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**THE ATLAS OF
ANCIENT ROME**
BIOGRAPHY
AND PORTRAITS
OF THE CITY
1. TEXT AND IMAGES

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3.2. The Servian Walls (table IV)

Gabriele Cifani

The literary tradition recounts the progressive development of Rome's fortifications. The development began with a primitive phase, limited to Capitoline, Palatine, and Quirinal Hills, then expanded in the period of the Tarquins to include the entire area of the seven hills (Cicero, *Republic*, 2.6.11; Livy 1.36.1, 1.44.3; Dionysius of Halicarnassus 3.67.4, 9.68.3; Strabo 5.3.7; Pliny, *Natural History*, 3.5.66–67; for a review: Begni 1952).

These defenses played a key role in military events between the end of the monarchy and the first century of the Republic, prior to an ambitious restructuring begun in 384 BC and completed twenty-four years later (Livy 6.32.1, 7.20.9).

Extensive restorations were made during the Second Punic War (Livy 22.8.6–7; 25.7.5), as well as in 82 BC, just before the Battle of the Colline Gate, when additional artillery edifices were installed (Appian, *Civil Wars*, 1.66.103).

The walls progressively lost importance in the late Republic and especially in the Augustan age. This diminishment can be particularly seen in the restructuring of Esquiline Hill with the *horti Maecenatis*, which were located on both sides of the ancient *agger* (Horace, *Satires*, 1.8.14). The juridical plan also betrays their waning significance. Finally, the legal status of the suburban area between the old fortifications and the one-mile mark was gradually integrated into the urban area (Le Gall 1991; Muzzioli 2008, with the bibliography).

There is no reason, archeologically speaking, to doubt that between the sixth and first centuries BC Rome was defended by a perimeter of fortifications 11 km long that included an estimated area of 426 hectares, a perimeter that corresponded to the tradition of the seven hills. These dimensions place it among the largest fortified centers of the era in the Mediterranean (for a critical discussion: Battaglini 2004, 2006; Cifani 1998, 2008, pages 25–73 and 255–64, with the bibliography; Barbera, Magnani, and Cianetti 2008).

Obviously, this extension was originally motivated by the necessity of having sufficient area within the walls for the outlying population in instances of military conflict (Muggia 1997), as is reported, for example, during the siege by Porsenna in 508 BC (Livy 2.11.3).

An event that stands out among the topographic benchmarks used to date the most ancient walls from the archaic age (in particular those of Esquiline Hill) is the movement of the burial grounds in the sixth–fifth century BC to clear a path for the growing fortifications. This process included the movement of various groups of tombs so that they all remained outside the limits of the *agger*.

When we consider urban fortifications, particularly those of the middle and late Republican period, we are considering a complex system of constructions that exploited the geomorphology of the urban area for defensive purposes through a series of discreet, but connected, works, namely:

- 1 the digging of vertical banks into the slopes of the tuff hills;
- 2 embankments on the top of the hills with walls and artificial fill behind them;
- 3 a defensive trench that combined a wall with turf fill behind it (Esquiline agger);
- 4 wall segments at the bottom of the valleys or foothills, possibly with turf fill behind them;
- 5 large gates defended by bastions;
- 6 allures, towers, and artillery emplacements;
- 7 accessory constructions, such as roads parallel to the fortifications, internal containment walls, sewer and drainage systems, and wooden bridges over the trenches;
- 8 a belt running along the inside of the wall to allow the movement of defenders;
- 9 a belt running along the outside of the wall, both to provide defenders with a clear line of sight for observation and missiles, as well as to deprive the attackers of any tactical positions for defense or attack near the walls.

Mention of the constructions immediately outside the wall is frequent in the *campi* sources, such as the *campus Flaminius* (or also *Tiberinus* and *Martius*), *campus Caelimontanus*, *campus Esquilinus*, *campus Viminalis*, as well as in the special legal and sacred definition of the ring of land within the first mile from the walls (Colonna 1991). Inside the walls, the line of the *pomerium* may have originally indicated the *post murum* (Varro, *On the Latin Language*, 5.143).

Path of the fortifications (table 1b)

The path of the fortifications can be reconstructed starting from the north. In that sector, the large tuffaceous plateau of Esquiline Hill was naturally open to the northeast and the urban area was fortified by means of an enormous agger with a trench dug before it, using a system that has been well documented in Latium and Tyrrhenia (Quilici 1994; Boitani 2008). This structure was still recognized up to the Renaissance (fig. 13). There were at least three gates on the agger: the *porta Collina* (VI 86, 232, 868), the *porta Viminalis* (VI 62), and the *porta Esquilina* (V 6).

This area was one of the most exposed sectors of the city. Crucial events in Rome's military history occurred at this spot, such as the battle in 477 against the Etruscans (Livy, 2.51.1–3; Dionysius of Halicarnassus, 9.24.4) and the battle in 468 against the Sabines (Livy, 6.64.3). In 390 BC, the Gauls entered through the *porta Collina* to sack the city. Then in 360 BC, another clash with the Gauls occurred outside the gate (Livy, 7.11.6). In 211 BC, Hannibal camped near the confluence of the Aniene and the Tiber, three miles north of the city. He inspected the area of the *porta Collina* many times, but did not begin a siege (Pliny, *Natural History*, 15.20.76). In the period of the civil

wars, this gate was the epicenter of several clashes, culminating in the Battle of the Colline Gate in 82 BC (Appian, *Civil Wars*, 1.66.103). At the end of AD 69, Vitellius's supporters were surrounded by Vespasian's troops in this zone (Tacitus, *Histories*, 3.82).

Some foundations of the *porta Collina*—and large sections of the internal containment wall (fig. 14)—have been documented from the archaic phase of the agger, though they are only partially preserved. However, vast sections of the yellow lithoid tuff wall outside the agger still remain from the middle Republican period.

From the slopes of Esquiline Hill, the walls then continued south and included the eastern part of Caelian Hill. A trace of them remains in the *porta Caelimontana* (II 9, fig. 114). The area between Caelian and Aventine Hills was fortified by a descent of the defensive line into the valley near Circus Maximus, where the *porta Capena* (I 81) was located. The walls therefore included the Aventinus Minor, along with the *porta Naevia*. In this sector, a large segment of the walls from the late Republican period is still visible near the Church of St. Balbina. The *porta Raudusculana* (XIII 523) was located near the bottom of the valley between the Aventinus Minor and the larger peak of Aventine Hill.

A large segment of wall in Roman concrete (*opus caementicium*) with the coping in blocks of tuff belonged to this sector. This segment was about 42 meters long and 8 meters high. At the top, an arch in tuff ashlar opened up to a ballistics room. The defensive line was reinforced, and (in this case) there was also a packed earth fill inside the wall. On the west summit of the hill, near the St. Sabina Basilica, there is a well-known segment of the wall in which the two principle building phases can be seen: the ashlar in grey granular tuff from the archaic age and in yellow lithoid tuff from the middle Republican period.

The topographic reconstruction of the stretch of walls between Aventine and Capitoline Hills remains problematic, but it seems probable that, at least during the middle Republican period, a line of walls flanked the Tiber. The *porta Trigemina* (XI 203) and *porta Flumentana* (XI 407) must have been in this sector. It follows that the *porta Carmentalis* (VIII 852) must have been near the sacred area of Sant'Omobono. The walls ran along the southern part of Capitoline Hill, as indicated by a section found in 1925 along via del Teatro Marcello. It is also likely that Capitoline Hill had artificial terracing and additional autonomous fortifications that were adjacent to the urban perimeter and perhaps correlated therewith (Mazzei 1998; Fabbri 2008).

The walls touched the bottom of the southern slope of the *Arx*. To the east of the *Arx*, the *porta Fontinalis* (VIII 855) was constructed, after which it went back up toward Quirinal Hill, thereby making use of a section of the valley floor that had already been altered during the creation of the Imperial Forums. From the street called Salita del Grillo, a structure in grey granular tuff blocks, also part of the defensive circuit, is still clearly visible.

Other stretches of the walls near Largo Magnanapoli may intimate the *porta Sanqualis* (VI 167 and 866), which lay in the valley between the two southwest summits of Quirinal Hill: *Collis Mucialis* and *Collis Latiaris*.

Farther north, under Palazzo Antonelli, there is an arch in tuff ashlar leading to a ballistics room dating from the late Republican era. Limited segments of the wall are also documented inside the Quirinal Palace (Attilia and Filippi 2009, pages 96–99) and in the *Caserma dei Corazzieri* (the barracks of the Cuirassiers). The *porta Salutaris* (VI 904) was located in this section, as well as the *porta Quirinalis* (VI 578). Further excavations were made in the sector that lay between the Church of Saint Susanna and the area around the *porta Collina*. Under the Ministry of Agriculture, part of the walls' retaining turf fill was stratigraphically investigated. The results indicated materials from the late archaic period (Boni 1910). Finally, near the since-demolished Villa Spithöver (now via Carducci), the walls ascended again to the north before reconnecting to the *porta Collina*.

Building and architectural classification

Archaic phase (6th–5th centuries BC)

The most ancient phase of the defensive circuit, which can be dated to the second half of the sixth century BC, is characterized by the use of square blocks. These are almost exclusively in grey granular tuff, cut in multiples of the 272-cm Oscan/Italic foot.

Several lengths of the fortifications from the archaic period have been found in the Quirinal sector between Largo Santa Susanna and the *porta Collina*. It is a wall with a retaining fill built on the edge of the hill. An interior containment wall probably ran parallel to this wall, as suggested by finds by the Ministry of Agriculture (table IV).

We can also identify some remains of the first phase of the Colline Gate dating between the sixth and the fifth centuries BC; namely, an entrance with two internal bastions has been discovered. The foundations of these structures are in blocks of grey granular tuff with sporadic instances of yellow lithoid tuff (table IV).

Middle Republican phase (4th–2nd centuries BC)

The middle Republican phase is in yellow lithoid tuff with blocks approximately 60 cm in height and bases of 2 Roman feet (296 cm each).

The walls from this period appear to be more resistant to artillery strikes, which began to assume a more central role in siege warfare with the use of ballistas and catapults. The development of siege weaponry accelerated between the end of the fifth century and the beginning of the fourth century BC, which period saw multiple turning points in warfare technology: the siege of Syracuse by the Athenians

(415–413 BC) and, above all, the siege of Motya in 397 BC by Dionysius of Syracuse in the war against Carthage (Diodorus of Sicily 14.42.1, 14.50.4). The latter saw the first known use of ranged siege machines in the western Mediterranean (Garlan 1974; Sáez Abad 2005, with the bibliography). In those same years, the first treatises on siege warfare appear. Works by Democritus of Abdera, and later by Aeneas Tacticus, describe a generalized evolution in the art of war during the fourth century BC, resulting in an evolution of urban fortifications (Bettalli 1998; Loreto 1995; Hellmann 2010, pages 317–42, with the bibliography).

We have documents from this phase attesting to an upgrade to the ample Esquiline agger, along with the digging of an impressive trench. The trench ran northwest to southeast for nearly 1,300 meters and spanned up to 36 meters in width. The walls had slopes of 45 degrees. At a depth of 18 meters, the trench reached the water table so that the bottom of the moat was filled with about 1 meter of water (table IV).

The dirt excavated to make the trench was placed inside the fortifications and supported by two containing walls. The internal wall was made of 1–2 rows of grey granular tuff. The external wall was up to five rows of blocks thick and about 8–10 meters high.

Four paths ran along the agger: One was at the top of the fortification. A road suitable for carts and carriages ran parallel to the internal containment wall (alongside this road was a drainage system for water runoff from the slope of the agger). The third path was a footpath of at least 8 meters in width that ran between the outside of the walls and the trench. The fourth ran parallel to the outer edge of the *vallum*; it was a street paved with large stones, which is known in the technical literature as a *clivus subager* (Menghi 2008, page 41, with the bibliography).

The presence of wooden bridges must also be taken into account. These bridges were used to cross the agger's trench near the city's gates and, at least during the late Republican period, near the portcullises (Appian, *Civil Wars*, 1.93.430).

From the middle Republican age on—but according to literary sources as early as the archaic age (Livy, 1.44.3; Dionysius of Halicarnassus, 4.54.2)—the external wall of the agger was also fortified by a series of towers, most likely placed at corners or near gates. In the middle Republican age, some reinforcing buttresses were also present on the agger. These were about 3.85 meters wide and protruded about 4 meters (Säflund 1932, page 265; De Angelis d'Osato 1948, page 448; Aurigemma 1961, page 30).

Two small semicircles that may have housed artillery have been documented near the internal margin of the agger, on the north side of *porta Viminalis*. This would have been near the corner of the wall, 250 meters northeast of the Esquiline Gate, in the area where piazza Manfredo Fanti is today (Lanciani 1893–1901, table 17; Battaglini 2004, page 108, with the bibliography).

Late Republican phase

The late Republican phase was characterized by a series of restorations in Roman cement in order to install arched emplacements for ballistas. These emplacements can still be found on the slopes of Aventine and Quirinal Hills (table IV).

We can also attribute the reconstruction of the *porta Sanqualis* to this phase. It was rebuilt as a large rectangular area split into two separate bays, each with wooden emplacements, similar to the fortifications in Ostia from the Sullan period (Säflund 1932, page 97; Brands 1988, pages 196–97) (table IV).

Augustan phase

Finally, in the Augustan age, some of the gates of the ancient defensive circuit were turned into monuments. For example, the Esquiline Gate was reconstructed as an arch with three archways, and became known as the Arch of Gallienus (the gate was rebuilt by the prefect Marcus Aurelius Victor, who then dedicated it to the emperor [*CIL*, VI 1106]). Consuls Dolabella and Silanus also made *porta Caelimontana* into a monument (*CIL*, VI 1384), and there are references in the Augustan age to reworkings of the *porta Trigemina* (*CIL*, VI 1385), the *porta Flumentana* (*CIL*, VI 878), and other parts of the urban wall along the Tiber (Coarelli 1988, pages 42–59, with the bibliography).