

CONTINUING THE DEBATE ON ROME'S EARLIEST CIRCUIT WALLS

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Rome's pre-Imperial circuit walls pose a particular problem of reconstruction: collectively, their 11 km course represents the largest single monument of the early city, but our understanding of this structure is based on an assemblage of several dozen disparate archaeological sites. After tracing the interpretation of these fragments from antiquity to the present, this article examines the literary, topographical and archaeological evidence for the wall's character and date. Ultimately, the non-archaeological data are inconclusive, and the material evidence seems to affirm an early phase (sixth century BC) focused on individual hilltops, rather than encompassing all hills within a full course. Following this logic, I continue to question the presence of a unified circuit wall at Rome prior to the mid-Republic (fourth century BC). A concluding section reviews the historical circumstances in support of this view.

Il circuito delle mura della Roma pre-imperiale pone un problema particolare di ricostruzione: complessivamente gli 11 km di percorso ne fanno il più grande monumento della città più antica, ma la nostra comprensione di questa struttura è basata sull'insieme di varie dozzine di siti archeologici. Dopo aver tracciato l'interpretazione di questi frammenti dall'antichità ai nostri giorni, questo articolo si concentra sull'esame delle evidenze letterarie, topografiche e archeologiche per definire le caratteristiche delle mura e la loro datazione. Infine sono inconcludenti i dati non-archeologici, e le evidenze materiali sembrano confermare una precedente fase (VI secolo a.C.) incentrata sui singoli colli, piuttosto che comprendere tutte le colline all'interno del suo percorso. Seguendo questa logica, io continuo a sottoporre a critica la presenza di un unico circuito di mura a Roma prima del medio periodo repubblicano (IV secolo a.C.). Una sezione conclusiva rivede le circostanze storiche a supporto di questa interpretazione.

The age and disposition of Rome's earliest circuit wall (or walls) have been a subject of discussion since antiquity.¹ In the archaeology of pre-Imperial Rome, the remains of the city's defensive circuit represent the largest physical monument still available for study, and so they have a signal importance to any understanding of the early city. While the circuit's date and shape may be long debated, a return to the topic of the age of the walls seems appropriate now for two reasons. First, the last several decades have produced an increasing amount

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of data through new archaeological discoveries as well as through the collation of archival material from earlier excavations: an *aggiornamento* to the question is in order. Second, and importantly, this study is made timely by the fact that a consensus of sorts recently has started to form around the idea that a full circuit wall surrounded Rome already in the sixth century BC. This paper sets to return a more circumspect approach to the question of the date of Rome's early circuit wall, and, after reviewing the evidence, I side against the existence of a full circuit until the mid-Republic.

As essential as this ultimate verdict, however, is a continuing awareness that the final analysis rests on context and inference, rather than on any indisputable archaeological evidence. An early form of fortifications does seem to have existed, but even considering the evidence of new excavations, there remains considerable room for debate as to its nature. Our view on the circuit wall of pre-Imperial Rome ultimately has as much to do with our opinion on the shape and capacity of the city itself at a given time.

THE HISTORY OF THE DEBATE

Ancient opinions on which of the kings was responsible for which section of the wall varied considerably. An *agger* on the city's eastern flank was the work of Servius according to Livy (1.44.3), and of Tarquinius Superbus according to Pliny (*HN* 3.66). Similar discrepancies are easily supplied (Cornell, 1995: 198–9). All ancient authors promoted the same basic concept: Romulus's original wall was expanded piecemeal during each subsequent king's reign as the city incorporated more outlying districts.² Such sources pass silently over any idea that Rome had no wall during the Regal period, but, considering the ancient view of the importance of earliest Rome, this should not surprise us.

By the Augustan period, however, the old ashlar circuit with its earthen *agger* was beginning to be dismantled in some places. Already, Dionysius considered the monument much as we do today: he attempted to trace the path of a single wall, which he assumed once made a full circuit, but which he could only locate in some places, all the while expressing frustration that it was overbuilt in others

Throughout, 'Archaic' refers to the period of Rome's kings, traditionally ending in 509 BC. Abbreviations are in accordance with the *Oxford Classical Dictionary* (third edition), with the following additions:

RMR = *Roma medio repubblicana. Aspetti culturali di Roma e del Lazio nei secoli IV e III a.C.* (1973). Rome, Assessorato Antichità, Belle Arti e Problemi della Cultura.

MAR = L. Haselberger (director) in collaboration with D.G. Romano, edited by E.A. Dumser (2002) *Mapping Augustan Rome (Journal of Roman Archaeology Supplement 50)*. Portsmouth (RI), *Journal of Roman Archaeology*.

Lanciani *FUR* = R. Lanciani (1990) *Forma Urbis Romae*. Rome, Quasar.

Platner-Ashby = S.B. Platner and T. Ashby (1929/2002) *A Topographical Dictionary of Ancient Rome*. Oxford, Oxford University Press.

² Sources on the Regal period were collected by Säflund (1932: 209–11).

(*Ant. Rom.* 4.13.5). By late antiquity and the medieval period the city's earliest fortifications mostly had disappeared, first from the city-scape and then from written topographies. While the walls of Rome remained a favorite topic for medieval writers and, later, for quattrocento humanists, the physical remains they discussed were the Aurelian walls. The earlier fortifications were by then known only through literary sources.³ Over the next centuries, chance finds would occasion further comment. In 1682, Pietro Sante Bartoli found a huge wall in the area of the Villa Montalto-Negrone, perhaps part of the *agger* under the Monte della Giustizia.⁴ Piranesi's reconstruction of Santa Maria del Priorato in 1765 turned up fragments of the wall on the Aventine.⁵

Antonio Nibby, in his *Le mura di Roma* (1820), still based his understanding of the pre-Aurelian walls largely on ancient sources. However, in the later part of the same century, study of the wall took a newfound energy from major excavation as part of the post-Risorgimento work to create Rome's new modern neighbourhoods. This urban expansion exposed long stretches of ashlar wall, especially on the Quirinal and Esquiline.⁶ Bolstered by more physical evidence, a new approach emerged. In a study of the walls published in 1878, the British archaeologist John Henry Parker claimed that his 'work is avowedly grounded upon the existing remains and not made out of other books; and the existing remains are my evidence of the truth of its statements' (1878: xix). He explicitly espoused a material-first methodology (1878: xi–xiv):

The construction of each period is soon ascertained by historically dated examples and experience has taught the Archaeologists that the construction of the same period was always the same, where the same building-materials are found. Construction thus becomes stronger evidence than books, because books are always liable to errors of transcribers or the misunderstanding of a passage from the same word being used in different senses . . . I thus make out the history of the building from the walls themselves, before I look for what anybody has said about it.

In this way, the discoveries of the golden age of Roman archaeology, the late nineteenth and early twentieth centuries, gave rise to a critical stance towards

³ A history of the disappearance of the wall remains a *desideratum*. In the Quattrocento, Flavio Biondo's *Roma Restaurata* discussed Rome's walls and gates for several chapters but never mentioned remains of an ashlar wall. Poggio Bracciolini, *De Varietate Fortunae* 1.8 (ed. Boriaud), referred to *antiqua moenia ex quadrato lapide* after Liv. 6.32, but related no physical evidence of it; cf. Weiss, 1969: 64.

⁴ 'Un muro grossissimo di 20 palmi e più, tutti di una specie di peperino, il quale vien detto cappellaccio,' cited by De Angelis Bertolotti (1983: 120). Barbera (2008: 19) identifies this as a partial discovery of the *agger* wall, as already had Carlo Fea.

⁵ Piranesi's *Diario di Roma*, Bib. Casanatense, MS 3816, fols 364r–365r, quoted by Barry (2010: 156–7 n. 33). Were these the remains still visible in that area in 1886? Cf. Battaglini, 2004: 106 no. 22.

⁶ A summary of excavations from 1878 to 1921 has been provided by Battaglini (2004). For the decade prior, the work of Säflund (1932) remains the most accessible description of the important years when work for Termini Station (starting in 1862) entailed the complete removal of the Monte della Giustizia superimposed over the *agger*.

the written source material in favour of an increasing corpus of archaeological data. This change in method was still new enough when Jesse Benedict Carter (1909: 129) wrote a brief account of the city prior to the Gallic Sack, something he remarked had previously ‘been written with small regard for that material and physical thing, the city of Rome’. Within this framework, Carter (1909: 136–41) dismissed the literary tradition of the Archaic period (although upholding that of the mid-Republican period) and asserted that Livy’s mention of a wall built in 378 BC (Liv. 6.32) was the only true indication of the age of Rome’s walls, previously and erroneously referred to as ‘Servian’.⁷

Concomitant with a growing scepticism towards textual evidence, the first half of the twentieth century saw rising attention paid towards those sets of data derived from close observation of archaeological remains. In particular, the study of building techniques and materials helped to promote a thesis of two distinct phases to the walls, with an earlier wall represented by blocks of *tufu del Palatino* and a later in *tufu giallo della via Tiberina (tufu giallo)*.⁸ Opinion divided over the shape of the first phase of the sixth century, which some held to be a full circuit, while others considered the earlier walls to have been part of either an incomplete circuit or separate hilltop fortifications until the later full circuit of the fourth century BC.⁹ Tenney Frank (1918) first detected that the *tufu giallo* came from the Grotta Oscura quarries on the right bank of the Tiber. As Livy recorded a wall begun in 378 BC, shortly after the Roman sack of Veii in 396 BC, and as these quarries would have been subsumed by Rome as part of the *ager Veientanus*, Frank noted a correlation between physical and literary evidence that suggested to him the reality of the fourth-century date.

Two studies in the 1930s combined Frank’s observation with a full and detailed review of the archaeology. Gösta Säflund’s magisterial and still indispensable monograph on the wall (1932) considered the full ashlar circuit wall as a product of the Republic, not the Regal period, and he allowed only for an earthen *agger* on the Archaic city’s eastern flank. Giuseppe Lugli’s first study of the wall (1933: esp. p. 39) represented a fully-formed argument for the two-phase theory, with the *tufu giallo* wall of the fourth century replacing a *tufu del Palatino* circuit of the Regal period along roughly the same course.¹⁰

With modification, these two theses continued to find support into the central decades of the twentieth century; however, greater weight remained on the side of

⁷ Scepticism already shown by Richter (1901: 43).

⁸ Recent geological work has done a great deal to characterize the volcanic tuffs that comprised the building materials of this era of Roman construction. See Jackson and Marra (2006), and on the wall specifically Panei and Dell’Orso (2008). I use the geological names found in these two publications, but for clarity I note that *tufu del Palatino* alternatively has been called *cappellaccio* or *tufu grigio*, and *tufu giallo della via Tiberina* is commonly known as *Grotta Oscura*.

⁹ For the Archaic full circuit, see: Graffunder, 1911. For hilltop fortifications, see: Pinza, 1912; Frank, 1924; von Gerkan, 1940; Blake, 1947: 116 (with some caution); Gjerstad, 1954.

¹⁰ Restated in a later work (Lugli, 1957: 172).

Säflund and against the concept of an earlier wall.¹¹ No less of an authority than Arnaldo Momigliano expressed scepticism about the existence of a circuit at Rome prior to the mid-Republic (Momigliano, 1963: 104; 1989: 80). The important exhibition *Roma medio repubblicana* (1973) collected for the first time the material evidence of mid-Republican Rome, and the show's catalogue claimed the structure for the period. Prominent scholars such as Tim Cornell (1995: 198–202; 2000: 45), Ross Holloway (1994: 91–102), Jacques Poucet (1992: 230–1; 2000: 177–8), Lawrence Richardson, Jr (1992: 262–3) and Christopher Smith (1996: 151–4) continued to argue for a discontinuous or even absent Archaic line of defence into the 1990s.

The pendulum has swung dramatically, however, after Andrea Carandini's sensational discovery in 1988 of a wall datable to the eighth century BC at the foot of the Palatine.¹² Excavation in the mid- and late 1990s affirmed the monumentality of the Rome of the kings and the abilities of Archaic Roman masons to work with cut-stone. Within this context, two influential papers by Filippo Coarelli (1995) and Gabriele Cifani (1998) reasserted the idea of a full Roman circuit wall in the sixth century BC along the same course as the later Republican wall. Cifani in particular has given graphic form to his reconstruction, mapping the Archaic wall as a full 11 km circuit, depicted as following the same line as Säflund's Republican walls with only minor adjustments. For almost a decade and a half now, this general picture has not been challenged and appears as *opinio communis*.¹³ More evidence has emerged, but by and large the complexity that the argument exhibited even twenty years ago has given way.

We know significantly more than we did a century ago about the material culture of early Rome and Latium, and some current interpreters of the wall promote their methodology as archaeologically grounded, eschewing both the title 'Servian' and the entire literary tradition.¹⁴ However, we have seen that such a material-first approach was already the intent of scholars by the late nineteenth century. Thus, the change in research has perhaps been more quantitative than qualitative — we can now draw from a dataset based on more and better documented physical evidence. But does this merit an end to

¹¹ For example, Gjerstad (1954) presented a point-by-point refutation of Lugli's interpretation (1933).

¹² See: Carandini, 1992; Terrenato, 1996; criticism of the applicability of this wall to the Romulus legend by Cornell (1995: 30, 72), Smith (1996: 153) and Poucet (2000: 165–71). More recently, Fontaine (2004) has criticized the architectural reconstructions of Carandini's *équipe* as well.

¹³ This is the opinion of Andreussi (1996), as well as in two recent academic guidebooks to the city by Coarelli (2007: 11) and Claridge (2010: 6), albeit the former is written by one of the Archaic wall's main proponents, and the latter admits caution. The arguments of Coarelli (1995) and Cifani (1998) are now found, explicitly or not, in discussions on the wall (Barbera, 2008; Fabbri, 2008 (who calls these issues *punti fermi*); Fabbri, 2009), as well as more general discussions on Roman topography, fortifications and urbanism of the period (for example: Becker, 2007: 159–61; Torelli, 2008: 270).

¹⁴ For example Cifani (1998) and Becker (2007: 159–61).

the long debate on the age of the first circuit wall? Let us revisit the parameters of the discussion.

PARAMETER I. THE LITERARY TRADITION

By and large, modern discussion of the wall has eroded any authority held by our ancient literary sources. For example, while the construction of a wall in Archaic society must have been bound up with a number of juridical and religious concerns, it does not always follow that such concerns can be understood sufficiently, and it is perhaps for this reason that such arguments mostly have fallen out of recent scholarship. Typically vexed is the important question of the relationship between the wall and the *pomerium* that defined the boundary between *urbs* and *ager*. To some, Carandini's Palatine wall confirms Romulus's creation of a *pomerium Palatinum* (cf. Tac. *Ann.* 12.24; Gell. *NA* 13.14.2) as well as the correspondence between the city's augural delimitation and the construction of a physical boundary.¹⁵ But even passing over any possible archaeological objections, Theodor Mommsen long ago pointed out that the problem of the Archaic *pomerium* is both topographic and linguistic, and, as such, the only clear thing is that, by the time Romans began to write about the *pomerium*, the term's original meaning was very unclear.¹⁶ Thus, for example, the sources are at odds over whether the *pomerium* belonged inside, outside, or on both sides of the wall, and Antaya (1980) even dismissed an etymological link between *pomerium* and *murus* altogether.¹⁷

There also remains the problem that our sources state unequivocally that the Aventine lay outside the *pomerium* through the end of the Republic, whereas archaeology confirms the hill's incorporation within the early circuit wall.¹⁸ Livy reported in the same sentence that King Servius completed the defensive circuit and enlarged the *pomerium* (1.44.3). Thus, if we choose to accept and connect these two acts, it becomes hard to argue that the Archaic and Republican walls followed identical courses, as Servius's *pomerium* would not include those stretches of wall upon the Aventine. One could suppose to the contrary that already by the sixth century the *pomerium* and the *murus* had become functionally discrete, that the wall, following Coarelli (1988: 386 n. 61), was 'deprived of ritual value'.¹⁹ This was true by the Empire, when changes in the *pomerium* in no way altered the old walls. But if we reject an

¹⁵ See: Liou-Gille, 1993: 97; Holloway, 1994: 101–2 (who connected the *pomerium* and Palatine wall without mentioning Romulus); Panella, 1996: 77; Andreussi, 1999; *contra*: Cornell, 1995: 432 n. 62; Poucet, 2000: 165–71.

¹⁶ Mommsen, 1876: 40: 'Sprachlich und sachlich ...'.

¹⁷ See Magdelain (1976) on ancient opinions on the *pomerium*'s form.

¹⁸ See: Gell. *NA* 13.14.4–5; Sen. *Dial.* 10.13.8; Säflund, 1932: 174–5; Cornell, 1995: 199.

¹⁹ This had been suggested already by Le Gall (1959: 52–4).

earlier connection between wall and *pomerium*, then the latter tells us very little about the former anyway.

Another crucial point for the shape of the wall between the late Archaic period and the Republic revolves around the ancient narrative of the Gallic Sack. The Gauls raided the city around 390 BC, twelve years before the Livian date for the Republican wall's construction. The argument goes: as we are frequently told that the Romans took refuge on the Capitoline during the invasion, this would indicate a lack of ability to defend themselves otherwise, in other words, a lack of a circuit wall encompassing the whole city (Carter, 1909: 139–40; cf. Cornell, 2000: 45).

The fact of the Gallic invasion seems secure; its details do not. While we possess a conglomeration of stories (Manlius, the geese, Camillus's return, for example) concerning the siege, the Capitoline narrative as a whole cannot be traced further back than Fabius Pictor.²⁰ This alone is probably not grounds for rejection, although Sordi (1984) called the whole episode a fiction based on the Persian sack of the Athenian Acropolis. Enticingly, new excavations under the Forum of Caesar have reopened the idea of a destructive fire at the foot of the Capitoline where the wall met the hill, although any traces of such a fire in the Forum itself are limited to damage rather than destruction.²¹

Coarelli (1995: 13–14), on the contrary, pointed out that the sources also recorded that the Romans left open the city's gates in the confusion after the defeat at Allia.²² This is not enough in and of itself to tip the scales: after all, our late Republican authors universally believed in a circuit wall built by the kings. Why should we expect details suggesting otherwise?²³ This and similar stories, such as the legend of Aius Locutius calling for the repair of the walls on the eve of the invasion, just as easily can be explained as fitting the expectations of later authors, who did not consider the idea of an unwalled or partially walled Archaic Rome.²⁴ Coarelli, however, intended to make a more subtle point: as the literary tradition is not coherent, we are apt to find what we are looking for if we approach the texts with a priori notions on the wall's date.²⁵

²⁰ Horsfall (1980–1) discussed the philological question.

²¹ The destruction layer has been connected cautiously with the *incendium Gallicum* by Meneghini (in Meneghini and Santangeli Valenzani, 2007: 27) and by Delfino (2010). The earlier reconstruction of Gjerstad (1960: 354) of a holocaustic *incendium* in the Forum was superseded by the work of Coarelli (1983: I, 130).

²² Sources are: Liv. 5.38.10, 41.4; Plut. *Cam.* 22.1; Flor. 1.7.14; Serv. *ad Aen.* 8.652; Oros. 2.19.7. Diod. Sic. 14.115 claimed that the Gauls broke open the gates.

²³ Alföldi, 1963: 322–3 n. 4: 'The Annals glorifying the Etruscan kings for the great technical achievements of the wall's construction could not admit that the city stood unprotected. But they disclose the truth when they pretend that the gates were left open in the chaos'.

²⁴ *Contra* Fabbri, 2008: 75; cf. Cic. *Div.* 1.45.101.

²⁵ The subtlety of Coarelli's argument was not picked up on by Barbera (2008: 16) or Fabbri (2008: 75).

PARAMETER II. COMPARATIVE CITY WALLS

Analogy bolstered by recent archaeology at ancient settlements in Latium forms another frequently cited body of evidence: how did Rome's walls compare to the defences of surrounding cities? Some have argued recently for a sort of peer-polity interaction where Rome's wall-building was undertaken in relation to larger, regional-level urban trends.²⁶ One argument emphasizes new walls in *opus quadratum* at the midpoint of the sixth century BC at Latin sites like Lavinium, Castel di Decima, Gabii and Antium.²⁷

On the other hand, scholars interested in a later date can point to other cities such as Veii, Ardea or Caere, where *opus quadratum* walls were constructed in the early fourth century. Cornell (1995: 199) argued that Ardea forms a good parallel for understanding Rome, as it had an *agger* that was removed from the city-centre and perhaps served as a first (but not last) line of defence. Sites such as Lavinium, Tellenae and perhaps Ficana underwent major urban change in the fourth century, often including a restructuring of their wall circuits (Guaitoli, 1984: 373).

Unfortunately, all of this Italian context is problematized by the 11 km size of Rome's wall. The only real comparison in terms of magnitude must be sought externally, in the kingdoms of Magna Graecia. The project of Dionysios I of Syracuse to fortify the Epipolae in 401 BC, shortly before work on the Republican wall began at Rome, has been cited as important precedent (Säflund, 1932: 237; Coarelli, 1995: 23–4). However, the Greek comparison is inexact: the *agger* and *fossa* system was not found in the Greek *poleis* of Sicily, and the Roman masonry style was distinct as well.²⁸ The context of Rome's wall remains that of the technology and warfare of central Italy, be it in the sixth or fourth century.

In this case, there is a heuristic flaw contained in such peer-polity driven comparison: Rome *could* have had a wall in the sixth century because other Latin communities had such walls, but Rome's wall was of a greater order of magnitude than any of its peers. Impossibly, however, Rome would then become at the same moment parallel and singular.

PARAMETER III. THE PHYSICAL EVIDENCE

As external evidence both literary and comparative only takes us so far, the greatest weight must be placed on the physical data presented by the fragmentary sections of the wall itself. Before considering the individual sites, some general observations should be made concerning the material, the metrology, the construction technique and the relevant stratigraphic evidence.

²⁶ Peer-polity interaction has been discussed by Becker (2007: 203) and Sewell (2010: 51).

²⁷ The situation in Latium was well reviewed by Guaitoli (1984: 370–3).

²⁸ Vitruvius' *De arch.* 2.8 encapsulates the different masonry techniques; cf. Lugli, 1957: 178–83; Castagnoli, 1974: 432.

THE MATERIAL

The early wall's two primary materials were volcanic tuffs from Rome itself (*tufo del Palatino*) and from the Tiber Valley (*tufo giallo della via Tiberina*). As discussed, Frank first connected the sack of Veii in 396 with the use of *tufo giallo* for the wall of 378, as that material was quarried in the *ager Veientanus* and hardly appeared at Rome prior to the conquest of Veii.²⁹ Early twentieth-century scholarship was very clear-cut on the wall's phasing along these lines, and, to some degree, this rigorously divisional approach continues, for example in Cifani's (1998) reconstruction of the Archaic wall from those sections of *tufo del Palatino*.³⁰

It is true that *tufo del Palatino* was the preferred building material for the period prior to the appearance of *tufo giallo* in Roman architecture. *Tufo giallo* itself begins to disappear in the mid-second century BC with the rise of stone from the Anio valley mixed with travertine, marble and cement. However, this progression from one type of volcanic tuff to another was by no means as absolute as often is represented. More often than not, Roman masons used multiple building stones in conjunction with each other. Recent work by Jackson and Marra (2006) has detailed the strategic manner in which such mixed-stone work paid attention to the individual physical properties of each type of volcanic tuff.³¹ While they have concentrated mostly on the late Republic, the practice of mixing stones is readily observable at earlier periods.³² There is often a scholarly resistance towards this fact, as we search for means by which to sort out the complex phasing of early and mid-Republican monuments. However, cut-stone masonry *tufo del Palatino* was still used with other types of volcanic tuff, including *tufo giallo*, at least into the second century BC.³³ Rather than insisting on a firm chronology, we have to recognize overlap and slow development, as builders sought to incorporate different materials, and did not move exclusively from one quarry source to the next.

METROLOGY

Graffunder (1911: 83) first used the module of the wall's blocks as evidence of its construction process. This argument was given greatest weight by Säflund (1932), who focused on units observable in the *agger* area, where a panel of wall, as well

²⁹ The most often cited earlier exception, the inscribed *stèle* of the Lapis Niger monument, proves this rule in its unusual nature.

³⁰ Cf. Fabbri, 2008: 74.

³¹ See also: Jackson *et al.*, 2005: 504–8.

³² For example the mixed-stone work at the *area sacra* of Sant'Omobono or the original platform of the Temple of Apollo Medicus.

³³ Second-century BC uses of *tufo del Palatino* include the Temple of Juno Sospita in the Forum Holitorium (Crozzoli Aite, 1981: 62–4), the Lacus Curtius (Giuliani, 1996) and the Temple of Hercules Musarum (Viscogliosi, 1996). In a private context, *tufo del Palatino* foundations appear in the Casa dei Grifi, thus in the early first century BC (Blake, 1947: 26).

as the distance between the two encasement walls of the *agger*, were readily divisible by what he called (after Hülsch) an Attic-Sicilian foot (0.295 m), in opposition to the earlier Oscan-Italic foot of 0.275 m. Based on this fact, his idea that the *agger* displays the influence of Syracusan workmanship has gained some acceptance.³⁴

Säflund's argument mostly derived from metrology in plan; some have continued to focus on the sizes of individual blocks. However, the soft volcanic tuff was squared off with a hand-axe or a simple pointed chisel; marks of these tools are frequently still observable. Working a friable material as such, Roman masons would have found fine tolerances difficult, if not impossible — we would be chasing after a change of only slightly above 2 cm per foot, which falls well within the typical deviation of block-size.³⁵

On the other hand, there is a clear variance in the basic size of blocks, expressed in the ratio of length:height:width of blocks of *tuffo del Palatino* measuring 2:1:3 and those of *tuffo giallo* measuring 2:2:3. This had an impact on the block-weight — the former weighed typically 230 kg and the latter about 650 kg. Not coincidentally we see the earliest holes for lifting tongs in Roman architecture on the heavier blocks of *tuffo giallo*. These dimensions for each material are, however, typical wherever these stone types are found in Roman architecture. That is, the size difference does not seem to reflect any change in the wall itself; instead, it reflects the standardization of quarry practices at the respective sources for each stone. Because of this, we are back to a discussion of the two types of materials, and thus the metrological evidence seems dependent on our views of phasing related to the use of two different materials.

CONSTRUCTION TECHNIQUE

The wall's ashlar masonry technique is consummately Roman, as Lugli (1957: 181–3) pointed out. The method of laying alternating courses faced entirely in either headers or stretchers differs from the Greek isodomic manner of alternating headers and stretchers in the facing of a single course. Cifani's detailed studies (1994: 187–8; 1998: 362; 2008: 238–9) have shown that this technique of squared-stone masonry belongs to technological developments seen

³⁴ See Coarelli's 'Presentazione' to the reissue of Säflund 1932 [1998]. *Contra* Torelli, 2008: 270.

³⁵ On this point, see the caution of Säflund (1932: 233). I am pessimistic about our ability to detect a module using the blocks, and generally this method produces some confusion. For example, Cifani (1998: 363; 2008: 239–40) has noted that the *tuffo del Palatino* blocks from the Archaic phase of the Temple of Castor and Pollux in the Forum show a transition already in the fifth century to the Attic foot of 0.295 m, well before the Republican wall. However, the excavators of the temple gave a rounded block size of 0.30 × 0.60 × 0.90 m, with a deviation of 0.05 m, easily encompassing both possible units of measurement (Nielsen and Poulson, 1992: 61). Furthermore, while they suggested a foot of 0.296 m, the temple width was 27.50 m, which actually accords perfectly with a 0.275 m foot (Nielsen and Poulson, 1992: 75). This becomes a pedantic exercise, but it does serve to indicate the wide range of interpretations applicable even in a single monument.

in Rome and Latium more generally in the first half of the sixth century, when it replaced other less regular forms of construction. It is not hard to see the proficiency of Roman masons working with this technique already by the end of that century in the platform of the Capitolium or the Archaic temple at Sant'Omobono. However, this ashlar technology, once gained, by no means diminished over the next several centuries. This construction technique, if considered exclusive of material or module, belongs to a broad time-span.

Along with the physical manner of construction, the frequent appearance of masons' marks only on the *tuffo giallo* has occasioned long-standing discussion of workmanship and phase.³⁶ The more work that has been done at sites in Latium and Etruria, the more commonly we recognize such marks, and they begin to lose their discriminatory value.³⁷ For our concerns, these marks should be seen as closely connected with the quarry production of *tuffo giallo*; they are still found on blocks of the same stone in the early phase of the Basilica Fulvia (179 BC).

STRATIGRAPHIC EVIDENCE

There is little stratigraphic record of those excavations of the late nineteenth and early twentieth centuries; what evidence we can point to is as tenuous as it is precious. Gjerstad (1953; 1966: 353–4) built his theory of an early fifth-century *agger* on the basis of a single fragment of an Attic red-figure pot from Boni's stratigraphic excavations for the construction of the Ministry of Agriculture on the Esquiline.³⁸ The idea that the date of the entire *agger* could rest on a single potsherd was criticized roundly already by Momigliano (1963: 103–4), though it continues to be repeated by those proponents of an Archaic circuit.³⁹ It matters little that the dating of this sherd to 490–470 BC rests on the authority of Beazley: the fact is that such a date comes *after* the traditional dates of Servius or any other king for that matter, and would support the interpretation of the *agger* as early Republican. This was not lost on Gjerstad (1953: 414–18), who used such data to support his now largely rejected chronology of early Rome.⁴⁰ At best, this potsherd furnishes a *terminus post quem* for that section of the *agger*. As the *agger* must have been filled with earth excavated from elsewhere, we need not be confined too closely by this *terminus*. Similarly, little more can be gleaned from the record of an inhumation tomb datable to around 730 BC destroyed by the construction of a section of wall on the Quirinal.⁴¹

³⁶ See: Richter, 1885; Frank, 1924; cf. L. Lazzarini's entry on the quarry marks in *RMR* (pp. 12–14); Castagnoli, 1974: 432.

³⁷ For example, marks as far away as Vulci have been compared to those in Rome by Moretti Sgubini and Ricciardi (2001: 65–6).

³⁸ For further discussion of this section of the wall, see below (pp. 33–4).

³⁹ Gjerstad's arguments were cited without comment by Cifani (1998: 363, 368; 2008: 69) and Coarelli (1995: 12–13). See the salient comments of Smith (1996: 153).

⁴⁰ The date for the sherd comes from Gjerstad's own communication with Beazley.

⁴¹ For the location of this tomb and its date, see: Cifani, 1998: 370 n. 59.

Along with tombs underneath the wall, equally important are considerations of tombs within the wall's course. Even if the exact legal relationship between the wall and the placement of burials in this early period is not perfectly clear, it would be hard to believe for cultural and sanitary reasons that tombs were intentionally placed intramurally with regularity (Holloway, 1994: 98).⁴² In this case, evidence less often discussed, but studied long ago by Pinza (1912), provides a different, no less significant, *terminus post quem*.⁴³ One chamber-tomb (Pinza's Tomb CLXX) comes from the Capitoline-facing slope of the Quirinal, where via Nazionale meets largo Magnanapoli, uphill from the remains of the Porta Sanqualis.⁴⁴ It would be very difficult to consider this intramural in the light of those remains of the wall known in this area (cf. the discussion below, with Fig. 10). Here, Pinza noted 'Etrusco-Italic' ceramics and black-gloss ceramics that precluded, in his mind, a date anterior to the fourth century (1912: 68–87).⁴⁵ The pots themselves are lost, and gains in recent years on the chronology of black-gloss ceramics make any conclusion speculative. However, if a tomb with mid-Republican ceramics existed within the route of the walls on the southwestern Quirinal, we would have strong evidence for a *terminus post quem* of a fourth-century date, and the burden of proof would appear to lie with those arguing for the Archaic circuit, at least in this area of the city.

A second important chamber-tomb (Pinza's Tomb LXI) comes from the Esquiline, excavated on via Lanza between via Merulana and San Martino ai Monti, and so decidedly again within the course of the Republican walls (cf. below, Fig. 2).⁴⁶ Here, too, Republican ceramics seem to have been found, and Holloway (1994: 98) argued that one pot in particular should be identified with the Genucilian class, the open-formed ceramics common in mid-Republican contexts.⁴⁷ Holloway accordingly down-dated the wall in this area to the time of the Pyrrhic war. Unfortunately, once again, the object itself is lost, but if Holloway's identification of the pot is correct, the date can be assigned broadly to the beginning of the fourth through the third centuries BC.⁴⁸

⁴² Cf. above (pp. 6–7) for a discussion of the problematic relationship of the wall and the *pomerium*. The XII Tables forbade burial *in urbe* (Cic. *Leg.* 22.58) and the *urbs* is coterminous with the wall in later legal texts (for example *Dig.* 50.16.87).

⁴³ See: Säflund, 1932: 150; stressed by Holloway (1994: 96–9).

⁴⁴ The find-spot was discussed by Pinza (1905: 261–2), who upheld the accuracy of Lanciani *FUR* 22.

⁴⁵ See in particular p. 85, where the important ceramics of his 'Period III' date (fourth century BC) are described as 'vasi etrusco-campani e quelli a fondo giallo e figure nere di fabbriche dell'Italia meridionale'. Cf. Säflund, 1932: 159–60; Lugli, 1933: 5–6.

⁴⁶ The find-spot of this tomb was reported in *Bullettino della Commissione Archeologica Comunale in Roma* 1886: 113.

⁴⁷ The work of Del Chiaro (1957) remains the most in-depth study of the ceramic class.

⁴⁸ The date was established by Del Chiaro (1957: 306) based on the identification of Falerii Veteres as a production centre, as well as stylistic affinities with Attic ceramics of the late fifth century; see, more recently, Poulsen (2002: 91–3).

Holloway's arguments go unmentioned in those recent discussions of the Archaic circuit of which I know. While we would very much like to have the specimen itself to continue with this line of argument, the possibility of mid-Republican burials within the Esquiline wall remains strong.

PARAMETER IV. THE ARCHAEOLOGY OF THE WALL

Any judgment of the wall's date must rest above all on the remains of the monument itself, and this has proven all the more important in reviewing other approaches of an inconclusive manner. We can now turn to such a study. To guide the reader, I have corresponded sites in the following discussion with numbers on the general map (below, Fig. 16) and with several inset drawings to show the relationship of remains to the modern city, but I must caution that a full topographic catalogue is well beyond the scope of this paper. Something not attempted, GIS mapping of the various sections, would be a very welcome contribution to our general understanding of the monument.⁴⁹ Instead, what follows intends to be a focused review of the phasing and dating of various parts of Rome's circuit walls. We begin at the northernmost corner and work our way around clockwise.

THE PORTA COLLINA

The excavation of the Porta Collina (1) in 1996 formed the impetus for Cifani's reappraisal of the Archaic wall (Cifani, 1998).⁵⁰ Situated at the modern intersection of via XX Settembre and via Goito, the complex consisted of a rectangular platform interpreted as a bastion protecting the gate's eastern side and built predominantly of *tufi del Palatino*, but not entirely, as the excavator reported a minor quantity of blocks of *tuffo giallo*. Could this belong to later repair? The blocks show dimensions (0.40–0.45 × 0.55–0.65 × 1.02–1.50 m) that are not paralleled easily elsewhere. The report notes no ceramics or other associated finds, perhaps because the area had been excavated already and reburied in the nineteenth century.

THE VIMINAL AND ESQUILINE *AGGER*

The *agger*, which can be observed in large sections at via Volturno (2), at piazza dei Cinquecento (Fig. 1) (3), and next to the McDonald's underneath Termini

⁴⁹ A more comprehensive study aiming in part to produce a sort of updated archaeological dossier is ongoing with researchers from the University of Rome Tor Vergata; for some first results, see: Fabbri, 2008. I am thankful to Rita Volpe for discussing her involvement in this project with me, and I express my anticipation for future work from this group.

⁵⁰ In her excavation report Fogagnolo (1998: 381) noted that the site was known in the late nineteenth century and indicated on Lanciani *FUR* 10.

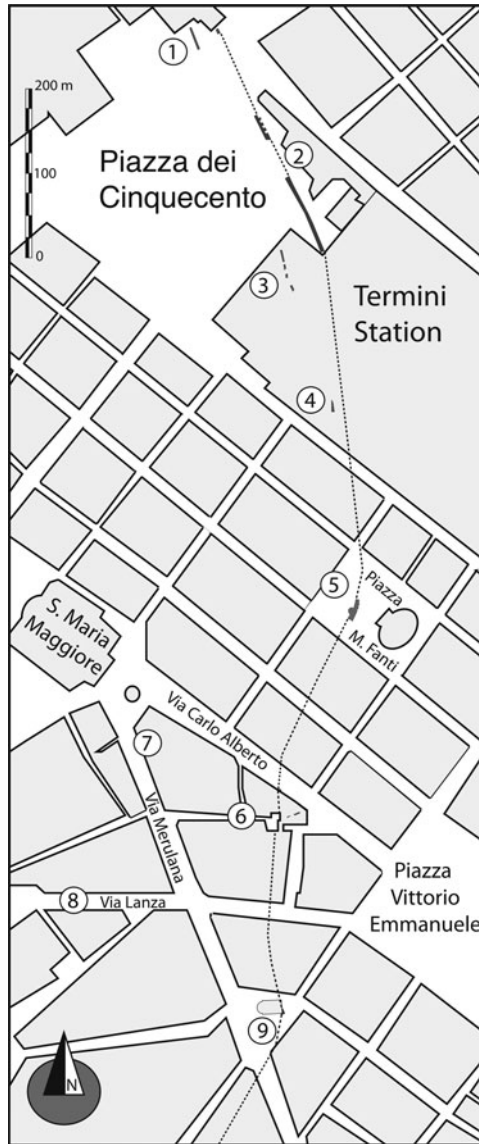


Fig. 1. The *agger* on the Esquiline. The dotted line represents its hypothetical course. 1. External and internal wall near via Volturmo; 2. Porta Viminalis; 3. *Tufo del Palatino* walls in McDonald's; 4. Excavations of the older *agger* underneath platform 24; 5. *Tufo giallo* walls at piazza Fanti; 6. Area of San Vito (see Fig. 3); 7. Via Merulana no. 13, older *agger* noted by Lugli; 8. Area of Pinza's Tomb LXI; 9. *Tufo giallo* walls in the Auditorium of Maecenas.

Station (4), presents multiple phases. Today, we mostly observe the unified system of two walls encasing an earthen *agger*, with the interior (west) wall entirely of *tufo del Palatino* and the exterior (east) of *tufo giallo* (Fig. 2). The use of a variety of other tuffs (*sperone*, *peperino*, *tufo lionato*) at the opening of the



Fig. 2. The *tufo giallo* external *agger* wall in piazza dei Cinquecento. (Photo: author.)

Porta Viminalis itself is due to rebuilding, plausibly occasioned by the construction in 144 of the Aqua Marcia, which passed into the city here.

We must stress that the two *agger* encasement walls, each of a different stone, do not themselves represent evidence of two phases of the *agger* at this location. The *tufo del Palatino* wall visible at via Volturno and underneath Termini is smooth and tapered on its western face, and rough and irregular on the eastern face. For this reason, it formed the interior (western) face of the *agger* and functioned in tandem with the exterior (eastern) *tufo giallo* wall to contain the earthwork mound in between. Collectively, this is the mid-Republican *agger*, and, as such, a fine example of the use of both *tufo giallo* and *tufo del Palatino* in a single monument and almost certainly in the same phase. The earlier *agger*, as far as we can tell, was a single-walled complex with an external wall of *tufo del Palatino* retaining an earthen *agger* behind it. Lugli (1933: 27) described traces of a *tufo del Palatino* wall of more modest dimensions — only one or two blocks thick — in between the two fourth-century *agger* walls in piazza dei Cinquecento, as well as further to the south, on via Merulana (see below).⁵¹ Recent excavations uncovered more of this single-block wall of *tufo del Palatino* retaining an earthen *agger* in a trench underneath platform 24 (previously 22) of Termini Station (5). Here, the absence of black-gloss ceramics suggests that these more modest Archaic defensive works were completely

⁵¹ No similar evidence was noted in excavations here by Aurigemma (1961–2).

buried underneath the construction of the Republican *agger* (Menghi, 2008: 34–6).⁵²

To the south, at piazza Manfredo Fanti (6) (Fig. 1), lies a significant stretch of wall, entirely of *tufu giallo*, that was discovered in the late nineteenth century but restudied and consolidated in 1990 and 1992, when the Sovrintendenza systematized the gardens around the Aquarium in the piazza. The wall bends slightly at the centre of this section, and a curvilinear wall of *tufu giallo* blocks disposed in a radial manner projects from the bend into the space of the *agger*. This unique feature served an uncertain function; Volpe and Caruso (1995: 186) suggested a sort of sentry post.

Further south, *tufu giallo* blocks from the wall are conserved in a nineteenth-century palazzo to the south side of via Carlo Alberto (7). This stretch of wall led up to the Porta Esquilina, now marked by the Arch of Gallienus adjacent to San Vito Esquilino and in reality a re-appropriated travertine arch from the Augustan period (Fig. 3).⁵³ Lanciani's plan of this area in the *FUR* 23 mistakenly represented a *tufu giallo* wall running from both sides of a single-bayed Arch of Gallienus, whereas the arch was originally triple-bayed. Still, the blocks on via Carlo Alberto confirm Lanciani's general scheme of a *tufu giallo* wall with a monumentalized entranceway.

It is for this reason that the discovery of a wall in *tufu del Palatino* underneath San Vito (8) in excavations of 1971 is so important and prompted Coarelli to question Säflund's interpretation of an earth-only *agger* in this area in the Archaic period.⁵⁴ The excavations underneath the church were published in brief by Santa Maria Scrinari (1979) with a plan showing a wall of *tufu del Palatino*, two blocks thick, running in the same direction as the aisle of the church for nearly its whole length, perpendicular to the course of the circuit wall. The perpendicular orientation tells us that, if this were originally part of the wall, it could have been the edge of a bastion alongside the gate's entrance, in similar fashion to the arrangement seen at the Porta Collina or the Porta Sanqualis. Staying for the moment with this hypothesis, we know that the line of defence here was continued to the north by those *tufu giallo* blocks on via Carlo Alberto. Either the two constructions, each of different stones, belong to a single phase, or the wall extending away from the bastion was rebuilt, with the structure in *tufu giallo* then assumed to represent the later rebuilding.

The surrounding neighbourhood is full of evidence for *tufu giallo* walls, while walls in *tufu del Palatino* were reported in the area, but are no longer visible for study. Among this *tufu del Palatino* evidence was a wall reported to have been 12 m long and over 4 m high, found in the enlargement of via Merulana

⁵² Filippa and Sbarra (2001: 223) noted that irregular fragments of *tufu giallo* were found in between several blocks.

⁵³ On the arch, see: Rodriguez Almeida, 1995.

⁵⁴ See Coarelli's 'Presentazione' to the reissue of Säflund's volume (1932 [1998]).

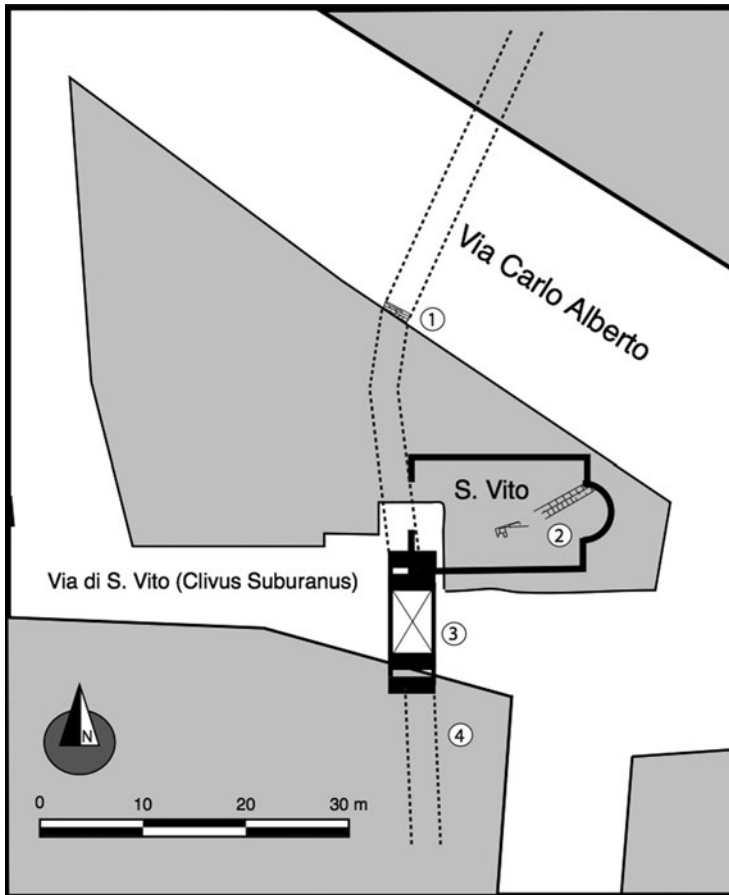


Fig. 3. The wall around the Porta Esquilina and modern San Vito. The dotted line represents its hypothetical course. 1. *Tufo giallo* visible on via Carlo Alberto; 2. *Tufo del Palatino* underneath San Vito; 3. The Arch of Gallienus; 4. Lanciani *FUR* 23 depicts remains of the wall here.

at no. 13 (9) and noted by Lugli (1933: 30–2).⁵⁵ Here, a single course of stretchers, all of *tufo del Palatino*, was built against an earthen mound and bedded on the virgin terrain, in a construction manner very similar to the structure recently excavated under platform 24 in Termini Station.⁵⁶

Further south, several walls in *tufo giallo* are identifiable: that cut by the later construction of the ‘Auditorium’ of Maecenas (10), and a section recently

⁵⁵ Another possibility raised with great reservation by Lugli are two parallel walls of *tufo del Palatino* 12 m apart bedded on a stratum containing ceramic evidence for a sixth-century date. A small transverse wall extending from one of the two parallel walls, interpreted by Lugli as a buttress or *rientranza*, is probably a sign that the entirety belongs to an unidentifiable Archaic structure rather than the city’s defences.

⁵⁶ That this relates to an earlier *agger* was suggested by Lugli (1933: 30–2) and accepted by Cifani (1998: 372–3); *contra* Gjerstad, 1954: 59.

conserved in the entranceway of a private building at via Mecenate no. 35 (11). As far south on the Esquiline as we may go, walls known in the nineteenth century were reported with masons' marks and thus can be presumed to be of *tufu giallo* (Säflund, 1932: 41). It should be noted that the thin-wall *agger* recorded by Lugli on via Merulana (9) lies to the west of the line made by extending the defences southward from San Vito to the Auditorium of Maecenas (cf. Fig. 1). Instead, Lugli's wall lies closer to the find-spot of Pinza's Tomb LXI, which possibly contained Genucilian class pottery. Taken together, this may represent a case where the Republican phase moved the entire course of the earlier *agger* eastward.

Summing up this area of the city, we see clear evidence for an earthen *agger* supported on its exterior by a wall of *tufu giallo* and contained on its interior by a wall of *tufu del Palatino*. There is evidence for an earlier iteration of the *agger* faced with a single, thin wall of *tufu del Palatino*, which appears to have been covered over or modified by the later construction of the Republican *agger*.

THE CAELIAN

No remains have ever been reported of the wall connecting the Caelian to the Esquiline. Even upon the Caelian, the circuit remains largely a mystery. Colini's hypothesis that the wall on the Caelian had been dismantled intentionally by the Augustan period continues to stand.⁵⁷ The only candidates for *in situ* remnants are the visible margins of several blocks of *tufu giallo* along the edge of the Arch of Dolabella and Silanus (12), identified by Colini (1944: 33–4) as the original Porta Caelimontana, later incorporated into the brickwork of the Neronian branch of the Aqua Claudia (Fig. 4). The possible course of the Republican wall can be suggested further by burials near Santo Stefano Rotondo, or clustered near the Ospedale di San Giovanni.⁵⁸

The Caelian's walls never appear to have made use of *tufu del Palatino*. Besides the *tufu giallo* adjacent to the Arch of Dolabella and Silanus, a large quantity of spoliated ashlar, all of a consistent quality of *tufu giallo*, were reused in the foundations of Santi Quattro Coronati as well as in the structures adjacent to the Oratory of Santa Silvia beside San Gregorio.⁵⁹ In comparison, there are only the scarcest traces of *tufu del Palatino* on the hill: a few blocks of *tufu del Palatino* appear reused in an unidentified building northeast of the Basilica Hilariana, but their original location and nature is unclear.⁶⁰

⁵⁷ See: Colini, 1944: 29–35, esp. pp. 32–3; unaltered in any substantial manner by Pavolini (2006: 13).

⁵⁸ The Ospedale di San Giovanni tomb was published by Santa Maria Scrinari (1968–9); cf. E. La Rocca's entry on the San Giovanni tomb in *RMR* (pp. 244–6). Caelian burials pertinent to the wall were discussed in E. Dumser's entries on 'Sepulcra: Caelius Mons (1)' and 'Sepulcra: Caelius Mons (2)' in *MAR*: 222–3.

⁵⁹ Cf. Ferrea (2002: 65) for various hypotheses on the blocks in Santa Silvia.

⁶⁰ Pavolini (2006: 70) has postulated a connection with the wall but has noted that this view has no certain basis.

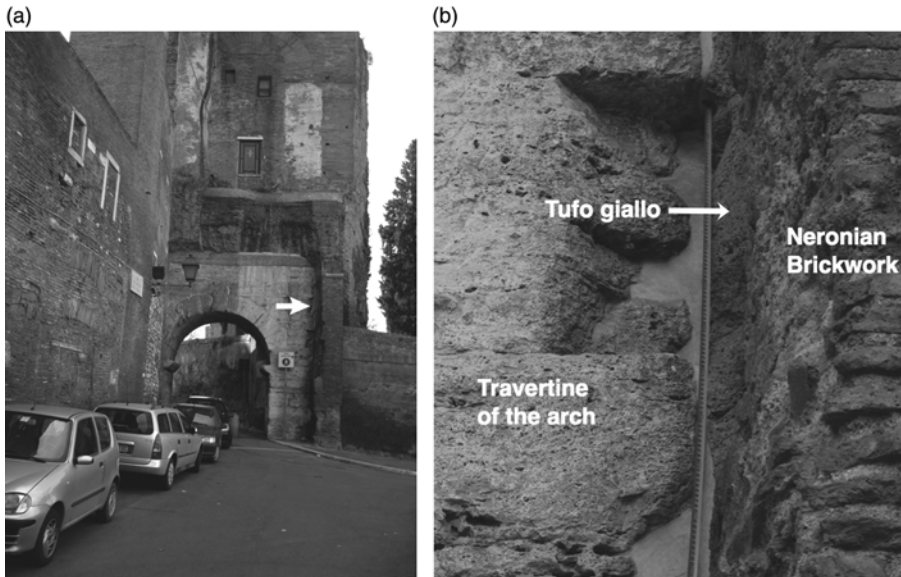


Fig. 4. (a) The Arch of Dolabella and Silanus on the Caelian; (b) detail showing the margins of *tufo giallo* blocks identified by Colini as the Porta Caelimontana. (Photos: author.)

THE PORTA CAPENA

Between the Caelian and the Lesser Aventine, the Porta Capena (13) protected the Via Appia's entrance into the city through a low-lying pass into the Circus Valley and then, through either the Velia or Velabrum, around the Palatine and into the Forum: thus, the walls around the Porta Capena were crucial to the defence of the low-lying urban centre. The only identifiable remains of the wall in this area were excavated by Parker in 1867, and no new evidence has come to light since the discussion of Säflund (1932: 34–9, 146–8), who reported walls in Anio *tufo lionato* between 0.57 and 0.63 m high. There is no mention of either *tufo del Palatino* or *tufo giallo*, and it seems likely that a later restructuring of this gate has obscured any earlier phases (Säflund, 1932).⁶¹

THE AVENTINE

Climbing up from the Porta Capena, the wall skirted the 'Lesser' Aventine. The area between the Circus and the Baths of Caracalla (14) was explored in some depth by the Sovraintendenza Comunale in 1982–3 in preparation for the

⁶¹ Travertine slabs and architectural fragments found by Parker probably suggest a *fornix* of late Republican or early Imperial date, similar to the Porta Esquilina or the Porta Caelimontana. This may have been the 'porta grande a due ingressi' mentioned by Francesco Piranesi in 1785 (p. 1 n. 6); cf. Säflund, 1932: 35.

enlargement of the United Nations Food and Agriculture Organization building, which occupies much of the area immediately south of the Porta Capena. The wall ran along the slope of the hill to the base of Santa Balbina, where it turned sharply from southward to westward. All material associated with its course here was *tufo giallo* (Di Manzano and Quinto, 1984: esp. p. 79). From there, following the natural topography, the wall arrived at San Saba (15), where Parker's photos (1878: pl. XI) show substantial ashlar walls below the porch of the church. In these areas, Lanciani (*FUR* 41) noted an *agger* and *fossa*, although so far only one stone wall has been located, as opposed to the double-wall system on the Viminal.

In the saddle between the 'Lesser' and 'Greater' Aventine, the wall appears first to the south of viale Aventino (16), adjoining a modern apartment building, where a cement core belongs to late Republican repairs, but holds important implications for consideration of the earlier phases. The exterior of the cement core preserved the impressions of ashlar blocks *c.* 0.60 m tall, thus of *tufo giallo*. Underneath the cement and beneath the entire structure, however, excavations photographed by Parker showed seven courses of *tufo del Palatino* blocks (Fig. 5). Troubled by this apparently problematic appearance of *tufo del Palatino* underlying the cement and *tufo giallo* wall, Säflund (1932: 28–31) dismissed the entire situation as an optical error produced by the angle of Parker's camera (!); Gjerstad (1954: 62) suggested that everything belonged to a unified construction. Instead, Quoniam (1947: 59–62) and Coarelli (1995: 16) saw this situation as analogous to the wall on the northern Aventine, where they argued that the *tufo giallo* wall was superimposed directly onto an earlier phase in *tufo del Palatino* (see below).⁶² In this view, this would represent the only evidence for *tufo del Palatino* on the entire *enceinte* of the 'Lesser' Aventine.

The possibility of the inclusion of the 'Lesser' Aventine behind a defensive circuit in the pre-Imperial period presents something of a mystery, as only a 'loose spread' of habitation with few public monuments can be postulated by the Augustan period.⁶³ The inclusion of both peaks of the Aventine must be explained, instead, on defensive grounds, as an extension of the hill's defences southward around the 'Lesser' Aventine better protected the depression that formed the hill's weak point.⁶⁴ The strategic importance of this point in the city's defences is evident in the numerous repairs evinced by different stone-types and construction techniques in the wall around piazza Albania, which we turn to next.

In piazza Albania itself (17) lies an impressive 42 m section of wall in *tufo giallo* mixed with *tufo lionato* and preserving an arch for an artillery engine

⁶² See: Cifani, 1998: 373.

⁶³ See: Haselberger in *MAR*: 63. The only real exception could have been the Temple of Bona Dea Subsaxa (see Platner-Ashby, *sub voce* 'Bona dea subsaxa'), although Di Manzano and Quinto (1984: 75) claimed it as extramural.

⁶⁴ In later times, this was a delivery point for heavy freight entering the city centre, as *Amm. Marc.* 17.4.15.



Fig. 5. Parker's excavations of the wall to the south of piazza Albania on the Aventine. Note the presence of ashlar blocks, likely *tufo del Palatino*, beneath the concrete. British School at Rome, Photographic Archive, Parker 2086. (Reproduced courtesy of the British School at Rome.)

(Fig. 6). The whole stretch is backed with *opus caementicium*, and on this account represents repair of a later date: Säflund (1932: 242) assigned it with the concrete section across the street to the Sullan period, but there is also nothing to preclude Lugli's suggestion (1957: 264) that it might pertain to a slightly earlier, though unattested, project.⁶⁵

Slightly uphill from the long stretch with the arch, the wall continued up the 'Greater' Aventine on via di Sant'Anselmo (18) where it was comprised entirely of *tufo giallo*, with the exception of two blocks of *tufo lionato* (Fig. 7). Lacking the cement backing, it shows fewer signs of repair than those sections in the valley below.⁶⁶ In this case, the earliest phase in evidence relied on *tufo giallo*.

⁶⁵ See App. B Civ. 1.66.103 for repairs before Sulla's arrival.

⁶⁶ Lugli (1957: 264) considered this more advanced than the section at the Esquiline *agger* and assigned it to attested third-century repairs, but I see no reason to think as much and would agree with Säflund (1932: 125) that this section belongs to the earliest *tufo giallo* phase of the fourth century.

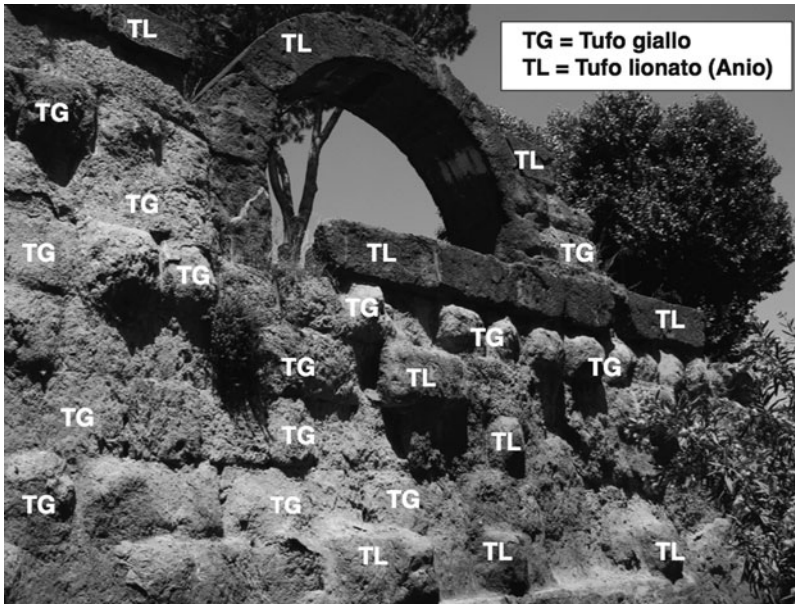


Fig. 6. The artillery arch to the north of piazza Albania on the Aventine, showing the mixture of building stones. (Photo: author.)

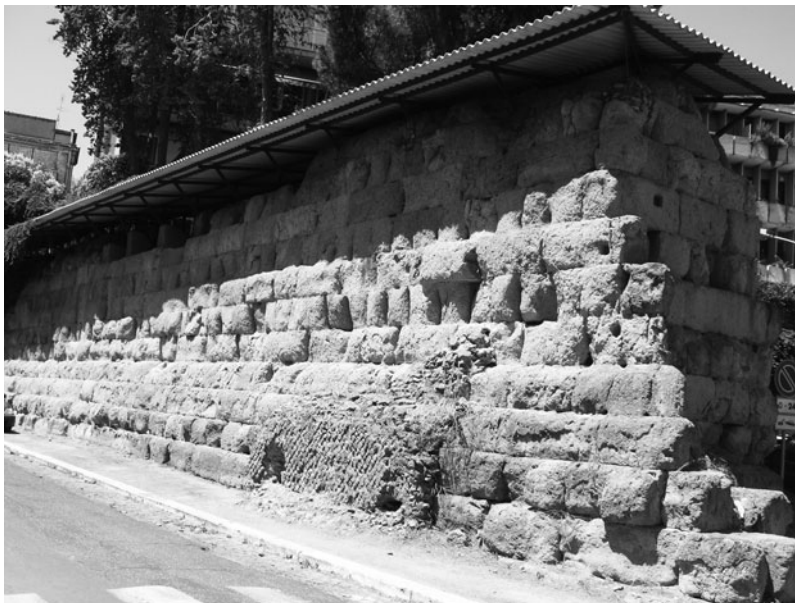


Fig. 7. A stretch of wall in *tufo giallo* on via di Sant’Anselmo. (Photo: author.)

From here, the wall reached the cliff overlooking the river, where it now runs underneath a series of churches. Remains underneath Santa Sabina (19) were first published fully by Quoniam, who remarked on the interesting fact that they were

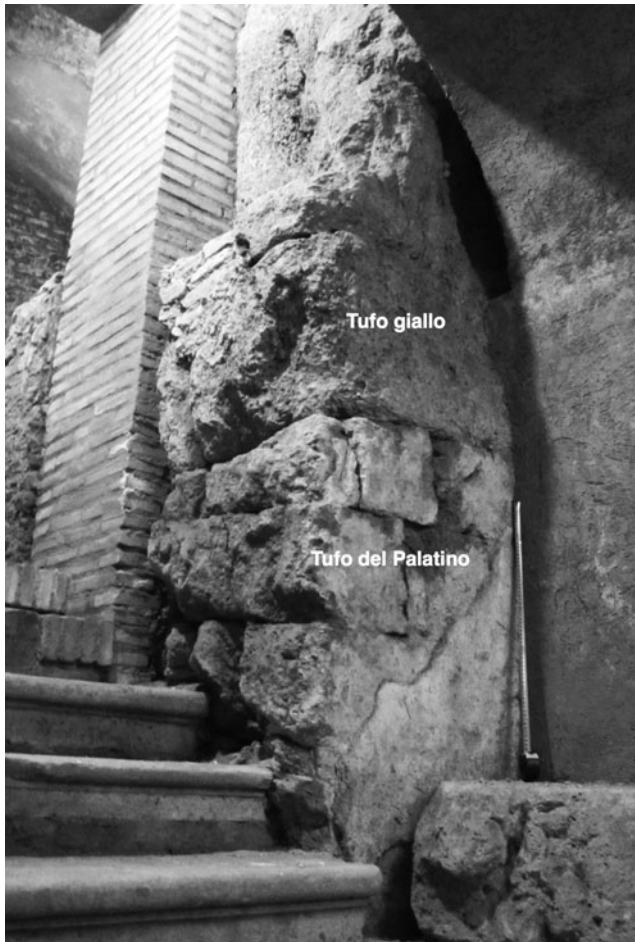


Fig. 8. The wall of two materials beneath Santa Sabina on the Aventine.
(Photo: author.)

composed of three to four courses of *tufo del Palatino*, directly on top of which were placed coursed blocks of *tufo giallo* (Fig. 8). Interpretation of these mixed-composition walls is divided between Quoniam (1947), who considered this evidence of two phases with the lower blocks Archaic and the upper ones mid-Republican, and Gjerstad (1954: 61) and Lugli (1957: 266), who saw both materials used together in the same phase. Lugli doubted an Archaic wall on the Aventine to begin with on grounds of the debate over the *pomerium*, and he brought up as comparison the Castrum of Ostia, which also used two stones, one beneath the other, in a single phase.⁶⁷

⁶⁷ The building of the Ostia Castrum is not uncontroversial, but a late fourth-century date for the structure has some basis in the stratigraphic excavations published by Martin (1996: 35–7).

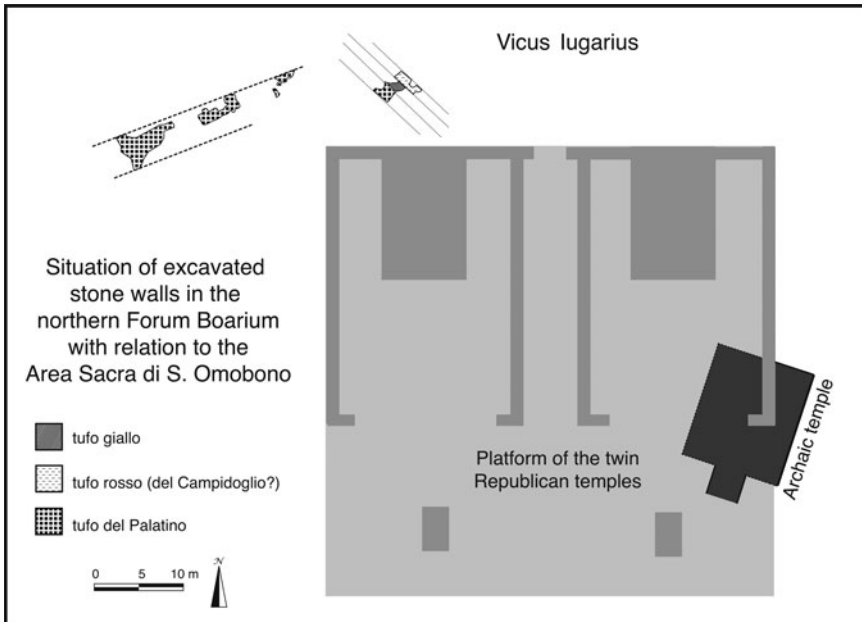


Fig. 9. Situation of excavated stone walls in the northern Forum Boarium in relation to the *area sacra* of Sant’Omobono. (After Ruggiero 1991.)

THE FORUM BOARIUM

If there was ever a part of the circuit protecting the Tiber port, it remains almost unknown despite over a century of interest.⁶⁸ Ruggiero’s in-depth study of this topographical problem (1991) did much to sort through the evidence for the course of the wall in the low area between the Aventine and Capitoline, but has succeeded also in demonstrating how little we actually know about the early fortifications in this area.⁶⁹

It is difficult to associate any *tufo del Palatino* remains in the entire area with a defensive wall. Ruggiero (1991: 23) rightly rejected the *tufo del Palatino* blocks at the far north of the Forum Boarium area, on the east side of via del Teatro Marcello; the blocks are arranged only in stretchers in an unparalleled manner and are bedded on later (post-antique?) brickwork.⁷⁰ The only other possibility is a stub of a wall found in excavations on the north side of the Vicinus Iugarius (20), where a particularly complex trench revealed blocks of *tufo del Palatino* following the turn of the Capitoline Hill (Fig. 9). This wall was abutted with another in an unidentifiable stone Ruggiero referred to as ‘tufo rosso (del Campidoglio?)’ and then a third of *tufo giallo*. How these three contiguous

⁶⁸ See: Haselberger in *MAR*: 174–6.

⁶⁹ Ruggiero raised the possibility that the excavations had not gone deep enough to reach any such levels.

⁷⁰ The antiquity of this structure was already questioned in *RMR*: 15.

stretches relate to each other or to whatever structure they formed part of is unclear (Ruggiero, 1991: 24).⁷¹ Ruggiero, however, noted that, if this orientation were maintained, the course of the stone walls would have run into the platform of the twin temples at Sant'Omobono.⁷² Even prior to the early Republican construction of that platform, the course of these walls extending across the Forum Boarium would have made the Archaic temple at Sant'Omobono either extramural or else awkwardly placed with its entranceway opening right into the wall. Regardless, the orientation dictates that these blocks on the Vicus Iugarius conformed to the Capitoline and seem either a terracing project or part of that hill's own defences.

In the same general area along the Vicus Iugarius is a 19 m long stretch of *tuffo giallo* (21), now reburied (Fig. 9). The orientation of this wall differs from the *tuffo del Palatino* wall by almost 90 degrees: the *tuffo giallo* pertains to a complete restructuring and is dated securely to the fourth century by associated ceramics, one of our rare opportunities for such evidence (Ruggiero, 1991: 26). Among all the various remains of ashlar walls in the Forum Boarium, and there are many, this seems best connected with a circuit wall in the area, and it is oriented east–west from the Capitoline slopes to the river, rather than north–south across the Forum Boarium.⁷³ Ruggiero (1991: 26–30, esp. p. 30) argued that Coarelli's idea (1988: 39) of a wall across the entire Forum Boarium paralleling the river is not necessarily borne out by the actual evidence, and combines several fragmentary structures of various types and constructions. More recently, Coarelli's reconstruction of a wall parallel to the Tiber, however, remains accepted with great caution by Haselberger (*MAR*: 175) as a sort of best possible hypothesis. If the Forum Boarium were defended by a wall, its fortifications appear to have gone out of use already by the third century BC (Coarelli, 1988: 36).

THE CAPITOLINE

The Capitoline shows evidence of several circuits, according well with the literary record of early fortification followed by various terracing projects through the Republic.⁷⁴ Beginning on the southwestern end, above the Vicus Iugarius, an arched marble entranceway spanning a stepped path up to the Arx was observed

⁷¹ For the original report, see: Virgili, 1978.

⁷² *Contra* Fabbri (2008: 77, 79), who has seen this as evidence of multiple phases of fortifications in this area.

⁷³ The 'pylon' published by Lyngby and Sartorio (1965–7) is too far south and too close to the river to pertain to the defensive wall.

⁷⁴ Fabbri (2008) has given a much fuller account of the Capitoline defences; refer to both his detailed map of remains on the hill, as well as that of Mazzei (1998). An early circuit around the Capitoline itself may now have been identified by Catalano, Fortini and Nanni (2001). Romulus's fortifications are mentioned in Dion. Hal. *Ant. Rom.* 2.37.1; a *substructio* in *saxum quadratum* was built in 388 (Liv. 6.4.12); work to shore up the hill under the Aequimelium is attested in 189 (Liv. 38.38.3) and may be visible in piazza della Consolazione.

in the Cinquecento and may have related to a later repair of a gate, possibly the Porta Catularia (Coarelli, 1995: 30–1).

We can observe two distinct courses of the wall on the west side nearer the saddle of the hill, just to the south of the equestrian stairway leading up to piazza del Campidoglio. The first course remains visible in gaps in the modern construction of Salita delle Tre Pile (22). Here, we see three courses of blocks in *tufo giallo* of the regular size surmounted by a slab of another material identified by Säflund (1932: 101) as the stone of the Capitoline. The second is just downslope, on via Tor de' Specchi (23), where a stretch of wall 15 m long and standing up to 8 m high was uncovered in 1930 as part of the removal of the neighbourhood at the foot of the hill for the creation of via del Mare (now via del Teatro Marcello). The wall here is entirely of *tufo del Palatino*. These two parallel sections of wall have given rise to debate over the phasing of the walls in this area.⁷⁵ The best view, it would appear, is to see these as different projects, but in that case the date is unclear. Some have suggested that the upper walls on Salita delle Tre Pile were merely part of a terracing project, perhaps related to the construction of the Temple of Jupiter Optimus Maximus, but this interpretation finds difficulty in the contrasting building stones (Cifani, 1998: 364–5; Coarelli, 1995: 31).⁷⁶ Coarelli (1986: 31) and Cifani (1998: 374–7) included the lower walls on via Tor de' Specchi in the Archaic circuit, whereas Säflund (1932: 136–8) argued for a Sullan date.⁷⁷

Moving to the east side of the Capitol facing the Quirinal, the wall is mostly obliterated by the Vittoriano. We rely on early archaeological reports, now made more accessible by the collations of Battaglini (2004; 2006) and Mazzei (1998). One report is of particular interest: excavations in 1892 behind Santa Rita, at the foot of the steps of the Aracoeli (24), uncovered a section of the wall with lower courses in *tufo del Palatino* surmounted by courses in *tufo giallo*, suggestive of the wall on the Aventine underneath Santa Sabina (Säflund, 1932: 99–100; Battaglini, 2004: 105).⁷⁸

Higher up the slope, in the area destroyed for the construction of the Vittoriano, were several other stretches of wall in *tufo giallo*, one *c.* 15 m long with masons' marks (25). Another pair of parallel walls, the east one thicker than the west, lay somewhat to the south (Mazzei, 1998: 10–20; Fabbri, 2008: 80).⁷⁹ The relationship of these to the circuit wall is unclear; they have been connected also to the terracing of the Capitoline in 388 (Mazzei, 1998: 35).⁸⁰

⁷⁵ A. Thein in *MAR*: 173 summarized the debate, eventually accepting Säflund's position.

⁷⁶ The *Capitolium*, of course, is *tufo del Palatino*.

⁷⁷ Säflund's argument was accepted by Gjerstad (1954: 57) and Thein (in *MAR*: 173).

⁷⁸ Santa Rita's position, prior to its translocation in 1928, is given by Lanciani *FUR* 21, although the wall is not depicted.

⁷⁹ Lanciani (1890: 216) published a drawing of the northern stretch. Säflund (1932: 98–9) mistakenly identified this stretch, which in fact does not appear on Lanciani's *FUR*, with the erroneous north–south wall on *FUR* 22 at the foot of the hill; see below at n. 84.

⁸⁰ Fabbri (2008: 80) has focused on the north side.

FROM THE CAPITOLINE TO THE QUIRINAL

As is well known, a saddle of land once connected the Capitoline to the Quirinal; its removal for the construction of the Imperial Fora, recorded in the inscription on Trajan's Column, probably had already begun in the late Flavian period.⁸¹ The course of the wall then, from the Porta Fontinalis to Porta Sanqualis, was mostly lost already by the high Empire.⁸² While we can no longer trace the wall's precise route as it crossed from one side to the other, we can discuss its points of contact, where it joined those parts of the circuit on the Capitoline and Quirinal.

To the west, the situation represented on Lanciani *FUR* 22, with a *c.* 35 m wall running perpendicular to the slope of the Capitoline, has been shown to be untenable based on Mazzei's meticulous archival research (1998: 13 n. 50, 23–7).⁸³ Rather, this was a wall underneath a modern structure, now destroyed, on the old via di Marforio nos. 81C–E. On the same street at nos. 73–5, Borsari reported parts of the wall in 1888, and his section drawing of blocks of equal height and width suggests *tufu giallo* (26) (Borsari, 1888: 14; Mazzei, 1998: 29).

Another candidate for a gate in the wall, and consequently for a juncture between the Capitoline wall and the wall that ran across to the Quirinal, is a group of blocks still visible further to the south, in front of the Museo del Risorgimento (27). As Mazzei (1998: 28–31) detailed, this structure is made up of lower courses of *tufu giallo* superimposed with *tufu rosso a scorie nere* and *tufu lionato*. Von Gerkan (1940: 12) suggested that this was the beginning of the point where the wall ran eastward towards the Quirinal; Coarelli and others have related this to the Porta Fontinalis, leading out to the Campus Martius, although Fabbri has pointed out that this would have made an awkward project out of the attested construction of a *porticus ab Porti Fontali ad Martis aram* in 193 (Liv. 35.10.12).⁸⁴

So much for the western side of the Capitoline–Quirinal connection. Our knowledge of the eastern side has benefited from very recent excavations in the

⁸¹ See: *CIL* VI 960; Bianchi and Meneghini, 2002: 399–400; Meneghini, 2009: 117.

⁸² I use the conventional names for the gate at largo Magnanapoli on the Quirinal (Porta Sanqualis) and the gate at the base of the Via Flaminia (Porta Fontinalis). Carafa (1993) presented an alternate reading, placing the Fontinalis in piazza Magnanapoli.

⁸³ Pace Fabbri (2008: 80) who has continued to follow Lanciani. The difficulty of the evidence was noted by Säflund (1932: 98). It was originally excavated in 1862 and subsequently destroyed; Pellegrini (1870: 112–13) only gave the modern street address and terse notice of the presence of associated paving-stones presumed to be from the ancient Via Mamertina. Neither the length nor the orientation of the wall was recorded. On this basis, Lanciani represented a *c.* 35 m stretch crossing the Via Mamertina and running between the Capitoline and the Quirinal. Fabbri has interpreted this as a long stretch of *tufu del Palatino*; Säflund (1932: 132) considered it *tufu giallo* in association with nearby remains. Pellegrini described it as 'pietra albana o peperino', which suggests *tufu del Palatino*, although Mazzei pointed out that such terms were at the time applied equally to *tufu del Palatino* and *tufu giallo*.

⁸⁴ See: Coarelli, 1995: 31 (followed by Meneghini (2009: 19–21)); *contra* Fabbri, 2008: 80.

Imperial Fora and Trajan's Markets, but has, if anything, grown less clear. On the slopes of the Quirinal, scholars have long been aware of a series of ashlar walls in *tufo del Palatino* in the Salita del Grillo behind the curve of Trajan's Markets (Fig. 10). Von Gerkan (1940) proposed that these walls related to the point at which the circuit reached the Quirinal from the Capitoline. This was accepted by Coarelli (1995: 31) and Cifani (1998: 376), who each suggested their own variations of the actual path taken by the wall from hill to hill.⁸⁵ Instead, recent work by Specchio (2010) shows many different walls on different elevations and orientations at Salita del Grillo, rather than one single wall; the interpretation of these ashlar blocks must now be that of the foundations of multiple structures, with no pertinence to a circuit wall.⁸⁶

Thirty metres or so to the north, between the base of the Torre delle Milizie and the back of the exedra of Trajan's Markets (28), Meneghini reports (2009: 23) 'two or perhaps three' blocks of what he identifies as 'tufo del Palatino' set directly onto the original bedrock at an angle parallel to the turn of the hill; he interprets these as the original line of defence (Figs 10 and 11). This is by no means certain: first-hand observation of these blocks shows them to be of a different material, a redder and more friable stone, not dissimilar to the living rock of the Quirinal itself; further geological study would be beneficial.⁸⁷ Whatever the geological nature, however, this represents a divergence from the stone-type found in piazza Magnanapoli, some 50 m away (see below). Most importantly, the orientation of these blocks does not appear to take into account a connection between the Quirinal and Capitoline, and adheres instead to the natural topography of the hillside. Meneghini must reconstruct a turn in the wall away from the hill somewhere to the south.⁸⁸ Whatever sat at the foot of the Torre delle Milizie, therefore, appears to have been planned without a wall connecting the Capitoline to the Quirinal in mind.

THE QUIRINAL

On the southern end of the Quirinal (Fig. 10), we can still see the *tufo giallo* remains of the aforementioned Porta Sanqualis standing two courses high in a traffic circle in piazza Magnanapoli (29): oblique to the direction of the circuit, these remains are normally restored as the side of a small gateway vestibule in an entrance-gate form, perhaps Greek in origin, paralleled at the Porta Collina (Brands, 1988: 196–7). To the northwest of this gate is a section of wall underneath Palazzo Antonelli with an arch, not entirely dissimilar from that

⁸⁵ *Contra* A. Thein in *MAR*: 177.

⁸⁶ Also: Meneghini, 2009: 21–3.

⁸⁷ They may be of what Jackson and Marra (2006: 419) have referred to as Grottarosa pyroclastic sequence subunit a.

⁸⁸ See: Meneghini in Meneghini and Santangeli Valenzani, 2007: 22–4; Meneghini, 2009: 19–21, esp. fig. 17 (where the bend in the wall from the slope of the Quirinal to the saddle is reconstructed to include a Republican well within the defences).

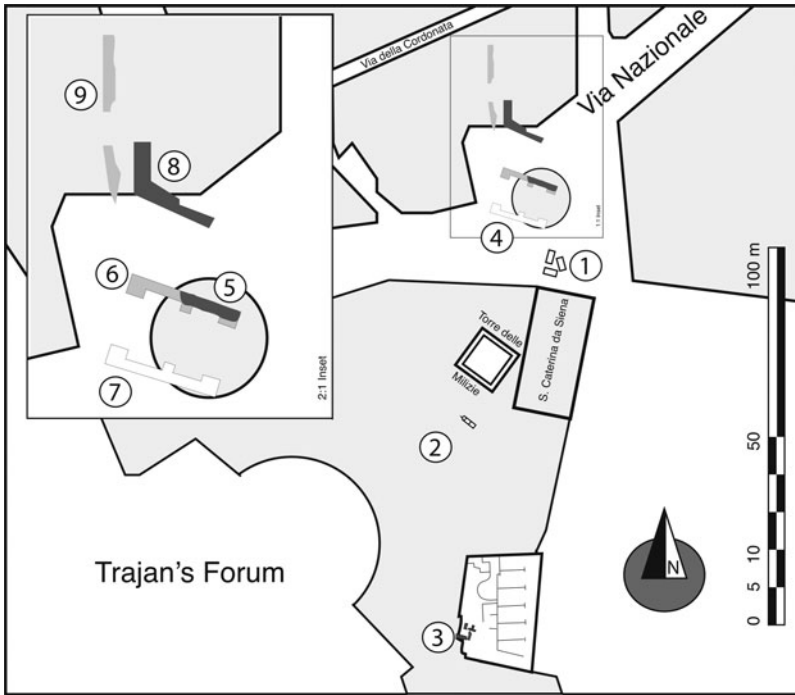


Fig. 10. Remains associated with the wall on the southern Quirinal. 1. Position of Pinza's Tomb CLXX on Lanciani *FUR* 22; 2. Blocks in front of the Torre delle Milizie; 3. Ashlar walls at the back of Salita del Grillo; 4. Piazza Magnanapoli, ancient Porta Sanqualis; 5. *Tufo giallo* visible in a traffic island; 6. Original extent (*Bullettino della Commissione Archeologica Comunale in Roma* 1876); 7. Reconstructed gate; 8. So-called *contromuro* of *tufo del Palatino* (*Bullettino della Commissione Archeologica Comunale in Roma* 1876); 9. *Tufo giallo* fragments (*Bullettino della Commissione Archeologica Comunale in Roma* 1876).

found in piazza Albania on the Aventine and likely also of later reconstruction.⁸⁹ This is the region of walls within which was found Pinza's Tomb CLXX with Republican pottery. The findspot of this tomb, in front of Santa Caterina da Siena, is almost certainly intramural, as the Torre delle Milizie lies just to west; it could be considered otherwise only by hypothesizing a very awkward southward extension of the wall from piazza Magnanapoli to the foot of the Torre.⁹⁰ Thus, the walls on the southern Quirinal appear on grounds of the ceramic evidence of the tomb to be fourth century and later. The scant traces of an L-shaped *tufo del Palatino* wall inside the Porta Sanqualis here are, for that

⁸⁹ The arch contains *tufo lionato* from Monteverde. Coarelli (1995: 32) followed Säflund (1932: 242) in supposing both arches to belong to the Sullan period.

⁹⁰ Furthermore, we should expect the tomb to relate to the road exiting the walls, but the ancient road in this area must be the one that passes through the Porta Sanqualis.



Fig. 11. Remains associated with the wall at the foot of the Torre delle Milizie on the Quirinal. (Photo: author.)

reason, difficult to interpret.⁹¹ Perhaps the internal wall of *tufo del Palatino* could have worked in tandem with the external wall of *tufo giallo*, in a single phase, similar to the arrangement at the Viminal *agger* discussed above.⁹²

⁹¹ The tomb evidence would seem to contradict the assertions of Lugli (1933: 22) and Cifani (1998: 365–6) that this represents part of the Archaic wall in this area.

⁹² This interpretation of a ‘contromuro’ is that of Lanciani (1876); followed by Säflund (1932: 92–6). The *tufo del Palatino* structure here seems to have been much more tenuous when it was discovered by Lanciani than when it was represented on *FUR* 22. In 1875, Lanciani (1876: 37) excavated a very short stretch (‘breve tratto’), in very bad shape (‘quasi ridotte in polvere’), of ashlar wall 6.75 m to the north of the *tufo giallo* wall in piazza Magnanapoli. Even Lanciani’s assertion of stone-type is difficult, considering the enigmatically small module reported as 0.30 × 0.80 × 0.40 m.



Fig. 12. Photograph by E.B. Van Deman taken during the destruction of the Villa Spithöver showing the original extent of the ashlar wall beneath. American Academy in Rome, Photographic Archive, Van Deman Collection no. 86/188. (Reproduced courtesy of the American Academy in Rome.)

The northern Quirinal preserves some of the finest evidence of a wall entirely in *tufo del Palatino*, conforming to the run of the natural topography. These include sections along via XX Settembre underneath the barracks of the Corazzieri (30), and in largo di Santa Susanna (31), as well as behind the church itself (32). The scarp here was originally quite steep north to south, and from its orientation, the wall in this area took full advantage of this.⁹³

Despite the terrain, Strabo called the Quirinal easily ascendable (*euepibatos*) and thus in need of a wall (5.3.7): these remains of *tufo del Palatino* walls plausibly are connected to an Archaic attempt to shore up the hill's defences. A problem, however, arises in consideration of the longest stretch of this *tufo del Palatino* wall still visible, now split into two sections by the construction of via Giosuè Carducci in 1909 (33). Prior to that, in the area of the old Villa Spithöver, this section ran 36 m in length and could be observed up to twelve courses in height (Fig. 12).⁹⁴ The dilemma stems first of all from the fact that

⁹³ On the steep scarp, see: de Vos, 1996.

⁹⁴ Pasqui (1909: 221) gave the length as 36 m and a maximum height of nine courses. Säflund (1932: 77) calculated the original length as 32 m and found traces of a twelfth course.

the wall here appears originally to have been bedded on concrete. Säflund's observations (1932: 78) are worth quoting at length:

Let us proceed now to complete the description given above with several observations of the greatest importance. If we examine the internal side of E¹ [the section north of via Carducci], we see a very singular type of construction. For a height of 2.80 m from the present ground level, there rises a concrete core that forms a foundation to the superimposed courses of *cappellaccio*. The core, however, extends for 1.30 m beyond the wall towards the *agger*. There can be no doubt that these [courses of blocks] were placed directly onto a base of concrete. This is sufficiently proven by the cut at the extreme northwest of the wall where the core can be seen in its full thickness of 3.70 m, and this is also demonstrated by a close examination of photographs taken during the excavation. The cement base is not, however, equal in its entire length, but it is interrupted regularly by a sort of pylon of harder and more consistent concrete.⁹⁵

Säflund recognized that it would be difficult, if not impossible, to attribute this regular cement work underpinning the entire width of the wall to casual repair.⁹⁶ Because the cement seemed similar in consistency to that backing the wall at piazza Albania on the Aventine, he argued (1932: 243–4) that this stretch in its entirety should date to the Sullan period.⁹⁷

More recently, the *tufo del Palatino* that remains visible on either side of via Carducci has been reclaimed for the Archaic circuit as a fine example of sixth-century workmanship; the cement has been attributed to later repair (Cifani, 1998: 368; Coarelli, 1995: 15).⁹⁸ Such an interpretation, however, is not entirely straightforward. This section of the wall was built carefully, with the lowermost courses battered and the upper more vertically faced; dividing these two sections is a course with an orderly band of rustication running horizontally across several blocks (Fig. 13).⁹⁹ Cifani (2008: 70) has pointed out that a similar band of rustication appears on the platform of the Temple of Jupiter Optimus Maximus.¹⁰⁰ If, in laying the cement, the wall was disassembled even partially in order to dig beneath it, it must have been put back together in incredibly meticulous fashion with attention to preserve the earlier appearance. This is not impossible, but it is also not the sort of care seen in other repaired sections (compare Fig. 6).

Even beyond the matter of the cement, the southward course of this stretch of wall raises further questions (Fig. 14). When Lanciani encountered the wall's

⁹⁵ For convenience, I translate from the Italian.

⁹⁶ As Säflund (1932: 80) noted, this stretch of wall, but not its foundations, had been visible at least since the seventeenth century, when Giovanni Lucio Traguritano described it in his treatise *Delle mura antiche di Roma e loro vestigi*; cf. the publication of the work by De Rossi (1879: 117–22 and p. 119 for the reference); an excavation report in the *Notizie degli Scavi di Antichità* (1909: 221) did not note the concrete.

⁹⁷ Gjerstad (1954: 59) followed Säflund. Lugli (1957: 252) was agnostic on the date, as were Picozzi and Santorio (RMR: 19–20).

⁹⁸ Gatti (1909: 120) initially also suggested repair.

⁹⁹ Noted by Pasqui (1909).

¹⁰⁰ The function of this band, if it had a function, is very unclear.

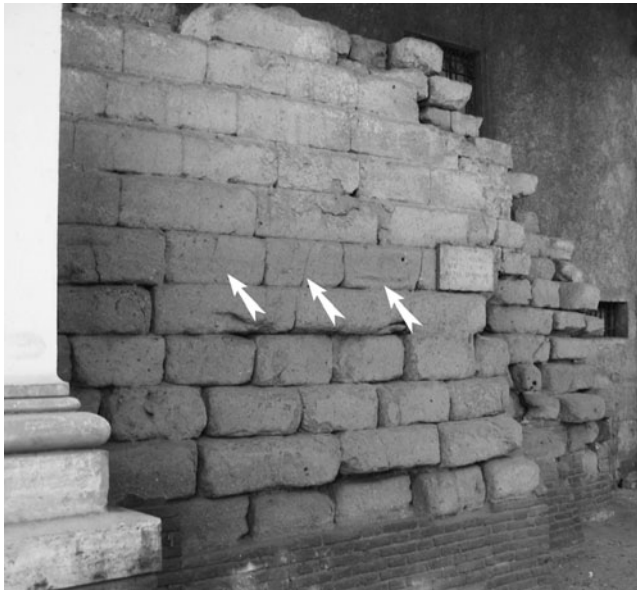


Fig. 13. The wall at via Carducci. The arrows indicate a band of anathrosis running across three blocks on the sixth course from the bottom. (Photo: author.)

extension in 1885 in the construction of via Salandra (then via delle Finanze), he recorded a different situation than what we can still see on the north side of that street. His sectional drawing depicts a thin wall in *tufo giallo* with blocks *c.* 0.60 m high and of equal height and width; this thin wall fronted an earthen *agger* and was abutted on its external face by smaller blocks of *tufo del Palatino*, which he attributed to later repair (Fig. 15).¹⁰¹ On the southwest side of via Salandra, where several pieces of the wall were recorded in the creation of the Ministry of Agriculture in 1907 (34), excavators described a similar situation: a wall of *tufo giallo* abutted in places by smaller blocks of *tufo del Palatino*.¹⁰²

Immediately adjacent to the south side of via Salandra, a 12 m long section entirely of *tufo giallo* was studied in depth by Boni (1910: 510–12). He excavated a trench into the *agger* behind this wall, and drew a detailed plan of the *agger*'s stratification: it is here that Boni found the single sherd of Attic red-figure pottery. Boni's lowest stratum (the sherd came from the next stratum up) did not correspond to any stone wall, and he suggested that it might belong

¹⁰¹ The *tufo del Palatino* blocks are labelled as a *restauro con pietre di vigne Querini*. Errors of detail in Lanciani's reports are notorious, but his description corresponds to those of both Fiorelli (1885) and Borsari (1888: 17 with fig. 8), who gave the height of the stones of 'tufi gialli' as 0.59 m, and those of the 'rivestimento esterno' of 'tufi lamellari cenerognoli delle cave di vigna Querini' as between 0.24 and 0.27 m, and also redrew Lanciani's plan. Further bibliography has been given by Battaglini (2004: 103 no. 6).

¹⁰² Gatti (1907: 336) mentioned a wall in two stones, part *tufo cinereo* (*tufo del Palatino*), suggesting that the *tufo del Palatino* wall initially must have been seen to the south of via Salandra. Säflund (1932: 83) cited an excavation log referring to a 'rivestimento di nenfro'.

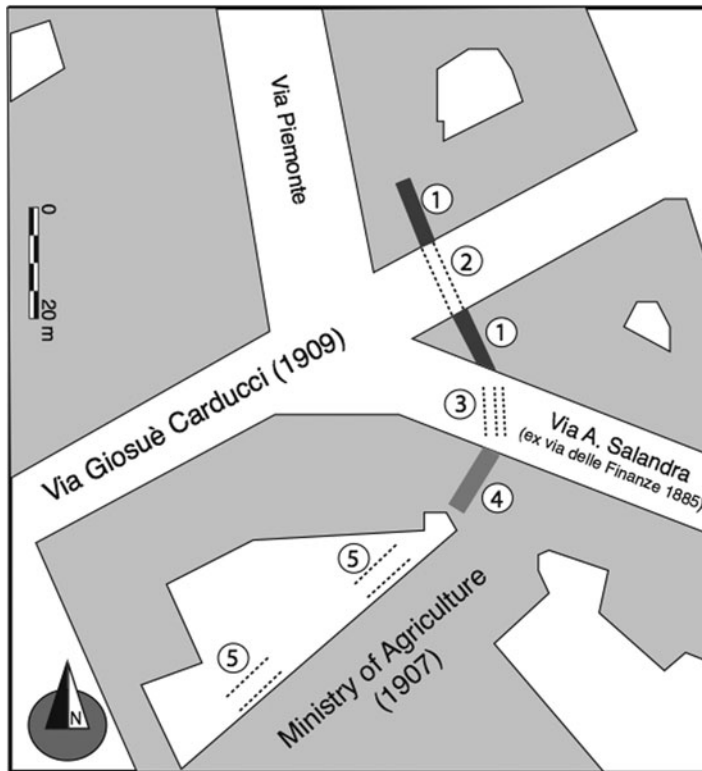


Fig. 14. The wall in the area of the old Villa Spithöver on the northern Quirinal. 1. Still visible *tufo del Palatino* remains; 2. Area destroyed with the construction of via Carducci; 3. Area destroyed by construction of via Salandra in 1885 and drawn by Lanciani (cf. Fig. 15); 4. *Tufo giallo* wall with an earth *agger* stratigraphically excavated by Boni (1910); 5. Walls excavated for the creation of the Ministry of Agriculture, cf. Gatti (1907).

instead to an even more primitive *agger* of pure earth, similar, he supposed, to the *murus terreus* mentioned by Varro in the *Carinae* (*Ling.* 5.48).

The wall in *tufo giallo* underneath the Ministry of Agriculture follows a different orientation to the long stretch of *tufo del Palatino* walls cut by via Carducci. Säflund (1932: 76–85) considered everything part of the same collective circuit, and he posited a slight turn at the point where via Salandra crosses the wall. Such a juncture resolves the discrepancy in orientation, but not the apparent inconsistency in building material and technique. Where and how the wall in *tufo del Palatino* underneath the Villa Spithöver became a wall in *tufo giallo* under the Ministry of Agriculture is no longer clear; that it happened precisely at the point where via Salandra crossed the line of the ancient wall seems too convenient, but at present there is no better solution. Here we are neither by a gate, nor a point that otherwise seems particularly crucial to the city's defences, but perhaps it is telling that such complexity is found at a point in the circuit where we might least expect it.

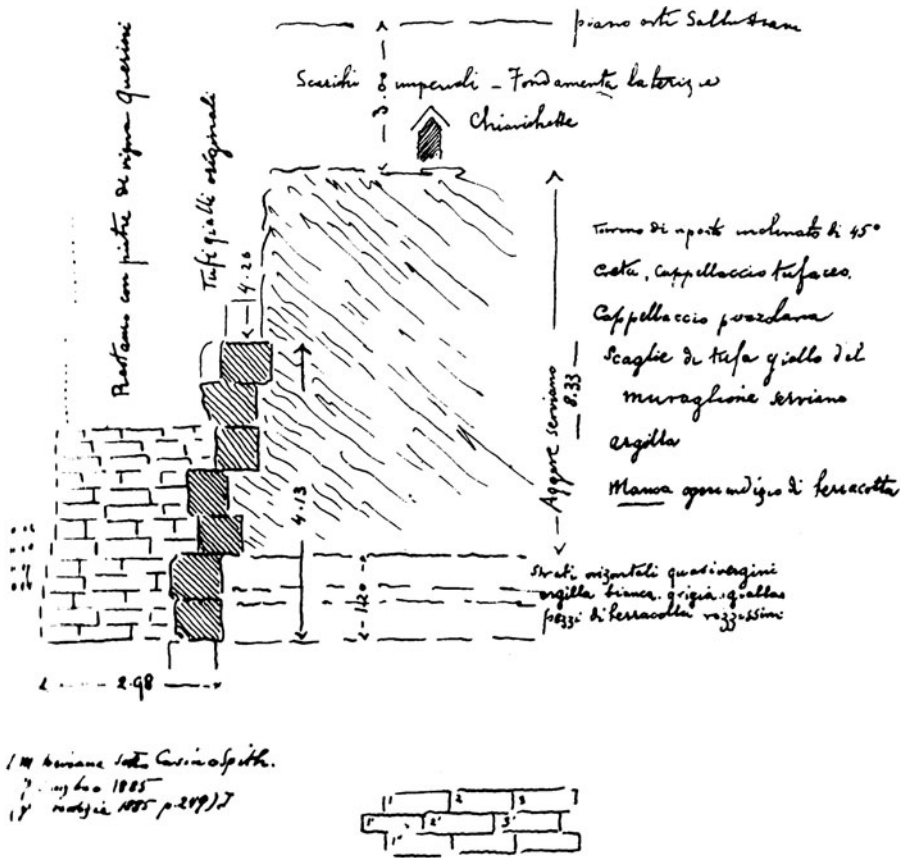


Fig. 15. Lanciani's excavation sketch of the plan in section of the wall destroyed for the creation of via Salandra (ex via delle Finanze) showing the relationship of two walls of different materials, with the small stones labelled as *restauro*. (From Säflund, 1932: fig. 35.)

CONCLUSIONS AND THE ISSUE OF HISTORICAL CONTEXT

Before beginning to synthesize all of the information presented, we should take our start from the simple observation that all of these sites show extraordinary variance for parts of a single monument (Fig. 16). Defensive circuits are often like this even when observable in their entirety: the constant need to repair or update a fortification often gives a more complex phasing than any other urban monument. The next time we hear of the wall begun in 378 is when Livy mentioned its repair in 353 (7.20.9).¹⁰³ Rome's pre-Imperial wall

¹⁰³ It is on the basis of this passage that some, for example Cornell (1995: 462 n. 11), have thought that the wall took over twenty years to build. In truth, we do not know: for what it is worth, Livy specified repair in 353, not ongoing construction.

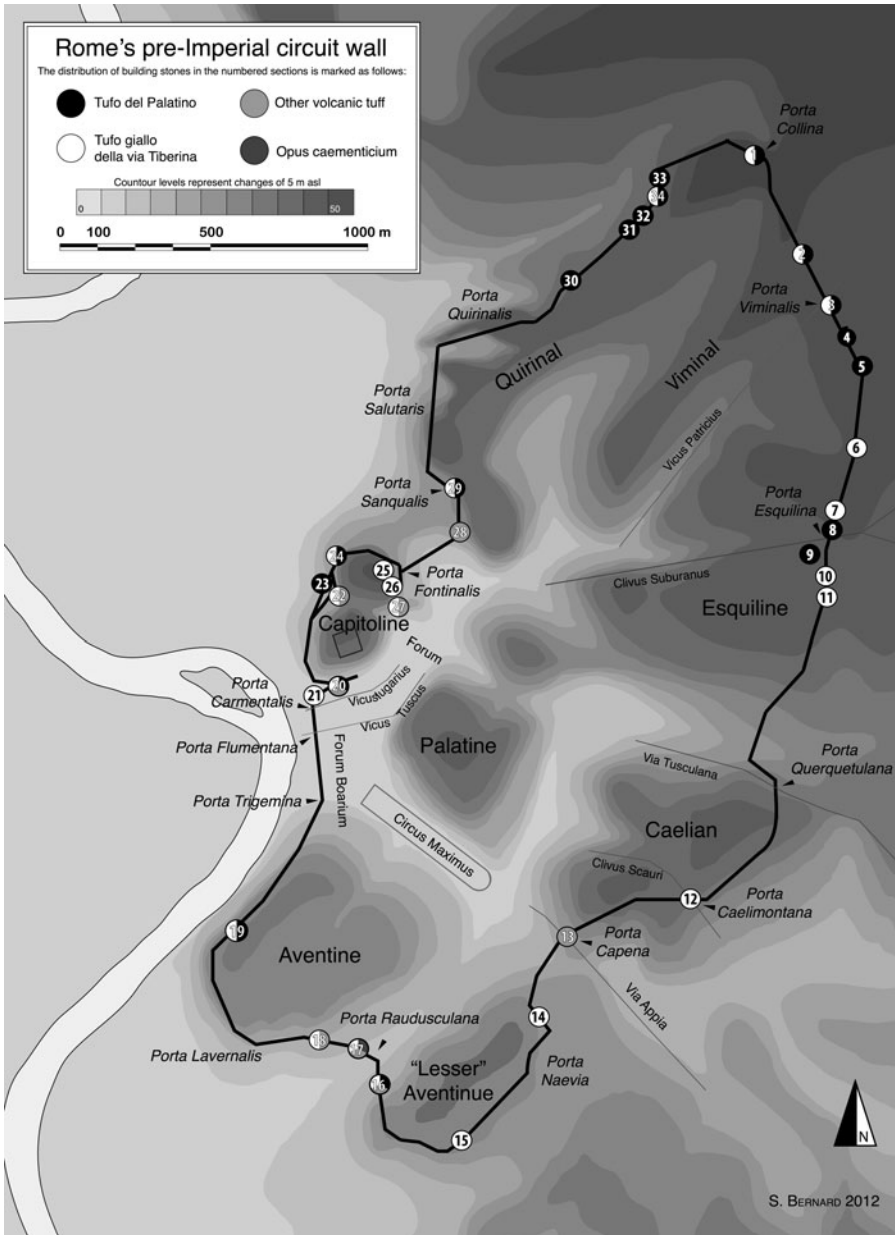


Fig. 16. Rome's pre-Imperial wall. The numbered sections are discussed in the text.

presents a further challenge: while it began its existence as a huge, highly visible monument, it did not stay so for long. Millennia of overbuilding have made the method of its reconstruction rather like Salman Rushdie's tale of the perforated sheet: we see our goal only by truncated, disparate views, but we assume that

behind these difficulties lies a recognizable, unified form able to be reassembled in the mind.¹⁰⁴

How do we reconstruct the wall's various component parts? An arrangement into construction phases based on building material should not be done too rigorously. However, there appears to be some truth to the fact that *tufo del Palatino* preceded *tufo giallo*, and that the latter material post-dates the sack of Veii in 396 BC. Even setting aside the problematic wall at via Carducci, the northern Quirinal is rich in walls of *tufo del Palatino*, and a defensive structure would complement what we can tell of Archaic temples and cults in that district.¹⁰⁵ Here and elsewhere in the city, it would be 'strange' to deny any stone wall in this early period.¹⁰⁶ The question, then, is not of existence, but of form and extent. In the end, I am sceptical that the evidence suggests a full circuit wall in the sixth century. My line of interpretation is as follows:

1. External evidence (literary, analogy) and general internal evidence (metrology) appear indecisive, although some limited stratigraphic evidence needs to continue to be considered. However, the archaeology of the wall itself forms the crucial datum.

2. The composition of the wall from the standpoint of construction and materials varies highly around the city, an unsurprising point when considering the function of a fortification wall and its frequent maintenance and repair. There is, however, some level of homogeneity when speaking of individual hills.

3. Considering the hills separately, some hilltop fortifications lack any clear signs of an earlier phase. This is true for the southwest Quirinal by the Porta Sanqualis (intramural tomb with Genucilian class ceramics), for the entire Caelian (all *tufo giallo*), and for the Forum Boarium, if indeed it ever had a wall.

4. The best arguments for two phases or for the presence of an earlier phase in *tufo del Palatino* come from higher locations and in parts of the wall that often show an orientation adhering to the natural topography.

5. Another area where an earlier phase appears is the *agger* on the Esquiline reaching as far north as the Quirinal. If Boni accurately identified an earthen-only *agger* in the stratigraphy of the wall at via Salandra, then interest in this sector's defences may antedate any attempt at an ashlar wall, circuit or otherwise.

6. Besides the *agger*, there is little firm evidence for a wall of *tufo del Palatino* in between the individual hills, in the low-lying areas or valleys where we would want proof of a full circuit connecting multiple hills. This seems an important and decisive point. The walls at Salita del Grillo now have to be excluded from consideration.

The gaps connecting the hills, to my mind, clinch the argument. The evidence for a stone wall in Archaic Rome is weakest *in between* the hills, and strongest on top of

¹⁰⁴ I refer here to the opening of *Midnight's Children*. An intriguing proposal by Fabbri (2009) suggests marking with paint the course of the wall in the modern city, and thus re-unifying the monument for today's Romans and visitors.

¹⁰⁵ See Carafa (1993) for the Archaic Quirinal.

¹⁰⁶ The word strange has been used by both Smith (2000: 27) and Coarelli (2007: 11).

some hills, and this coheres with the interpretation of a complex of separate hilltop fortifications bolstered by an eastern *agger*. Elsewhere, the city could have relied on its terrain: even in later periods of the Republic, this remained its *nativa praesidia*, defined on all sides by steep hills (Cic. *Rep.* 2.11). It is not clear anyway whether prolonged sieges were typical of Roman warfare prior to the mid-Republic.¹⁰⁷ Some stretches of the Republican wall's course, such as the Caelian, were brand new and relate to a later project of expansion and unification. In other places, earlier fortifications were adjusted, such as at the Esquiline *agger* near via Merulana, or even obliterated, such as the case found beneath Termini Station platform 24.

In terms of context, it is apparent that Rome in the time of the Tarquins was a flourishing city with an impressive capacity for monumental architecture. But it does not automatically follow that the city was endowed by that point with a full circuit of defences: however impressive the Archaic city looks in the light of recent archaeological work, the early fourth century equally is not an arbitrary date given by a chance mention of a circuit wall in Livy. Though the historical accounts must be handled with care, the capture of Veii in 396 appears to have followed a period of measured military success after the trough of the fifth century, and the implication of the event in so many aspects of Roman society confirms its importance as a 'climactic war'.¹⁰⁸ Built from stone quarried in the *ager Veientanus*, the Republican wall belongs to this moment and demonstrates that changes to the fabric of Roman society were accompanied, unsurprisingly, by a re-imagining of the city itself. This is not the place to describe the development of the mid-Republican city with the complexity that it deserves. Still, we can note that the wall belongs at the beginning of a period of urban redefinition that would, within two generations, reshape the city from its monumental core to its hinterland.¹⁰⁹ Spatial change may be detectable also in burial patterns: the less organized burial areas of the Archaic period came to be replaced by the monumental, multi-burial family tombs of the fourth and third

¹⁰⁷ The first seemingly authentic prolonged siege in which Rome took part is that of Veii ending in 396. Smith (1996: 110–11, 153–4) raised the idea that material evidence might indicate the persistence of single combat through the end of the Archaic period, which would support this argument; Camous (2004) more recently has seen ritualized single combat transitioning to more wide-ranging battle within the tradition of the early kings, although his anthropological reading of the sources strikes me as credulous.

¹⁰⁸ See: Harris, 1990: 507; additionally: Cornell, 1995: 311–13. On the importance of the conquest to military structures, see: Massa-Pairault, 1986: 38–45; and to socio-economic structures: Lo Cascio, 2009: 19–26.

¹⁰⁹ Specifically in the activities of C. Maenius in the Forum in 338 and 318 (cf. Coarelli, 1983: II, *passim*), and Appius Claudius's aqueduct and road begun in 312. Cornell (2000: esp. pp. 44–6) provided an entrée to this topic. I am perhaps less convinced than he was that the early fourth century was itself a period of intense building. Much will depend on the publication of recent excavations into mid-Republican layers underneath the Temple of Concord in the Forum; cf. Ferroni, 1993.

centuries (Valeri, 2010: 137).¹¹⁰ The slopes of the Caelian and Esquiline began to host impressive *sepulcra*.¹¹¹ The creation of a family tomb for the Corneli Scipiones between the Appia and the Latina marked the area beyond the Porta Capena as a location *par excellence* for burials of the Roman Republican élite (cf. Cic. *Tusc.* 1.7.13), and the two sarcophagi of the Corneli Scapulae from that same general area may indicate that such a trend began in the fourth century (Blanck, 1966–7). With such monuments, we see the origins of Roman *Gräberstraßen*, with burial now focusing on roadways and those areas just beyond the gates of the city wall (Purcell, 1987: 29).

Were these urban developments of the mid-Republic related to the creation of a newly unified circuit wall? What is indisputable is that there are gaps in the wall's archaeological record, and that these gaps must be supplied from what we can infer about the shape of the city. Some degree of agnosticism remains appropriate as any reconstruction must continue to bear in mind that the fourth century was a time of great urban change at Rome, unlike any since the late Archaic period. It would not have been an inappropriate moment for the city's first unified circuit wall.

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¹¹⁰ Comparatively, changes in Late Archaic funerary practices were no less radical, but it can be argued that they were expressed in terms of grave-goods rather than urban spatial disposition; see Colonna (1977) with the comments of Cornell (1995: 105–8). There is some evidence for a spatial shift from the Forum necropolis to the Esquiline in the Latial Period IIB, perhaps in recognition of a sort of proto-urban settlement, as noted by Smith (1996: 52–3), but this would be difficult to connect to the creation of a circuit wall.

¹¹¹ For the Caelian, see: Santa Maria Scrinari 1968–9; Esquiline: the best example of this is the tomb (of the Fabii?) containing the famous fresco with scenes from the Samnite wars.

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