Abstract
Since its discovery, the tomb of Aulus Hirtius in Rome has been regarded as a firmly dated monument and, thus, constituted a widely used fixed point for those tracing the early development of Roman brick architecture. However, several peculiarities regarding the construction of the tomb and its inscriptions strongly indicate that the present dating, which is based on historical sources, may not be correct. In this note it is suggested by the author that the original tomb was destroyed and thoroughly remodelled in the early or mid-Augustan period. Some general implications of this regarding the introduction of brick architecture in Rome are also considered.*

THE TOMB OF AULUS HIRTIUS
In 1938 the tomb of A. Hirtius was found under the northwest corner of Palazzo della Cancelleria in Campo Marzio.1 The name is given by three identical inscriptions and the owner has been positively identified as the consul of 43 BCE, who fell in battle, together with his colleague C. Vibius Pansa, in the fighting against M. Antonius that year. Both consuls were honoured with state funerals, and buried in the Campus Martius.2 Since this sepulchre has, until now, been believed to be the earliest securely dated building with opus testaceum (or structura testacea) in Rome,3 it has been considered of great significance for the study of the development of brick architecture.4 However, it can be argued that the construction found under Palazzo della Cancelleria may not be the original tomb of A. Hirtius and, therefore, perhaps should not be attributed to the year of 43 BCE, but should rather be given a somewhat later, probably Augustan, date.

The remains of A. Hirtius’ tomb were found at a depth of 7.82 m below ground level and consisted of two considerable fragments of a square walled precinct, divided by the massive foundations of the Palazzo della Cancelleria (Figs. 1–2). The west section was destroyed shortly after its discovery and only two inscribed corner-stones were salvaged (now in the Vatican Museum; Fig. 3), but the east section is still visible in situ (Figs. 4–5). The main part of this wall, 1.55 m high and 0.60 m thick, is built of fired bricks, covering a thin, concrete core. It stands on a socle of brownish tufa blocks, 0.70 m high, and is topped by a row of travertine blocks, 0.39 m high and 0.91 m wide. The cap-stones project from the brick surfaces on either side by about 15 cm. The total height of the wall is 2.64 m and the length along the east side 5.72 m (6.02 m if measured along the travertine coping blocks).5 The length of each side, thus, corresponded roughly to twenty Roman feet. Possibly the socle was situated partly below ground, functioning as a foundation-course.6 The bricks are made of roof-tiles,7 and the five-stone brick-module measures 23.3 cm on average.8 In each corner of the square structure, oblong travertine slabs with a curved upper end were embedded in the wall. Their main dimensions are:9

No. 1: 1.05 × 0.375 × 0.20 m (Fig. 3)
No. 2: 0.72 × 0.47 × 0.21 m (Fig. 3)

* I am grateful to all those who have read and commented on various drafts of this paper, in particular Dr. Marianne Wifstrand Schiebe, Dr. Christer Henriksén and the anonymous referee. I also owe thanks to Svenska Rominstitutets Vänner for supporting my research.
1 Early reports on the excavation: Colini 1938, 269; Van Buren 1939, 508; Magi 1939, 205; Nogara 1939; Fuhrmann 1940, 261–263; Lugli 1940, vol. 3, 19–20; Nogara 1941, 12–15; Degrassi 1942–1943, 389–396; Magi 1945. The first report by M.E. Blake (1947, 155) is fraught with misunderstandings.
2 Livy Per. 119; Vell. Pat. 2.62.4–5; Val. Max. 5.2.10. Cf. also Cic. ad Brut. 1.15.8.
3 Opus testaceum is the modern archaeological term for the Roman method of facing concrete walls with a layer of brick masonry. It served the twofold purpose of providing a form to cast within and a protective surface for the concrete. Structura testacea is the term which Vitruvius (2.8.17) used to designate walling of this sort, although it may indicate that broken tiles were employed both as aggregate and facing. This construction technique was introduced during the 1st century BCE, probably in Campania.
5 All measurements from Magi 1945, 46.
6 Colini 1938, 269.
7 Lugli 1957, 533; Blake 1959, 161.
8 The module can be calculated from photographs on the basis of published measurements (infra n. 9).
9 Magi 1945, 45–47.
Fig. 1. The tomb of Aulus Hirtius. Plan of excavation area (after Magi 1945, 38, fig. 37).

Fig. 2. The tomb of Aulus Hirtius. Cross-section and lateral view of excavation area (after Magi 1945, 41, fig. 40).
No. 3: 1.07 × 0.42 × 0.20 m (Fig. 5)
No. 4: 0.84 × 0.42 × 0.17 m (Fig. 6)

Three of them (nos. 1, 2, 4) carry the inscription A. Hirtius A. f., whereas the fourth (no. 3), still in situ, has no visible inscription. These corner-stones differ considerably in size and have an awkward shape for their position. The blocks were clearly not cut to present symmetrical faces at a 90 degree angle. Instead of having a similar appearance on both sides of the corner, as might have been expected, they display a wide, inscribed front on one side and only a narrow flank on the other. Also, instead of a flat top for supporting the brick courses above, they have a curved upper end, which makes the brick continuation difficult (Fig. 4). In comparison with the well-cut and highly serviceable coping-blocks on top of the wall, the corner stones seem out of place.

One possible explanation for this anomaly is that the corner-blocks originally had a different use. According to the present author, the four stones once constituted, or belonged to, a group of inscribed cippi, which had previously marked the sepulchral precinct of A. Hirtius, by themselves. In

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10 CIL VI 40899–40901; ILLRP 419.
11 The corner-stones are called cippi by most writers who have reported on the tomb and in one case the word “boundary-stone” is used (Van Buren 1939, 508).
and the variation in height would probably have been concealed if they were set directly in the ground. This use of markers for the delineation of sepulchral areas was recognised by B. Götz, who suggested it for the cenotaph of C. Julius Caesar in the Forum Romanum. The Mausoleum of Augustus was also surrounded by a row of freestanding cippi, similar in shape to those embedded in the tomb of A. Hirtius. In some tumuli and cylindrical tombs the outlying row of cippi appears to have been substituted for stylised altar-blocks, crowning the retaining wall. In both cases we are dealing with free-standing markers, providing a visual delimitation of the sepulchral area and enclosing the central monument. The cippi inscribed with the name of A. Hirtius probably served a similar purpose. At some stage, however, they must have been removed from their original position and integrated with a new brick-wall construction.

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\[\text{Fig. 5. The tomb of Aulus Hirtius. The preserved east wall of the sepulchral precinct as seen from the south (Arch Vat XVIII–17–23). Courtesy of Musei Vaticani.}\]

\[\text{Fig. 6. The tomb of Aulus Hirtius. Corner-stone no. 4 in the northeast corner of the precinct wall (Arch Vat XVIII–17–22). Courtesy of Musei Vaticani.}\]

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\[\text{Cf., e.g., ILLRP 488 (Imagines 1965, no. 209). This cippus, which defined a private road, is almost identical to the corner-blocks of Hirtius’ tomb and even has similar dimensions: } 0.87 \times 0.42 \times 0.25 \text{ m.}\]


\[\text{Hesberg & Panciera 1994, 31.}\]
representing a restoration or aggrandisement of the original tomb.\textsuperscript{15}

In my view, the old \textit{cippi} were not included in the wall for constructive purposes,\textsuperscript{16} nor because of the inscriptions, but rather in order to transmit the sanctity, i.e. the status as \textit{locus religiosus}, of the original tomb to the new one. It is quite probable that the fourth slab also carries an inscription, although it was set carelessly, facing inwards. Furthermore, it is possible that the brick surface was once coated with plaster, perhaps stuccoed in imitation of an ashlar wall.\textsuperscript{17} Although often laid bare today, \textit{opus testaceum} is repeatedly shown to have been originally covered with wall-plaster\textsuperscript{18} and, in this case, the original presence of plaster would also explain the wide projection of the coping stones beyond the width of the brick wall. If this assumption is correct, none of the inscriptions would have been visible and their existence would have been quite pointless, unless the \textit{cippi} had had a previous use.\textsuperscript{19}

\section*{THE TOMB OF CAIUS VIBIUS PANSA}

Only a small distance, no more than 60 m, from the tomb of A. Hirtius, another inscription was recovered in 1899.\textsuperscript{20} It was cut on a rectangular travertine slab (1.25 \times 0.65 m) decorated with a profiled frame (Fig. 7). The text reads:

\begin{verbatim}
EX·S·C
C·VIBIO·C·F·PASAE
CAETRONIAN·COS
\end{verbatim}

Without doubt, the inscription belonged to the tomb of C. Vibius Pansa, the consular colleague of A. Hirtius, and it has accordingly also been dated to 43 BCE.\textsuperscript{21} However, until now, the noticeable differences between the inscriptions of Hirtius and Pansa has not received proper attention. The great disparity between the inscriptions, both in content and execution, indicates that they were not made on the same occasion.\textsuperscript{22} Even if each burial was prepared separately and different stone-cutters were employed, the two consuls were given a joint funeral. The two graves were located next to each other and probably considered a pair, as indicated by the sources.\textsuperscript{23} It is, therefore, striking that the senatorial decree is mentioned in one inscription but omitted in the other.\textsuperscript{24} Furthermore, in the inscription of Hirtius the punctuation marks are irregular dots; in that of Pansa the stonemason used neat triangles pointing down. A preliminary study of punctuation marks carried out by the present author shows that the latter type probably was introduced in the 20s BCE.\textsuperscript{25} Although triangles pointing down constitute the overwhelming majority of punctuation marks from the Augustan period, there is no securely dated example before 24 BCE.\textsuperscript{26} This makes the triangles of Pansa conspicuously early, if the inscription were to retain its traditional date.\textsuperscript{27}

As a solution to the various discrepancies presented above, it is further suggested that the remodelling of the tomb of Hirtius also included that of Pansa and that new

\textsuperscript{15} The tomb of C. Publicius Bibulus in the south-east corner of Campus Martius provides a close parallel: it was built by senatorial decree and soon restored (Frischer 1982–1983, 68; Wesch-Klein 1993, 109).

\textsuperscript{16} In some early Roman brick-walls, stone masonry was used as ‘reinforcement’ or ‘frames’ (quoins) at corners and around openings. More often, though, we find brick quoins in concrete walls faced with \textit{opus incertum} or \textit{opus reticulatum}. In both cases, the two materials are firmly bonded to each other with interlocking courses. The \textit{cippi} of A. Hirtius’ tomb are exceptionally ill suited as quoins for two reasons. Firstly, they do not bond with the brick construction; secondly, none of them covers the full height of the corner, another fact which indicates a secondary use.

\textsuperscript{17} The fact that ancient graffiti were painted directly on the brick wall may put this hypothesis into question, but does not exclude it. The dipinti are dated to the end of the first century CE or the beginning of the second. However, the sepulchre was probably abandoned as early as the beginning of the first century CE and quickly became dilapidated (Degrassi 1942–1943, 395–396; Magi 1945, 138–140). The first stage in this process would have been the loss of plaster or stucco coating.

\textsuperscript{18} See, e.g., Blake 1947, 292.

\textsuperscript{19} It may be argued that that the plaster/stucco only covered the brickwork and the joints around the inscribed blocks, thus leaving the inscriptions clear and visible. However, it is difficult to envisage how this could have been done at the lower part of a corner in a practical and aesthetically pleasing way.

\textsuperscript{20} At the corner of Corso Vittorio Emanuele and Vicolo Savelli. \textit{CIL VI} 37077; \textit{ILLRP} 421; \textit{ILS} 8890; Gordon 1958, 17–18, no. 5.

\textsuperscript{21} A.E. Gordon (1958, 17) also assigns the inscription to this year, but is obviously hesitant.

\textsuperscript{22} The differences in content and execution may also be due to the fact that the inscriptions of Hirtius and Pansa had different functions. Whereas the inscription of Pansa is probably a proper epitaph, those of Hirtius may have had the sole purpose of assigning a delimited area to him. This function may have been regarded as less formal and not requiring such careful execution. However, even assuming this scenario, it must follow that the inscribed blocks were originally freestanding \textit{cippi}, and that they were later reused as corner-stones. I am indebted to Dr. Christer Henriksen for bringing this possibility to my attention.

\textsuperscript{23} Supra n. 2.

\textsuperscript{24} B. Frischer (1982–1983, 69) has argued that the senate only granted a public funeral, not a monument. However, the phrase “\textit{EX S(enatus) C(onsulto)}” together with the name of the deceased in the dative can only refer to the bestowal of a monument or the piece of land it was standing on.

\textsuperscript{25} Gerding 2002, 62–64. The study is based on three publications of photographically reproduced dated Latin inscriptions: \textit{CIL VI}:8:2; \textit{ILLRP} (\textit{Imagines} 1965); Gordon 1958. The complete material comprises 76 inscriptions (or sets of inscriptions) from about 68 BCE to 14 CE.

\textsuperscript{26} \textit{CIL VI} 40302.

\textsuperscript{27} The epitaph of Pansa has no other palaeographic features that can be firmly distinguished as either Augustan or pre-Augustan, except possibly the oval shape of the letter O (with a slant of its axis), which rather indicates the Augustan period. It should be noted, however, that this inscription (with its present date) is the earliest known stone in Rome with blunt top join for A and N (Gordon & Gordon 1957, 211, 213).
epitaphs were commissioned for the renewal of both monuments, perhaps in place of old ones. Whereas the inscription of Pansa and the brick-wall construction probably belong to a secondary phase, the inscribed *cippi* of A. Hirtius should be associated with the original consular tombs.

**AUGUSTAN RENEWAL OF THE CAMPUS MARTIUS**

Even though the walled precinct under Palazzo della Cancelleria constitutes a secondary phase, the brickwork is clearly early. The fact that the bricks are made from roof tiles, together with the relatively small five-stone brick-module (23.3 cm), indicates an Augustan date. Similarly, the use of travertine (and not marble) for the epitaph of Pansa seems to rule out a post-Augustan date, perhaps even a late-Augustan one.

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28 Lugli 1957, I, 585–592; Marta 1986, 30–31. Broken tiles were used in brickwork down to the mid-first century CE, but already from the late Augustan period regular bricks became increasingly common. The closest parallels date from the early- or mid-Augustan period: tomb of Caecilia Metella (module: 19/22–23 cm; Gerding 2002, 32–33,36); tomb of Munatius Plancus (module: 22 cm; personal observation 23 November 1997); Domus Publica: (module: 24 cm; Lugli 1957, 586).

According to F. Coarelli, the location of the graves of the two consuls should be interpreted as an ‘anti-Antonian’ statement on behalf of Cicero and the senate, as the tombs were erected on the very edge of M. Antonius’ private estate (previously Pompey’s and later Agrippa’s). Being protected by both religious and civil laws, the monuments would constitute indestructible evidence of the violent actions taken against the Republic, right on the door-step of the perpetuator’s house. As the triumvirs fell out, Augustus would have been highly motivated to upgrade the monuments for a similar political purpose, highlighting the past atrocities of M. Antonius and promoting the image of himself as saviour of the Roman Republic. These particular tombs would have had a high symbolic value, as reminders of Octavian’s successful participation in the battles at Forum Gallorum and Mutina, together with Hirtius and Pansa. The two consuls were also given a special mention in the introduction to the Res gestae, probably for the same reason. As tombs were considered to be sacred buildings, especially if they were raised on a senatorial decree, they may have been included in Augustus’ large-scale restoration-activities in Rome amongst the very large number of temples and sanctuaries that were repaired.

Why, then, would the tombs of Hirtius and Pansa need to be rebuilt only 20 or 30 years after they were originally erected? The Campus Martius was heavily affected by frequent and severe floodings of the Tiber, especially before protective measures had been taken by Augustus. These floods would have damaged any kind of building, but must have been particularly detrimental to tumuli – sepulchral monuments consisting basically of an earth mound. There are several late Republican tombs of this type around Rome, for example along the Via Appia, and we know from literary sources that there were tumuli also on the Campus Martius, belonging to the Roman aristocracy. In the mid-first century BCE the tumulus-grave, even if simply executed, was regarded as a highly dignified monument, probably with honorific and heroic connotations. The walled precinct is also a well known category of funerary buildings, of which the tomb of Hirtius has until now been regarded as one of the earliest known examples. Its closest parallels, however, several of which are found in Pompeii, belong to the Augustan era or later periods. If the original tomb of Hirtius was a modest-sized earth-mound, encircled by a row of inscribed cippi, it may well have been badly eroded within only a few decades. When the tomb was restored, the old design would have been replaced by something more lasting and in vogue.

Another possibility is that the renewal of the tombs of Hirtius and Pansa was triggered by wider urban development. The building of the baths of Agrippa (dedicated in 25 BCE) not only represented a tremendous innovation in Roman public architecture, but also comprised enormous works of infrastructure, affecting the whole of Campus Martius. This project entailed a new aqueduct (Aqua Virgo, dedicated in 19 BCE), a large artificial lake (Stagnum), a public grove and an ornamental canal. The latter is known as the Euripus and probably led excess water away from the Stagnum into the Tiber. A stretch of the canal was discovered less than 2 m from the tomb of Hirtius (Figs. 1–2), and the two structures are perfectly aligned. Since the Euripus appears to have traversed the entire Campus Martius along a straight line, turning only at one or two points, it is far more likely that the tomb of Hirtius was orientated after the canal than the other way around. The close stratigraphic interrelation between the Euripus and the tomb also indicates closeness in time. The tombs of Hirtius and Pansa were probably regarded as important monuments of the Roman Republic, carrying symbolic connotations which prompted their restoration. Agrippa’s dramatic transformation of the southern Campus Martius would have offered an opportunity and strong impetus for their renewal.

THE INTRODUCTION OF FIRED BRICKS IN ROME

In 2000, F. Coarelli published an important article, discussing the introduction of brick architecture in Italy and Rome. The author draws attention to the fact that fired bricks were used in various places throughout the Italian peninsula at

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31 Res gestae divi Augusti 1.2–4.
33 Res gestae divi Augusti 20.4.
34 Hesberg 1992, 95.
35 The tomb of Sulla was probably some kind of mound. See Luc. 2.222; La Rocca 1999, 286. The identification of the tomb as a proper tumulus has been defended by M. Eisner (1979, 321, 323f.) and P. Gros (2001, 423), among others, although the validity of the evidence was questioned by H. von Hesberg (1989, 209). The tomb of Julia, daughter of Julius Caesar, is described by Suetonius as a tumulus. See Livy Per. 106; Suet. Iul. 84.1; Plut. Vit. Pomp. 53.4; Coarelli 1999b.
37 The monumental tomb of Sulla had eroded into near-obscurity when it was finally restored by Caracalla (Cass. Dio 78.13.7).
38 To this can be added the Pantheon, the Trigarium, the Pons Agrippae, Agrippa’s own tomb (cenotaph) and probably numerous new roads.
40 This is also the conclusion of M.T. Boatwright (1985, 492 n. 35). It has also been suggested that the tombs faced a pre-existing road, which also determined the line of the Euripus (Cf. Coarelli 1997, 557).
41 Cf. Augustus’ program to refurbish the northern Campus Martius, transforming it into his personal proastion (Purcell 1987, 27–28).
least from the early third century BCE. He argues, correctly in my view, that Vitruvius was familiar with the use of fired bricks when writing his treatise. In addition, however, he suggests that the perceived rarity of brick-lined concrete walls (opus testaceum) in late-Republican and early-Augustan Rome is due to crude dating-conventions and circular reasoning. The few examples that have been acknowledged are mostly sepulchral monuments or public buildings which can be dated from historical sources, and they are seen by Coarelli as only the tip of an iceberg. A list of early buildings in Rome with opus testaceum was collected by G. Lugli, and it is cited also by Coarelli:

The so-called ‘piccolo lupanare’ in the Forum Romanum 60–50 BCE
The tomb of Caecilia Metella (interior) c. 50 BCE
The tomb of Aulus Hirtius on Campus Martius 43 BCE
Rostra Augusti in the Forum Romanum 42–31 BCE
The Domus Publica (apsed hall) 36–12 BCE
The tomb of C. Sulpicius Platarius after 18 BCE
The theatre of Marcellus (crypt) 13 BCE
The pyramid of C. Cestius (interior) 12 BCE
The tomb of Lucilius Paetus Augustan period

Whereas Lugli saw these buildings as the first examples of the new building-technique in Rome, Coarelli regards them as representatives of a well-established phenomenon. Coarelli admits, however, that some revisions of the suggested dates are called for: the tomb of Caecilia Metella is lowered to the “proto-Augustan period”, and this coincides with the findings of the present author. The new speaker’s platform in the Forum Romanum (Rostra Augusti) has been assigned to various dates: Lugli suggested 42–31 BCE, whereas Coarelli favours 30–27 BCE. The so-called ‘tomb of Sulpicius Platarius’ is now associated with Artorius Geminus and can be dated to about 20 CE. On the other hand, Coarelli adds to the list the so-called ‘Torrione di Micara’ in Tusculanum, which has been tentatively attributed to Lucullus (died 56 BCE). The circular tomb displays some internal brick-faced walls and these have, accordingly, also been given a date in the mid-first century BCE. However, it is evident from the irregular layout of these walls that they are secondary installations. The fact that a travertine block in the external wall of the sepulchre, which apparently was meant to carry the inscription, has been left blank, demonstrates that the tomb was never used and probably not even completed (i.e. the rotunda was never filled). The interior of the building was, thus, accessible for later reuse. The size of the bricks and the width of the mortared joints are also more consistent with a date in the 1st or 2nd century CE. The date of the tomb of A. Hirtius has already been treated in this note, but other items on the list also need to be reconsidered. The so-called ‘piccolo lupanare’ in the Forum Romanum, sometimes also known as carcer, is a small constellation of rooms adjacent to the ‘temple of Romulus’, just by the Sacra Via. This structure, which probably once was a part of a late-Republican private house, has interior partition-walls faced with early opus testaceum. Lugli dated the original building to 60–50 BCE, but he also identified the partition walls as belonging to a secondary phase. That is, they may have been erected later. In early archaeological publications treating the tomb of M. Lucilius Paetus, the presence of fired bricks in the interior was reported. This statement has since repeatedly resurfaced in scholarly literature, although no bricks are to be found in the tomb. In view of the many revisions that have been made since Lugli compiled his list of early examples of opus testaceum in Rome in 1957, an updated version is now due:

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domus Publica (apsed hall)</td>
<td>36–12 BCE</td>
</tr>
<tr>
<td>Rostra Augusti in Forum Romanum</td>
<td>30–27 BCE</td>
</tr>
<tr>
<td>The tomb of Caecilia Metella (interior)</td>
<td>30–20 BCE</td>
</tr>
<tr>
<td>An anonymous tomb on Via Collatina (interior)</td>
<td>30–20 BCE</td>
</tr>
<tr>
<td>The pyramid of C. Cestius (interior)</td>
<td>18–12 BCE</td>
</tr>
</tbody>
</table>

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43 Lugli 1957, 587–588; Coarelli 2000, 90.
44 Gerding 2002, 72. The higher date has been advocated until recently (Lugli 1956, 239; Quilici 1997, 42–43).
45 Lugli 1957, 588.
47 Silvestrini 1987, 82.
48 McCracken 1942; Fontana 1999, 292.
49 Blake 1947, 169–170; 293; Lugli 1957, 533.
51 According to tradition, the building was used as baths in antiquity; in the medieval age a monastery was founded on the site; at present it is used as a private house. Only some walls have visible brickwork, two of which may be of Roman origin: The first is evenly laid with bright red and porous bricks of homogenous dimensions (length: c. 20 cm; thickness: c. 3 cm; joints: c. 1 cm). The second wall, which abuts on the first, has a distinctly different character. The bricks are pale yellow and have a dense fabric (although perhaps slightly brittle). Their size vary (length: 12–47 cm; thickness: 2.9–4.3 cm), but the joints are consistently thin (0–3 mm).
52 Lugli 1957, 587.
54 Lugli 1938, 342; Pietrangeli 1941.
55 E.g. Blake 1947, 294.
56 Personal observation 29 November 1997. Although the presence of bricks has been refuted once before by M. Eisner (1986, 125 n. 394), the assertion has continued to be made (Hesberg & Pfanner 1988, 480 n. 57).
57 Van Deman 1923, 402; Blake 1947, 256.
59 Gerding 2002, 72.
60 Hesberg 1992, 106.
The theatre of Marcellus (crypt) 23–17 BCE
The tomb of Aulus Hirtius on Campus Martius Augustan period
An anonymous tomb in Villa Borghese Augustan period

In the first seven cases, the bricks are made of broken tiles. In the eighth and last example, neat triangles have been cut from purpose-made, square bricks (bessales?), which probably indicates that this anonymous tomb belongs to the late-Augustan period rather than the early. The ‘piccolo lupanare’ and some brick structures found by the Viminal gate probably also belong to the Augustan period, but further investigations are required to support such a statement. It should also be noticed which buildings did not have fired bricks. Most prominent is perhaps the mausoleum of Augustus, which was begun in the late 30s BCE.

Coarelli is right in pointing out that this kind of list, which represents the chance survival of some conspicuous and datable monuments, may not give the whole picture. The notorious difficulties of dating even these buildings with precision add to the problem. The revised list indicates that the new building-technique was established in Rome after a decade or so of Augustan rule. It is premature, however, to assume a widespread use of opus testaceum in late Republican Rome on the basis of this list and earlier occurrences of fired bricks in other places on the Italian peninsula, or even in Latium. The development and diffusion of fired bricks was not continuous and systematic. This is demonstrated by the fact that they were not introduced in the Greek world until the mid fourth century BCE, even though the technical and logistical prerequisites for making fired bricks had already existed for at least three centuries and the concept of fired bricks was previously known. The use of fired bricks during the following three centuries, although considerable in some places, was often sporadic and geographically limited, a fact which indicates that local conditions and fortuitous factors for a long time determined the development. The combination of fired bricks with Roman concrete acted as a catalyst and from Augustus onwards the advance of brick architecture accelerated. Within a century the Romans had spread it all over their realm.

CONCLUSION

It has been argued in this note that the traditional date of the tomb of A. Hirtius in 43 BCE is wrong, and that it should rather be given an early- or mid-Augustan date. Thus, it can no longer uphold the claim of being the earliest securely dated example of opus testaceum in Rome. In a way, the tomb of A. Hirtius has acted as an anchor, securing a group of less well-dated brick monuments in the pre-Augustan period. Without it, the proposed dates of all these buildings can be seriously questioned. Although an interpretation based on the absence of finds can be treacherous, it is to be hoped that we are now in a better position to understand the introduction of brick architecture in Rome. Despite the very long history of production and use of fired bricks in some parts of Italy, Rome appears to have remained unaffected by this development until the early Augustan period. When fired bricks finally appeared, the impact was sudden and massive.

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BIBLIOGRAPHY

Blake 1947 M.E. Blake, Ancient Roman construction in Italy from the Prehistoric period to Augustus, Washington D.C. 1947.
Blake 1959 M.E. Blake, Roman construction in Italy from Tiberius through the Flavians, Washington D.C. 1959.
Coarelli 1999b F. Coarelli, s.v. ‘Sepulcrum: Iulia (tumulus)’, LTUR IV (1999), 291.

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62 Ciancio Rossetto 1999, 31–32. The theatre was in use by 17 BC, but work must have begun some years before.
63 Hesberg & Pfanner 1988, 476.
64 Hesberg & Pfanner 1988, 484.
65 Oliver 1932, 164–167; Blake 1947, 295.
66 Gerding 2006.