of the Maxima is perhaps the most directly tied to it. Just south of the Pons Aemilius, Romans aggrandized the mouth of the Cloaca in the first century BC with a triple arch embedded in the Tiber wall (figures 5.9, 5.10: A). The arched facade was a distinct initiative; sometime in

⁶⁷ Voute (1972); Cahn (1981) 33; Bajard (1998) 185–6; Williams (1999) 311. Cf. Ambühl (1894) 1154; cf. Hesiod, *Theogonia* 133.

⁶⁸ Ambühl (1894) 1154; Bajard (1998) 188, 91; Williams (1999) 311–12.

⁶⁹ Barry (2011).

⁷⁰ And it seems they put much effort into the symbolism, with Phrygian marble, meant to evoke water and a stock of other iconographic and stylistic idiosyncrasies: cf. Barry (2011).



5.10 Mouths of three *cloacae* on the Tiber. Photo: R. Lanciani, after Cressedi (1984).

the middle Republic, the Tiber embankment was built out of tufo giallo della Via Tiberina, and, according to Marion Blake and Lanciani, who examined the arch and wall during the modern Tiber reclamation project, the large lapis Gabinus arches were added at the mouth of the Maxima in the first century BC.⁷¹ Though six other *cloacae* emptied into the Tiber, the mouth of the Maxima is the only one that evidences such elaboration. To the south, an outlet from the Forum Boarium, now covered by the embankment, was finished with an unmarked opening in plain masonry (figure 5.10: B). The mouth of the Cloaca Circi Maximi 20 metres south of this small *cloaca* was elaborated with a single arch, perhaps indicating its archaic heritage (figure 5.10: C), but the dimensions and arched embellishment of the Maxima's mouth seem to have been unmatched (figure 5.10: A).⁷² Such embellishment would not have facilitated drainage and would have served only to mark the Maxima's entrance into the Tiber with a monumental image. Even if this facade was by no means as resplendent as the triumphal arches or other major monuments in the city, it was nonetheless exceptional and technologically superfluous. Had Romans seen the Maxima as nothing but an unsavoury waste chute, surely they would have done everything to hide

⁷¹ Lanciani (1897) 62–3; Blake and Van Deman (1947) 125, 159; Cressedi (1984) 273–4, figs 5–8.

⁷² Cressedi (1984) 273–4, figs 5–8.

its issue into the Tiber. Instead, they isolated this lone outlet and called attention to its opening with the triple-coursed archway.

Sacred pollution

For nearly five hundred years, as the city centre rose and fell on top of it, Romans maintained the Maxima's original course. Its persistent reconstruction under the Basilica Aemilia and its snaking path through the Velabrum and Forum Boarium suggest a reverence for the religious stream it originally channelled and for the power of the structure to recall and promote the earliest history of Rome. Religious ties to the origins of the temples of Janus and Venus Cloacina further reveal the sanctity of the Maxima, and the historical tradition of their origins in the regal period must have compounded the Cloaca's ties to Rome's most ancient past. As reminders of the subterranean sacred stream below, the temples and other markers also recall a dramatic change in the Maxima's image during the Republic: its transition from visible canal to invisible underground drain. Sometime in the middle Republic, probably in the second century BC if not before, Romans vaulted the entire length of the Maxima, thrusting the channel into a new obscurity.⁷³ Over the subsequent centuries, though, they by no means forgot or neglected the drain; instead they continued to refurbish it and build new shrines to propitiate the hidden waters. In place of a simple travertine drain cover, the marble disk of Oceanus signified the sacred primordial nature of the stream waters that ran below, and at the mouth of this most ancient stream, an arched facade proclaimed its terminus. Each of these monuments reveals that Romans went to great lengths and expense to highlight the path of their primary sewer, and, whether for religious reasons, historical pride or some combination of both, a re-analysis of the construction and marking of the Cloaca Maxima indicates that Romans believed it to be a hallowed monument.

In this way, the Maxima is markedly different from modern sewers, and when contemplating its significance in antiquity, one must seek to recover

⁷³ The date is controversial, but a reference in Plautus' *Curculio* would seem to indicate that it was open to the sky at least until the second century. Plautus, *Curculio* 475–6: *in foro infimo boni homines atque dites ambulant / in medio propter canalem, ibi ostentatores meri* ('in the lower forum walk the good, wealthy men; in the middle, near the canal, there [one finds] the utterly boastful ones'). Also, it was probably not covered solely because of the pollutants therein, but also because the pavement of the Forum had risen so high that the deep channel was either too dangerous, or was simply now low enough to allow for vaulting and a continuous pavement above it.

its distinct and enduring place in Roman culture. Rome's main sewer was not merely a waste receptacle, nor was its impressive vaulted construction of sole importance. The attention paid to the monument, its waters, its path and its outlet reveal a broader sense of respect, appreciation and veneration. Thus, like many polluted aspects of ancient and non-Western culture, the Cloaca Maxima held multivalent meanings for Romans who lived and built around it. Its waters were undoubtedly polluted, soiled; they were not hygienic and were apparently foul enough to demand a cover in the middle Republic. But by the same token, they remained inherently tied both to the natural sacred stream that continues to flush the drain even today, and to the vaunted history of earliest Rome. Romans' reverence for this ancient channel seems therefore to have led them to conflate sacred and polluted in the Maxima, and, however repulsive it was, the structure's sanctity and historicity demanded that Romans venerate it.