# A REPUBLICAN DILEMMA: CITY OR STATE? OR, THE CONCRETE REVOLUTION REVISITED

by Penelope J.E. Davies<sup>1</sup>

In a well-known passage, the Greek historian Polybius, writing in the mid-second century BC, attributes Rome's success as a republic to a perfect balance of power between its constituent elements, army, senate and people (Histories 6.11); and indeed, the Republic's long survival was an achievement worth explaining. On another note, over a century later, Livy remarked how Republican Rome, with its rambling street plan and miscellany of buildings, compared unfavourably with the magnificent royal cities of the eastern Mediterranean; he put this down to hasty rebuilding after a great Gallic conflagration around 390 BC. Few scholars now accept his explanation. A handful of scholars argue for underlying rationales, usually when setting up the early city as a foil for its transformation under Augustus and subsequent emperors, and their conclusions tend towards characterizing the city's design as an unintended corollary to the annual turnover of magistrates. This article, likewise, argues for the role of government in the city's appearance; but it contends that the state of Republican urbanism was deliberate. A response, of sorts, to both ancient authors' observations, it addresses how provisions to ensure equilibrium in one of the Republic's components, the senatorial class, in the interests of preserving the res publica, came at a vital cost to the city's architectural evolution. These provisions took the form of intentional constraints (on time and money), to prevent élite Romans from building like, and thus presenting themselves as, Mediterranean monarchs. Painting with a broad chronological stroke, it traces the tension between the Roman Republic in its ideal state and the physical city, exploring the strategies élite Romans developed to work within the constraints. Only when unforeseen factors weakened the state's power to self-regulate could the built city flourish and, in doing so, further diminish the state. Many of these factors — such as increased wealth in the second century and the first-century preponderance of special commands are known; to these, this article argues, should be added the development of concrete.

Attorno alla metà del II sec. a.C., lo storico greco Polibio attribuisce in un noto passo il successo di Roma come Repubblica al perfetto bilanciamento del potere tra i suoi elementi costitutivi: l'esercito, il senato e il popolo (Storie 6.11). Ed in effetti, la lunga durata della Repubblica era un risultato che andava spiegato. In un altro passo, successivo di oltre un secolo, Livio osserva invece come la Roma repubblicana con il suo assetto stradale incoerente e la sua mescolanza di edifici, uscisse sfavorita da un paragone con le magnifiche città regali del Mediterraneo orientale. Lo storico riconduceva questa situazione alla frettolosa ricostruzione seguita all'incendio gallico del 390 a.C. Alcuni studiosi sostengono che in questo assetto siano da riconoscere scelte razionali, ponendo generalmente la città più antica come elemento di confronto con la sua 'trasformazione' sotto il regno di Augusto e dei suoi successori. Le loro conclusioni tendono pertanto a caratterizzare la struttura della città come una sorta di corollario non intenzionale del turnover annuale dei magistrati. Il presente articolo sostiene concorda nel sostenere la rilevanza del ruolo giocato dal governo nell'aspetto

This article began as a paper presented at the Theoretical Roman Archaeology Conference in Leicester in 2015. I am grateful to Matthew Mandich for the invitation to participate and to Andrew Wilson for further discussion. Thanks also to Mark Bradley, Seth Bernard and an anonymous reviewer. For abbreviations of ancient sources, see the Oxford Classical Dictionary.

della città; ma asserisce per contro come il tipo di urbanistica della Roma repubblicana fosse una scelta deliberata. Quasi a mo' di risposta alle osservazioni di entrambi gli autori antichi, si mette in evidenza come i provvedimenti volti ad assicurare l'equilibrio di uno degli elementi costitutivi della Repubblica - l'ordine senatorio - nell'interesse della conservazione della res publica abbiano avuto come contropartita il tipo di evoluzione architettonica della città. Nel dettaglio queste misure hanno preso la forma di vincoli intenzionali (in termini di tempo e di risorse economiche), per evitare che i membri dell'élite potessero edificare come monarchi mediterranei, presentandosi conseguentemente come tali. L'adozione di questo approccio su di un ampio lasso cronologico mette in evidenza la tensione tra la Repubblica Romana nella sua concezione ideale e la città reale, esplorando le strategie che l'èlite romana ha sviluppato per lavorare entro specifiche limitazioni. Ne consegue che solamente quando fattori imprevisti indebolirono il potere di autoregolamentazione dello Stato, la città poté fiorire dal punto di vista urbanistico/architettonico, sminuendo però in questo modo lo Stato stesso. Molti di questi fattori sono noti. È il caso, ad esempio, dell'incremento della ricchezza nel II sec. a.C. e della prevalenza di special commission nel I sec. a.C. E in particolare a questi fenomeni, secondo la lettura proposta in questo articolo, dovrebbe essere attribuito lo sviluppo dell'opera cementizia.

#### THE LIE OF THE LAND

The last five centuries BC witnessed rapid urban development in cities throughout the Mediterranean, where grand public spaces and monumental buildings enhanced their essential functioning and their prestige vis-à-vis rival states. Public construction was perceived as the responsibility and the hallmark of local ruling élites, usually monarchs, who gained visibility through architecture's physical presence and used construction to legitimize their status in at least two ways. First, their acts of benefaction improved standards of living for their subjects (as with, for instance, expensive water-distribution projects, like Pergamon's Madradag aqueduct, probably built by Eumenes II [197–159 BC]).<sup>2</sup> These were especially desirable and powerful in societies without welfare systems and public utility programmes; and in return, they entailed obligation. Second, through building, élites masterminded the spaces that framed daily rituals of life and élite power. Thus the centres of Hellenistic cities, such as Attalid Pergamon or Athens, were overhauled, beautified and made more habitable; in some cases (such as Priene), orthogonal planning lent space a rational air.<sup>3</sup>

In Rome, things were different. In 182, so Livy claimed, a group of Macedonians 'mocked ... the appearance of the city, the public and private spaces of which were not yet embellished'; even in 61, Cicero could imagine the Capuans' derision as they 'laughed at and despised Rome, planted in mountains and deep valleys, its garrets hanging up aloft, its roads none of the

<sup>&</sup>lt;sup>2</sup> Fahlbusch 1977: 758–62; Garbrecht 1979, 1987; La Rocca 1990: 324; Veyne 1990; Humm 2005: 495–6. All dates are BC unless otherwise indicated.

<sup>&</sup>lt;sup>3</sup> In general: Favro 1998: 51; Pollitt 1986: 277, 283–4.

<sup>&</sup>lt;sup>4</sup> Liv. 40.5.7.

best, by-ways of the narrowest'. Lacking the 'Hippodamian' plan of some Greek cities and Roman colonies, and the open spaces of contemporaneous cities in Latium and Campania, Rome had no integrated design; characterized instead by isolated buildings and independent nodes, often grouped around the *via triumphalis*, it was experienced as something of a jumble, and certain categories of architecture (low-income housing, for instance, or sanitation) and measures to curb pollution or implement zoning, received little attention. Livy (and later Tacitus, at the start of the second century AD) ascribed the city's condition to a flurry of rebuilding after a great conflagration during the Gallic occupation of *c.* 390, though his reasoning gains little traction among scholars. Indeed, recent assessments of literary and archaeological evidence conclude that the extent of any fire is exaggerated; seeking plunder rather than conquest, the Gauls targeted only private houses for destruction.

Scholarly assessments of Republican urbanism, while compelling and nuanced, tend to come at the issue from a different angle, tracing the diverse factors behind Rome's forward evolution rather than questioning what might have held it back. Filippo Coarelli tackles individual regions of the city, masterfully unpacking their topography and monuments;8 Mario Torelli's analysis of the city's growth, meanwhile, offers reasoned explanations for different phases of its development from the Bronze Age to the end of the Republic, from a relative paucity of Republican building until the mid-fourth century due to a commitment to isonomia (equal rights before the law) among the political élite, to an uptick in architectural sponsorship caused by an urge for self-representation, especially at the end of the fourth century and as Rome spread through Italy; after a lull during the First and Second Punic Wars, and as Rome spread its reach through the Mediterranean, a surge of building accompanied the influx of wealth from foreign plunder and taxes, tempered at moments by a nationalistic mood; and in the final phase of the Republic, the self-promotion of outstanding generals led to massive urban initiatives that appealed to an urban populace seeking employment and entertainment.9 The present paper does not dispute the importance of these political, imperialistic and social factors, which all fed into the city's growth in great measure; rather, it explores whether additional factors might account for the city's relative lack of large-scale grandeur and overall planning vis-à-vis its Mediterranean peers for most of the Republican era.

<sup>&</sup>lt;sup>5</sup> Cic. Leg. agr. 2.95–6 (Loeb translation).

<sup>&</sup>lt;sup>6</sup> Liv. 5.55; Tac. Ann. 15.43. As a gloss on this explanation, Owens (1991: 94–5) surmises that Romans were reluctant to impose a more organized plan after the fire because of their commitment to existing land usage, admitting all the while that little evidence survives for widespread conflagration anyway.

Polybius (2.18.2) mentions only an occupation, and, finding little sign of fire or violent damage, archaeologists have tended to conclude that, mercenary warriors, the Gauls came for plunder, not conquest. For a recent assessment of the evidence: Delfino 2014: 226–39.

<sup>&</sup>lt;sup>8</sup> Coarelli 1983; 1985: 8; 1988a, 1988b, 1997, 2012, 2014.

<sup>&</sup>lt;sup>9</sup> Torelli 2007. See also general discussion in Cornell 1995.

To address this question, Diane Favro floats the notion that Republican Romans were content with the city as a concept or, unlike Hellenistic monarchs, who had time and resources to build, lacked the motivation. Other scholars, following Aristotle, who, in his *Politics*, argued that urban design and systems of government were interconnected, lay the blame for the city's ramshackle design at the feet of the Republican government; thus Paul Zanker sees it as the result of élite ambition and ill-defined populism gone awry. Olivia Robinson, meanwhile, spells out the issue more fully in terms of time constraints:

There was no disaster in the later Republic comparable to the Gallic sack which might have offered an opportunity of large-scale reconstruction. But the fundamental reason why a city planned as an entity could not be considered in Republican Rome was the constitutional arrangement of annual magistracies; even the censors, who had in theory five years in which to exercise their office, normally laid it down after some eighteen months. Such civil servants as there were, even though they seem sufficiently organised to have had some sort of a career structure, were too subordinate, too inferior to their political masters, the magistrates, to be in a position to formulate or sustain policies, even if they did act as guides through the daily routine.<sup>13</sup>

Like Zanker and Favro, she characterizes the city's design as the accidental outcome of Republican government, an unintended corollary to the rapid turnover of magistrates.

Andrew Wallace-Hadrill, for his part, concedes that so little of the Republican street plan is in evidence today that any assessment of it is by necessity speculative. Still, he notes that 'the alternative to the "rationalism" of the grid-design is not

<sup>&</sup>lt;sup>10</sup> Favro 1998: 45. For Tomlinson (1992: 148, 151), Rome simply developed late from its 'primitive origins', remaining, despite its growing stature in the Mediterranean, an architectural 'backwater'.

Arist. *Pol.* 7.11: 'As to strongholds, what is suitable to different forms of government varies: thus an acropolis is suited to an oligarchy or a monarchy, but a plain to a democracy; neither to an aristocracy, but rather a number of strong places. The arrangement of private houses is considered to be more agreeable and generally more convenient, if the streets are regularly laid out after the modern fashion which Hippodamus introduced, but for security in war the antiquated mode of building, which made it difficult for strangers to get out of a town and for assailants to find their way in, is preferable. A city should therefore adopt both plans of building: it is possible to arrange the houses irregularly, as husbandmen plant their vines in what are called "clumps". The whole town should not be laid out in straight lines, but only certain quarters and regions; thus security and beauty will be combined.'

<sup>&</sup>lt;sup>12</sup> Zanker 1988: 20–1: 'Rome's condition was the result of a process of rapid but haphazard building. Since the middle of the second century great generals had increasingly seized every opportunity to promote their own grandiose ambitions and curry favor with the people. But projects such as city planning, water supply, or sewage system were too slow and not flashy enough for their taste.' As for the senate, 'though able to prevent the building of major recreational buildings for generations, [it] was for its own part incapable of erecting large civic buildings or monuments with which all Romans could identify, much less of developing a coherent plan'.

Robinson 1992: 16; also Bernard 2013: 519: 'Republican Rome's urbanism was hampered by the competing ambitions of individual magistrates ...'

irrational chaos, but systems that follow their own logic'. 14 Citing Spiro Kostof and other historians of urban design, he stresses the relationship between urban layout, on the one hand, and ideology and social structures on the other. Just as the broad boulevards of Renaissance Rome asserted papal authority for Julius II, Paul III and Sixtus V, and aided in riot suppression in Haussmann's post-revolutionary Paris, so labyrinthine urban plans can serve different types of social nucleation, based, for instance, in control by (quasi-)kinship, tribal or ethnic groupings, as evidenced in medieval cities such as Damascus, Mérida or Genoa, or in a need for protection against outsiders, as in squatter-towns in developing nations. 'If late Republican Rome did not strike its inhabitants as a well-ordered city,' Wallace-Hadrill concludes, 'it may be that they had become blind to the earlier logic which underpinned it.'15

That there was a logic seems more likely than apathy or accident. Indeed, this article contends that the state of Republican urbanism was the result of a deliberate system of checks and balances designed for the governing élite's selfregulation in the interests of the state's preservation. Unlike a monarchy, within the Republic, the élite struggled constantly to negotiate status with a voting public. Their understanding that visibility enhanced their electability and prestige must have made it all but irresistible to use architecture as a tool for self-advancement. Yet as K. Gast observed, epigraphical and literary evidence suggests that the sponsorship of public architecture, broadly defined here as architecture that served the state, through, for instance, religion, provision of civic amenity, or display of imperialism, was reserved for elected magistrates (the premise for Robinson's assessment), which prevented privati from deploying personal wealth on state construction (though their houses and tombs were their own concern). 16 Eva Margareta Steinby argues that these magistrates built at the senate's pleasure. The grand arc of Republican development was therefore the result of a senatorial plan, devolved onto censors and the aediles with an appropriate allocation of pecunia from the treasury: first came the construction of a seat for the censors and city fortifications, followed by a broad infrastructure initiative (streets and aqueducts) and development of the Forum and the port area; only with Cn. Pompeius Magnus (Pompey) and C. Julius Caesar was the senate transformed from the principal decision maker to a body that merely granted its consent.<sup>17</sup> That public

<sup>&</sup>lt;sup>14</sup> Wallace-Hadrill 2008: 271.

<sup>&</sup>lt;sup>15</sup> Kostof 1991: 47–55; 1992: 266–75; Hobsbawn 2005; Erickson and Lloyd-Jones 1997, cited by Carl, Kemp and Laurence 2000: 342; Wallace-Hadrill 2008: 270–1, 274.

Gast 1965: 10. For the thorny issue of public versus private space in ancient Rome, see Riggsby 1997; Russell 2016.

Mommsen (1887: 434–54), Astin (1985) and others proposed freedom of magisterial action on the basis of three principal episodes, recounted by ancient sources: (1) Ap. Claudius' dispute with the senate over his aqueduct and road in 312 and following, with the allegation that he used state resources without senatorial permission (Diod. 20.36.2); (2) senatorial opposition to M. Porcius Cato's plan to build a basilica in 184 (Plut. *Vit. Cat. Mai.* 19); and (3) the senate's decision to demolish L. Cassius Longinus' stone theatre in 154 (Val. Max. 2.4.2; Liv. *Per.* 48). Steinby

building was the sole domain of magistrates is a fundamental premise of the present article; but the notion that these magistrates lacked any freedom in the choice of their initiatives lacks persuasive power. As Seth Bernard notes, 'A tension between consensus and competition was fundamental to Republican political culture.' Still despite their likely autonomy, magistrates were heavily constrained by the conditions of their offices and these conditions, explored below, had a direct impact on the city's development.

#### THE REPUBLIC'S DILEMMA

From the end of the sixth century to around the dissolution of the Latin League in 338, little public architecture was constructed, with the exception of temples (which were, nevertheless, monumental in scale, as evidenced in the Temple of Castor vowed by L. Postumius Albinus during the Battle of Lake Regillus, c. 496), 19 the Villa Publica on the Campus Martius as a base of operations for the first censors, C. Furius Pacilus and M. Geganius (c. 433),<sup>20</sup> and an amplification of the fortification walls by the censors of c. 378, Sp. Servilius Priscus and Q. Cloelius Siculus.<sup>21</sup> Across the board, these early public building initiatives were reactive, answering state crises such as war and famine, and they appear not to have been designed to distinguish their sponsors within their peer group: enclosing the city, the walls defined it as a community; so too did the headquarters for the census; and temples were extraordinarily homogeneous in form (frontal staircase, widely spaced facade columns, a porch leading to a triple or a single cella with solid lateral walls; gabled roofs, open pediments and painted terracottas). In this much, they support Torelli's notion of an ideal of isonomia among the élite. Still, these initiatives did articulate power relations within the city more broadly: where names are known, all public buildings were vowed or commissioned by patricians, who

<sup>(2012)</sup> uses the same episodes for a counter-argument: (1) a hostile literary tradition misrepresents Ap. Claudius' censorship; at the start of his career he could hardly have initiated such ground-breaking projects; (2) the senate was rescinding existing contracts; and (3) the senate was in favour of the theatre until a change in political climate that raised fears of political demonstrations. See the excellent response by Bernard (2013), who notes that while successive initiatives to improve certain parts of the city (the Forum, the port) offer relatively good support for the argument, it makes sense that the senate would entrust the city's development to two of its most senior members; while the senate may have directed the censors' attention to pressing needs, the censors nevertheless retained the initiative.

<sup>&</sup>lt;sup>18</sup> Bernard 2013: 518.

<sup>&</sup>lt;sup>19</sup> Liv. 2.20.12, 2.42.5; Dion. Hal. 6.13; Nielsen and Poulsen 1992; Forsythe 2005: 7; Gorski and Packer 2015: 285–9.

<sup>&</sup>lt;sup>20</sup> Liv. 30.21.12; RRC 429/2a; Coarelli 1997: 164–75; LTUR V.203–5, s.v. Villa Publica (S. Agache). LTUR IV.228–9, s.v. Saepta Iulia (E. Gatti); Torelli 2007: 113–15.

Liv. 1.44.3, 6.32.2, 7.20.9; Varr. *Ling*. 5.163; Dion. Hal. 4.54.2; Såflund 1932; Lyngby 1954: 63–71; Picozzi and Santoro 1973; Coarelli 1988b: 13–16; *LTUR* III.319–34, s.v. 'Murus Servii Tullii'; mura repubblicane and 'Murus Servii Tullii': mura repubblicane: portae; Barbera and Cianetta 2008: 17–18, 22, 24–6; Bernard 2012a; Cifani 2013.

held a near monopoly on magistracies and priesthoods; and they were probably achieved through corvée labour (labour distrained upon the populace as a form of taxation).<sup>22</sup> With the Villa Publica, censors underscored their authority to stratify society in the census, and temples, in their uniformity, presented patrician solidarity at the top of the hierarchy. Thus public architecture articulated and protected the political élite's vision of an ideal state.

By the end of the fourth century, when plebeians broke the patrician stranglehold on power, when the nobility expanded and competition for political office intensified, construction began to gain pace, and a general scheme of magistrates' building privileges seems to have fallen into place. As part of a mandate to provide ludi, aediles sponsored entertainment venues, such as (probably) temporary theatres for plays and, in 329, starting gates or carceres at the Circus Maximus;<sup>23</sup> charged with maintaining the city's infrastructure, they undertook paving initiatives (such as the Clivus Publicius. surfaced by L. and M. Publicius in 238, to make the path up the Aventine cleaner and less arduous),<sup>24</sup> and they probably supervised minor building restorations from an early date. Though rare, their most ambitious projects were temples, funded using fines on the wealthy; L. Postumius Megellus may have been the pioneer of this practice, with a Temple of Victoria on the Palatine, built (according to Livy) using fines amassed as an aedile (probably before his first consulship in 305), and dedicated when he was consul in 294.<sup>25</sup> Consuls sponsored buildings as triumphatores, often using income from spoils; thus C. Duilius commemorated Rome's first victory on the seas during the First Punic War with the Temple of Janus of c. 260 (Fig. 1).<sup>26</sup> Most powerful, in building terms as in many others, but with least to gain in terms of career advancement, were the censors, who were responsible for letting contracts using state funds; they sponsored aqueducts, such as the Aqua Appia and the Anio Vetus (initiated by Appius Claudius in 312 and M. Curius Dentatus in 272, respectively),<sup>27</sup> and major roads like the via Appia (also by A. Claudius in 312).<sup>28</sup> Sometimes they turned their energies to public spaces, as C. Flaminius did by defining the Circus Flaminius in the southern Campus Martius in 218;29

<sup>&</sup>lt;sup>22</sup> Bernard 2012b.

<sup>&</sup>lt;sup>23</sup> Liv. 8.20.2; also Enn. in Cic. *Div.* 1.108; Varr. *Ling.* 5.153; Humphrey 1986: 133, 157–70; Marcattili 2009: 160–1.

<sup>&</sup>lt;sup>24</sup> Varr. *Ling.* 5.158; Ov. *Fast.* 5.275, 5.287–94, trans. Kline; Fest. 276 L; *LTUR* I.284, s.v. Clivus Publicius (F. Coarelli); also Staccioli 2003: 17–19. Contra Lyngby 1968.

Liv. 10.32–4, 37.1–12; also Zonar. 8.1; Davies 2012a with bibliography. In 304, C. Flavius also used fines on usurers to fund a shrine of Concordia at the Comitium: Plin. NH 33.19.

<sup>&</sup>lt;sup>26</sup> Tac. Ann. 2.49.1; Holland 1961; Gros 1976; Ziolkowski 1992: 61-2.

<sup>&</sup>lt;sup>27</sup> Aqua Appia: Frontin. *Aq.* 5, also 65.3; Liv. 9.29; Diod. Sic. 20.36; Eutr. 2.9.2; *Vir. ill.* 34.6–7; Paul. Fest. 23 L; Van Deman 1934: 23–8; Ashby 1935: 49–54; De Kleijn 2001: 10–14; Humm 2005: 493. Anio Vetus: Frontin. *Aq.* 1.6; also *Vir. ill.* 33; *LTUR* I.45–6, s.v. Anio Vetus (*Z.* Mari).

<sup>&</sup>lt;sup>28</sup> Diod. Sic. 20.36.1–4. Tibiletti 1972; Evans 1994; Humm 1996: 704, 716–24, 744–6; 2005: 491–3.

<sup>&</sup>lt;sup>29</sup> Zevi 1976: 1048; LTUR I.269–72, s.v. Circus Flaminius (A. Viscogliosi); Coarelli 1997: 363–76.



Fig. 1. Temple of Janus, vowed in 260, actual state (© Penelope J.E. Davies).

other significant enterprises, such as a third-century mint on the Capitoline and a prison (the *carcer* or Tullianum), were probably also censorial initiatives.<sup>30</sup> Dictators, for their part, engaged in construction only when it helped to resolve the emergency at hand (and thus Fabius Maximus strengthened the walls and towers under Hannibal's threat in 217).<sup>31</sup> With regard to agency, two additional points are worth stressing: the senate as a body never sponsored public buildings, except when answering the directives of the Sibylline Books, which, by definition, was in times of emergency; and in building as in other things, magistrates did not function as a board or a committee; they acted alone (with the exception of a few pairs of censors). Committees (usually *duumviri* or *decemviri*) were sometimes appointed to oversee certain aspects of construction, but only once sponsorship had been established.

Inherently, the system self-regulated through a set of further constraints. Unlike monarchs of the eastern Mediterranean, who could, as Favro notes, reasonably anticipate the fullness of their reigns to accomplish their goals, and who had the resources of the state at their disposal, magistrates had unusually brief terms

<sup>&</sup>lt;sup>30</sup> Mint: Liv. 6.20.13; Gatti 1888a: 497–8; 1888b: 330–1; Serafini 1943–5; Ioppolo 2001; Meadows and Williams 2001; Serafin 2001: 33–5. Prison: Sall. *Cat.* 55; Coarelli 1985: 64–74; *LTUR* I.236–7, s.v. Carcer (F. Coarelli), places it in *c.* 300. Also Frank 1924: 23, 39–46; Lugli 1932, 1946: 107–11; Le Gall 1939; Coarelli 1983: 62–87; Fortini 1998; Catalano, Fortini and Nanni 2001; Di Giacomo 2007; Cadoux 2008. For the location: Liv. 1.33.8; Cass. Dio 58.5, 58.11; Val. Max. 6.3.3.

Liv. 22.8.6–7. Såflund 1932 records no archaeological evidence of this phase of repair.

of office — one year, or at most 18 months for a censor — and (unlike Pericles of Athens) no successive terms; moreover, the senate seems to have watched over their use of state resources. These conditions informed their building projects: in general plan and inception (though not completion) a single structure (such as a temple) was manageable; vast enterprises, massive orchestrations of urban space and urban programmes for broad popular appeal, of the kind that Hellenistic kings and later emperors could realize, were not. Though magistrates acted alone, in other words, in theory no single individual could be Rome's overarching benefactor or urban designer, and use that privilege to gain visibility or accrue obligation; thus conceived, in theory, the state, embodied in the senatorial élite, controlled public architecture tightly enough to prevent individuals from exploiting it to threaten the state.

Theory notwithstanding, magistrates developed strategies for manoeuvring within these constraints, which grew increasingly sophisticated with the passing of time. These included, inter alia, an emphasis on utilitarian euergetism that played to the plebeian voting bloc (as with Ap. Claudius' Aqua Appia, which conveyed an astounding 75,000 m<sup>3</sup> of water a day to Rome's industries on the Aventine), naming privileges (the Aqua Appia again) and novel design and decoration (like Postumius Megellus' Temple of Victoria, possibly the first temple in Rome with a stone entablature).<sup>32</sup> There were topographical juxtapositions (seen in the series of temples known as Temples A to D in the area sacra at Largo Argentina (Fig. 2), probably augmented by three more temples to the south, and in the Temples of Janus, Juno Sospita and Spes in the Forum Holitorium),<sup>33</sup> and topographical appropriations and counterappropriations, evident in efforts to control the via Appia region by, on one side, the Scipiones (with their tomb of c. 298 and a Temple to Tempestas in 259) and the Fabii (with the Temple of Honos, c. 233), and on the other the Claudii (with successive pavings of the road and the Temples of Honos and Virtus, 222–205).<sup>34</sup> Pervasive, too, were what might be termed architectural inter-texts, where buildings referred to and gained meaning from those that went before. But the most ambitious among these strategizers — Ap. Claudius, for one, or Postumius Megellus — were roundly castigated and obstructed.<sup>35</sup> And the effect of the state's ideal was that though individual initiatives enhanced the city, Rome was prevented from evolving with the grandeur of contemporaneous cities elsewhere. Such was the system, in fact, that Romans

Davies 2012a. Questioning naming opportunities: Steinby 2012.

Largo Argentina: Coarelli 1981. Janus: above, n. 25. Juno Sospita: Crozzoli Aite 1981: 62–4; LTUR III.128–9, s.v. Iuno Sospita (in Foro Holitorio), aedes (F. Coarelli). Spes: Cic. Leg. 2.28; Tac. Ann. 2.49.2; Coarelli 1997: 227–35; Crozzoli Aite 1981; Ziolkowski 1992: 152–4.

Tomb of the Scipios: La Rocca 1977; 1990: 354ff.; Coarelli 1988b: 8–9; Talamo 2008. Temple of Tempestas: CIL VI.1286–7 = ILLRP 310; Ov. Fast. 6.193–4; Ziolkowski 1992: 162–4. Temple of Honos: Cic. Nat. D. 2.61; Vir. ill. 32. Temple of Honos and Virtus: Cic. Nat. D. 2.61; Liv. 27.25.6–10; Gros 1979: 105–7; LTUR III.31–3, s.v. Honos et Virtus, aedes (D. Palombi); Bastien 2007: 69; McDonnell 2009: 234–5;. Via Appia pavings: Liv. 10.23.13, 29.37.2, 38.28.1–3.

<sup>&</sup>lt;sup>35</sup> Ap. Claudius: e.g. Liv 9.46; Val. Max. 2.2.9; Taylor 1960: 134; also Humm 2005: 101–31.

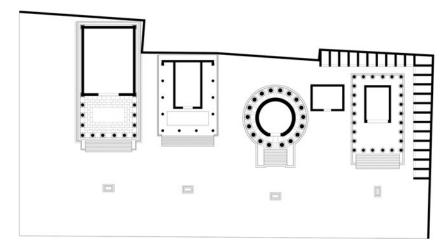


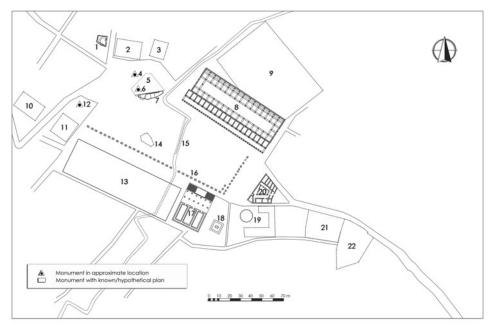
Fig. 2. Area sacra of Largo Argentina, hypothetical plan. (© John Burge).

had set themselves up to choose between the security of their state on the one hand and the evolution, beautification and liveability of their city on the other — or at least to try to find a balance.

In the wake of the Second Punic War, this conundrum grew more apparent. As Rome's status in the Mediterranean was enhanced, to many, Romans and visitors alike, its urban image must have seemed to lag behind.<sup>36</sup> As interactions with the impressive *metropoleis* of the Mediterranean intensified in the first half of the second century, moreover, as generals and their armies penetrated deeper into the east, the grandeur of other cities encouraged new models of urbanism. Problematically, Rome lacked the political set-up (and the high-quality stone) to enter the fray. At first, politicians upped the ante on individual buildings in terms of experimentation and monumentalization. Thus, for instance, basilicas erected by M. Fulvius Nobilior and C. Sempronius Gracchus (the Basilica Fulvia of 179 and the Basilica Sempronia of 169), with their elongated, porticoed plans, differed radically (so scholars believe) in form and scale from the *domus*-like Basilica Porcia of M. Porcius Cato in 184 (Fig. 3);<sup>37</sup> and in his Temple of Hercules Musarum on the Circus Flaminius of *c*. 187, Fulvius Nobilior seems to have conflated Greek design (a circular cella) with Roman

<sup>&</sup>lt;sup>36</sup> Liv. 40.5.7.

Basilica Porcia: Liv. 39.44.7; also Plut. *Vit. Cat. Mai.* 19.3; Astin 1978: 84; Coarelli 1985: 59–62; Welch 2003: 33; *LTUR* I.187, s.v. Basilica Porcia (E.M. Steinby). Basilica Fulvia: Liv. 40.51.5; *LTUR* I.173–5, s.v. Basilica Fulvia (H. Bauer); Freyberger and Ertel 2007: 495–7; 2009: 38–43. Traces beneath the basilica indicate an earlier phase of building, with bays measuring 4.9 m, and two aisles on the north side: John Burge, personal communication. For alternative dating sequences for the phases and alternative reconstructions: Carettoni 1948; Fuchs 1956; Coarelli 1985: 135–8, 203–5. Basilica Sempronia: Liv. 44.16.9–11; Carettoni and Fabbrini 1961: 53–60; David 1983; Coarelli 1985: 138–9, 154–5; *LTUR* I.187–8, s.v. Basilica Sempronia (I. Iacopi); Freyberger 2009: 43–4.



- 1. Carcer
- 2. Basilica Porcia
- 3. Curia Hostilia
- 4. Shrine of Concordia
- 5. Comitium
- 6. Sundial of Marcius Philippus
- 7. Rostra
- 8. Basilica Fulvia

- 9. Macellum
- 10. Southwest Building
- 11. Temple of Saturn
- 12. Portico
- 13. Basilica Sempronia
- 14. Lacus Curtius 20. Regia
- 15. Cloaca Maxima
- 16. Pozzi

- 17. Temple of Castor
- 18. Lacus Curtius
- 19. Sanctuary of Vesta
- 20. Regia
- 21. Domus Regis
- Sacrorum
- 22. Domus Publica

Fig. 3. Forum Romanum and environs, c. 133, plan. (© Penelope J.E. Davies).

design (a rectilinear frontal porch), to innovate on the more standard rectangular temple plan (Fig. 4),<sup>38</sup> while others individualized their buildings with paintings (as early as Iunius Bubulcus Brutus' Temple of Salus, at the end of the fourth century)<sup>39</sup> or sculpture (e.g. M.' Acilius Glabrio's Temple of Pietas, dedicated in 181).<sup>40</sup> To give certain zones the appearance of an integrated urban design, some magistrates channelled energies into what William MacDonald termed

Judging by a Renaissance drawing of a lost fragment of the *Forma Urbis*. See Eum. *Paneg*. 5 (9).7, 8.3; Cic. *Arch*. 27; Macrob. *Sat*. 1.12, 16; *Schol*. *Dan*. *Aen*. 1.8; Liv. 38.5.2, 38.9.13, 38.43; Richardson 1977; Marabini Moevs 1981; Martina 1981; Iezzi 1984; Gianfrotta 1985; Coarelli 1997: 452–84; *LTUR* III.17–19, s.v. Hercules Musarum, Aedes (A. Viscogliosi); also Russell 2016: 139–45. Contra Castagnoli 1961; Olinder 1974; Aberson 1994: 199–216; Rüpke 2011: 88–90, who interpret the absence of a vow in Livy's text to mean that Fulvius Nobilior merely added to an existing temple to Hercules, perhaps Hercules Custos; Bernard 2012b: 411–14, who suggests that Fulvius Nobilior made his dedications in an otherwise unknown temple to Hercules.

<sup>39</sup> Plin. *HN* 35.7.19.

<sup>&</sup>lt;sup>40</sup> Liv. 40.34.5; Martin 1987: 146–7.

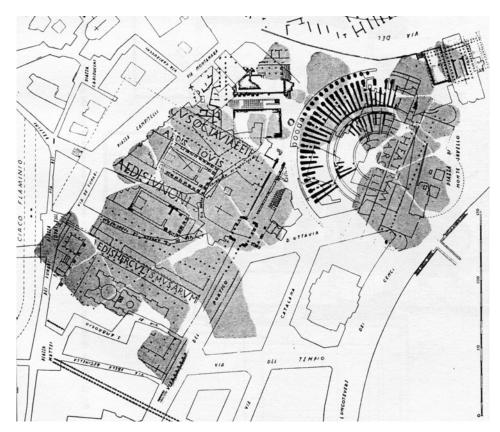


Fig. 4. Temple of Hercules Musarum, as depicted on the *Forma Urbis Romae*, showing the Temple of Hercules Musarum at the lower left. From Carettoni *et al.* 1960, plate 29. © Roma, Sovrintendenza Capitolina ai Beni Culturali.

'urban armatures';<sup>41</sup> hence the sudden popularity of arches (first conceived by L. Stertinius at S. Omobono and the Circus Maximus on his return from Hispania Ulterior in 196)<sup>42</sup> and street-side porticoes, built in the emporium district by aediles in the late 190s, in disparate parts of the city by Fulvius Nobilior in 179, and in the Forum by the censors of 174.<sup>43</sup> And some achieved a monumental effect through successive initiatives: thus over the course of ten years the Basilicas Fulvia and Sempronia transformed the Forum from an Italic space into a grand public square articulated by majestic colonnades, of the kind that was rapidly becoming a Mediterranean *koine*,<sup>44</sup> and the joint initiatives of

<sup>&</sup>lt;sup>41</sup> MacDonald 1988.

<sup>&</sup>lt;sup>42</sup> Liv. 33.27.4. Coarelli 1968: 82, 89–92; Calabi Limentani 1982: 123–35; De Maria 1988: 262; *LTUR* II.267, s.v. Fornices Stertinii (F. Coarelli); also Aberson 1994: 139; Gros 1996: 56–8; Kontokosta 2013: 11–15, 17–18. Bernard 2012b: 388, argues against these arches as free-standing monuments.

<sup>&</sup>lt;sup>43</sup> Liv. 35.10.11–12, 35.41.9–10, 40.51.4–6, 41.27.7; Richardson 1991: 396; Wiseman 1993: 184; Coarelli 1997: 186; Bernard 2012b: 423–4.

Welch 2003; Davies 2013: 454; 2014.

the same censors overhauled the port area into something resembling a rational scheme, with paved streets, wharves, stairways, bridges and porticoes. Though conceived in a spirit of one-upmanship, these ventures articulated the state's ideal of collaboration. A compromise of sorts between state and city was achieved.

## A 'CONCRETE REVOLUTION'

It was not to last. As political rivalry escalated around the mid-second century, some *triumphatores* (now consuls and praetors) brought literal reminders of Greece to Rome by importing marble for manubial temples. First to do so, so Velleius Paterculus states, was Q. Caecilius Metellus Macedonicus, conqueror of the Macedonian League in 148, who invited the architect Hermodorus, from Salamis on Cyprus, to design an all-marble temple to Jupiter Stator;<sup>46</sup> he was followed (probably) by his arch-rival, L. Mummius Achaicus, conqueror of Corinth and the Achaean League in 146, with a Temple of Hercules Victor, probably the Round Temple by the Tiber, built of Pentelic marble (Fig. 5).<sup>47</sup> The stone's bright luminosity enriched the city, and spoke of foreign lands and luxury, conquest and cultural advance. Alarmed by the threat posed by foreign influence, broadly conceived — the debilitating potential of luxury — the senate responded by striving in various ways to circumscribe *Romanitas*.<sup>48</sup>

It was in an Italian fabric, however, that those who wanted to build on a massive scale found a brilliant way forward despite the state's restrictions. This fabric was opus caementicium, or concrete. Its component elements — aggregate, and mortar strengthened by pozzolana from the Alban hills<sup>49</sup> — were inexpensive and

<sup>&</sup>lt;sup>45</sup> Livy 40.51.4–6, 41.27.5–9; Cic. *Prov. Cons.* 20; Val. Max. 4.2.1; Gell. *NA* 12.8.5–6; Varr. *Ling.* 6.4; Obs. 16; Gatti 1936; Le Gall 1953: 109–11, 119–20; Rodriguez Almeida 1981; 1984: 29–33; Mocchegiani Carpano and Mereghini 1985; Conticello De' Spagnolis 1986; Coarelli 1988a: 38–9, 139–55; Steinby 2012: 65; Davies 2013: 447–51 with further bibliography; 2014; Panella 2013: 45.

<sup>&</sup>lt;sup>46</sup> Vell. Pat. 1.11.2–5; Liv. *Per.* 52.7; Val. Max. 7.5.4; Eutr. 4.14.2; Vitr. *De Arch.* 3.2.5, 3.3.8; Gros 1973: 393, 395–7; 1976; Pollitt 1986: 242–7; Viscogliosi 1996; Coarelli 1997: 488–92; *LTUR* III.157–9, s.v. Iuppiter Stator, aedes ad circum (A. Viscogliosi); Boyd 1953; Corso 1988; Winter 2006: 7; Bernard 2010.

<sup>&</sup>lt;sup>47</sup> Ziolkowski 1988. Also Delbrück 1907–12: 2, 43, 58 (who dates the temple to *c.* 130); Valadier 1813: 5; Strong and Ward-Perkins 1960; Rakob and Heilmeyer 1973: 19–21, 23 (who date the temple to *c.* 100–90); Stamper 2005: 70–5. Coarelli (1988a: 92–103, 180–204; *LTUR* III.19–20, s.v. Hercules Olivarius) argues for a Temple to Hercules Olivarius; also Bariviera 2013: 429.

<sup>&</sup>lt;sup>48</sup> E.g. Plin. *HN* 33.148–50, 37.12; Liv. 25.40.1–3; Vell. Pat. 2.1–2; Malcovati *ORF* fr. 224; Gruen 1990: 136–7; 1992: 94–103; Wallace-Hadrill 2008: 329–55. Senatorial measures: for instance, the prohibition of Bacchanalian celebrations in 186 (Gruen 1990), the public incineration of potentially disruptive religious texts in 181 (Liv. 40.29; Orlin 2010: 168–70, 174–6), or the expulsion of practitioners of foreign religions, philosophers and rhetors (Plut. *Vit. Cat. Mai.* 22.1–5; Plin. *HN* 7.112; Cic. *Rep.* 3.9; Wallace-Hadrill 2008: 161–2).

<sup>&</sup>lt;sup>49</sup> DeLaine 2001; Lancaster 2005: 3, 12–18.

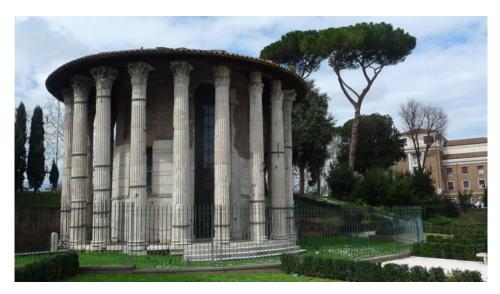


Fig. 5. Round Temple by the Tiber (Temple of Hercules Victor ?), vowed *c*. 146 (?), actual state (© Penelope J.E. Davies).

easily available, and relatively unskilled labourers could work it faster than masons could cut and dress stone. Scholars recognize that its malleability gradually liberated architects to dream, whence MacDonald's 'concrete revolution' in architectural form;<sup>50</sup> yet as used in Republican Rome, its more radical significance, and the likely reason for its rapid ascent as a material for public architecture, is that, quick and economical, in one sweep it neutralized the primary determinants on magistrates' construction ambitions: time and money. Other factors, noted by Torelli and others, coincided with its introduction to create the perfect storm: enormous wealth from foreign conquest and a vast unskilled (voting) workforce, whose employment constituted a benefaction in its own right. Its first datable use in Rome, according to Marcello Mogetta, is in the foundation the Porticus of Caecilius Metellus on the edge of the Circus Flaminius, conceived in the context of his bitter rivalry with Mummius and P. Cornelius Scipio Aemilianus Africanus, conqueror of Carthage in 146<sup>51</sup> — and immediately the advantages of the fabric are evident. Set around an existing Temple of Juno Regina and Caecilius Metellus' own marble Temple of Jupiter Stator, the portico's dimensions were unparalleled in Rome.<sup>52</sup> It comprised an unprecedented management of public space by a single individual; in the crowded city, it defined a place of peace and tranquillity, in the service of popularity-winning benefaction.

Without change to the state's restrictions on architectural sponsorship, with concrete magistrates' aspirations could adapt to new possibilities, and in relatively

<sup>&</sup>lt;sup>50</sup> MacDonald 1982.

<sup>&</sup>lt;sup>51</sup> Mogetta 2013: 140–6.

<sup>&</sup>lt;sup>52</sup> Lauter 1980–1: 37–46; Giustini 1990: 72; La Rocca 1990: 385; Coarelli 1997: 529–38; *LTUR* IV.130–2, s.v. Porticus Metelli (A. Viscogliosi).

short order they built on a whole new scale. Outside the walls, for instance, a vast building was constructed at the foot of the Aventine, downstream of the commercial port. Inside, a forest of piers bore 200 barrel vaults set perpendicular to its long sides, defining a series of long narrow rooms that sloped towards the river. Surviving tracts of wall (Fig. 6) correspond to a building shown on the Severan marble plan (fragments 23 and 24a–c: Fig. 7), with the partial label—*LIA*, long reconstructed as 'Porticus Aemilia', but a compelling hypothesis by Lucos Cozza and Pier Luigi Tucci, recognizing similarities to ship-sheds (neosoikoi) at various Mediterranean sites, identifies it instead as navalia. Measuring, in its entirety, an extraordinary 487 m × 60 m, covering about 30,000 m², it was far and away the largest covered structure in the city. If its identification as navalia is correct, it was most likely a public building and the work of a censor, perhaps M. Antonius, who, as praetor in 102–100, won a triumph against the pirates to secure the seas and the grain supply. St

More significantly, perhaps, magistrates could shape urban space more ambitiously, with complexes such as the late second-century restoration of the Sanctuary of Magna Mater on the Palatine, instigated by another member of the Caecilius Metellus family.<sup>56</sup> At the time of rebuilding, the sanctuary's platform was expanded and raised on a massive concrete barrel-vaulted substructure, which supported it beyond the natural contour of the hill to enlarge the setting for scenic games in honour of Magna Mater. In the process, the access path — the *clivus Victoriae* from the Forum Boarium — was radically altered: lowered and paved with silex, it was enclosed as a *via tecta*, with a walkway on the south. At the east end it met the *Scalae Caci* and veered north to ascend to the platform (Fig. 8). Thus reconceived, this magnificent

<sup>&</sup>lt;sup>53</sup> Fabretti 1680: 166; Gatti 1934; Cozza and Tucci 2006: 183–6.

Cozza and Tucci 2006, and Tucci 2012, refuting Arata and Felice 2011. Platner and Ashby 1929 questioned the identification as the Porticus Aemilia; Gerkan 1958: 189–90 earlier proposed identification as *navalia*. It is conceivable that the building is shown on denarii of M. Lollius Palicanus, minted in 45: Crawford 1974, no. 473/1; Elkins 2015: 33–4. Contra: Rankov 2013: 39–41. Tuck 2000 sees it as a granary owned by the Cornelii.

For dating: Mogetta 2013. Cozza and Tucci 2006 for a mid- to late second-century date; Blake 1947: 249 dated it to the second or early first centuries. Cic. *Orat.* 1.62 connects *navalia* of some sort with Hermodorus; whether he is referring to this structure is unclear, though it is possible the architect was still alive at the end of the second century, and there is evidence for ship-sheds with a similar ground-plan in his home town of Salamis. Coarelli 1997: 356–8; Cozza and Tucci 2006: 195 hypothetically attribute the Navalia to Hermodorus, either around 140 after the Temple of Jupiter Stator and before the Temple of Mars or a little earlier, before either temple. In the same passage, Cicero mentions Antonius, praetor with proconsular *imperium* in 102–100, who was charged with controlling the pirates around Cilicia, and who celebrated his naval triumph in 100 before advancing to a consulship in 99 and a censorship in 97.

Pensabene and D'Alessio 2006. Ov. *Fast.* 4.348; also Val. Max. 1.8.11; Obs. 39. Morgan 1973: 238–9. Also Coarelli 2012: 251–2. Pensabene and D'Alessio (2006: 39) assume that the restoration was the work of Caecilius Metellus Numidicus using *manubiae*. A more likely scenario would attribute it to Caecilius Metellus Numidicus and/or Caecilius Metellus Caprarius, censors in 102–101: Davies, forthcoming 2017.



Fig. 6. Navalia (?), late second century, actual state. (© Penelope J.E. Davies).

sanctuary effected a scenographic reconfiguration of the landscape, where the whole was far greater than the sum of its parts;<sup>57</sup> like the contemporaneous Sanctuary of Fortuna Primigenia at Praeneste, it indulged an innovative vision for sanctuary planning, drawing on a Mediterranean design koine that favoured kinetic schemes, as seen at the sanctuaries of Asclepios at Kos and Athena Lindaia at Lindos, and in urban planning as evidenced at Pergamon.<sup>58</sup> These eastern sites impressed from afar; through changes of elevation, form and volumetric space, they controlled movement, framed vistas and, at times, offered sudden visual revelations; through their form, experience was masterfully stage-crafted.

The restoration at the sanctuary of Magna Mater allowed the Caecilii Metelli to claim credit for victory against the Gauls at Vercellae in 102, a victory Cybele's chief priest, the Battakes, had attributed to Magna Mater; thus they shouldered out Marius, the populist hero who had really won the war.<sup>59</sup> But more than that, movement to and within the sanctuary was newly circumscribed, which served a broader agenda. Introduced to Rome from Phrygia in 205, the cult of Magna Mater sat at the far edge of élite self-identity, and by the time of the

Pensabene and D'Alessio 2006.

<sup>&</sup>lt;sup>58</sup> Gullini 1973; Pollitt 1986: 230–42; Coarelli 1987; Pensabene and D'Alessio 2006: 42–7; Winter 2006: 207–18.

<sup>&</sup>lt;sup>59</sup> Liv. 29.11.3.

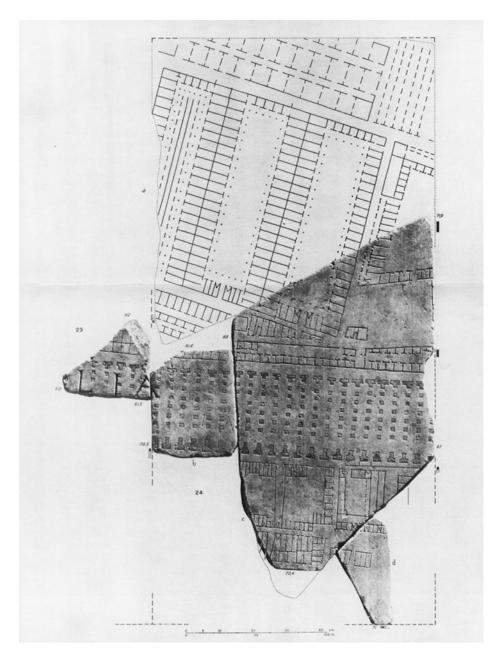


Fig. 7. Forma Urbis Romae, from Carettoni et al. 1960, plate 24. © Roma, Sovrintendenza Capitolina ai Beni Culturali.

reconstruction its principal — and fervent — devotees seem to have belonged to Marius' constituency, the lower orders of society.<sup>60</sup> Raucous processions

<sup>&</sup>lt;sup>60</sup> Gell. NA 2.24.2; CIL I.1 234; Cic. Senec. 13.45, Har. Resp. 21–2; Liv. 18.9–10, 37.9.9; Diod. Sic. 36.13; Val. Max. 7.7.6; Dion. Hal. 2.19.4–5; Ov. Fast. 4; also Polyb. Hist. 21.37.4–6;



Fig. 8. Sanctuary of Magna Mater, as restored in *c.* 102, hypothetical reconstruction. (© John Burge).

characterized the cult: priests in bright, luxurious robes, brandishing knives to symbolize their castrated state, begging for alms, and playing loud music to a strange metre; Phrygian *Corybantes* leaping about, shaking crested helmets and clashing armour; crowds of plebeians showering their path with money and roses. With the restoration, these processions were contained; through concrete, the Caecilii Metelli imposed symbolic and physical authority on two forces embodied in the cult that threatened the *mos maiorum*: the non-Roman, and the escalating non-élite population. Born as competition — and chaos — in politics reached a crescendo, as tribunes explored the potential of their power as representatives of the non-élite, culminating in the aborted careers of the Gracchi, as the political consciousness of the people grew and the senate awoke to its possible weakness, this new type of architecture staged experience; it manipulated, it persuaded.

Graillot 1912; Galinsky 1969: 187; Morgan 1973: 235-6; Beard, North and Price 1998: 164-6; Roller 1999; Pensabene and D'Alessio 2006: 46-7.

<sup>&</sup>lt;sup>61</sup> Lucr. 2.601–43; Dion. Hal. 2.19.2–5; also Polyb. 21.37.4–6; Roller 1999: 289; Latham 2007: 225–8, 230–1.

When Licinius Lucullus proposed a levy in 151, tribunes cast him and his co-consul, A. Postumius Albinus, into prison; a similar event occurred in 138: Cic. *Leg.* 3.20; Liv. *Per.* 55; Taylor 1962: 26. On tribunician initiatives, which led to improved army conditions, the institution of a permanent court in 149 to try magistrates accused of extortion by allies and subject peoples and, in 139–137, the secret ballot: Liv. *Per.* 44, 47; Cic. *Brut.* 80; Malcovati, *ORF*<sup>2</sup>

The most overpowering early example of concrete construction, perhaps, and the most innovative, is the vast substructure bridging the Capitoline saddle (often known as the Tabularium), which transformed the landscape of the Capitol and the Arx and irrevocably altered an experience of the Forum below. Probably the commission of Q. Lutatius Catulus, consul of 78, and designed by the architect L. Cornelius, it was likely the base for a temple (to Juno Moneta?) or even three temples (Figs 9, 10).63 Trapezoidal in plan, with an inset at the southwest corner for the Temple of Veiovis, it incorporates at least four distinct components. At the lowest level a corridor runs the length of the east flank, with a series of small chambers facing the Forum; at the south end, a staircase leads down to a doorway opening into an upper storey in the Southwest Building in the Forum, and another at the north end leads up to a suite of interconnected, travertine-paved rooms on the short side of the substructure.<sup>64</sup> Second, above the lower corridor, a monumental via tecta links the Capitol and the Arx, with massive arches framing views across the Forum and five rooms, probably shops, lining the west side.<sup>65</sup> Third, a large niche on the south side of the substructure contained remnants of a mud-brick hut, likely preserved as the house of Titus Tatius or Romulus;66 and finally, a staircase runs through the substructure from the Forum to the Temple of Veiovis, and on to the temple terrace or to a second gallery and finally to the temple.<sup>67</sup>

If Lutatius Catulus' complex responded to the Palatine structure, it was more daring in scale and in its transformation of the landscape: with its construction, political and sacred topography was radically reshaped.<sup>68</sup> Where a gentle valley had dipped between the Capitoline's peaks, the substructure blocked the way with a soaring vertical wall. Visually, it resumed the process of defining the Forum, which, highly politicized, was being lavishly repaved just as the substructure rose to completion.<sup>69</sup> On the north and south sides of the piazza, the colonnades and porticoes of the Basilicas Sempronia and Fulvia had earlier established permeable boundaries of light travertine and stuccoed tufo, a language of openness and access that had subsequently been appropriated for the Temple of Concordia and the Basilica Opimia of 121 now, on the west, the new substructure's solid surface, sheathed with unreflective Gabine and Alban stone, made an uncompromising backdrop for these icons of optimate triumph

<sup>79</sup>f.; Plin. HN 14.19; Plut. Vit. C. Gracch. 9; Sall. Iug. 69.4; Taylor 1962: 24; Lintott 1990: 6–7. On measures designed to rein them in: Liv. Per. 56; App. Hisp. 84; Plut. Vit. Mar. 12; Cic. Orat. 1.181; Taylor 1962: 24–7.

<sup>63</sup> CIL VI.1314, 31597. Canina 1845; Delbrück 1907–12: 44–5; bibliography in LTUR V.17–20, s.v. Tabularium (A. Mura Sommella); MAR 238–40, s.v. Tabularium (A.G. Thein); Tucci 2005.

<sup>&</sup>lt;sup>64</sup> Coarelli 1994: 39–40.

<sup>65</sup> Delbrück 1907–12: 35.

<sup>66</sup> Solin. 1.21; Sommella 1984; Tucci 2005: 30-1.

<sup>67</sup> Sappa and Sappa 1999: 202.

On similar sanctuaries constructed at Terracina and at Tibur in the interval between the two structures: Giuliani 1970: 1998–9, 2004; Coarelli 1987; Tucci 2005: 24–8.

<sup>&</sup>lt;sup>69</sup> Davies, forthcoming 2017.



Fig. 9. Substructure on the Capitoline saddle, 78, actual state (© Penelope J.E. Davies).

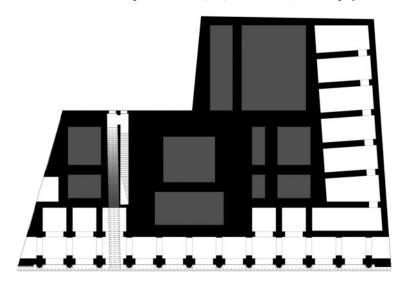


Fig. 10. Substructure on the Capitoline saddle, begun in 78, plan. (© John Burge).

over the Gracchans. Its height and massiveness dignified the surmounting temple, but also marked a formal, authoritative separation of the Forum from a fortress-like Capitoline, as if to set religious space beyond popular grasp, a built expression of the return of priesthoods to co-optation during Sulla's dictatorship.<sup>70</sup>

<sup>&</sup>lt;sup>70</sup> Liv. Per. 89; Vir. ill. 75; Tac. Ann. 6.12.3; Lactant. Div. Inst. 1.6.11. Rawson 1974; North 1990; Beard, North and Price 1998: 136; Thein 2002: 166, 174; Keaveney 2005: 148.

Within the substructure, in turn, where the Capitoline's natural contour receded to the west between the Capitol and the Arx, 71 an ancient path or staircase had probably led to the forecourt of the Temple of Veiovis, the entrance to the area Capitolina opposite and the Asylum beyond. The sights and sounds of the Forum and Capitoline would have encouraged lingering on this open-air climb, drenched in natural light. With the construction of the substructio, a steep staircase replaced the path, encased by concrete, dark and deafeningly silent (Fig. 11): access to the Capitoline was arduous and controlled, another architectural analogy for popular access to the gods. The via tecta, in turn, was a passage of a different order (Fig. 12). Roofed with soaring pavilion vaults, it formed a magnificent processional way for the final leg of the triumphal procession, and a link between the Arx and the Capitoline, two stages for the senate's self-presentation: the Auguraculum on the Arx, where augurs took the auspices with which state processes began, and the area Capitolina, the site of the capstone rituals of Republican government.<sup>72</sup> The grand arcade framed the pontiffs and augurs as they advanced in their regalia between functions on these two peaks, among them the most powerful senators of the day.<sup>73</sup> In the gallery, they stood above the fray, overseers with a privileged vantage point, and if the architecture's open form instilled in them a sense of responsibility and accountability, it must also have engendered a feeling of control. From the Forum where crowds assembled, meanwhile, the arcade drew the eye with its engaged half-columns and decorative entablature, outlining the actors in space (Fig. 9); the gallery embodied the notion of surveillance. In its totality, the complex projected an ideal vision of society and its hierarchies as conceived by Lutatius Catulus and his conservative peers, in which the senate held authority over all religious and political processes; into that vision, viewers were drawn.

This, now, was the new language of political architecture. Though conceivable, architectonically, using cut stone, any of these monuments would have been prohibitively time-consuming and expensive for a Republican magistrate, working with the time and money constraints imposed by the senate. With concrete, scale shifted; simultaneously, agendas were proportionately redimensioned; and the persuasive, even theatrical, power of built form both to control and to promote became more manifest. Concrete, one might say, enabled transgression against the state. The implications of the shift, and its momentousness, become most apparent in Pompey's magnificent manubial initiative on the Campus Martius, begun in the aftermath of his spectacular triumph over Mithridates and dedicated in 55 and 52.74 Combined within it

<sup>&</sup>lt;sup>71</sup> Sappa and Sappa 1999: fig. 3.

Auguraculum: Coarelli 1983: 97–107; Linderski 1986: 2226–7. Archaeologists sometimes identify the Auguraculum with the *cappellaccio* walls in the Aracoeli garden, but most place it further west at the highest point of the Arx. *LTUR* I.142–3, s.v. Auguraculum (Arx) (F. Coarelli).

<sup>&</sup>lt;sup>73</sup> For a list: Rüpke 2008: 118.

Gell. NA 10.1.7. On problems concerning the date of dedication, placed by Chron. Pasch. 1.215 in 52, see most recently Russell 2016: 164–5. On the theatre: Baltard 1837; Canina 1845; LTUR V.35–8, s.v. Theatrum Pompei (P. Gros) with extensive bibliography; Gagliardo and

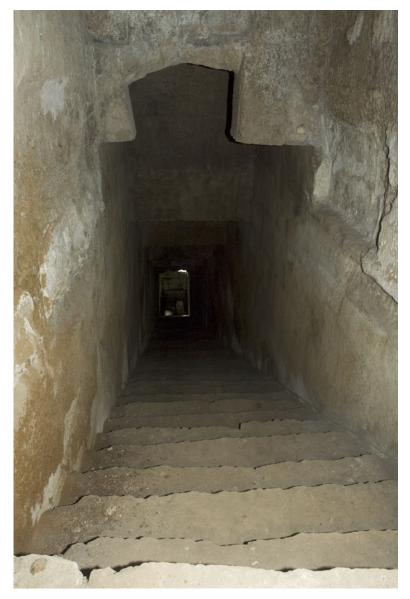


Fig. 11. Substructure on the Capitoline saddle, 78, stairs from the Forum Romanum to the Temple of Veiovis, and from the Temple of Veiovis to the summit. (© Penelope J.E. Davies).

were a theatre and a temple to Venus Victrix (Figs 13, 14); a portico framing a garden with formal plantings, shaded walkways and a sculpted fountain, and a senate house, all embellished with a multitude of art-works: not for Pompey to choose between different types of manubial monument as others had before

Packer 2006; Montesorro Checa 2006; Packer 2006; Sear 2006: 57–61; Packer et al. 2007; Filippi et al. 2015.

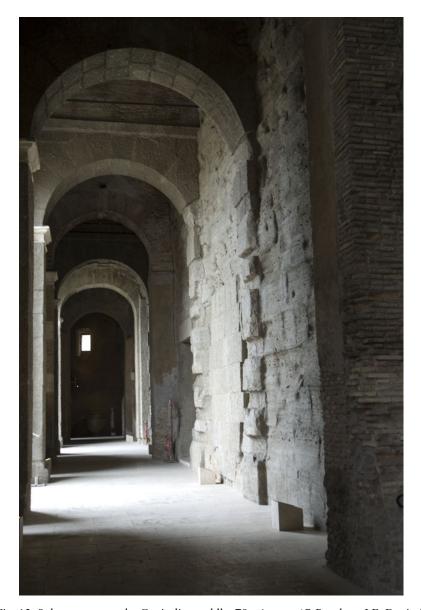


Fig. 12. Substructure on the Capitoline saddle, 78, via tecta (© Penelope J.E. Davies).

him, but to build them all. At about 33,950 m<sup>2</sup>, in footprint the complex surpassed the city's largest buildings; and at about 45 m high — the altitude of the Arx — in vertical mass it rivalled the very hills of Rome.<sup>75</sup> Unlike Greek theatres, which nestled into hillsides, the *cavea* stood free of natural buttressing on the marshy plain; a concrete metaphor for Pompey's tendency to challenge norms throughout his meteoric rise through extraordinary commands, it was a

<sup>&</sup>lt;sup>75</sup> LTUR V.35–8, s.v. Theatrum Pompei (P. Gros): 38.

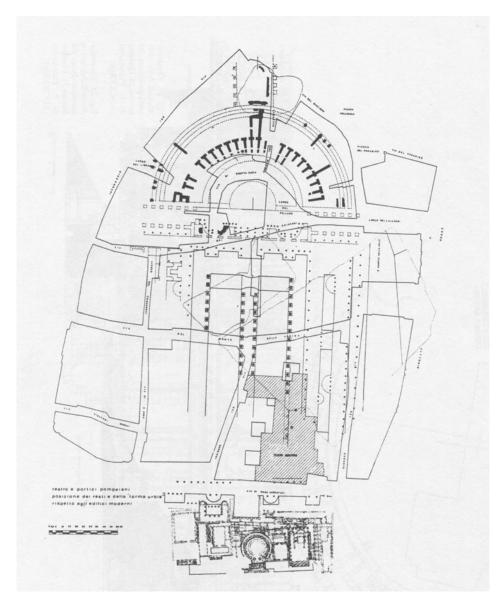


Fig. 13. Forma Urbis Romae, from Carettoni et al. 1960, plate 32. © Roma, Sovrintendenza Capitolina ai Beni Culturali.

miracle of construction. That he could think on such a scale and with such daring — understanding that completion was feasible within a limited time-frame (for though his commands were extraordinary, they were also finite) — was thanks, to be sure, to a wealth of *manubiae* and a vast, ready workforce; but neither would have sufficed to overcome the constraints of sponsorship norms without concrete.

That this project enhanced the city was undeniable. As a whole, it embodied the concept of luxury, as such complexes did in the East; and the permanent theatre

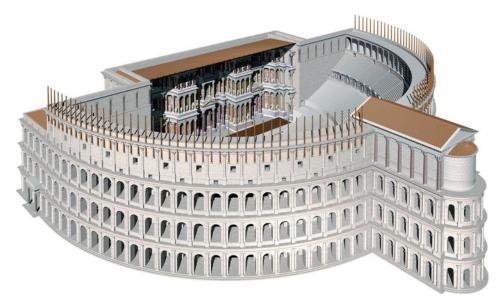


Fig. 14. Theatre of Pompey, c. 62–52, hypothetical reconstruction. (© John Burge and James Packer).

placed Rome on a par with other cities of Italy and the Mediterranean, such as Pompeii and Mytilene, where Pompey reputedly found his model.<sup>76</sup> Yet the enhancement came at a price. The multitude of buildings assembled within it made it Rome in microcosm, built in Pompey's name, imbued with his presence, under his control. The complex was, unequivocally, a grand act of euergetism on the part of a single man. By now, theatres and porticoes were recognized as such, thanks to centuries of public entertainment and the Portico of Caecilius Metellus, but the public garden was a new contribution to the genre, drawing inspiration from places like Pergamon, where porticoed gardens, with formal plantings, water features and art displays were adjoined to theatres, gymnasia, palaistrai, philosophical schools and palaces. Inspired by regal paradeisoi of the Near East, first introduced to Greece by Alexander, the grandest, like the most magnificent theatres and porticoes of Greek lands, were royal benefactions.<sup>77</sup> In a city overcrowded with people — three-quarters of a million according to one estimate — most of whom lived in poverty, packed into squalid, noisy accommodations or lacking housing altogether, where private gardens were the privilege of the wealthy few, and buildings were encroaching on sacred groves, Pompey's gardens were a place of refuge, with shady promenades, the peaceful sound of running water and a museum of art-works people could call their own.<sup>78</sup> This grand benefaction embodied the popular benefit derived from Pompey's extraordinary talents to evoke a termless abstract authority that approached kingship.

<sup>&</sup>lt;sup>76</sup> Plut. Vit. Pomp. 42.4; Seager 2002: 60–1, 75–6; Sear 2006: 57. Russell 2016: 172.

<sup>&</sup>lt;sup>77</sup> Grimal 1984: 80–4, 85, 173–7; Gleason 1994; Kuttner 1999: 346–9.

<sup>&</sup>lt;sup>78</sup> On gardens and conditions in the city: Meier 1982: 151–2; Grimal 1984: 58; Scobie 1986; Boatwright 1998: 72; Wallace-Hadrill 1998; Davies 2012b.

In this vision, the theatre played a critical role. In 154, when the censors C. Cassius Longinus and M. Valerius Messalla had sponsored a permanent stone theatre, the senate had ordered it demolished and the parts sold at auction, <sup>79</sup> fearing, probably, for their authority in the running of state: a permanent place of assembly would empower the people to debate their own concerns, as they did in a Greek *bouleuterion* but not at the Roman Comitium; <sup>80</sup> and in Greek lands, it was in theatres, more than any other kind of building, that monarchs and *strategoi* — such as Demetrius Poliorcetes or Aratos, and later Mithridates — conflated drama and reality to frame and perform their leadership before their seated subjects. <sup>81</sup> With the people and the patron thus exalted, the senate risked a debilitating diminution of its prestige and influence.

At the theatre's opening ceremonies Pompey staged this new order. Throughout the city, in stalls of his providing, was his vast audience, ready to speak in favour of anyone who pleased them.<sup>82</sup> For their delectation there were musical and gymnastic contests, a horse race and five days of wild beast hunts in the Circus. Rare animals were imported, some for the first time, others in unprecedented numbers: sources record 500-600 lions, 410 leopards and Rome's first rhinoceros; there were rare monkeys too, and lynx, and vicious Gallic wolves. A hunt with eighteen elephants backfired when the audience sympathized with the beasts, but it was 'a most terrifying spectacle' nonetheless.<sup>83</sup> The scenic games to inaugurate the theatre featured plays in Latin, Greek and Oscan, and Pompey led popular actors out of retirement, one so old that his voice failed. The props were astounding: 'a train of six hundred mules, ... three thousand bowls, ... [and] brightly-coloured armour of infantry and cavalry in some battle', according to Cicero, which dazzled and delighted the crowd and vividly recalled the trappings of a triumph.<sup>84</sup> At the front of the cavea sat Pompey; before his assembled audience, in a building tailored to reflect his glory, the man who styled himself Alexander the Great staged a performance of the triumphal homecoming of Agamemnon to Argos in Accius' Clytemnestra, to evoke and re-enact the glory of his magnificent triumph of 61.85 Through his theatre, he framed himself as king.

<sup>&</sup>lt;sup>79</sup> Liv. *Per.* 48; App. *BCiv.* 1.28.12; Val. Max. 2.4.2; August. *De Civ. D.* 1.32; Oros. 4.21.4; Vell. Pat. 1.15.2; Sordi 1988; 327–41.

<sup>&</sup>lt;sup>80</sup> Rumpf 1950; Frézouls 1983, especially 195–7; La Rocca 1990: 407; Forsythe 1994; Gros 1994: 293–4; Dauster 2003: 70; Wallace-Hadrill 2008: 160–9; Russell 2016: 170–1. On stone theatres and acoustics: Vitr. *De Arch.* 5.5.7.

E.g. Plut. Vit. Demetr. 34.3, Vit. Arat. 23.1–4, Vit. Sull. 11; Von Hesberg 1999; Soyoz 2010, on fine-tuning of theatre design to control their performances; Russell 2016: 170–1.

<sup>82</sup> Cass. Dio 39.38.2-5; Plut. Vit. Pomp. 52.5.

<sup>83</sup> Plin. HN 8.53, 8.64, 8.70, 8.71, 8.84, trans. Bostock; Plut. Vit. Pomp. 52.5.

<sup>&</sup>lt;sup>84</sup> Cic. Fam. 7.1.3, adapted from Yonge's translation; Plin. HN 7.158; also Westall 1996: 85.

<sup>&</sup>lt;sup>85</sup> Greenhalgh 1981; Champlin 2003; Cic. Fam. 7.1.2; Erasmo 2007. For social segregation in the theatre: Packer *et al.* 2007: 517.

With Pompey's complex, a line was crossed. Not only had the scale of construction changed, but so, on the part of patrons, had expectations for how architecture might serve their goals and ambitions and, on the part of a growing electorate, for how politicians might craft the city to the people's advantage and enjoyment. So categorically was Pompey's complex a marker of power and a euergistic appeal for popular favour, and so overwhelmingly was it associated with a single authoritative individual, that it demanded a response, and the face-off between Pompey and C. Julius Caesar played itself out in architectural benefactions to the city well before it reached the battlefield. It was precisely through massive public works projects, inspired by the scale achievable through concrete construction, that, though removed from the city for fear of prosecution, Caesar established a surrogate presence before the people of Rome, with a magnificent rebuilding of the archaic ovile or voting precinct in marble as the Saepta Iulia that, at roughly 37,200 m<sup>2</sup>, would outsize Pompey's portico, only hundreds of metres away.86 And he embarked on a Forum Iulium that, once completed, Pliny would compare to the pyramids of Egypt (Fig. 15).87 A boon to the city and its inhabitants, his behaviour was deeply transgressive in a new way that reflects the urgency of the situation: he commissioned manubial buildings without any normative authority, before being granted a triumph, as what might be termed a presumptive triumphator. Where Pompey built with travertine-faced concrete, Caesar upstaged him: Rome's transformation into a city of marble had begun, a match for the dazzling cities of the east, and the material, from quarries close to his headquarters in Liguria, was the mark of a single man. Like Pompey's oeuvre, these magnificent enhancements to the city and the lived experience therein served Caesar's growing authority; and through the distinctions between their projects Caesar manipulated public perception of Pompey to secure his own position. Benefactions all, their buildings addressed chronic discontents with life in the city, but where Pompey aimed to seduce the crowd with spaces devoted to otium, Caesar's Forum, built for judicial negotium and the ovile, where the assembly met to vote for consuls, functioned at the heart of political business.<sup>88</sup> They exalted and expanded precisely the structures — the law, elections — that could help to provide solutions. They cast Caesar as an agent of change.<sup>89</sup>

When, in 46, Caesar was appointed dictator for ten years and then, in 45, for life, 90 he ascended to the very post that these massive urban initiatives had come to imply. In turn, the office removed all customary constraints, allowing him to usurp and conflate magistracies, to plan beyond time limits; and thus he gained the

<sup>&</sup>lt;sup>86</sup> Cic. Att. 4.17; Cass. Dio 53.23; Gatti 1934: 1937; Coarelli 1997: 155–64, 580–2; LTUR IV.228–9, s.v. Saepta Iulia (E. Gatti).

<sup>&</sup>lt;sup>87</sup> Plin. *HN* 36.103; Suet. *Iul.* 26; Ricci 1933; Thomsen 1941; Fiorani 1968; Amici 1991; Delfino 2008: 52–3; 2014.

<sup>&</sup>lt;sup>88</sup> App. *BCiv.* 2.102.

<sup>&</sup>lt;sup>89</sup> Davies, forthcoming 2017.

Gass. Dio 43.14.3; Meier 1982: 411–12, 452–5.



Fig. 15. Forum Iulium, begun c. 54, hypothetical reconstruction. (© John Burge).

latitude to think in terms of a broad policy for the betterment of the city as no one had before. Many of his reforms addressed social issues, 'to better the condition of the poor', as Appian put it, and were particularly resonant in a city where residents paid no taxes and harboured low expectations of the state.<sup>91</sup> His reforms were not directed at quick solutions and instant favour but at longterm practical objectives: securing the corn supply, dealing with widespread debt, and reducing urban violence. 92 For his architectural plans, the assured longevity of his rule obviated the need for rapid concrete construction; even without it, his intentions could, and did, approach the programmatic: he paid homage to the gods (planning a temple to Mars, as well as his temple to Venus Genetrix),93 provided entertainment venues, such as a refurbished Circus Maximus, the first known artificial lake in Rome for mock sea-battles, and two theatres in the planning, one on the east slope of the Arx, the other near the Circus Flaminius, west of the Capitoline, which would be completed eventually as the Theatre of Marcellus;<sup>94</sup> and he overhauled the spaces of politics, relocating the Rostra to give the Forum a logical axis (and to sideline

<sup>&</sup>lt;sup>91</sup> App. *BCiv.* 2.11, trans. Oldfather; Meier 1982: 196–8.

<sup>&</sup>lt;sup>92</sup> Plut. Vit. Caes. 55.5, 58.10; Suet. Iul. 41–42.3, 43; App. BCiv. 2.102; Cass. Dio 43.21.4, 43.51.3; Meier 1982: 386, 417–18, 447; Favro 1998: 75; Parenti 2003: 150–1; Lott 2004: 61–5 (with caveats); Donati 2008: 39–40.

<sup>93</sup> Suet. *Iul.* 44.1; Robinson 1992: 17.

Gircus Maximus: Dion. Hal. 3.68.1–4; Suet. *Iul.* 39.2; Humphrey 1986: 73–7; Favro 1998: 62, 67; Liverani 2008: 49; Marcattili 2009. Naumachia: Suet. *Iul.* 39 (where scholars correct a textual corruption, *in morem cochleae*, to *in minore Codeta*, located in the Campus Martius by Dio or in Trastevere by Fest. 50 L); Cass. Dio 43.23; App. *BCiv.* 2.102; Vell Pat. 2.56; Coleman 1983: 50; Coarelli 1997: 584–5; Favro 1998: 67; Liverani 2008: 49; *LTUR* III.338, s.v. Naumachia Caesaris (A.M. Liberati). Theatres: Suet. *Iul.* 44; Valentini and Zucchetti 1940: 123; Sear 2006: 62. Coarelli, 1997: 586–8 argues for a single theatre in the location of the Theatre of Marcellus.

the senate). 95 Inspired, presumably, by his sojourn in Alexandria, he also intended 'the greatest possible libraries of Greek and Latin books' (as Suetonius put it), where public recitals would likely have occurred, giving the plebs access to information and luxuries hitherto reserved for the élite, and making the city a centre of culture and learning.96 And he addressed the root causes of the problems plaguing the non-élite: for some he remitted exorbitant rents; and to make more land available, he auctioned public properties, extended the pomerium (possibly), and even planned to divert the Tiber west of the Vatican Hills, more than doubling the Campus Martius area with land assigned to housing.97 His compilation of regulations for municipal administration prescribed street maintenance and traffic control, and banned construction in public areas. In short, he aspired to aggressive changes that would strike at the heart of the urban experience, to make the city more 'liveable', and at the same time, increase its grandeur and appeal as a cultural centre. At last a politician approached the city with a policy, as its mastermind; and this, precisely, underlined the a-constitutionality of his role in a republic.

During the Republic, architecture and politics were inextricably intertwined. A necessary corollary of controlling exploitation of urban development by individual politicians to protect the state was a city lacking the monumental quality of contemporaneous Mediterranean kingdoms. Initial strategies to push the limits in architectural sponsorship enriched Rome in beauty and scale, while causing little threat to the delicate balance that Polybius so admired. But concrete, which neutralized the primary determinants on magistrates' construction ambitions — time and money — released them from state control; when politicians realized its potential, and the city, as an architectural and urbanistic entity, could finally flourish, the Republic, as an ideal state, existed no more.

Address for correspondence: Prof. Penelope J.E. Davies

Department of Art and Art History, The University of Texas at Austin, 2301 San Jacinto Blvd, D1300, Austin, TX 78712, USA

pjedavies@austin.utexas.edu

## REFERENCES

Aberson, M. (1994) Temples votifs et butin de guerre dans la Rome républicaine. Rome, Institut Suisse de Rome.

Aldrete, G.S. (2007) Floods of the Tiber in Ancient Rome. Baltimore, MD, Johns Hopkins University Press.

<sup>&</sup>lt;sup>95</sup> Cass. Dio 43.49; Coarelli 1985: 237–57; *LTUR* IV.214–17, s.v. Rostra Augusti (P. Verduchi); *RRC* 473/1; Favro 1998: 68–9. Based on Boni (1900: 306), Coarelli (1985: 133–5) also posits a new pavement in the Forum in Caesar's time, made of travertine and with marble slabs in front of the Curia.

<sup>&</sup>lt;sup>96</sup> Suet. *Iul.* 44.2, trans. Rolfe; Dix 1994: 286–7; Miles 2008: 238.

<sup>&</sup>lt;sup>97</sup> Rents: Cass. Dio 42.50; Suet. *Iul.* 38.2; Cic. Off. 2.83–4; Meier 1982: 418; Donati 2008: 39. Auctions: Cass. Dio 43.47.4. Tiber diversion: Cic. Att. 13.33a; Suet. *Iul.* 44; Plut. Vit. Caes. 58; Le Gall 1953: 130–3; Lagunes 2004: 117–29; Aldrete 2007: 182–4; Liverani 2008: 49–50.

- Amici, C.M. (1991) Il Foro di Cesare. Florence, Olschki.
- Arata, F.P. and E. Felice (2011) Porticus Aemilia, navalia o horrea? Ancora sui frammenti 23 e 24 b–d della Forma Urbis. *Archeologia Classica* 62: 127–53.
- Ashby, T. (1935) The Aqueducts of Ancient Rome. Oxford, The Clarendon Press.
- Astin, A.E. (1978) Cato the Censor. Oxford, Oxford University Press.
- Astin, A.E. (1985) Censorships in the Late Republic. Historia 34: 175–90.
- Baltard, V. (1837) Mémoire explicatif de la restoration du Théâtre de Pompée. Paris, École Nationale Supérieure des Beaux-Arts.
- Barbera, M. and M.M. Cianetta (2008) Archeologia a Roma Termini. Milan, Electa.
- Bariviera, C. (2013) Regione XI. Circus Maximus. In A. Carandini and P. Carafa (eds) *Atlante di Roma* 1: 421–45. Milan, Electa.
- Bastien, J.-L. (2007) Le triomphe romain et son utilisation politique à Rome aux trois derniers siècles de la République. Rome, École Française de Rome.
- Beard, M., J.A. North and S. Price (1998) *Religions of Rome*. Cambridge, Cambridge University Press. Bernard, S. (2010) Pentelic marble in architecture at Rome and the Republican marble trade. *Journal of Roman Archaeology* 23: 35–54.
- Bernard, S. (2012a) Continuing the debate on Rome's earliest circuit walls. *Papers of the British School at Rome* 80: 1–44.
- Bernard, S. (2012b) Men at Work: Public Construction, Labor, and Society at Middle Republican Rome (390–168 B.C.). University of Pennsylvania, Ph.D. thesis.
- Bernard, S. (2013) Politics and public construction in Republican Rome. Review of E.M. Steinby, Edilizia pubblica e potere publico nella Roma repubblicana. Journal of Roman Archaeology 26: 513–19.
- Blake, M.E. (1947) Ancient Roman Construction in Italy from the Prehistoric Period to Augustus. Washington DC, Carnegie Institution.
- Boatwright, M.T. (1998) Luxuriant gardens and extravagant women: the horti of Rome between Republic and Empire. In M. Cima and E. La Rocca (eds), *Horti romani: atti del convegno internazionale: Roma, 4–6 maggio 1995:* 71–82. Rome, L'Erma di Bretschneider.
- Boni, G. (1900) Roma: nuove scoperte nella città e nel suburbio. *Notizie degli Scavi di Antichità*: 291–340.
- Boyd, M.J. (1953) The Porticus of Metellus and Octavia and their two temples. *Papers of the British School at Rome* 21: 152–9.
- Cadoux, T.J. (2008) The Roman Carcer and its adjuncts. Greece and Rome 55: 202-21.
- Calabi Limentani, I. (1982) I fornices di Stertinio e di Scipione nel racconto di Livio (XXXIII, 27, 1–5 e XXXVII, 3, 7). In M. Sordi (ed.), *Politica e religione nel primo scontro tra Roma e l'oriente* 8: 123–35. Milan, Contributi dell'Istituto di storia antica.
- Canina, L. (1845) Esposizione storica e topografica del Foro Romano e sue adiacenze. Rome, A. Forni. Carettoni, G. (1948) Esplorazioni della Basilica Emilia. Notizie degli Scavi di Antichità: 111–28.
- Carettoni, G. and L. Fabbrini (1961) Esplorazioni sotto la Basilica Giulia al Foro Romano. Atti dell'Accademia nazionale dei Lincei. Rendiconti 16: 53-60.
- Carl, P., B. Kemp and R. Laurence (2000) Were cities built as images? *Cambridge Archaeological Journal* 10: 327–65
- Castagnoli, F. (1961) Review of Carettoni *et al.*, La pianta marmorea di Roma antica. *Gnomon* 33: 607–10.
- Catalano, P., P. Fortini and A. Nanni (2001) Area del Carcer-Tullianum. Nuove scoperte. In F. Filippi (ed.), *Archeologia e giubileo: gli interventi a Roma e nel Lazio nel Piano per il Grande Giubileo del 2000:* 192–6. Naples, Electa.
- Champlin, E. (2003) Agamemnon at Rome: Roman dynasts and Greek heroes. In D. Braund and C. Gill (eds), *Myth, History and Culture in Republican Rome: Studies in Honour of T.P. Wiseman*: 295–319. Exeter, University of Exeter Press.

- Cifani, G. (2013) Le Mure Serviane. In A. Carandini and P. Carafa (eds), *Atlante di Roma* 1: 81–4. Milan, Electa.
- Coarelli, F. (1968) La porta trionfale e la via dei trionfi. Dialoghi di Archeologia 2: 55-103.
- Coarelli, F. (1981) Topografia e storia. In I. Kajanto (ed.), *L'area sacra di Largo Argentina I*: 9–51. Rome, Studi e Materiali dei Musei e Monumenti di Roma.
- Coarelli, F. (1983) Il Foro Romano. Periodo arcaico. Rome, Edizioni Quasar.
- Coarelli, F. (1985) Il Foro Romano. Periodo repubblicano e augusteo. Rome, Edizioni Quasar.
- Coarelli, F. (1987) I santuari del Lazio in età repubblicana. Rome, La Nuova Italia Scientifica.
- Coarelli, F. (1988a) Il Sepolcro degli Scipioni a Roma. Rome, Fratelli Palomba Editori.
- Coarelli, F. (1988b) Il Foro Boario dalle origini alla fine della Repubblica. Rome, Edizioni Quasar.
- Coarelli, F. (1994) Moneta. Le officine della zecca di Roma tra Repubblica e Impero. *Annali dell'Istituto Italiano di Numismatica* 38–41: 23–66.
- Coarelli, F. (1997) Il Campo Marzio. Dalle origini alla fine della Repubblica. Rome, Edizioni Quasar.
- Coarelli, F. (2012) Palatium: il Palatino dalle origini all'impero. Rome, Edizioni Quasar.
- Coarelli, F. (2014) Collis: il Quirinale e il Viminale nell'antichità. Rome, Edizioni Quasar.
- Coleman, K.M. (1993) Launching into history: aquatic displays in the early Empire. Journal of Roman Studies 83: 48–74.
- Conticello de' Spagnolis, M. (1986) Nuove osservazioni sull'area del tempio dei Dioscuri in circo Flaminio. Bullettino della Commissione Archeologica Comunale di Roma 91: 91–6.
- Cornell, T.J. (1995) The Beginnings of Rome: Italy and Rome from the Bronze Age to the Punic Wars (c. 1000–264 BC). London/New York, Routledge.
- Corso, A. (1988) Plinio, Storia Naturale, 36. Turin, Giulio Einaudi editore.
- Cozza, L. and P.L. Tucci (2006) Navalia. Archeologia Classica 57: 175-201.
- Crawford, M. (1974) Roman Republican Coinage. Cambridge, Cambridge University Press.
- Crozzoli Aite, L. (1981) *I tre templi del Foro Olitorio*. Atti della Pontificia Accademia Romana di Archeologia: Memorie, 13. Vatican City.
- Dauster, M. (2003) Roman Republican sumptuary legislation, 182–102. In C. Deroux (ed.), *Studies in Latin Literature and Roman History*: 65–93. Brussels, Latomus.
- David, J.-M. (1983) Le tribunal dans la basilique: évolution fonctionelle et symbolique de la République à l'Empire. In Architecture et société: de l'archaïsme grec à la fin de la Républic romaine: actes du colloque international organisé par le Centre national de la recherche scientifique et l'École française de Rome (Rome 2–4 décembre 1980): 219–45. Rome, École Française de Rome.
- Davies, P.J.E. (2012a) On the introduction of stone architraves in Republican temples in Rome. In M. Thomas and G. Meyers (eds), Monumentality in Etruscan and Early Roman Architecture: Ideology and Innovation: 139–65. Austin, TX, University of Texas Press.
- Davies, P.J.E. (2012b) Pollution, propriety and urbanism in Republican Rome. In M. Bradley (ed.), *Pollution and Propriety: Dirt, Disease and Hygiene in Rome from Antiquity to Modernity*: 67–80. Cambridge, Cambridge University Press.
- Davies, P.J.E. (2013) The archaeology of mid-Republican Rome: the emergence of a Mediterranean capital. In J. DeRose Evans (ed.), *Blackwell Companion to Roman Republican Archaeology*: 440–58. Oxford, Blackwell Publishing.
- Davies, P.J.E. (2014) Rome and her neighbors: Greek building practices in Republican Rome. In R. B. Ulrich and C. Quenomeon (eds), *Blackwell Companion to Roman Architecture*: 27–44. Oxford, Wiley–Blackwell.
- Davies, P.J.E. (Forthcoming 2017) Architecture and Politics in Republican Rome. Cambridge, Cambridge University Press.
- De Kleijn, G. (2001) The Water Supply of Ancient Rome: City Area, Water, and Population. Amsterdam, Gieben.
- DeLaine, J. (2001) Bricks and mortar: exploring the economics of building techniques at Rome and Ostia. In D.J. Mattingly and J. Salmon (eds), *Economies beyond Agriculture in the Classical World*: 230–68. London, Routledge.

- Delbrück, R. (1907–12) Hellenistische Bauten in Latium. Strasbourg, K.J. Trübner.
- Delfino, A. (2008) Il foro di Cesare nella fase Cesariana e augustea. In C. Balsamo (ed.), Giulio Cesare: l'uomo, le imprese, il mito: 52-4. Milan, Silvana Editoriale.
- Delfino, A. (2014) Forum Iulium. L'area del Foro di Cesare alla luce delle campagne di scavo 2005–2008. Le fasi arcaica, repubblicana e cesariana-augustea. Oxford, Archaeopress.
- De Maria, S. (1988) *Gli archi onorari di Roma e dell'Italia romana*. Rome, L'Erma di Bretschneider. Di Giacomo, G. (2007) Il Carcer-Tullianum nel Foro Romano. *Forma Urbis* 12: 21–6.
- Dix, T.K. (1994) 'Public libraries' in Ancient Rome: ideology and reality. *Libraries and Culture* 29: 282–96.
- Donati, A. (2008) Cesare e il diritto. In G. Gentili (ed.), Giulio Cesare: l'uomo, le imprese, il mito: 38–41. Milan, Silvana Editoriali.
- Elkins, N. (2015) Monuments in Miniature: Architecture on Roman Coinage. New York, The American Numismatic Society.
- Erasmo, M. (2007) Pompey's self-representation at the gala opening of his theatre. Paper delivered at 'The Theater of Pompey: Staging the Self through Roman Architecture', University of Georgia, Athens.
- Erickson, B. and T. Lloyd-Jones (1997) Experiments with settlement aggregation models. *Experiments and Planning B: Planning and Design* 24: 903–28.
- Evans, H.B. (1994) Water Distribution in Ancient Rome: The Evidence of Frontinus. Ann Arbor, MI, University of Michigan Press.
- Fabretti, G. (1680) *De aquis et aquaeductibus veteris Romae*. Rome, Apud Natalem Barbiellini in Foro Pasquini.
- Fahlbusch, H. (1977) The development of the Pergamon water supply between 200 B.C. and 300 A.D. *Proceedings of the 17th Congress of the International Association of Hydraulic Research (IAHR):* 758–62. Baden-Baden, International Association of Hydraulic Research.
- Favro, D. (1998) The Urban Image of Augustan Rome. Cambridge, Cambridge University Press.
- Filippi, F., B. Porcari, H. Von Hesberg et al. (2015) Teatro di Pompeo. Nuove ricerche. In F. Filippi (ed.), Campo Marzio. Nuove ricerche. Atti del seminario di studi sul Campo Marzio: 323–68. Rome, Edizioni Quasar.
- Fiorani, G. (1968) Problemi architettonici del Foro di Cesare. Studi di Topografia Romana 5: 91–104.
  Forsythe, G. (1994) Review of Erich Gruen, Culture and National Identity in Republican Rome (1992). Bryn Mawr Classical Review 94.02.11.
- Forsythe, G. (2005) A Critical History of Early Rome. Berkeley, CA, University of California Press. Fortini, P. (1998) Carcer Tullianum. Il Carcere Mamertino al Foro Romano. Milan, Electa.
- Frank, T. (1924) Roman Buildings of the Republic: An Attempt to Date them from their Materials. Rome, American Academy in Rome.
- Freyberger, K.S. (2009) Das Forum Romanum. Spiegel des Stadtgeschichte des antiken Rom. Mainz am Rhein, Philipp von Zabern.
- Freyberger, K.S. and C. Ertel (2007) Neue Forschung zur Basilica Aemilia auf dem Forum Romanum. *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung* 113: 493–552.
- Frézouls, E. (1983) La construction du *theatrum lapideum* et son contexte politique. In *Théâtre et spectacles dans l'antiquité (Actes du colloque de Strasbourg 5–7 nov. 1981)*: 193–214. Leiden, E.J. Brill.
- Fuchs, G. (1956) Zur Baugeschichte der Basilica Aemilia in republikanischer Zeit. Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung 63: 14–25.
- Gagliardo, M.C. and J.E. Packer (2006) A new look at Pompey's Theater: history, documentation, and recent excavation. *American Journal of Archaeology* 110(1): 93–122.
- Galinsky, G.K. (1969) Aeneas, Sicily, and Rome. Princeton, NJ, Princeton University Press.
- Garbrecht, G. (1979) L'alimentation en eau de Pergame. Dossiers de l'Archéologie 38: 26-33.

- Garbrecht, G. (1987) Die Wasserversorgung des antiken Pergamon. In G. Garbrecht (ed.), *Die Wasserversorgung antiker Städte: Mensch und Wassr, Mitteleuropa, Thermen, Baumaterialen, Hygiene*, 2: 13–47. Mainz, Philipp von Zabern.
- Gast, K. (1965) Die zensorischen Bauberichte bei Livius und die römischen Bauinscriften Versuch eines Zugangs zu livianischen Quellen über Formen der Inscriftensprache. University of Göttingen, Ph.D. thesis.
- Gatti, G. (1888a) Scoperte recentissime. Bullettino della Commissione Archeologica Comunale di Roma: 330-1.
- Gatti, G. (1888b) Scoperte avvenute nella città e nel suburbio. *Notizie degli Scavi di Antichità* 8: 497–8.
- Gatti, G. (1934) Saepta Iulia e Porticus Aemilia nella Forma Severiana. *Bullettino della Commissione Archeologica Comunale di Roma* 62: 135–44.
- Gatti, G. (1936) L'arginatura del Tevere a Marmorata (un manoscritto inedito del P. Luigi M. Bruzza). Bullettino della Commissione Archeologica Comunale di Roma 64: 55–82.
- Gerkan, A. von (1958) Review of Lugli, La tecnica edilizia romana I, 1957. Göttingische Gelehrte Anzeiger 212: 178–97.
- Gianfrotta, P.A. (1985) Indagini nell'area della Porticus Philippi. Roma. Archeologia nel centro II: 376–84. Rome, De Luca Editore.
- Giuliani, C.F. (1970) Tibur. Pars prima. Forma Italiae, Regio I: 7. Rome, De Luca.
- Giuliani, C.F. (1998–9) Il linguaggio di una grande architettura: il santuario tiburtino di Ercole Vincitore. Atti della Pontificia Accademia romana di archeologia: Rendiconti 71: 53–110.
- Giuliani, C.F. (2004) Tivoli. Il santuario di Ercole Vincitore. Tivoli, Tiburis Artistica.
- Giustini, R. (1990) Porticus Metelli. Nuove acquisizioni. Bollettino di Archeologia 4: 71.
- Gleason, K.L. (1994) Porticus Pompeiana: a new perspective on the first public park of ancient Rome. *Journal of Garden History* 14: 13–27.
- Gorski, G.J. and J.E. Packer (2015) *The Roman Forum: A Reconstruction and Architectural Guide*. Cambridge, Cambridge University Press.
- Graillot, H. (1912) Le culte de Cybèle, mère des dieux, à Rome et dans l'Empire romain. Paris, Fontemoing et cie.
- Greenhalgh, P.A.L. (1981) *Pompey the Roman Alexander*. Columbia, MO, University of Missouri Press.
- Grimal, P. (1984) Les jardins romains à la fin de la république et aux deux premiers siècles de l'empire: Essai sur le naturalisme romain. Paris, E. de Boccard.
- Gros, P. (1973) Hermodoros et Vitruve. Mélanges de l'École Française de Rome. Antiquité 85: 137-61.
- Gros, P. (1976) Les premiers générations d'architectes hellénistiques à Rome. In A. Balland (ed.), L'Italie préromaine et la Rome républicaine. Mélanges offerts à Jacques Heurgon I: 387–410. Rome, Ecole française de Rome.
- Gros, P. (1979) Les statues de Syracuse et les 'dieux' de Tarente (la classe politique romaine devant l'art grec à la fin du IIIe siècle avant J.- C.). Revue des Etudes Latines 57: 85-114.
- Gros, P. (1994) Le schéma vitruvien du théâtre latin et sa signification dans le système normatif du De architectura. *Revue Archéologique* 1994: 57–80.
- Gros, P. (1996) L'architecture romaine: Du début du IIIe siècle av. J.-C. à la fin du Haut-Empire. Paris, Picard.
- Gruen, E.S. (1990) Studies in Greek Culture and Roman Policy. Leiden, E.J. Brill.
- Gruen, E.S. (1992) Culture and National Identity in Republican Rome. Ithaca, NY, Cornell University Press.
- Gullini, G. (1973) La datazione e l'inquadramento stilistico del santuario della Fortuna Primigenia a Palestrina. In H. Temporini (ed.), Aufstieg und Niedergang der römischen Welt: Geschichte und Kultur Roms im Spiegel der neueren Forschung 4.1: 746–99. Berlin, W. de Gruyter.
- Hobsbawm, E.J. (2005) Cities and insurrection. Global Urban Development 1(1): 1-8.

- Holland, L.A. (1961) Janus and the Bridge. Rome, American Academy in Rome.
- Humm, M. (1996) Appius Claudius Caecus et la construction de la via Appia. Mélanges de l'Ecole Française de Rome. Antiquité 108: 693–749.
- Humm, M. (2005) Appius Claudius Caecus: La République accomplie. Rome, École Française de Rome.
- Humphrey, J.H. (1986) Roman Circuses: Arenas for Chariot Racing. Berkeley, CA, University of California Press.
- Iezzi, E. (1984) Aedes Herculis Musarum et Porticus Philippi. *Bollettino della Storia dell' Arte* 27: 120–9. Ioppolo, G. (2001) *La moneta romana*. Milan, G.A. Bufalini.
- Keaveney, A. (2005) Sulla. The Last Republican. London/New York, Routledge.
- Kontokosta, A.H. (2013) Reconsidering the arches (fornices) of the Roman Republic. *Journal of Roman Archaeology* 26: 7–36.
- Kostof, S. (1991) The City Shaped: Urban Patterns and Meanings through History. London, Thames and Hudson.
- Kostof, S. (1992) The City Assembled: The Elements of Urban Form through History. London, Thames and Hudson.
- Kuttner, A.L. (1999) Culture and history at Pompey's Museum. *Transactions of the American Philological Association* 129: 360–73.
- Lagunes, M.M.S. (2004) Il Tevere e Roma: Storia di una simbiosi. Rome, Gangemi Editore.
- Lancaster, L.C. (2005) Concrete Vaulted Construction in Imperial Rome: Innovations in Context. Cambridge, Cambridge University Press.
- La Rocca, E. (1977) Cicli pittorici al sepolcro degli Scipioni. Roma Comune I Suppl. to No. 6–7: 14ff.
- La Rocca, E. (1990) Linguaggio artistico e ideologia politica a Roma in età repubblicana. In C. Ampolo, F. Cassola, F. Fabbrini et al. (eds), Roma e l'Italia: radices imperii: 289–498. Milan, Libri Schweiwiller.
- Latham, J.A. (2007) The Ritual Construction of Rome: Procession, Subjectivities, and the City from the Late Republic to Late Antiquity. University of California, Santa Barbara, Ph.D. thesis.
- Lauter, H. (1980-1) Porticus Metelli Porticus Octaviae. Die baulichen Resten. Bullettino della Commissione Archeologica Comunale di Roma 87: 37-46.
- Le Gall, J. (1939) Notes sur les prisons de Rome à l'époque républicaine. Mélanges de l'École Française de Rome 56: 60–80.
- Le Gall, J. (1953) Le Tibre, fleuve de Rome dans l'antiquité. Paris, Presses Universitaires de France.
   Linderski, J. (1986) The Augural Law. In H. Temporini (ed.), Aufstieg und Niedergang der römischen Welt: Geschichte und Kultur Roms im Spiegel der neueren Forschung II 16.3: 2146–312. Berlin, W. de Gruyter.
- Lintott, A. (1990) Electoral bribery in the Roman Republic. Journal of Roman Studies 80: 1-16.
- Liverani, P. (2008) Cesare urbanista: l'uomo, le imprese, il mito. In C. Balsamo (ed.), *Giulio Cesare:* l'uomo, le imprese, il mito: 42–59. Milan, Silvana Editoriale.
- Lott, J.B. (2004) *The Neighborhoods of Augustan Rome*. Cambridge, Cambridge University Press. Lugli, G. (1932) Il Carcere Mamertino. *Capitolium* 8: 232–44.
- Lugli, G. (1946) Roma antica. Il centro monumentale. Rome, G. Bardi.
- Lyngby, H. (1954) Beiträge zur Topographie des Forum Boarium Gebietes in Rom: Testominien nebst Kommentar unf kritischem Apparat. Lund, C.W.K. Gleerup.
- Lyngby, H. (1968) Ricerche sulla Porta Trigemina. Opuscula Romana 6: 76-8.
- MacDonald, W.L. (1982) The Architecture of the Roman Empire. Vol. 1: An Introductory Study. New Haven, CT, Yale University Press.
- MacDonald, W.L. (1988) The Architecture of the Roman Empire. Vol. 2: An Urban Appraisal. New Haven, CT, Yale University Press.
- Marabini Moevs, M.T. (1981) Le Muse di Ambracia. Bollettino d'Arte 66(12): 1-58.

Marcattili, F. (2009) Circo Massimo: architetture, funzioni, culti, ideologia. Rome, L'Erma di Bretschneider.

Martin, H.G. (1987) Römische Tempelkultbilder. Eine archäologische Untersuchung zur spät Republik. Rome, L'Erma di Bretschneider.

Martina, M. (1981) Aedes Herculis Musarum. Dialoghi di Archeologia 3: 49-68.

McDonnell, M. (2009) Roman Manliness: 'Virtus' and the Roman Republic. Cambridge, Cambridge University Press.

Meadows, A. and J. Williams (2001) Moneta and the monuments: coinage and politics in Republican Rome. *Journal of Roman Archaeology* 91: 27–49.

Meier, C. (1982) Caesar: A Biography. New York, Basic Books.

Miles, M.M. (2008) Art as Plunder: The Ancient Origins of Debate about Cultural Property. Cambridge, Cambridge University Press.

Mocchegiani Carpano, C. and R. Meneghini (1985) Lungotevere Testaccio. Bullettino della Commissione Archeologica Comunale di Roma 90: 86–95.

Mogetta, M. (2013) The Origins of Concrete in Rome and Pompeii. University of Michigan, Ph.D. thesis.

Mommsen, T. (1887) Römisches Staatsrecht II.1. Leipzig, S. Hirzel.

Monterroso Checa, A. (2006) Theatrum Pompei. Romula 5: 27-58.

Morgan, G. (1973) Villa Publica and Magna Mater. Klio 55: 214-45.

Nielsen, I. and B. Poulsen (eds) (1992) The Temple of Castor and Pollux I. Rome, Edizioni de Luca.

North, J.A. (1990) Family strategy and priesthood in the late Republic. In J. Andreau and H. Bruhns (eds), *Parenté et Stratégies Familiales dans l'Antiquité*: 527–43. Rome, École Française de Rome.

Olinder, B. (1974) Porticus Octavia in Circo Flaminio. Topographical Studies in the Campus Region of Rome. Lund, P. Åströms Förlag.

Orlin, E.M. (2010) Foreign Cults in Rome: Creating a Roman Empire. Oxford, Oxford University Press.

Owens, E.J. (1991) The City in the Greek and Roman World. London, Routledge.

Packer, J.E. (2006) Drawing Pompey: three centuries of documenting Pompey's Theater (1833–2007). In A. Leone, D. Palombi and S. Walker (eds), Res Bene Gestae. Ricerche di storia urbana su Roma antica in onore di Eva Margareta Steinby: 257–78. Rome, Quasar.

Packer, J.E. et al. (2007) Looking again at Pompey's Theater: the 2005 excavation season. American Journal of Archaeology 111: 505–22.

Panella, C. (ed.) (2013) Scavare nel centro di Roma. Storie uomini paesaggi. Rome, Edizioni Quasar. Parenti, M. (2003) The Assassination of Julius Caesar: A People's History of Rome. New York/London, The New Press.

Pensabene, P. and A. D'Alessio (2006) L'immaginario urbano. Spazio sacro sul Palatino tardo-repubblicano. In L. Haselberger and J. Humphrey (eds), *Imaging Ancient Rome. Documentation, Visualization, Imagination. Proceedings of the Third Williams Symposium on Classical Architecture Held at the American Academy in Rome, the British School at Rome and the Deutsches Archäologisches Institut, Rome, on May 20–23, 2004*: 30–50. Portsmouth, RI, Journal of Roman Archaeology.

Picozzi, M.G. and P. Santorio (1973) Le mure serviane. In R. Benedetto (ed.), Roma medio repubblicana: aspetti culturali di Roma e del Lazio nei secoli IV e III a. C.: 7–31. Rome, Assessorato Antichità. Belle Arti e Problemi nella Cultura.

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

Pollitt, J.J. (1986) Art in the Hellenistic Age. Cambridge, Cambridge University Press.

Rakob, F. and E.D. Heilmeyer (1973) Der Rundtempel am Tiber in Rom. Mainz, Philipp von Zabern.
 Rankov, B. (2013) Roman shipsheds. In D. Blackman and B. Rankov (eds), Shipsheds of the Ancient Mediterranean: 30–54. Cambridge, Cambridge University Press.

- Rawson, E. (1974) Religion and politics in the late second century B.C. at Rome. *Phoenix* 28: 193–212. Ricci, C. (1933) Il Foro di Cesare. *Capitolium* 8: 157–72, 365–30.
- Richardson, L. Jr (1977) Hercules Musarum and the Porticus Philippi in Rome. *American Journal of Archaeology* 81: 355–61.
- Richardson, L. Jr (1991) Urban development in ancient Rome and the impact of empire. In J. Emlen, A. Mohlo and K.A. Raablauf (eds), *City States in Classical Antiquity and Medieval Italy. Athens and Rome*, *Florence and Venice*: 381–402. Ann Arbor, MI, University of Michigan Press.
- Riggsby, A. M. (1997) 'Public' and 'Private' in Roman Culture. *Journal of Roman Archaeology* 10: 36–56.
- Robinson, O.F. (1992) Ancient Rome: City Planning and Administration London, Routledge.
- Rodríguez Almeida, E. (1981) Forma urbis marmorea. Aggiornamento generale. Rome, Edizioni Ouasar.
- Rodríguez Almeida, E. (1984) *Il monte Testaccio: ambiente, storia, materiali*. Rome, Edizioni Quasar. Roller, L.E. (1999) *In Search of God the Mother: The Cult of Anatolian Cybele*. Berkeley, CA, University of California Press.
- Rumpf, A. (1950) Die Entstehung des römischen Theaters. Mitteilungen des Deutschen Archäologischen Instituts 3: 40–50.
- Rüpke, J. (2008) Fasti Sacerdotum. A Prosopography of Pagan, Jewish, and Christian Religious Officials in the City of Rome, 300 BC to AD 499. Oxford, Oxford University Press.
- Rüpke, J. (2011) The Roman Calendar from Numa to Constantine: Time, History, and the Fasti. Oxford, Wiley-Blackwell.
- Russell, A. (2016) The Politics of Public Space in Republican Rome. Cambridge, Cambridge University Press.
- Såflund, G. (1932) *Le mura di Roma reppublicana*. Rome, Skrifter utgivna av Svenska Institutet i Rom (Acta Instituti Romani Regni Sueciae).
- Sappa, M. and G. Sappa (1999) Sulla situazione fondale del Tabularium sul Colle Capitolino. *Geologia e Geotecnica Ambientale* 98: 199–208.
- Scobie, A. (1986) Slums, sanitation, and mortality in the Roman world. Klio 68: 399-433.
- Seager, R. (1979, 2002) Pompey the Great: A Political Biography. Oxford, Blackwell Publishing.
- Sear, F.B. (2006) Roman Theatres: An Architectural Study. Oxford, Oxford University Press.
- Serafin, P. (2001) Dove erano le zecche di Roma repubblicana? In I luoghi della moneta; le sedi delle zecche dall'antichità all'età moderna: atti del convegno internazionale, 22–23 ottobre 1999, Milano: 29–40. Milan, Commune di Roma.
- Serafini, C. (1943–5) Tesoretto di monete d'età repubblicana rinvenuto al Campidoglio. *Bullettino della Commissione Archeologica Comunale di Roma* 14: 109–12.
- Sommella, A.M. (1984) L'esplorazione archeologica per il restauro del Tabularium. *Archeologia Laziale* 6: 159–63.
- Sordi, M. (1988) La decadenza della Repubblica e il teatro del 154 a.C. *Invigilata Iucernis* 10: 327–41.
- Soyoz, U. (2010) Drama on the Urban Stage: Architecture, Spectacles and Power in Hellenistic Pergamon. University of Texas at Austin, Ph.D. thesis.
- Staccioli, R.A. (2003) The Roads of the Romans. Los Angeles, J. Paul Getty Museum.
- Stamper, J.W. (2005) *The Architecture of Roman Temples: The Republic to the Middle Empire*. Cambridge, Cambridge University Press.
- Steinby, E.M. (2012) Edilizia pubblica e potere politico nella Roma repubblicana. Rome, Jaca Book. Strong, D.E. and J.B. Ward-Perkins (1960) The Round Temple in the Forum Boarium. Papers of the British School at Rome 28: 7–30.
- Talamo, E. (2008) La fronte depinta del sepolcro degli Scipioni. In E. La Rocca and S. Tortorella (eds), *Trionfi romani*: 119. Rome, Electa.
- Taylor, L.R. (1960) *The Voting Districts of the Roman Republic* (Papers and Monographs of the American Academy at Rome 20). Rome, The American Academy at Rome.

- Taylor, L.R. (1962) Forerunners of the Gracchi. Journal of Roman Studies 52: 19-27.
- Thein, A.G. (2002) Sulla's Public Image and the Politics of Civic Renewal. University of Pennsylvania, Ph.D. thesis.
- Thomsen, R. (1941) Studien über den ursprünglichen Bau des Caesarforums. Opuscula Romana 5: 195–218.
- Tibiletti, G. (1972) Problemi gromatici e storici. Rivista Storica dell'Antichità 2: 87-92.
- Tomlinson, R.A. (1992) From Mycenae to Constantinople: The Evolution of the Ancient City. London, Routledge.
- Torelli, M. (2007) L'urbanistica di Roma regia e repubblicana. In P. Gros and M. Torelli (eds), *Storia dell'urbanistica. Il mondo romano* 4: 81–157. Rome/Bari, Editori Laterza.
- Tucci, P.L. (2005) 'Where high Moneta leads her steps sublime.' The 'Tabularium' and the Temple of Juno Moneta. *Journal of Roman Archaeology* 18: 6–33.
- Tucci, P.L. (2012) La controversa storia della 'porticus Aemilia'. *Archeologia Classica* 63: 575–91.
- Tuck, S.L. (2000) A new identification for the 'Porticus Aemilia'. *Journal of Roman Archaeology* 13: 175–82.
- Valadier, G. (1813) Tempio detto di Vesta in Roma. Raccolta della più insigni fabbriche di Roma antica 3. Rome, dai torchi di Mariano de Romanis e figli.
- Valentini, R. and G. Zucchetti (1940) Codice Topografi co della città di Roma. Rome, Fonti per la Storia d'Italia, Istituto Storico Italiano per il Medio Evo.
- Van Deman, E.B. (1934) The Building of the Roman Aqueducts. Washington DC, Carnegie Institute.
- Veyne, P. (1990) Bread and Circuses: Historical Sociology and Political Pluralism. London, The Penguin Press.
- Viscogliosi, A. (1996) Il Tempio di Apollo in Circo e la formazione del linguaggio architettonico augusteo. Rome, L'Erma di Bretschneider.
- Von Hesberg, H. (1999) The king on stage. In B. Bergmann and C. Kondoleon (eds), The Art of Ancient Spectacle: 65–75. New Haven, CT, Yale University Press.
- Wallace-Hadrill, A. (1998) Horti and Hellenization. In M. Cima and E. La Rocca (eds), *Horti romani: atti del convegno internazionale: Roma*, 4–6 maggio 1995: 1–12. Rome, L'Erma di Bretschneider.
- Wallace-Hadrill, A. (2008) Rome's Cultural Revolution. Cambridge, Cambridge University Press.
- Welch, K.E. (2003) A new view of the origins of the Basilica: the Atrium Regium, Graecostasis, and Roman diplomacy. *Journal of Roman Archaeology* 16: 5–34.
- Westall, R. (1996) The Forum Iulium as representation of Imperator Caesar. Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung 103: 83–118.
- Winter, F.E. (2006) Studies in Hellenistic Architecture. Toronto, University of Toronto Press.
- Wiseman, T.P. (1993) Rome and the resplendent Aemilii. In H.D. Jocelyn and H. Hunt (eds), *Tria Lustra: Essays and Notes Presented to John Pinsent*: 181–92. Liverpool, Liverpool Classical Monthly.
- Zanker, P. (1988) The Power of Images in Augustan Rome. Ann Arbor, MI, University of Michigan Press.
- Zevi, F. (1976) L'identificazione del tempio di Marte 'in circo' e altre osservazioni. In A. Balland (ed.), L'Italie préromaine et la Rome républicaine. Mélanges offerts à Jacques Heurgon II: 1047–64. Rome, École Française de Rome.
- Ziolkowski, A. (1988) Mummius' Temple of Hercules Victor and the Round Temple on the Tiber. *Phoenix* 42: 309–33.
- Ziolkowski, A. (1992) The Temples of Mid-Republican Rome and their Historical and Topographical Context. Rome, L'Erma di Bretschneider.