THE BUILDING BLOCKS OF EMPIRE: CIVIC ARCHITECTURE, CENTRAL ITALY, AND THE ROMAN MIDDLE REPUBLIC

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ABSTRACT

JEFFREY ALAN BECKER: The Building Blocks of Empire: Civic Architecture, Central Italy, and The Roman Middle Republic
(Under the direction of Nicola Terrenato)

The built, urban context of the city served as the dominant mechanism by which Rome’s hegemony expanded during the Republican period. As Rome’s political and territorial influence grew, encompassing first Italy and, later, the Mediterranean basin, the physical and institutional aspects of urban contexts developed along similar lines so that by the first century AD many Roman architectural forms and institutions had reached a point of canonization. These uniform Imperial cities and towns are well known to both ancient and modern observers and they predominate in scholarly reconstructions of Roman civilization. Less studied, however, are the origins of Roman urbanism and civic architecture that grew out of Italic traditions of the archaic period and developed more fully during the middle Republic. During this seminal period the Romans both established new cities and towns in Italy and reorganized other, pre-existing sites. While some theorists propose a centrally controlled approach to urban foundation, the archaeological evidence runs contrary, suggesting instead that indigenous influence played an important and abiding role in the construction, both physical and theoretical, of Roman urban systems in Italy. By studying the architecture of civic spaces, as well as the architecture and infrastructure that defined communities (including fortification walls and road networks), it is possible to identify and trace numerous important trends in Republican urbanism that have been heretofore overlooked. These trends suggest that the role of the city in Roman expansion was a nuanced
one, rather than a static construct imposed by military domination. The move toward urban settlements was not restricted to those connected with Rome, but was a widespread phenomenon with numerous participants. In viewing the cities and the influences working on them from a local and regional point of view it is possible to arrive at a new understanding of the role of the city in the Roman expansion, a role that is made no less vital by the participation of indigenous cultures and the perpetuation of local architectural traditions.
DEDICATION

PARENTIBUS OPTIMIS UXORIQUE CARISSIMAE
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<tr>
<td>AJAH</td>
<td><em>American Journal of Ancient History</em></td>
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<td>AJP</td>
<td><em>American Journal of Philology</em></td>
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<td>AntCl</td>
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<td>BABesch</td>
<td><em>Bulletin Antieke Beschaving</em></td>
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<td>BollArch</td>
<td><em>Bollettino di Archeologia</em></td>
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<td>CIL</td>
<td><em>Corpus Inscriptionum Latinarum</em></td>
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<td><em>Classical Journal</em></td>
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<td>CMGr</td>
<td><em>Convegni di Studi sulla Magna Grecia – Atti</em></td>
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<td>CQ</td>
<td><em>Classical Quarterly</em></td>
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<td>G&amp;R</td>
<td><em>Greece &amp; Rome</em></td>
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<td>JHS</td>
<td><em>Journal of Hellenic Studies</em></td>
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<td>JRA</td>
<td><em>Journal of Roman Archaeology</em></td>
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<td>OpRom</td>
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<td>PP</td>
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<td>RA</td>
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<td>ScAnt</td>
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CHAPTER ONE: INTRODUCTION

Standing *in comitio*, gazing up at the Curia Iulia in Rome affords one the opportunity for a startling realization, namely that the Romans hammered together a vast empire having started out from a rather humble place and setting. Within the empire itself one still may encounter the physical remains of the Roman administration, as many *fora* were built in far-flung places from Britain to Arabia, Romania to Tunisia. In these civic spaces were the edifices that embodied the Roman system of government and, in effect, the authority of the state. In exporting their urban nuclei, the Romans were more successful than almost any culture that had come before them in the history of the Mediterranean world and their developed urban systems were the result of both myriad influences and innovation.

Before there was much of a Roman empire, there was the city-state of Rome and a multitude of other city-states in Central Italy that could be categorized according to various cultural categories. These city-states had their own catchment area and, in some cases, signed pacts and treaties to band together for one cause or another, although their basic defining characteristic was independence. As Rome grew in influence and in size the landscape changed as well, absorbing the changes Rome brought about and, ultimately, reflecting a new political geography. This dissertation examines the two very important, and interrelated, topics of civic architecture and urbanism during the time of the middle Republican period. This period stands as one of the most crucial in the whole of Roman history, for it was at this time that the city of Rome began to expand in a significant way and
to engage in urbanization as a manifestation of that expansion. The middle Republic also was tremendously significant for Rome’s political and military growth, both of which stand as a backdrop to the development of cities in Italy. The cultural and political significance of the middle Republic would seem to indicate that a more comprehensive examination of its architecture is needed, as is further elucidation of the role played by urbanism in the conquest of Italy. Examined together, these two categories of evidence promise to reveal new perspectives on this important period, and to challenge accepted viewpoints about the nature of the city in Republican Italy.

**Issues and Objectives**

As with any subject, the architecture and urbanism of middle Republican Italy has been addressed by many scholars, although in the latter half of the twentieth century the approaches to this topic have tended to focus on the compilation of compendious catalogues, regional surveys or on micro-studies of individual (and often highly anomalous) sites. Most of the previous scholarship that has treated issues of middle Republican civic architecture and urbanism has either added to the consternation and confusion inherent in the interpretation of this period, or has dealt only a glancing blow rather than confront the issues

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1 While many scholars have studied the sites that will be discussed in the following chapters, for the most part the majority of work undertaken on middle Republican archaeology has been anomalous in one way or another, with the most common complaint being that sites are analyzed as if in a vacuum, with detailed local investigations but little contextualization. Likewise, some sites are only studied in light of a specific evidentiary class (e.g. architectural terracottas or votives). These studies result in a high level of available detail for specific questions, but less in the way of broad frameworks that can be used to relate a site in Latium, for example, to one in Etruria or Umbria. In Latium some of the most in-depth studies have been those of the Dutch at Satricum (and in the Pontine region) and Lugli’s detailed work for the *Forma Italiae* and his corpus of building techniques. In south Etruria we have the American excavations at Cosa that have produced highly irregular and incomplete reports; for Umbria there is the excellent work of the Belgians at Alba Fucens. But even the latter reports do little to situate the sites in a broader context, something that is extremely important for the middle Republic, a time when so many changes and developments were afoot. The work of L. Quilici and S. Quilici Gigli has done more than any other single corpus to advance our understanding of Republican sites in central Italy, but here again the highly detailed studies are localized in nature and often without in-depth conclusions or contextualization.
head-on. There are several central issues that, once explicated, will be useful to the present study as it attempts to re-frame our understanding of the archaeology of this period.

**Issues**

As the material presented in this thesis will address several key issues in the archaeology of Republican Italy, it will be useful to set out, in brief, the most central problems to be addressed. One of the primary areas of consideration for a study of urbanism in this period is the fact that the Roman political process is, at least in part, defined by permanent architecture. Even though the political process had to accommodate various elite prerogatives and goals, all the same it stood as an analogy for Rome itself and, as such, the architecture of that political process has often been used to gauge the degree to which the communities of Italy had been Romanized. Political architecture, particularly the forum and its *Curia-Comitium* complex, tends to conjure views of egalitarian and representative governance, even if this perception does not conform to historical reality.

A second problematic area is the correspondence, if any, between foundation dates reported by the ancient textual sources and the emergence of identifiable archaeological evidence of these communities. One predominate assumption that complicates a consideration of the middle Republic from an archaeological point of view is the often held belief that the reported dates of city foundation found in ancient texts are accurate. Ancient codification of the reported facts has only encouraged these modern scholastic beliefs, as evidenced by an inscription from Ostia that specifically cites the role of Rome’s fourth king, Ancus Marcius (r. 640-614 BC), in the foundation of the *colonia* in the late seventh century.
As the case of Ostia demonstrates, for the ancients the accuracy or reality of history may not have been as much of a concern as the accuracy of recorded history has become in the modern period, since source materials in antiquity were scanty or nonexistent. In any case, the scholarly inclination to treat written sources as authoritative has done little to clarify actual chronologies; and certainly in the case of Republican urbanism it has only further complicated the situation. When one turns to archaeology, it emerges that the earliest datable archaeology places the foundation trench of the castrum wall at Ostia in the second quarter of the fourth century BC, long after Ancus Marcius’ reign. In many cases it is difficult to extricate one evidentiary group from the other, but chapter three will, to the extent possible, present a clear account of what civic foundations and architecture can be related to the middle Republic.

Coupled with the problems associated with textual interpretation is the relative scarcity of other evidence that would aid further in a reading of the middle Republic. The period has been deemed, by at least some scholars, a time of crisis and decline because of the acute shortage of identifiable buildings and building activity in the archaeological record. This decline may have been precipitated by the “crisis” of the fifth century BC and by the instability created by the movement of Gallic tribes in Western Europe or it was simply a

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2 An inscription from Ostia (Ostia Museo inv. no. 8310) records Ancus Marcius as its founder, as do ancient authors like Ennius (Ann. 144-5). Serious historical questions remain about the potential of a Roman presence at Ostia during the seventh century BC, some of which have been addressed excellently by Camous 2004.

3 Zevi 2001, 12.

4 Following the definition established by Ziolkowski, the middle Republic is here conceived of as the years between 396 and 219 BC. Ziolkowski 1992, 8-9.

5 An interesting example is provided by Coarelli’s 1977 article that studies construction in Republican Rome on the basis of the ancient texts, especially Livy’s history.
 symptom of socio-economic malaise. Yet in spite of this, authors like Livy record what may be reliable dates for the foundations of numerous temples in Rome and we also have evidence for massive Roman infrastructure projects in Central Italy toward the end of the fourth century BC, including the Aqua Appia, the Anio Vetus, and the Via Appia. It was the scope of these fourth century building programs that helped to establish firmly Rome’s identity in Italy, a circumstance reflected in the political arrangements like the Latin League. This coalescence of identity, along with an attendant power base, would prove important in the third century when Rome faced extended wars against Carthage and the Samnites. It is important to note the vital role played in third century politics by Italian cities loyal to Rome, many of them originally constituted as coloniae.

The preponderance of colonial foundations has led to the often-held perception that Rome had the market cornered on urbanism in Italy, a notion based most often on Romano-centric readings of the evidence. Since the middle Republic was a time of widespread urbanization in Central Italy, numerous scholars have connected the bulk (if not the entirety) of middle Republican urbanism directly to Roman imperialism, with both aggressive and defensive theories proposed as motives for urban foundations. Yet the evidence assembled in the present study will demonstrate that indigenous traditions played a significant role in the urbanization of Italy during the middle Republic, thus calling into question the role of the Romans in the establishment of cities and the motives that may have driven this process.

A crucial problem that pertains to this point concerns the establishment of a reasonable working definition of ‘Roman’ architecture. Prevailing scholarly conceptions of such a definition are founded, for the most part, upon the architecture of Imperial Rome, but

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7 Ziolkowski 1992; Coarelli 1977.
when did this vernacular come about? If we look to archaic Rome we find a city (and
hinterland) defined, in part, by monumental architecture. Structures such as the temple of
Iuppiter Optimus Maximus on the Capitoline Hill, the Cloaca Maxima and Sacra Via, along
with evidence for a regal palace on the Palatine slope and the suburban Auditorium villa,
clearly demonstrate a complex and stratified society with developed institutions and
hierarchy. But in spite of the monumentality of these projects, can the architectural features
represented by them be defined as “Roman” or is it the scale that is “Roman”, or perhaps all
are simply indicative of the contemporary Italic vernacular for public architecture?

Since Livy reports that the influence of the Tarquins was instrumental in the
implementation of these projects, it seems that in the archaic period, non-Roman perspectives
defined architecture at Rome, especially monumental forms, to a large extent.\footnote{Livy 1.34-41. The discussion of the so-called “La Grande Roma dei Tarquini” remains controversial, as do the implication of Etruscan domination at Rome during the regal period. What is clear from the material record is that the evidence from Rome, both in terms of art and architecture, puts the city on par with the leading, contemporary Etruscan centers, regardless of events in the political sphere. The implications of such peer polity parity are clearly significant in considering the trajectory of Roman urbanism. See Cristofani 1990.} Moving beyond Livy’s account, we find parallels in the archaeological record for what is happening
at Rome. The construction of temples, particularly the massive Capitoline temple and the
archaic temples of the Forum Boarium, drew on the Italic tradition of the Tuscan type, such
that architectural comparanda for Rome’s archaic temples may be found at Etruscan sites like
Veii, Caere, and Tarquinii. In the case of these monumental, poliadic shrines it seems clear
that the Romans are participants in an architectural lingua franca that is common to Latium
and Etruria; our knowledge of Roman ritual, strongly influenced by the Etrusca disciplina,
substantiates this archaeology, as does the famous mention of the Etruscan artist Vulca being
hired to craft the cult image for the Capitolium.\footnote{Plin. \textit{HN} 35.157.} Since public cults and their rituals were
central to the state and its identity, it is of no small consequence that what was being built and practiced at Rome was in keeping with Italic traditions. This notion of Italic commonality is even reflected in Livy’s history wherein he describes the people of Romulus as a random assortment of men, a topic recently and convincingly addressed by Emma Dench.\textsuperscript{10} Rome as a melting-pot community of refugees complicates further any attempt to define this notion of Romanitas in the early period, but perhaps it is the commonalities that Rome shares with other Italic groups that helps to define, in an internal sense, the community’s identity.

This commonality in architectural terms extends to other areas as well. The engineering feat of the \textit{Cloaca Maxima} can be placed in the same category as Etruscan \textit{cuniculi} (those in the territory of Veii, for example).\textsuperscript{11} These projects show an awareness of (and ability to) construct hydraulic systems to serve public and/or sacred needs. Similarities may be drawn between elite architecture situated in Rome’s hinterland (e.g. the Auditorium and Grottarossa villas) and other large-scale archaic structures at Poggio Civitate (Murlo) and Acquarossa, especially in terms of built surface.\textsuperscript{12} These dwellings suggest that elite Romans in the early period shared a lifestyle similar to elite Etruscans. Another category that should be mentioned briefly, although it is extremely contentious, is that of private architecture. The fieldwork of Andrea Carandini and his team on the north slope of the Palatine Hill has uncovered a great deal of material evidence for early Rome, including structures that relate to the earliest phases of the city on the Palatine. Some of the architectural remains on the north

\begin{footnotes}
\item \textsuperscript{10} Livy 1.8; Dench 2005.

\item \textsuperscript{11} Judson and Kahane 1963.

\item \textsuperscript{12} On the Auditorium site, see Carandini 1997, Carandini, \textit{et al.} 2006, and Terenato 2001; for Grottarossa, see Becker 2006. On the Etruscan structures at Acquarossa, see Stopponi 1985 and Ostenberg 1975.
\end{footnotes}
slope have been interpreted by Carandini as four large atrium houses dating to the archaic period\textsuperscript{13} as well as a structure Carandini has labeled “Domus Regia” or “Casa di Numa”.\textsuperscript{14} The interpretation of these architectural remains is, in part, highly imaginative, especially when the reconstructed plan is compared to the state plan. While these interpretations continue to be debated, new and as yet unpublished data from the excavations of Clementina Panella at the northeast corner of the Palatine is indicative of at least one impluviate atrium house with phases stretching from the late Archaic to the Augustan period, with an impluvium present by the middle Republic at the latest.\textsuperscript{15} As exceptional as these finds are, can they be used to set Rome apart architecturally and culturally from other contemporary Italic cities? At this point the answer is that such a distinction cannot be drawn on these grounds. Given that the major Etruscan cities remain largely unexcavated, it is difficult to fashion a general reconstructed view of a major Etruscan center contemporary to middle Republican Rome. From tombs and some urban contexts (e.g. Marzabotto and Rusellae) archaeologists have gained some insight into Etruscan private architecture and town planning, but the picture remains far from clear.\textsuperscript{16} While private architecture will not be explored here, having an awareness of these remains will prove significant once a full discussion of civic architecture has taken place.

\textsuperscript{13} Carandini and Carafa 1995.

\textsuperscript{14} Carandini 2006.

\textsuperscript{15} Panella’s current excavation is a continuation of fieldwork that began at the Meta Sudans in 1986. While the material from the northeast corner of the Palatine has yet to be published in a scholarly venue, the discovery of the domus, along with some late Imperial insignia, was announced to the popular press in summer 2006 (see, e.g. “Lo scettro dell’Imperatore torna all’luce sul Palatino. Eccezionale scoperta sul colle dove nacque Rome” in Corriere della Sera 22 June 2006). The first scholarly paper on the domus is forthcoming: V. Carbonara “Domus et tabernae lungo la via verso il Foro,” in Scienze dell’Antichità 12.

\textsuperscript{16} See Donati 1994 on the Casa dell’Impluvium at Rusellae.
On the basis of architectural morphology and building materials and techniques it is difficult to define architecture at Rome as distinct from other Italic forms early on, although in terms of aspect and dimension, construction at Rome seems to trend higher than at other sites. The distinction that may be drawn with regard to Rome, at least by the fourth century BC, is the evident political process and an interest in expansion. After defeating Veii and rebounding from the Gallic sack, Rome becomes intent on territorial expansion, something that the independently minded Etruscan city-states had never attempted widely. It is here that many scholars have established a firm link between the Roman political practice centered on curiae and the beginnings of a definition of “Roman” architecture.\(^{17}\) Since Roman hegemony was expanding in the fourth century, so, too, must have duplicate copies of Roman civic buildings, namely the curia-comitium, or so some scholars have argued. This conclusion proves to be somewhat circular, however, since our knowledge of these structures in contemporary Rome is vague at best.\(^{18}\) Many twentieth century theorists found the notion of a colonial foundation as a replica of the parent city appealing, but as this thesis will demonstrate, the archaeological evidence does not substantiate this notion for the middle Republic – precisely when the majority of these cities in Central Italy were allegedly founded. It also should be noted that modern imperialist constructs heavily influenced many of the twentieth century’s foremost scholars of ancient urbanism and that as scholarship begins to disentangle itself from this dogmatic approach, the evidence often is in need of fresh consideration.

Further complicating this issue is the question of Hellenization and the degree to which advances in Republican architecture at Rome were the result of Hellenic influence.

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\(^{17}\) Smith 2006.

\(^{18}\) Fentress 2000.
Many scholars, most encumbered by the baggage of early academic constructs of the superiority of Greek aesthetics, believe wholeheartedly that any significant advance in Italic architecture was the direct result of contact with the Greeks, either from the Aegean or Magna Graecia. While the argument for Greek influence in art forms may well hold up to scrutiny, the same cannot necessarily hold true for architectural morphology during the fifth through third centuries BC. Just as one cannot overlook (or underestimate) the possibility of influence exerted on Central Italy by the Greek world, at the same time the increasing complexity of Roman civilization as one moves toward 150 BC cannot be ascribed simply to increased contact with the Greek East, because wider, profound currents of change were sweeping the Mediterranean. In short, the catalyst for change was multifaceted and any unilateral explanation denies the true complexity of the climate of the period.

As Torelli demonstrates, the monumentalization of many Italian cities was a phenomenon of the later second century BC, when Roman concrete was fully developed in technical terms, resulting in opus incertum becoming a widespread masonry technique. It was precisely in this period, continuing through to the time of Sulla, that the forms commonly conceived as “Roman” architecture were invented. If that is the case, what were the antecedents, and how can they be seen as distinct from the “Roman” architecture of the first century BC? The dividing line is difficult to detect, but when post-Sullan architecture is set against the Italic background of the Republican period (and the preceding archaic and orientalizing periods), clear differences emerge. These differences are substantial from a macroscopic point of view, and while they have some implications for a discussion of the development of architectural forms, they have colossal importance for a discussion of architecture as it relates to culture and the Roman expansion. What is evident is that across
Central Italy, especially Etruria, Latium, and Umbria, there exists a generic, Italic architecture, at least from the sixth century BC onwards, that transcends the boundaries of culture.

As we will see in chapter four, the case of polygonal masonry fortification walls bolsters this notion of common, Italic traditions in architecture. The Romans were clearly innovators, adopting techniques from other groups and improving upon them, but for much of the Republican period they are simply participants in (and practitioners of) broader Italic trends. A multitude of factors might explain this, however one clear issue is the changing role (and conception) of cities between the time of Tarquinius Superbus’ expulsion from Rome and the time when Octavian consolidated his power. Leaders at both ends of the latter chronological spectrum used the city as a palette with which to create, define, and display their political power and influence. My contention is that during the period that falls between these two extremes, the city served different roles, especially when the ambitions of individual aristocrats and families were directed in different ways. Considering the city in this way allows for an exploration of the trajectory of architectural development, with a particular interest in determining when (or if) “Roman” architecture can be separated from the background of Italic building morphology. Such an inquiry also allows for an examination of the institutionalization of Roman culture through architectural means.

Aims and methodology

The present study came about initially as a result of an interest in determining more precisely what defined the architecture of early and middle Republican Rome, growing out of earlier work that has focused on villa architecture in Rome’s hinterland.\(^1\) It soon became

\(^1\) Becker 2002; Becker 2005; Becker 2006.
obvious that in many cases the archaeology of the middle Republic is poorly understood and little explored, thus it seemed worthwhile to explore not only the situation at Rome but also within the sphere of Rome’s influence during the same period. It was during this time that Rome’s own hegemony was growing, with roads and aqueducts and city foundations extending Roman influence further and further from the middle Tiber valley. This area – comprising much of Latium and parts of Campania, Etruria, and Umbria – became the core of the study, as it was in this region that Rome’s networks first began to develop. Happily there are also a great many urbanized sites within these key zones, all of them city-states by ca. 400 BC and all fully integrated into the Roman system by 150 BC. In effect this geography represents the core of Italy’s urban system and proved a logical place to seek answers to questions about the nature of Roman urbanism and architecture. From the testimony provided by ancient authors we know that Rome’s armies were active across the Italian peninsula, but it is the activities connected to city foundation, road building, and similar categories of work that were centered in this core area. This is not to say that every site in these areas will be treated here, as their number would make this impossible. Rather, sites that are significant on account of their size, political history or particular geographic position have been chosen to serve as representatives of sites that have not been included; given that a range of sites in various size categories has been included, the overall sample is representative, to the extent possible, of all sites active during the study period.

As some scholars have approached these sites, many of which were defined politically, the reported foundation date would be connected with the visible remains of civic buildings. Further, it was often assumed that Roman-style architecture would be present at the site that would be contemporary (or nearly so) with the foundation date. Given that such
claims hold significant importance for the nature of the settlements (and the method of Roman expansion), a determination needs to be made about which structures can be securely dated to the middle Republic. One clear group of structures datable to this time period are sanctuaries and temples, but they do not represent a primary evidentiary category here because of the fact that they have been studied effectively and extensively by numerous scholars in recent years.\footnote{Coarelli 1987; Ziolkowski 1992; Cifarelli 2003, \textit{et al.}} As much as the religious buildings are well studied, the category of civic buildings and infrastructure is equally under studied.\footnote{The category of “civic architecture” denotes architectural forms that relate to urban administration, fortification and infrastructure, thus excluding strictly private architecture, as well as sacred structures.} Included in this category are fortification walls, a feature present at many of these sites, as chapter four explores in detail. But it is important to note that while these walls represent a major category of evidence, this study is not simply a consideration of middle Republican fortification walls. Rather it is a study that aims to assemble the evidence assignable on archaeological grounds to the middle Republic and, on that basis, to assess the picture of Roman urbanism in Central Italy. This collection and analysis promises to reveal new trends that carry with them considerable implications for how scholars discuss Roman imperialism and the spread of Roman culture in Italy during the Republic, as well as for a discussion of what, exactly, Roman culture might have been like during this time period.

\textbf{Prolegomena to the study of Roman civic architecture}

One theme that unites the myriad of approaches to architecture in the Roman world is a relentless focus on function as the crucial means by which form is determined and, as a result, identified in the archaeological record. Rome commonly is conceived of as a society filled with institutions, with each requiring its own particular sort of structure for its...
activities. Senates and councils required suitable meeting halls, priests suitable sanctuaries, attorneys suitable tribunals, merchants suitable basilicae and macella. Ordinary citizens who had no such requirements were contented to glory in the awesome aspects of public monuments and trophies, and to rest in the shade of the tall buildings of the forum square. Of course this is a gross oversimplification of Roman society, but it serves to illustrate some of the perils that plague this approach, not least of which is the fact that many who study Roman architecture focus on the Imperial period, based on the overwhelming preponderance of massive evidentiary bodies. This then leads scholars to insert the Republic into the matrix built on the basis of Imperial architecture, with the result that the fit is often an uncomfortable one.

In Cato’s treatises, among the earliest extant examples of Latin prose, the world characterized differed greatly from that of Livy’s day or, indeed, Juvenal’s. While Cato has his own agenda – to position himself among the leading men of Rome while remaining conscious of his status as a homo novus – the glimpses of the Golden Age he construes are revelatory.22 This world of the past, for Cato, is one in which Romans were content with humble statues made of wood, rather than opulent ones of Greek marble, at a time before the luxury of Greek cities like Syracuse began to pollute the Roman psyche.23 Cato’s constructed world is one in which even powerful senators would have the grime of fieldwork wedged beneath their fingernails. How faithful are these images and to this point how much farm work did Cato himself actually do? While it is impossible to state with certainty, the chances are good that Cato’s world is a useful, if literary, construct, informed by tradition. Other than farm buildings, Cato tells us little of architecture, but one wonders what sort of buildings the

22 Reay 2005.
23 Livy 34.4.
Romans of Cato’s imagination would have been content with, given that they were happy with terracotta or wooden statues. Cato’s writings serve to highlight the stark differences that existed between Roman culture of the middle and late Republic.

Many scholars have faced the issue of how to define Roman culture, often approaching with perplexity the issue of what, precisely, the term “Roman” signifies. What does it mean to label something (or someone) as Roman? Does this somehow define its character or quality, form or nature? While the present study does not seek to address the solution of this cultural question per se, it is important to test the categorization of urban communities and architecture in this way, since these material manifestations helped in their own way to define whatever it was that Roman culture might have been. Since Roman dominion and influence was spread far and wide by the first century AD, one might expect that establishing a working definition of “Roman” would be easier than it actually is. Many causes could be speculated on, but the fact of the matter is that in contemporary terms, the Romans were always redefining Romanitas themselves, so for modern scholars to seek a contained definition seems futile.

Otto Brendel approached this question as it applies to plastic art, attempting to arrive at a definition of “Roman” in artistic terms.\(^\text{24}\) For Brendel no single approach can define Roman art, yet theoretical approaches that are either dualistic or pluralistic likely come nearest to offering any sort of conclusion. Recent scholarship by Tonio Hölscher and Jas Elsner has moved along similar lines, attempting to define the inherent and identifiable qualities of Romanitas in visual art forms, which seem to exist because of (and to run in the

\(^{24}\) Brendel 1953; Brendel 1979.
face of) the underlying Classical background that periodically rears its head. These three scholars tend to find that a Roman *objet d’art* is a bit of a hobgoblin in that it incorporates various elements – Greek, Etruscan, Italic – and blends them together with a certain touch, and perhaps it is this blending that makes art “Roman”. While scholars still search for the aesthetic qualities that help to define something as Roman, architecture may provide a surer footing.

Approaches to Roman architecture have varied greatly over time, often reflecting the interests and biases of the contemporary period. There has long been a tendency to consider “Roman” architecture not as one body of evidence, but to subdivide the extant remains into Republican and Imperial categories, a subdivision that reflects the perceived dichotomy between primitive and advanced states of development. While this approach has some merits, the ancient buildings are stranded in two artificial categories. As with visual art forms, architecture moves along a trajectory that is neither smooth nor predictable. In various periods Italic architecture demonstrates innovation and influence that can be difficult to trace, yet in spite of outside influence, always seems to maintain something of its own inherent nature. Even in the Imperial period, Classically inspired structures (the building projects of Hadrian, for instance) blend in enough indigenous elements such that the result is a unique building that can only be called Roman.

A consideration of previous attempts to create a definition of Roman architecture reveals, if nothing else, that this problem is not easily resolved. One seemingly logical approach in reaching a working definition of Roman architecture is to seek out building types

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or techniques that occur in the Roman world before they occur elsewhere, and thus try to define Rome in contrast to Greece, a tactic that some theorists have attempted in the past. But in the end even this approach does not prove to be satisfactory, on account of the flawed assumptions inherent in the approach. Even buildings that seem to be highly “Roman”, such as the curia-comitium complex, cannot be so easily pinned down, as it is possible to recognize structures with similar morphology at both Etruscan and Greek sites in Italy. The same might be said of the impluviate domus and the basilica, both presumed to be quintessentially Roman constructions, yet again similar morphology in decidedly non-Roman contexts casts doubt on this categorization. Since the Romans have been defined in terms of their architecture, this realization is unsettling. As unsettling as this may prove, it could be constructive in that it may dissuade scholars from the all too easily applied labels, as architectural forms (and their inspiration) do not always fall cleanly along cultural lines.

Numerous nineteenth and twentieth century scholars set out to compile handbooks of Roman architecture, motivated to create encyclopedic lists in hopes that from such categorization, analysis would logically follow. One of the earliest and most significant such works is that of Josef Durm, who published the second edition of his handbook in 1905. Durm, characterized by Brown as an encyclopedist, wrote a massive work that chronicled Etruscan and Roman architecture and which seems to have inspired Luigi Crema who published his own compendious handbook in 1959. John Ward-Perkins would describe Crema’s large volume and its smaller, partner volume, as a “conspectus of Roman architecture” in a time when the study of the Roman material record in its own right (i.e.

26 Winckelmann defined Rome in contrast to Greece, but in the pejorative sense that Greek culture was inherently superior, thus anything Roman was but a poor imitation of a Greek prototype.

independent of Greek material) became de rigeur for scholars.\textsuperscript{28} In his review of Crema’s work, Ward-Perkins remarks on the fact that the remains of Roman material culture were finally free of the bias toward the Greek world and could finally be considered in their own right.\textsuperscript{29}

The next generation of Roman architecture treatments, this time from scholars in the United States, is exemplified by the treatises of W. L. MacDonald and Frank Brown, each of who offers something of an idiosyncratic and personalized view of Roman architecture.\textsuperscript{30} Brown saw that the roots of Roman architecture lay in the functions of ritual practice, and that the earliest Romans were predisposed to provide built places to house their rituals.\textsuperscript{31} This theme recurs in his volume, which reads as almost a reaction to Roman architecture rather than a study of it. For MacDonald the birth of “Roman” architecture is heralded by the arrival in Italy of the true arch, either by way of Etruria or the Hellenistic world.\textsuperscript{32} MacDonald defines his quarry on the basis of a single architectural feature (the arch) and, in so doing, seems to pass over too easily the influence that the vast background of Italic architecture exerted on the developing Roman forms of the late Republic.

For the history of the Italic background in architecture, English-speaking students are still directed to the handbook by Axel Boëthius, which initially appeared with Ward-Perkins’ survey of Imperial Roman architecture in one volume in 1970, although it was written during

\textsuperscript{29} Ward-Perkins 1962, 251-2.
\textsuperscript{30} MacDonald 1965; Brown 1958; Brown 1961.
\textsuperscript{31} Brown 1961, 10-1.
\textsuperscript{32} MacDonald 1982, 3.
the 1950s.\textsuperscript{33} The first portion of the text was, from the outset, less-than-successful, as Boëthius’ attempts to synthesize the material do not result in the construction of a cogent chronological framework. Later, Ward-Perkins’ own approach would stand alone, with his handbook being published in revised form, separate from Boëthius’ portion of the text. In the foreword to the stand-alone edition, Ward-Perkins impresses upon the reader the importance of Hellenic influence on the development (and continuity) of Roman architectural forms; he points out that while Greece exerted tremendous influence on Rome, little influence flowed in the reverse direction.\textsuperscript{34} Yet students still have to navigate Boëthius’ contribution, as it remains assigned reading for many students in Classical archaeology in the United States. Other recent approaches have also been less-than-successful in approaching the study of Roman architecture from a socio-cultural standpoint. Among these examples is the volume of J. C. Anderson that attempts in a rather ineffective way to situate Roman architecture within society by studying, among other topics, the builder and the construction process.\textsuperscript{35} Along similar lines is the volume of R. Taylor who builds a theoretical framework for the processes of Roman architecture that is grounded too little in facts and evidence while relying over much on fanciful ideas.\textsuperscript{36}

Perhaps the most comprehensive approach to architecture in the Roman world of recent date is that of Pierre Gros, whose two-volume treatise covers an impressive range of building types, time periods, and contexts.\textsuperscript{37} Gros’ text not only reviews the archaeological

\textsuperscript{33} Boëthius and Ward-Perkins 1970.

\textsuperscript{34} Ward Perkins 1981, 9-10.


\textsuperscript{37} Gros 1996.
and scholarly material for Roman architecture, but also adds new insights resulting from his own vast work in the field. Taking into account up-to-date data from fieldwork, Gros surveys the world of Roman architecture by dividing the corpus into categories. While his coverage is extremely detailed from the late Republic onward, even Gros’ volumes could do better service to architecture of the Orientalizing through middle Republican periods. The difficulty of the evidentiary corpus makes any neat and tidy treatment of this material difficult, yet such a study remains fundamental to a full understanding of fully developed Roman architecture after 50 BC.

Other scholars, notably the pioneer G. T. Rivoira, as well as Mark Wilson-Jones, have chosen instead to approach Roman architecture not from the connoisseur’s point of view but from that of the architect, focusing on the technical details, proportions, and principles that informed Roman building of the Imperial period. Work by Jean Pierre Adam and C. F. Giuliani have examined Roman architecture strictly from the standpoint of building techniques. The recent work of Lynne Lancaster has taken an approach akin to Rivoira’s in focusing on the technology and techniques of Roman architects, studying in turn the construction of the column of Trajan, the Trajanic markets at Rome, and the technology of Roman concrete vaults. In addition to the recent focus on the principles and practices of construction and design, a new English edition of Vitruvius, offered with architectural commentary, reflects a renewed interest in the writings of the famed Roman architect and

38 Rivoira 1925; Wilson-Jones 2000.
39 Adam 1984; Giuliani 1990.
40 Lancaster 2005. In his review of Lancaster’s work, James Packer points out how useful an approach from the standpoint of function and principles can truly help to unlock the nature of buildings (see BMCR 2005.12.09).
raised again the question of how useful his treatise may be in interpreting the physical remains of antiquity.\(^{41}\)

Even a quick survey of the canonical scholarly works demonstrates that the architecture of middle Republican Italy – not to mention the earlier periods – has yet to be studied in sufficient depth and to be presented in a clear, cogent fashion. The best treatments, represented by Gros’ 1996 work and his earlier collaboration with Mario Torelli,\(^{42}\) address some of these issues and touch upon theoretical frameworks for dealing with the middle Republic, but in general they discuss the situation in broad terms rather than focusing on specific, persistent problems.

This study attempts to address some of the lacunae that remain in the scholarship discussed above by adopting a novel approach with the belief that an assessment of the archaeological material that pertains to the middle Republic will reveal new insights. At the outset it must be admitted that such a survey of the available evidence may, in the end, return a verdict that makes the middle Republic seem essentially devoid of public buildings other than city walls and temples. If that is the case, then scholars may find themselves in a position to reexamine what they think about this important period of Roman history. Since many approaches to Republican archaeology have been founded, seemingly, on inexact chronologies and evidence, these, too, will want reevaluation. The second chapter will address site-based history as it is known from the ancient sources and modern scholarship, in order to situate each site under study within its proper context. The third chapter will focus on civic architecture in Republican Italy, both in terms of building types as well as presenting the evidence for civic buildings dating to the middle Republic within the sample area. Then

\(^{41}\) Rowland, et al. 1999.

in the fourth chapter, some of the same sites will be revisited as part of a consideration of middle Republican fortification walls and the distribution of various masonry typologies utilized in the construction of those walls. An appendix presents other occurrences of polygonal masonry construction within the sample area. In terms of political and social history, the middle Republic must be considered among the most crucial in all of Roman history, for it was during this time that Rome better defined herself and, as part of the process of self-definition, widened the scope of her influence, both politically and culturally.
CHAPTER TWO: THE MIDDLE REPUBLIC IN HISTORY

As an historical period, the Roman middle Republic remains notoriously difficult to define, perhaps because chronologically it falls between the well-defined archaic and late Republican periods. The archaic period has received a great deal of attention in recent decades, as archaeological fieldwork has expanded our knowledge of the physical nature of early Rome, Latium, and Etruria and has, in some instances controversially, sparked prolonged debate concerning the historicity of the legends of Rome’s foundation. The outcome of ongoing work on early Rome, in spite of the debates, presents the picture of a complex and developed community in the archaic period, one with institutions and infrastructure on a grand scale. The year 509 BC serves as the convenient bookend that marks the terminus of the archaic period in Rome; in some ways it marks a hiatus of monumental construction as much as it signals the end of the regal period.

The collapse of the Republican system has been the focus of intense study and profuse scholarship. The period from the Civil Wars to the accession of Augustus and the beginning of the principate has been studied in depth on numerous archaeological, historical, and social levels, yielding a detailed picture of the nature of Roman culture and society in this time of violent transition, both in Italy and across the Mediterranean basin. The scrutiny
of scholarship has been intense and probing, bringing to light the intricate and myriad tapestry of Roman society at the beginning of the Imperial period.

The centuries that fall between the inception of the Republican system and its demise remain unevenly studied. Certainly a great deal of scholarly attention has been devoted to the study of the Punic Wars, as Rome was in the process of expanding her empire. Likewise the Roman conquest of the eastern Mediterranean has been the subject of in-depth study, with particular interest in recent years focused on the Romanization of Greece.¹ But while scholars have developed treatises and assembled evidence that chronicle Rome’s military campaigns and resultant cultural diffusion, in many ways the middle Republic has been neglected by scholarship, due in part to the difficult (and in many cases nonexistent) nature of the evidence relevant to this period.

The tradition of city foundation

The foundation of a city in Italic terms involved as much ritual as it did construction. This circumstance is crucial in interpreting and understanding the role of urban communities in Italy, as it speaks to the concept of the city as much as it does to the architecture or topography. The Roman practice, gleaned from Etruscan ritual procedures, is codified in the story of Romulus and Remus and the foundation of Rome, made famous by Livy and other ancient authors.² Central to the ritual of foundation was the sulcus, a furrow cut with a clean bronze plowshare around the limits of the future settlement. A priest with a pristine ox would carry out the creation of the sacred furrow, a line that would be mirrored later by the

¹ e.g. Alcock 1993.

² Festus 258 L describes what undertakings, including city foundation, should be carried out “rito Etrusco”; Plut. Rom. 11 describes in detail the foundation ritual itself, including the lifting of the plow to set a gate in place. See also Cato Origines I.18a=fr. 18 P. On the Etrusca disciplina, see Jannot 1998.
city’s *pomerium*. Within the limit of the *sulcus*, *gromatici* would survey the land, and establish the *cardo* and *decumanus*. Once the two main streets were established, the property could then be divided into plots. While the ritual and technical aspects of the *Etrusca disciplina* are beyond the scope of the present discussion, it is important to note the close link between the methodology of foundation and the creation of a physical and topological identity for the new community. In ritual terms the *pomerium* was an inviolable space, closely connected with the line of the city’s walls and defensive works. Citizens, enemies, and guests alike would have to cross the line of the walls, and thus the *pomerium*, in order to enter the city or town, a symbolism that would constantly reflect the day of the city’s inauguration. The Romulus story again reflects the situation, as Remus was accused of crossing “*novos muros*”, and with Remus having been slain, Romulus states, “*sic deinde, quicumque alius transiliet moenia mea,*’ *interfectum*”. The correspondence between the *pomerium* and the walls sends a powerful message about the identity of the community and its citizenry.

The discussion about the urban character and complexity of early Rome continues to develop as scholarship, and in particular fieldwork, expose more details about the earliest layers of the city and her true character. Despite controversies that remain unresolved, it

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3 Dilke 1971, Campbell 2000.

4 Castagnoli 1971.

5 Livy 1.7.2.

6 Livy 1.7.3. The description of Romulus as founder is legendarily famous, of course, and continues to fuel passionate debate about the foundation of Rome and the historicity of the legend. The 1988 discovery of the “*Murus Romuli*” (cf. Carandini 1992 [1995]; Terrenato 1996) on the slope of the Palatine Hill has prompted Andrea Carandini to seek to establish the historical nature of Romulus and his actions in a series of publications. Carandini 2006 presents the most recent discussion of this issue, while Dench 2005 focuses less on historicizing Romulus than on an effort to contextualize the foundation story and the role it played in Roman society and identity, including its use in Roman literature and history, as well as its reception after the ancient period. Whatever verdict scholarship might yet reach as to the reality of Romulus, the centrality of the foundation story and ritual to the Roman consciousness cannot be overlooked.
seems clear that in the archaic period, at the very latest, Rome was a complex and urbanized community, meeting the definition of the latter on several fronts. Foremost among the criteria is the presence of monumental architecture, as the Temple of Iuppiter Optimus Maximus clearly attests. Additional criteria include infrastructure (e.g. Cloaca Maxima), organized religion, markets (e.g. Forum Boarium), and a system of governance. Further it seems likely that Rome was, at least in part, fortified in this early period, as discoveries on the north slope of the Palatine Hill provocatively suggest. But as complex as Rome herself may have become in the Archaic period, it is difficult to conjecture that her reach and influence were anything more than purely local. Given this circumstance many scholars have sought explanations for Rome’s relatively rapid expansion, but the shortage of sources, particularly relating to the fifth century BC, makes the search difficult.

The Roman citizenship and urbanism

A discussion of the Roman citizenship and the constitution of the Roman res publica remains a locus classicus for scholars. The pioneering work of A. N. Sherwin-White remains the mainstay for this important topic, but new evidence offered by archaeological research has begun to expand the traditional limits of this area of inquiry so as to take into account the non-Roman citizenry of Italy and their relationship with the Roman system. Emma Dench’s two studies have attempted to examine the issue of Roman citizenship from two perspectives – one being an external approach that considers the incorporation of “barbarians” into the Roman aristocracy and the other an internalized view that studies the issues that relate to Romulus and the construction of the very notion of Roman citizenship.\footnote{Dench 1995; Dench 2005.} For Dench a key concept at work in the idea of Roman citizenship is the very permeability of the notion,
wherein non-Romans could be given Roman rights.\textsuperscript{8} She goes on to point out that this concept was extremely foreign to the autochthonous Athenians and may, in large part, help to explain Rome’s success in amassing an empire.

The attestation of alliances made between Rome and other Latin communities during the fifth century offers an important piece of evidence for a discussion of early Roman expansion. In 493 BC the Romans met a group of Latin armies under the command of Octavus Mamilius, then dictator Latinus. Rome prevailed in the engagement, leading to the establishment of the foedus Cassianum, named for Spurius Cassius Vecellinus. Dionysius describes the terms of the foedus, a copy of which he may have seen in the Forum Romanum in the first century BC.\textsuperscript{9} His description of the treaty’s terms confirms the notion that its primary purpose was to establish a league for mutual defense. Even though the Romans entered into this league with the Latins and the treaty spells out notions of peer polity relationships (e.g. the division of spoils in common wars), Rome likely held the upper hand all along, and augmented their superiority when the Hernicans were admitted to the defensive

\textsuperscript{8} Dench 1995, 96-107.

\textsuperscript{9} Dion. Hal. Ant. Rom. 6.95.1-3. “At the same time a new treaty of peace and friendship was made with all the Latin cities and confirmed by oaths. The provisions of the treaty were as follows: ‘Let there be peace between the Romans and all the Latin cities as long as heaven and earth shall stay in the same position. Let them neither make war upon one another theirselves nor call in foreign enemies, nor grant safe passage to those who shall make war upon either, but let them assist one another with all their might when warred upon, and let each have an equal share of the spoils and booty taken in their common wars. Let suits relating to private contact be judged within ten days and among the people where the contract was made. And let it not be permitted to add anything to this treaty except by the consent of both the Romans and all the Latins.’ This was the treaty entered into by the Romans and the Latins with each other, and confirmed by their oaths sworn over sacrificial victims.” (trans. E. Carey Loeb Classical Library 1974). On the foedus see Catalano 1965, 248-70; Harris 1969; K.-E. Petzold “Die bieden ersten römisch-karthagischen Verträge und das Foedus Cassianum,” ANRW 1.1 (1972) 364 n.1; Baronowski 1988. Cic. Balb. 53 describes the treaty inscribed on a bronze pillar in the Forum Romanum.
alliance in 486 BC. The admission of the Hernicans also gave Rome some control over several strategic cities in Latium, including Aletrium, Ferentinum, and Verulae.

The *foedus Cassianum* offers important insights into the relationship between Rome and her Latin neighbors, but also helps to shed light on the fifth century BC in Italy. All of the available sources point to the fact that this century was one of emigration, wherein various groups of people were on the move and the defensive agreement reflected in the *foedus Cassianum* may be indicative of attempts to confront these shifts and protect Rome’s interests. Among the mobile groups of émigrés were the Aequi and Volsci, two tribal entities about which we know very little. Some have attributed the establishment of sites like Norba to this supposed defensive mindset, predicated upon comments made by Livy and other authors. While the archaeology of fifth century BC Rome is often difficult to interpret, this period was one of modest military and political success. The siege and destruction of

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10 Dion. Hal. *Ant. Rom.* 8.64; Livy 2. 41. It is possible that the Hernicans had a treaty with Rome during the Regal period (Dion. Hal. *Ant. Rom.* 4.49; Festus 476 Lindsay), but no evidence survives for it. After the agreement in 486 BC the Hernicans were staunch allies of Rome until they opposed the Romans in 387 and 362, but then renewed their treaty in 358 BC (Livy 6.2, 7.6). All of the Hernican cities, save Aletrium, Ferentinum, and Verulae, joined Anagnia in making war on Rome in 306 BC but received *civitas sine suffragio* after being defeated (Livy 9.42; Festus 262 L).

11 The Aequi likely hailed from the upper Anio valley and spoke a dialect that resembled Oscan. Their initial territorial holdings in central Italy included mountaintop sties near Praeneste and Tibur, perhaps including Aefula and Civita di Artena. The Romans expelled the obstinate Aequi from the Alban Hills in 431 BC (Livy 6.12) and they are infrequently mentioned after 304 BC. The Latin *coloniae* at Alba Fucens and Carsulae occupy Aequi territory and the remaining tribes received *civitas sine suffragio*. A *municipium Aequiculanorum* founded after 90 BC may be the last trace of the Aequi in the record (Plin. *HN* 3.10). Like the Aequi, the Volscians seem to have moved into Latium during the fifth century BC. By degrees they overran the Pomptine plain and the coastal area from Antium to Terracina. Some indigenous Volscians are believed to have lived in the middle Liris valley near Arpinum, Atina, and Sora, a conjecture based on the so-called *tabula Veliterna* (see E. Vetter, *Handbuch der italische Dialekte* (1953), no. 222) that some scholars believed is a Volscian inscription. The Romans soundly defeated the Volscians in 431 BC and gradually won back territory from them during the fourth century BC with colonial foundations at Circeii (393 BC), Satricum (385) and Setia (382). The territory of *Latium adiectum* was added to the *Ager Romanus* in 358 BC and included the Pomptine plain. Both the Aequi and the Volscians are difficult to identify in the material record and seem to have become quickly and thoroughly Roman. See G. Devoto. 1951. *Gli antichi Italici* (Rome).
Veii at the beginning of the fourth century demonstrates that Rome was able to put an
expansion-minded agenda in play.

The catalyst for a new and broader phase of urban expansion was the sacking of Veii in 396 BC. In terms of expansion this important military event had implications not only for the physical city of Rome, but also for the nascent notion of Roman urbanism, a concept that would soon be transferred from the hinterland of Rome to many outposts, first in Italy and, later, across the Mediterranean. It is also significant that Rome was able to overcome one of the largest and most powerful Etruscan cities by force of arms, likely signaling to the other Etruscan city-states that Rome was a force to be reckoned with carefully.

Close on the heels of the Roman victory at Veii came a set back in military terms – the Gallic sack of Rome in 390 BC. Historians and archaeologists remain divided on this issue – what damage, if any, did the Gauls actually inflict on the city? From Livy’s account, the reader is to believe that the physical damage was substantial, and in the aftermath the haphazard rebuilding of the city was to be blamed for the apparent lack of semblance in Rome’s urban layout. Perhaps from Livy’s point of view in the first century BC this was a plausible explanation, but it seems unlikely that it could have been an accurate one. Whatever physical damage the Gauls did wreak on the city, the rebuilding in the aftermarket is unlikely to have been the principal reason behind Rome’s disorganized system of streets and neighborhoods, rather Rome’s agglomerative urban development predates notions of organized city-planning.

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12 Livy, 5.1-22; Plut. Cam. 2-6.

13 Livy 5.55.3-5. “formaque urbis sit occupatae magis quam divisae similis”.

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After the Gallic crisis, Marcus Furius Camillus emerges as an obvious hero of Rome and is responsible for a noteworthy spate of construction at Rome.\textsuperscript{14} While we know the most about Camillus’ erection of sacred structures, it seems likely that Camillus also saw to problems of civic buildings, public services, and fortifications. It was Rome’s ability to recover from the Gallic crisis and to meet the challenges of the fourth century that demonstrates the staying power of the Roman state. Building upon this recovery, the Romans carried out extremely important projects, including the \textit{Aqua Appia} and the \textit{Via Appia},\textsuperscript{15} both of which served to expand the infrastructure needed to support Rome’s burgeoning population. The fourth century recovery at Rome not only led to more civic foundations in the third century, but it also helped to prepare Rome to face the Punic and the Samnite wars, perhaps its two greatest challenges.

\textbf{Rome and her colonies}

The author Aulus Gellius discusses the relationship between “colonists” and the mother city.\textsuperscript{16} In Gellius’ view the citizens and the physical elements of \textit{coloniae} were miniature, transplanted bits of the state, imbued with all of the legal prerogatives that pertained thereto. And yet one must remember that Gellius is not describing the early colonial experience and that his writing postdates the \textit{Lex Iulia} of 90 BC that had granted

\textsuperscript{14} The subject of Camillus’ building program is contentious, but he was reportedly responsible for a temple to Juno Regina on the Aventine Hill (Livy 5.21.3, 22.6-7, 23.7, 31.3, 52.10; Dion. Hal. \textit{Ant. Rom.} 13.3; Plut. \textit{Cam.} 6; Val. Max. 1.8.3) and possibly a shrine of Mater Matuta in the Forum Boarium (Livy 5.19.6, 23.7; Plut. \textit{Cam.} 5).


\textsuperscript{16} Aulus Gellius \textit{Noctes Atticae} 16.13.8-9 “Sed “coloniarii’ alia necessitudo est; non enim veniunt extrinsecus in civitatem nec suis radicibus nituntur, sed ex civitate quasi propagatae sunt et iura institutaque omnia populi Romani, non sui arbitrii, habent. Quae tamen condicio, cum sit magis obnoxia et minus libera, potior tamen et praestabilitior existimatur propter amplitudinem maiestatemque populi Romani, cuius istae coloniae quasi effigies parvae simulacraque esse quaedam videntur, et simul quia obscura obliterataque sunt municipiorum iura, quibus uti iam per innotitiam non queunt.”
citizenship to all Italian peoples that had not taken up arms against Rome during the Social Wars. This viewpoint of Gellius’ may not be representative of the realities of Roman urbanism during the middle Republic, but it is worth nothing since it connects directly with some twentieth century thought as to the nature of Roman cities. Some scholars simply assumed, as Gellius did, that Imperial Roman cities told the entire story and that since the monumental Imperial architecture visible in cities like Lepcis Magna, Timgad, and Jerash bore some resemblance to the monuments of Rome, then it could be conjectured that from the very beginning Rome’s urban process operated by breaking bits off the monolithic mother city and planting them, like seeds, in new territories. While this theoretical standpoint offers some appealing possibilities, it is simply too convenient and tidy to explain the complexities of Republican urbanism in Italy. One of the most profound shortcomings of this position is the fact that it denies the richness of the cultural tableaux that characterized Italy in the middle Republic.

However the process of constructing urban identities functioned, the Romans clearly had goals with respect to new foundations and re-foundations during this period. Among them were basic ideas such as establishing defensive settlements, ensuring control of trade routes and waterways, and positioning settlements as buffers that could be used to enforce the control of boundaries. Since the nineteenth century, scholars scrutinizing the ancient sources have attempted to correlate the sites mentioned by the ancient authors with those known on the ground. This line of inquiry has led to the identification of many sites on the basis of ancient literary sources, yet some sites remain archaeologically obscure. Several studies have collected the colonies and the relevant sources, although none eclipses the entry

17 The Lex Iulia Municipalis of 45 BC, known from a tablet found at Heraclea in 1732-1735, established regulations for the municipalities in Italy that already had received citizenship. On this law, see ILS 6085; Hardy 1914; Reid 1915.
of E. Kornemann in the *Real-Encyclopädie*.*18* Within the catalog of sites we can distinguish various legal categories, as did the Romans, and note that important urban variations pertain to the various assignations.

**Citizen colonies**

The earliest type of Roman colonial establishment was the *colonia civium Romanorum*, within which the subcategory of *coloniae maritimae* may be included (see below). These citizen colonies usually included a detachment of 300 colonists, with each being allotted 2 *iugera* of land.*19* The colonists in these colonial establishments were granted full Roman citizenship rights, included the all-important rights of commerce and intermarriage, along with suffrage.

**The maritime colonies**

The catalog of citizen colonies termed *coloniae maritimae* has been the focus of a great deal of scholarship. These colonies were small in size, usually numbering 300 colonists, just as the citizen colonies.*20* Salmon felt that the number was small for several reasons, not least of which was the sometime unattractive position of some of the sites. Additionally, the colonists were allotted the same meager amounts of land, usually about two *iugera.*21

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*18* E. Kornemann *RE* 4 (1901) 510-87. Kornemann’s exhaustive list is still referred to by many scholars, but some are attempting new approaches, e.g. *Conventi* 2005.

*19* A *iugerum* measured 240 by 120 Roman feet, thus 28,8000 Rft² *cf.* Varro *LL* 5.35; in modern terms, the amount of land allotted to each colonist in a citizen colony was the equivalent of 0.62 ha. Colum. *RR* 5.i § 6; Quintil. 1.18.

*20* This is true of Terracina, among other sites. *Livy* 8.21.11.

*21* See Varro *RR* 1.10.2 on the size of the *centuria*. *Siculus Flaccus* p. 153 L.
By Salmon’s definition the *coloniae maritimae* were seaboard communities populated by those with the privileges of *ius Romana* as opposed to other colonists whose legal privileges were those of the *ius Latii*. Livy makes clear that the inhabitants of the *coloniae maritimae* enjoyed legal exemption from service in the Roman army and navy, an exemption made clear by an episode in 207 BC when, after Hasdrubal’s arrival in Italy, the *sacrosancta vacatio* was suspended for Alsium, Terracina, Minturnae, Sinuessa, and Sena Gallica.22 The war with Antiochus the Great (191 BC) also resulted in the suspension of the exemption, this time including Ostia and Antium.23 Based on the lists provided by Livy and other authors, the *coloniae maritimae* number ten and they also constitute the only citizen colonies known to have been founded before 200 BC, although other citizen colonies would be founded after that (e.g. Gravisca, 181 BC).24

**Latin colonies**

The foundation of a colony at Cales on the Via Latina in 334 BC began the phenomenon of the so-called Latin colonies, one that would continue during the middle Republican period. The decision to establish the colony at Cales came in the wake of the dissolution of the Latin League; there would be 14 of the *priscae coloniae Latinae*.25 These colonies were organized on a scale that was much larger than that of the Roman colonies. To begin with, more colonists were assigned, with the lowest allotment being 3,000, but in some cases many more. The amount of territory involved in the Latin colonial foundations was

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22 Livy 27.38.3-5; Salmon 1963, 13-4. Both Ostia and Antium remained exempt from service.

23 Livy 36.3.4-6.

24 Salmon 1963, 15. The ten *coloniae maritimae* are Antium, Ostia, Fregenae, Castrum Novum, Pyrgi, Minturnae, Sinuessa, Sena Gallica, Alsium, and Terracina.

25 Salmon 1970.
also more substantial, as the colonists were assigned between 12.5 and 35 ha each, on average. They enjoyed limited political and suffrage rights, especially by comparison to the citizen colonies.

**Other types of colonies**

We may also identify two other forms of urban and quasi-urban foundation, namely *municipia* and the viritane assignations. The former were annexed, non-Roman communities that received varying degrees of suffrage rights (either *civitas optimo iure* or *civitas sine suffragio*) and, as a method of colonization, post-date 338 BC. The latter method, although its importance is minor compared to the Roman and Latin *coloniae*, is the system of non-colonial viritane deductions (*assignatio*).

These were self-governing property holders who received land parcels, often at a distance from Rome, yet remained nominally under Rome’s direct administrative control.

**Historical background of cities and towns under study**

Having examined the broad historical framework for a consideration of urbanism during the middle Republic, individual sites will now become the focus of this chapter, so that through the examination of local examples, a broader picture of the archaeology of this period might be painted. A number of sites, scattered across Latium, Etruria, Umbria, and Campania will provide the evidentiary basis for this consideration and, when considered

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26 Livy 4.48 details one such episode when a debate in the Senate ensures over how to deal with lands captured from the Aequi ca. 417 BC. The tribunes of the plebs (Spurius Maelcilius and Marcus Metilius) proposed a system wherein the captured lands would be divided among the citizens (*virtim divideretur*), but this proposal leads ultimately to controversy. In general terms, when such allotments were made, the normal amount of land per citizen was 2 *iugera*, just as with Roman colonies, although other allotments are attested, including 3, 10, and 14 *iugera*. Pliny *HN* 17.18 comments that 7 *iugera* was the most land any frugal Roman should desire; and up until the Gracchan reforms, 14 *iugera* was the maximum amount of land assignable under the viritane scheme. Cicero *de Leg. Agr.* 2.7.17 indicates that a group of appointed commissioners would handle the land assignments in these cases. See also Varro *RR* 1.2.7; Livy 4.48, 5.24; Festus, p. 373 L; *Gromatici* 154, i 60.
collectively, will help to establish a picture of the middle Republic that is both more clear than previous studies have produced and also quite different from commonly accepted views on this period. The sites outlined below are presented here in brief, as detailed consideration of each site and its relevant archaeological and historical evidence will follow in successive sections of this study.

**Latium and Campania (Regio I)**

**Aefula**

The *oppidum* of Aefula was situated in the Colle Ripoli near Tibur and is known both from the ancient sources and from modern archaeological investigation carried out by R. Lanciani, L. Cozza, and C. F. Giuliani. The site of Aefula occupies Monte S. Angelo in Arcese (598 m a.s.l.) but also includes the entire *Mons Aefulanus*. This is a long spine of a hill that descends from Monte S. Angelo in Arcese to the north-northwest and includes no less than six clusters of settlement activity. Nuclei with archaeological remains are located at Monte Arcese (428 m a.s.l.), Colle Ripoli (522 m a.s.l.), and three other hilltops. Giuliani believes that a temple dedicated to Bona Dea occupied the Monte S. Angelo in Arcese site.

**Antium (Anzio)**

The site of Antium, 52 km south of Rome, was a Volscian community that became one of the *priscae colonia Latinae* in 467 BC. In 338 BC a Roman colony was established

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27 Livy 26.9.9, 32.29.2; Vell. Pat. 1.14.8; Horace *Carmina* 3.29.6; Plin. *HN* 3.69 mentions Aefula as a vanished city (*sine vestigiis*) of Latium. An inscription to the Bona Dea (*CIL* 14.3530) also mentions the site. There are some variations on the ancient name, with both Aefula and Aefulum attested in the sources.

28 Giuliani 1966, 171.

29 Livy 6.9.1. The Volscians of Antium were later made citizens *sine suffragio* cf. Livy 8.14.8.
there, and it may have been the first such colony.\textsuperscript{30} The ancient city walls, whose perimeter was ca. 3.9 km, consisted of tufa blocks laid on earthworks and are dated generally to the fifth century BC.

**Aletrium (Alatri)**

Located in the Monti Ernici near Frusino, Aletrium was a Hernican town. The site is mountainous, rising to 502 m a.s.l. In chronicling the events of 306 BC, Livy mentions the town and comments on its loyalty to the Romans.\textsuperscript{31} By the first century BC Aletrium had become a *municipium*. An inscription records the works of L. Betilienus Varus who built an aqueduct along with other public works.\textsuperscript{32} The site flourished in the Late Roman period as the locus of several villas and a Christian abbey.\textsuperscript{33} Within the citadel stand the modern cathedral and the remains of an ancient aqueduct, although in 1889 portions of a temple were excavated on the site, revealing the remains of an elaborate decorative scheme that employed painted terracottas.\textsuperscript{34}

**Anagnia (Anagni)**

Situated at an elevation of 460 m a.s.l., Anagnia was the principal town of the Hernicans\textsuperscript{35} It is located in the Sacco (Trerus) valley, a fertile agricultural area, and has

\textsuperscript{30} Salmon 1963, 16.
\textsuperscript{31} Livy 9.42.11.
\textsuperscript{32} *CIL* 10.5807.
\textsuperscript{33} Fentress 2005 explores the long-term continuity of the site into the medieval period.
\textsuperscript{34} Fiorelli 1882, 417.
\textsuperscript{35} Vergil *Aen.* 7.684.
imposing fortification walls. The Romans defeated the Hernicans in 305 BC\textsuperscript{36} and the city had become a \textit{municipium} by Cicero’s time.\textsuperscript{37} The city wall is partly built in \textit{opus quadratum} and incorporates some fourth century BC tombs. Anagnia would suffer at the hands of Hannibal and Pyrrhus,\textsuperscript{38} but remained an active community at least until the time of Marcus Aurelius.\textsuperscript{39}

\textbf{Antinum (Antino)}

The ancient city of Antinum was located in the territory of the Marsi and would change hands several times. The sources record a \textit{castellum} of the Volscians at the site, one that the Romans attacked in 408 BC.\textsuperscript{40} The people of Antinum were enrolled in the \textit{tribus Sergia} and the sources record the \textit{Antianus ager} that lay between the Fucine Lake and the territory of Sora.\textsuperscript{41}

\textbf{Anxur / Terracina}

One of the principal cities of the Volscians, Anxur was reportedly founded by a group of Spartiates.\textsuperscript{42} In 406 BC, the tribune Numerius Fabius Ambustus sacked Anxur and captured it.\textsuperscript{43} Under the Latin name of Terracina the site received a colonial foundation in

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\textsuperscript{36} Livy 9.42; 9.43.24. In the fourth century BC (probably 306), Anagnia became a \textit{civitas sine suffragio}. Also, Sommella 1966, 49-60.

\textsuperscript{37} Cic. \textit{De Dom.} 81.

\textsuperscript{38} Livy 9.42, 26.9; App. \textit{Sam.} 10.

\textsuperscript{39} Fronto \textit{Ep.} 4.4.

\textsuperscript{40} Livy 4.57.

\textsuperscript{41} \textit{Liber coloniarum} 259; Livy 4.57.

\textsuperscript{42} Dion. Hal. \textit{Ant. Rom.} 2.49. Livy 4.59.4 refers to the site as “\textit{prona in paludes}”.

\textsuperscript{43} Livy 4.59, 5.12.6.
\end{flushleft}
329 BC. The original colonists numbered 300, and the ancient authors noted the strategic importance of the site. The original colony was likely established on the hill of S. Francesco, where polygonal masonry remains are evident.

**Arpinum (Arpino)**

The origins of Arpinum remain obscure, although the earliest archaeological material on the site dates from the seventh century BC. A Volscian and Samnite hill town captured by Rome, Arpinum was granted *civitas sine suffragio* in 305-303 BC. During the consulship of the elder Cato the *Ager Arpinas* was extended as far as present day Rocca d’Arce (Arx Fregellana). The city would go on to gain full Roman citizenship in 188 BC and become a *municipium* ca. 90 BC. The pre-Roman Porta dell’Arco employs a corbel vault in its construction.

**Arx Fregellana / Arx Volscorum (Rocca d’Arce)**

Not to be confused with the Roman colony of Fregellae (328 BC), the Arx Fregellana was a Volscian town that occupied an imposing hilltop. Polygonal walls surrounded the citadel, projecting strength from a naturally strong position.

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46 *cf.* Lugli 1926.

47 Livy 4.57.7 suggests the existence of a walled Volscian town in 408 BC.

48 Arpinum was the birthplace of two prominent Romans of the Late Republic – Caius Marius (157 BC) and M. Tullius Cicero (106 BC).
Atina

Atina was a Volscian settlement,⁴⁹ and came to be mentioned in the *Aeneid* in connection with Antemnae, Tibur, Ardea, and Crustumerium.⁵⁰ Located 19 km north of Casinum and 23 km east of Arpinum, the site sits at 490 m a.s.l. The Romans established a *colonia* there during the third century BC and the site became a *municipium* in the first century BC.⁵¹ The line of the walls measured about 8 km, enclosing an area of 110 ha.

Casinum (Monte Cassino, Crocifisso, Frosinone)

Samnites and Romans subsequently occupied the Volscian town of Casinum, which may have had Oscan origins, in the fourth century BC. The city would be sacked by Hannibal in 208 BC, but would flourish during the Imperial period when the Ummidius family was prosperous.⁵² Not far from the town at Monticelli lie the remains of a villa and bath complex near the river Gari, identified by some as the villa of M. Terentius Varro.⁵³ Eventually, invading Longobards destroyed the city in the sixth century AD. The famous Benedictine abbey of Monte Cassino (ca. AD 529) sits atop the hill (523 m a.s.l.) on which the Volscian town and temple of Iuppiter originally stood.

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⁴⁹ Not to be confused with the site of the same name in Lucania (modern Elena) that also has walls of megalithic construction *cf.* Patron *NSc* 1897, 112.

⁵⁰ Vergil *Aen.* 7.630-1.

⁵¹ The town is mentioned in the ancient sources several times: by Cicero in relation to a dream he had, *Div.* 1.59, 2.136-41 (*cf.* Val Max 1.7.5); and by Plin. *HN* 22.11 who describes a famous citizen of Atina, Cn. Petreius, who received the *corona graminea* for rescuing his legion from the Cimbri.

⁵² The amphitheater was built by the patronage of Ummidia Quadratilla who had a passion for actors. *cf.* Plin. *Epist.* 7.24.

**Circeii (S. Felice Circeo)**

The ancient sources attribute the foundation of the city to Tarquinius Superbus.\(^{54}\) The sources also state that Cn. Marcus Coriolanus captured the city ca. 489 BC when he marched on Rome at the head of a Volscian army.\(^{55}\) In 393 BC colonists assigned to the *tribus Pontina* established a second colony of Latin status was established at the site.\(^{56}\) The site occupies a hilltop near the coast and is quite isolated. The city participated in the Volscian revolt against Rome in 385/4 BC and again took sides against Rome in 340 BC during the revolt of the Latin League.\(^{57}\) Circeii refused to supply Rome with arms in 209 BC, and was again punished;\(^{58}\) in 198 BC the town was involved in a slave revolt that also affected Norba.\(^{59}\)

**Civita di Artena**

The site of Civita di Artena, situated in the territory of the Volscians, rises to some 632 m a.s.l. The name of the ancient site remains uncertain, although Ecetra has been suggested. The modern village was known as Monte Fortino until 1873 when the name was

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\(^{54}\) Livy 1.56.3; Dion. Hal. *Ant. Rom.* 4.63.1.


\(^{57}\) Livy 8.3.9. Livy records that during the second revolt, a citizen of Circeii, L. Numisius, led the Latin army against Rome.

\(^{58}\) Livy 27.9.7, 29.15.5.

\(^{59}\) Livy 32.26.4-8.
changed to Artena because of the Volscian town of the same name that was destroyed in 404 BC.  

**Cora (Cori a Valle)**

The town of Cora, site of a Latin colony before the *foedus Cassianum*, would come to be occupied by the Volscians. The town minted its own coins and enjoyed municipal status by 211 BC. When the city sided with Marius, Sulla destroyed it, after which little is known about the settlement. A circuit wall surrounded the city’s irregular grid of streets. In some places polygonal terraces, built to level the uneven terrain, support the streets. The wall, built in polygonal masonry, had round towers built in *opus incertum* added in the first century BC. The city is most known for the temples of its acropolis, notably the Temple of Castor and Pollux and the so-called Temple of Herakles.

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60 Livy discusses Artena when he relates that the Romans fought the Volsci in the area of Ferentinum and Ecetrae. The consular tribunes for the year laid siege to the town of Artena that occupied an impregnable hill; after some time, the town was betrayed from within and so fell to the Romans. The exact location of the site mentioned by Livy remains unknown. The site was studied in the seventeenth century when B. Teoli identified the site as Eccetra in his treatise *Teatro istorico di Velletri* (Velletri, 1644); the site was also relevant to Ph. Clüver’s treatise, *Italia antiqua* (Leiden, 1624). Others studied the site, including A. Kircher for his study, *Latium, Latii tum Veteris tum Novi Descriptio* (Amsterdam, 1671). The site is mentioned in virtually every study on the Roman Campagna, and Quilici 1982, 15-29 provides a discussion of the history of relevant scholarship. The decision to change the name of the site to Artena was reached by the Amministrazione Comunale on 13 February 1873. The choice of the name was based on theories advanced by Gell 1834, 110 and Nibby 1848-1849, 1.264 (*Analisi della Carta dei Dintorni di Roma*). A French study was published just after the name change, M. René de la Blanchère in *MEFR* 1 (1881) 161-80. In the twentieth century Ashby again focused attention on the site (*cf.* Ashby and Pfeiffer 1905, 87-107). Quilici’s excavations (*NSc* 1968, 31-74 and *NSc* 1974, 56-87) and the subsequent monograph demonstrates the importance of the archaeological remains on the site, even though many of the historical particulars of the ancient town are lost. See Livy 4.61.6-9.

61 Livy 2.16.8. “*eodem anno duae coloniae Latinae, Pometia et Cora, ad Auruncos deficiunt.*”

62 Livy 26.7.

63 Luc. 7.392ff.
Elea / Velia

Elea was a city of the Ionian Phokaians located on the coast of Lucania, located between Cape Palinurus and Poseidonia, the latter of which is ca. 40 km distant. The city was founded ca. 540-535 BC and it long withstood the assaults of Italic tribes. By 387 BC the city had become allied with the Italian league against the tyrant Dionysios I of Syracuse; by 88 BC it had become a municipium and a source of Greek cults at Rome. Even under Roman administration Elea maintained a strong sense of its own Hellenic identity into the Imperial period. Elea is especially known for the monist philosopher Parmenides (fl. ca. 500 BC) and his pupil, Zeno (b. 490 BC). The theologian-philosopher Xenophanes lived in Elea and founded the Eleatic school, thus playing a key role in the development of Ionian enlightenment in South Italy.

The ancient remains of the city include an impressive civic center, a fifth century BC altar some 25 m in length that recalls the Altar of Hieron II at Syracuse, a canal, and, perhaps most impressively, a complex system of fortification walls with a circumference ca. 6.4 km. A cult of Poseidon Asphaleios was established on the site, as well as a cult of Aphrodite Euploia. The remains of a sixth century BC temple are also known, perhaps also dedicated to Athena.

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64 Herod. 1.163-67. The circumstances of the city’s foundation are connected to the campaigns of Gyges in Asia Minor, as Herodotus viewed Elea as the last refuge of Phokians from Asia Minor who chose not to submit to the Persians. The site was close to the sea and had good harborage. The city also serves as a point of geographic reference in Vergil Aen. 6.365-6.

65 Strabo 6.2.54.

66 Cic. Balb. 55.


68 Winter 1971, 27. Winter suggests that the polygonal walls on the site “probably belonged to the sixth-century circuit”, although little in the way of available archaeological data can confirm this date.
Ferentinum (Ferentino)

Ferentinum, a town of the Hernicans, first appears in the written record for 413 BC during the campaigns of the consul Lucius Furius; the city was eventually taken by Rome in 361 BC. The city became a faithful ally of Rome and was decimated by Hannibal during the Second Punic War. An inscription records the work of the city’s censors, Aulus Hirtius and Marcus Lollius, in constructing the city walls.

Formiae (Formia)

Formiae, a coastal town on the gulf of Gaeta of Ausonian or Volscian background, first appears in the historical sources for the year 338 BC when it received civitas sine suffragio from Rome. In 188 BC, the citizens were enrolled in the tribus Aemilia when they received Roman suffrage rights. During the late Republic the town served as a popular resort area for wealthy villa owners. In the Imperial period Formiae flourished, receiving the Colonia Aelia Hadriana Augusta in the second century AD and remained a town until AD 859 when the Saracens destroyed it.

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70 Livy 7.9.1; 9.42.11; 26.9.11.

71 CIL 1.1522-23 = 10.5837-38. “fundamenta murosque af (ex) solo faciunda coaravere eideraque probavere. In terram fundamentum est pedes altum XXXIII, in terram ad idem exemplum quod supra terr[am sili]c[i].”

72 Livy 8.14.10.

73 Livy 38.36.9.

74 cf. S. Aurigemma Gaeta-Formiae Minturno (1955). Cicero was assassinated at Formiae in 43 BC by triumviral proscription (Plut Vit. Cic. 47-8). It may also have been the hometown of Vitruvius.
Fregellae

The site of Fregellae in *Latium adiectum* was originally a settlement of the Opiscans or Oscans and later passed into the hands of the Volscians. The Samnites laid waste to the site ca. 330 BC, causing the citizens of *Fabrateria Vetus* (modern Ceccano) to seek aid from Rome against them, leading the Romans to establish a Latin *colonia* there in 328 BC. Control of the site seesawed between the Romans and Samnites until 313 BC, after which the town remained fiercely loyal to Rome until a revolt over citizenship rights broke out there in 125 BC. The Romans destroyed the site and subsequently established a new town, *colonia Fabrateria nova* to the southeast. Additionally, a post station at *Fregellanum* (modern Ceprano) is listed in the late antique itineraries.

Fundi (Fondi)

An Auruncan town, Fundi sat on the Via Appia in the *Ager Caecubus*, located between the Monti Lepini and the sea. During the Latin War the city remained neutral, along with Formiae, and was awarded *civitas sine suffragio* in 337 BC; it would become a *municipium* in 188 BC. The citizens were enrolled in the *tribus Aemilia* following the passage of the *lex Valeria*. During the conflict between Marius and Sulla the walls were repaired in *opus incertum*, although the ancient sources do not mention the town during this period. Under Augustus the town did receive a detachment of settled veterans. The town was known for its association with Herakles, although the site of the temple remains

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76 Livy 38.36.7; *CIL* 10.6245; *cf.* Livy 41.27.11 on the town’s public works and the Roman censors.

77 *CIL* 10.6238, 6239, 6242. On the position of the town, see Strabo 5.3.6; Pompon. 2.4.9; Plin. *HN* 3.9.59; *Ptol.* 3.1.63. Excavations at the site of Fondi have revealed an Imperial bath, among other features. *cf.* E. L. Caronna, *NSc* (1971) 330-63.
Many villas of the Imperial period were located in the area of Fondi, as the region was known for its excellent wine.¹⁹

**Minturnae (Minturno)**

Minturnae, located on the Liris River, may originally have been an Ausonian town of the seventh century BC. The site is first mentioned in relation to the year 340 BC, and then later when the Romans captured it after bloody fighting in 313 BC. In 311 BC the course of the Via Appia crossed the site, resulting in a brief period of abandonment. In 296/5 BC a new Roman colony would be established astride the Via Appia. This third century BC settlement had a *castrum*-type plan and was roughly 3 ha in area. The settlement was established during the period of the Samnite Wars along with a sister colony, Sinuessa. As Minturnae was situated on the river, it usually numbers among the so-called *coloniae maritimae*, but little evidence survives to indicate the size of the original colony.

**Norba (Norma)**

A Latin colony was located at Norba, in the territory of the Volscians, in 492/1 BC, according to Livy. Situated on the edge of the Monti Lepini, Norba occupies a naturally impregnable position and enjoys a commanding view of the Pontine plain. Norba was

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⁸⁰ Livy 8.10.


⁸² Livy 10.21.7 “*statio perpetua infestae regionis*”.

⁸³ The site was significant prior to the Roman *colonia* as an Auruncan city (*cf.* Strabo 5.3.10). See Salmon 1963, 18.

⁸⁴ Livy 2.34.6. Describing Norba, Livy says “*quae arx in Pompitino esset.*”
destroyed during the Sullan crisis when the citizens dared resist Sulla and his armies after Praeneste had fallen. The city was betrayed from within, leading some citizens to commit suicide, while others closed the gates and set fire to the town.\textsuperscript{85} These events seem to have marked the end of Norba as a settlement, as the elder Pliny includes it in his list of once-famous Latin towns\textsuperscript{86}.

\textbf{Ostia}

The port city of Imperial Rome certainly had humble beginnings as a small settlement near the salt pans at the mouth of the Tiber. The strategically advantageous nature of Ostia’s topography had much to do with its success as an economic center. According to the ancient literary tradition, Ancus Marcius, Rome’s fourth king, was the founder of Ostia, perhaps in 620 BC.\textsuperscript{87} While this date cannot be confirmed by archaeological evidence, there are strong

\textsuperscript{85} App. B Civ. 1.94.

\textsuperscript{86} Plin. \textit{HN} 3.68.69. \textit{In prima regione praeterea fuere in Latio clara oppida Satricum, Pometia, Scapta, Politorium, Tellena, Tijata, Caenina, Ficana, Crustumerium, Ameriola, Medullum, Corniculum, Saturnia ubi nunc Roma est, Antipolis quod nunc Ianiculum in parte Romae, Antemnae, Camerium, Collatia, Amidianum, Norbe, Sulmo …”} Later in the same passage Pliny goes on to remark that these towns are no longer in existence in the first century AD: \textit{“Ita ex antiquo Latio LIII populi interiere sine vestigiis.”}

\textsuperscript{87} The ancient literary sources mention the founding of Ostia numerous times: Enn. \textit{Ann.} \textit{“Ostia munita est; idem (Ancus) loca navibus pulchris munda facit, nautisque mari quaesentibus vitam.”}; Cic. Rep. 2.18.33: \textit{(Ancus Marcius) ad ostium Tiberis urbeb condidit colonisque firmavit.”}; Cic. Rep. 2.3.5: \textit{“In ostio Tiberino, quem in locum … rex Ancus coloniam deduxit.”}; Livy 1.33.9 \textit{“In ore Tiberis Ostia urbs condita, salinae circa factae.”}; Dion. Hal. \textit{Ant. Rom.} 3.44.4; Strabo, 5.3.5; Festus Gloss. Lat. \textit{“Ostiam urbeb ad exitum Tiberis in mare fluentis Ancus Marcius rex condidisse furt; quod sive ad urbeb sive ad coloniam qua postea condita est refertur”; Festus “Quibus (fossis) Ancus Marcius circumdedit urbeb, quam secundum ostium Tiberis posuit, ex quo etiam Ostiam”; Flor. 1.4 \textit{“Ancus … Marcius … Ostiam …in ipso maris fluminisque confinio coloniam posuit, iam tum videlicet praesagienus animo futurum ut totius mundi opes et commeatibus illo velut maritimo urbis hospitio recipierentur”; [Aur. Vict.] De vir. ill. 5.3 \textit{“Ostiam coloniam maritimis commateibus opportunam in ostio Tiberis deduxit (Ancus Marcius);” Serv. Ad Aen. 1.13 \textit{“Ostiam … ideo veteres consecratam esse voluerunt … ut si quid bello navali ageretur … id … fieret ex maritima et effata urbe”; Servius, Ad Aen. 6.815 \textit{“Hic (Ancus) Ostiam fecit”; Eur. 1.5 \textit{“Ancus Marcius … apud ostium Tiberis civitatem supra mare sexto decimo miliario ab urbe Roma condidit”; Jer. Ab. Abr. 1397; Isid. Etym. 15.1.56: \textit{“Ancus Marcius ex filia Numae Pompiliui natus: hic urbeb in exitu Tiberis condidit quae et peregrinas merces exciperet et hostem moraretur, quam ab ipso situ Ostiam appellavit”; Polyb. 6.2a.9 records that Numa was the founder; Plin. \textit{HN} 3.56: \textit{“Ab Romano Ostia colonia rege deducta”}.}}
indications of a settlement at Ostia in the fourth century BC. The so-called castrum of the earliest phase has been identified in the area of the later forum. The latest archaeological evidence indicates that the original castrum measured 194 by 125.7 m and was surrounded by a wall built of tufa blocks without mortar.

**Poseidonia / Paestum**

The Sele plain, 96 km south of Naples, is the site where colonists from Sybaris established a city sometime in the middle of the seventh century BC. The site was fortified with walls and was named Poseidonia. The fertility of the Sele plain, and the advantages of coastal trade, made the city prosperous, until sometime after 400 BC when the Lucanians sacked the Greek city. When Alexander the Molossian of Epirus united the Greek peoples of southern Italy against the Lucanians, the city was free for a brief time (ca. 332 to 323 BC). The city became the site of a Latin colony in 273 BC, when it was again renamed, this time as Paestum. The city prospered until the first century AD when the silting of the river channel allowed malaria to overspread the Sele plain, thus making the area uninhabitable.

**Privernum (Piperno)**

Few remains of ancient Privernum survive on the site, as the current city dates mostly from the foundation of the medieval town in the tenth century. The site is attested in the ancient sources, however, as the Privernates launched an attack on Signia in 382 BC, provoking a military response from Rome. The town was captured in 329 BC and in 318 BC

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88 Martin 1996.

89 Zevi 2001, 10.

90 Strabo 5.4.13.

91 At this point the city was renamed Paistos or Paiston. See P. C. Sestieri, *Paestum* (8th English ed.) 1967.
the *tribus Oufentina* was established (the name came from the river Ufens, the modern Ufente). Some polygonal terrace walls survive at the site, although no substantial ancient remains are visible.\(^92\)

**Setia (Sezze)**

In legend, Herakles founded Setia,\(^93\) but in the ancient sources the first mention of Setia comes in the text of Velleius Paterculus who refers to the Roman settlement there in 382 BC,\(^94\) although the Volscians likely controlled the territory previously.\(^95\) In 379 BC Rome went to the aid of Setia when it was under attack by its hostile neighbor Privernum.\(^96\) Soon after this Setia joined the Latin League in taking sides against Rome in 340 BC.\(^97\) Demonstrating further distaste for Rome, Setia refused to give aid during the Second Punic war (although Setia did not make an alliance with Hannibal); for this infraction Setia was punished, in part by becoming the prison for the Carthaginian hostages after the war, as the city’s position in the Monti Lepini was both strategic and isolated.\(^98\) In 198 BC a slave revolt broke out at Setia,\(^99\) and in the first century BC the city sided with Marius, and was then

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\(^{92}\) G. B. Giovenale and L. Mariani in *NSc* (1899) 88; Armstrong 1910; Armstrong 1911, Armstrong 1911, Armstrong 1911.

\(^{93}\) The city’s motto, “*Setia plena bonis gerit albi signa leonis*” is based in part on an inscription discovered in 1657 that reads “Herculi fundatori S.P.Q.R.” and is connected to Herakles’ slaying of the Nemean lion.

\(^{94}\) Vell. Pat. 1.14.


\(^{96}\) Livy 7.42.8; 8.1.1; 9.19.6.

\(^{97}\) Livy 27.9.7; 29.15.2.

\(^{98}\) Livy 32.36.5.

\(^{99}\) Livy 32.26.9.
savaged by Sulla. There are numerous late Republican inscriptions known from the site, but by the Imperial period Setia was merely an urbs exigua, and remembered fondly by the poet Martial for its wine.

Signia (Segni)

The historical tradition names Tarquinius Superbus as the founder of Signia, which was subsequently re-colonized by the Romans in 494 BC. Like Norba, Signia is located in the Monti Lepini in a naturally strategic position with only one approach road. The acropolis dominates the site and was the site of a temple of Iuno Moneta that dates at least from the fifth century BC. An inscription was discovered reused in a wall near the Porta Maggiore that dates from the late third century or early second century BC. The text likely records the erection of statues and corresponding bases by a praetor after 209 BC, when having participated in the Punic War, the people of Signia received honors from the Roman senate and possibly also donative denarii after the Battle of Zama.

Sora

Sora, located roughly 96 km east southeast of Rome, was a Volscian town and became a Latin colony in 303 BC. In 209 BC Sora refused aid to Rome during the Punic War. The rights of ius Romanum would not come until 90 BC. Archaeologically, remains of

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100 App. B Civ. 87; Plut. Vit. Caes. 58.
101 Mart. 13.112; Plin. HN 3.5.64 comments on Setia, stating that it had the status of a municipium and not a colonia.
102 Livy 1.56.3; Dion. Hal. Ant. Rom. 4.63.
103 CIL 10.5969 “Manius Memmius, Memmi fili / Praetor / Signa baseis / De sua pecunia.”
104 Livy 7.28.6; 9.23.1; Strabo 5.238. The Romans had captured the town previously in 345 BC, 314 BC, and 306 BC.
the Republican period are preserved on Monte S. Casto, some 224 m above the town. The city received a colony of Augustan veterans of *legio IV Sorana* in the first century BC. Sora is notable as the birthplace of M. Atilius Regulus (d. 250 BC), who served as consul in 267 and 256 BC, capturing Brundisium during the former term. The sources report that the general Lucius Mummius also was born at Sora.

**Venafrum (Venafro)**

The city of Venafrum is situated close to the boundaries of *Latium adiectum* and Samnium, but lies in Campania. The site sits along the Via Latina and roads also connected it to Aesernia and to Telesia and Allifae. Festus records the city of Venafrum, one of the centers of the Pentri Samnites in the valley of the Volturno, as a Roman prefecture. The city was known for its agricultural and craft products.

**Verulae (Veroli)**

The city of Verulae, located in southern Monti Ernici, occupies a crescent-shaped mountain ridge and is surrounded by medieval walls that rest on foundations of Roman and pre-Roman walls. Its position has strategic value with respect to the valleys of the Liris and Sacco rivers. When the Hernicans declared war on Rome in 307/6 BC, the people of Verulae, in league with Aletrium and Ferentinum, did not take up arms against Rome. The Republican walls were of polygonal masonry, and significant stretches survive. The city is

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105 Livy 9.24.2 remarks on the height of this promontory: “*Ceterum cum propter difficilem urbis situm nec oppugnandi satis certa ratio iniretur et aut tempore longinqua aut praeceps periculo victoria esset.*” The Romans were able to take Sora only with the aid of a Soran deserter who knew best how to breach the unassailable heights.

106 Plin. *HN* 3.5.63.

107 Festus 262 L.

108 Livy 9.42.11.
referred to as “Verulae oppidum muro ductum”\textsuperscript{109} and is probably best known for the discovery of the fragments of an inscription known as the \textit{Fasti Verulani}.\textsuperscript{110} Within the walls little ancient construction remains, although a large masonry structure in \textit{opus incertum}, perhaps originally a cistern, beneath the Piazza del Duomo has been investigated.\textsuperscript{111}

\textbf{Etruria (Regio VII)}

\textbf{Alsium (Palo Romano)}

Located near the modern city of Ladispoli, Alsium was a coastal settlement in ancient times; its foundation was most likely undertaken in tandem with the town of Fregenae (ca. 245 BC).\textsuperscript{112} The site was affected by the construction of the Via Aurelia, but little of its Roman remains are known. Little is known about Alsium either archaeologically or historically, although it can be presumed that its plan followed the \textit{castrum}-type plan that was employed in the Roman settlement at Pyrgi.

\textbf{Aurinia (Saturnia)}

According to the ancient sources, the Pelasgians originally founded Aurinia in the \textit{Ager Caletranus}, about 20 miles inland from the coast.\textsuperscript{113} Today the site lies in the province

\begin{footnotesize}
\begin{enumerate}
  \item Vell. Pat. 1.14.8; Polyb. 1.56.2; Zonaras 8.16. Strabo 5.2.8 indicates that the settlement was small in size.
  \item Plin. \textit{HN} 3.8, 3.52; Dion. Hal. \textit{Arch}. 1.20; Livy 39.55; Ptol. \textit{Geogr}. 3.1.43. It also appears on the Peutinger Table as a road station on the Via Clodia. As for Caletra, this Etruscan site receives only fleeting mention in the texts, with both Pliny (\textit{HN} 3.5.8) and Livy (39.55) making passing reference to it.
\end{enumerate}
\end{footnotesize}
of Grosseto near the confluence of the Albegna and Stellata rivers. The pre-Roman settlement, on the basis of burial evidence, began in the late Villanovan period and had become a center of some importance under the Etruscans. In 280 BC a Roman praefectura was established there and, in 183 BC, the site became a colony under the triumvirate of Q. Fabius Labeo, C. Afranius Stellius, and T. Sempronius Graccus. Most of the archaeological remains at the site date from the Roman period.

**Caere (Cerveteri)**

Caere occupied a tufa plateau that was 8 km from the Tyrrhenian Sea. Ancient authors attribute the foundation of the city to Thessalians. Caere had a tumultuous relationship with Rome; it gained civitas sine suffragio in 353 BC, but lost it again after a revolt in 293 or 273 BC. By the Imperial period the city was but a small village. Two Villanovan necropoleis are known at the site in addition to three later ones. The remains of at least six temples are also known at the site.

**Castrum Novum (Torre Chiaruccia / Santa Marinella)**

Another of Rome’s so-called maritime colonies was established at the sixty-fourth mile of the Via Aurelia. The site of Castrum Novum, established in 264 BC, was situated on the northern coast of Caeretan territory. The early history of the site remains obscure,

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115 Livy 7.19.6; Dion. Hal. Ant. Rom. Fr. 33 Boissevain; Fest. 155 L, 262 L.

116 Strabo 5.2.3.

117 Livy 36.3 (Ostia et Fregenae et Castrum Novum et Pyrgi et Antium et Tarracina et Minturnae et Sinuessa fuerunt, quae cum praetore de vacatione certarunt); Plin. HN 3.5.51; Ptol. Geog. 68; Vell. Pat. 1.14.8. The territory had presumably been usurped by Rome ca. 353 BC. Confusion persists over the identification of Castrum Novum in the ancient sources, as a settlement of the same name existed both in Etruria and Picenum. See Salmon 1963, 20-3 and Frank 1914, 82ff. for discussion.
although it did receive a new group of settlers in the first century BC when the *Colonia Iulia Castronovana* was established there. The town’s imperial history is better known, mostly through epigraphic evidence that attest to the expected local magistrates. The imperial town possessed a theater, curia, tabularium, and a system of aqueducts, although the original rectangular form of the *castrum* remained evident. Numerous Iron Age artifacts suggest that, like Pyrgi, the site of Castrum Novum was occupied prior to the Roman conquest.

**Cosa**

The Latin colony of Cosa, located in southern Etruria, may have been planted on the territory of the Etruscan town of Chisa. Located close to the modern towns of Ansedonia and Orbetello, the site of Cosa occupies a rocky promontory that affords strategic visibility along the Tyrhenian coast. The site of the original Etruscan settlement is not certain, however Orbetello may be the most likely candidate. There, near the lagoon of the town, stand the remains of a system of polygonal walls that encircle a sandy spit of land, as well as burial evidence.

The history of the settlement at Cosa is certainly an interesting one, but despite the excavations of the twentieth century, little about Cosa is known from the ancient sources.

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118 Vell. Pat. 1.14.7; Livy *Per.* 14; Strabo 5.2.8; Pliny *HN* 3.51. The city was prosperous in the third century BC, Livy 22.11.6; 27.10.8-9; 32.2.7; 33.24.8-9.

119 Most discussions of Cosa must contain a lament over the fact that almost 60 years after Brown’s excavations commenced, the site remains insufficiently published. Several volumes of “final publications” have appeared, dealing the temples of the *arx*, the buildings of the forum, the houses, and Fentress’ excavation; numerous studies of artifacts have also appeared. The only real attempt at a synthetic treatment of the town as a whole came in the form of Frank Brown’s Jerome lectures for 1979 that appeared as the volume, *Cosa: the making of a Roman town* (Ann Arbor, 1980). The book allows one to glimpse something of Brown’s own vision of the Cosa evidence in context, but the volume is so brief that the treatment is largely superficial. Dyson, in the course of reviewing *Cosa V*, raises the contention that perhaps Cosa has received (and continues to receive) more attention than is its due. In archaeological terms this is a reasonable point, especially since Cosa is anything but typical, and yet has factored significantly in twentieth century thinking about Roman Republican towns. It has become the paragon Republican site (especially for English-speaking scholars) even though it may not have been the best choice for the exemplar of Republican towns. Taylor 2002 joins Fentress 2003 in
The town suffered during the third century BC when Rome was involved in the Punic and Samnite wars, and the population of the colony seems to have declined markedly, so much so that another group of colonists may have been dispatched in 197 BC. Over the next centuries, little mention of Cosa appears in the ancient sources, although it does receive some attention during the Augustan period when some new buildings are built in the forum area. Around 70 BC, the town seems to have fallen victim to a violent destruction that resulted in many buildings of the forum, as well as private houses, being burned. Some Cosa scholars attribute this destruction to some sort of “pirate raid”, although only one human casualty is known. In the Imperial period, the Ager Cosanus was the site of large-scale agricultural production and also fish-raising. While the colony may have declined in terms of prosperity, some renewal occurred in the Late Antique period, when new cults seem to have been established on the site. One ancient source alleges that a plague of mice caused the town to be abandoned in the late Roman period. The later history of the site has been the focus of the most recent work at Cosa, carried out by Elizabeth Fentress, whose aim it was to
down-dating the site. However, the difficult facts of the Cosa situation are impossible to escape and even if scholars might wish to remove Cosa from the forefront and consider it as yet another anomalous Republican town, we must first address the problems associated with Cosa and its study, echoing at the very least Dyson’s plea that the other long-promised studies of Cosan materials appear in the near term.

Brown 1980, 73. Also see Bruno and Scott 1993 for “House of the skeleton”. There are also a number of coin hoards associated with the burned deposits.

Perhaps as a result of the American excavations at Cosa, the Ager Cosanus subsequently became the focus of major excavation and survey projects. These include the excavations of the villa at Settefinestre (Carandini and Settis 1979, 1985), as well as survey campaigns, including the Wesleyan survey (Dyson 1978), surveys by a joint Italian-British team (Carandini, et al. 2002) and, more recently, work in the Albegna valley (Perkins 1999). While work on the site of Cosa (and publication of the material) waned, interest remained in the port and fisheries near Cosa, along with the economic activity of the Imperial period, both of which have been studied and presented principally in McCann and Bourgeois 1987.


Rut. Namat. De reditu suo 1.285-90 records that by AD 416 the site was deserted: “Cernimus antiquas nullo custode ruinas, et desolatae moenia foeda Cosae ridiculam clades pudet inter seria causam promere sed risum dissimulare piget. Dicuntur ciues quondam migrare coacti. Muribus infestos deseruisse Lares.”
construct a history of the site after the Roman period. Fentress’ work finds previously unobserved activity at Cosa in later periods.

**Fregenae**

The site of Fregenae, situated in coastal Etruria, lies just north of the mouth of the Tiber and not far from Ostia. The date of the colony is either 248 or 245 BC. Little in terms of archaeological or historical evidence survives for Fregenae.

**Pyrgi (Santa Severa)**

The site of Pyrgi was the main port Caere, and an important *emporion* in Central Italy. Dionysius I sacked the sanctuary there in 384 BC. Modern excavation has uncovered two archaic temples that are constructed in a unique style blending Tuscan architecture with Greek forms. Temple A has been dated ca. 480-470 BC, while Temple B dates ca. 500 BC. The site is most famous for the discovery, in 1964, of the three gold Pyrgi plaques, bilingual documents that record a dedication to Astarte in Etruscan as well as in Phoenicio-Punic. The castle at Santa Severa (ninth to fifteenth centuries AD) utilizes ancient polygonal masonry walls in its foundations; these walls most likely pertain to the Roman *colonia* that was planted at Pyrgi in the third century BC, likely in conjunction with

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124 Fentress et al. 2003. Fentress’ volume, the most recent Cosa volume to appear, has been reviewed in Dyson 2005. Dyson discusses Fentress’ excavation strategy that consisted, for the most part, of digging soundings in the area of Cosa’s forum and on the eastern height of the settlement.

125 Vell. Pat. 1.14.8 gives 245 BC as the date of foundation, while Livy Per. 19 provides 248 BC, “Coloniae deductae sunt Fregenae, in agro Sallentino Brundisium”.


127 Ciasca, et al. 1959, 143; Serra Ridgway and Descoeudres 1990, 511.

the construction of the Via Aurelia in 241 BC. The *colonia*, likely in the form of a *castrum*, occupied only a portion of the Etruscan site and was reinforced by polygonal walls. Most scholars believe that the *colonia* was a citizen colony and that it was in existence before 200 BC. The original size, plan, and organization of the *castrum* remains an open question, one that is difficult to resolve due to shifting coastlines and a greater interest in the Etruscan sanctuaries at Pyrgi than in the Roman phase(s) of the site.

**Rusellae (Roselle)**

Rusellae, situated about 9 km inland from Grosseto and close to Vetulonia, occupies two hilltops in the valley of the Ombrone River. The earliest nucleated settlement at the site dates from the eighth and seventh centuries BC, while the second period corresponds to the sixth to fourth centuries BC and was the most prosperous period in the site’s pre-Roman history. Even before the Roman conquest the city occurs in the written sources, as it promised aid to Rome against Tarquinius Priscus. The Romans captured the city, which was a member of the Etruscan federation, in 294 BC. In 205 BC, during the Second Punic War, the city contributed supplies of grain and timber for the fleet of Scipio Africanus.

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129 On the foundation, Strabo 5.2.8 and Diod. Sic. 15.14.4. See also Cozza 1957, 16-21 and Oleson 1977, 297-308.

130 Pallottino 1959, 253-8. The *castrum* measured ca. 183 by 229 m.

131 Salmon 1963, 23-4 expounds upon the arguments for the foundation of the *colonia* prior to 200 BC, based largely upon the fact that the city considered itself deserving of *sacrosancta vacatio*, thus helping to establish a date in the third century BC. For further discussion, see G. Tibiletti *Athenaeum* 28 (1950) 196 and T. Mommsen *Gesammelte Schriften* 4, 53.

132 Cummer, *et al.* 1974 and Oleson 1977 offer some of the most recent perspectives.

133 Dion. Hal. *Ant. Rom.* 3.51; Bianchi Bandinelli 1925.

134 Livy 10.4; 37.3.

The *triumvirs* established a *colonia* at the site in the first century BC, occupying a smaller area than the Etruscan city did.\(^{136}\) By the fifth century AD the site had become mostly abandoned.\(^{137}\)

**Sutrium and Nepet (Sutri and Nepi)**

The towns of Sutrium and Nepet, located in Southern Etruria, played an important role in the Roman expansion into Etruscan territory. Soon after the fall of Veii, the Roman expansion led to the establishment of Latin colonies at these two Etruscan communities in either 390 or 383 BC.\(^{138}\) The towns changed hands several times between the Etruscans and Romans. During the Second Punic War Sutrium reportedly joined 10 of the other 30 Latin colonies in refusing aid to Rome, for which they were fined in 204 BC.\(^{139}\) The only other mention of Sutrium in the ancient sources comes during the civil war between Octavian and Antonius when Agrippa occupied the town.\(^{140}\)

During the South Etruria Survey carried out by the British School at Rome during the 1950s, the site was studied in some detail and reports of the ancient remains visible there were prepared.\(^{141}\) Sutrium lies 50 km north of Rome on the course of the Via Cassia and had important strategic value in the ancient period.\(^{142}\) Little of the ancient town remains today, save some portions of the town’s circuit wall that was built of tufa in *opus quadratum*.\(^{143}\)

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\(^{136}\) Plin. *HN* 3.51; Ptol. *Geog.* 3.1.43; *CIL* 11.2618.

\(^{137}\) Rut. *Namat.* *De reditu suo* 1.220.


\(^{139}\) Livy 27.9.7; 29.15.

\(^{140}\) App. *B Civ.* 5.31. It is likely that Sutrium received a triumviral colony after the end of the Social War, on the basis of an inscription, “*Colonia Coniuncta Iulia Sutrina*” *CIL* 11.3254 and Plin. *HN* 3.51.

\(^{141}\) See Duncan 1958, 63-134.
At Nepet, some portions of the Republican city wall can still be observed. The walls have been the focus of recent study thanks in part to work on the Medieval castle there in 1998 that revealed a gate from the Roman period. The walls are built of squared blocks and previous studies, notably Blake’s, have compared them to the walls of Veii of the fifth century BC. Most studies of the walls at Nepet confront the same issues as at other sites, namely an apparent absence of archaeological data that could help secure a date for the walls; thus most studies presume a date in the fourth century BC, as does Guzzetti’s recent article.

**Tarquinii (Tarquinia)**

Perhaps the oldest of the Etruscan cities, in legend Tarchon founded Tarquinii when he led the Etruscans from Lydia to Italy. Early Villanovan remains are known from the site, as are numerous rich tombs. The city is connected with the origins of the *Etrusca disciplina* and the legendary child, Tages, who instructed the *Lucumones* in the ritual procedures. Also at Tarquinii was the exile Bacchiad Demaratos of Corinth who reportedly brought Greek artisans to Italy, and so introduced clay modeling. Much of

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142 Livy 9.32.1 refers to Sutrium as a blockade (*claustra*) against the allied forces of the Etruscans and Samnites: “…Sutrio, quae urbs socia Romanis velut claustra Etruriae erat”. Livy also famously refers to the towns as being the “gateway of Etruria” at 6.9.4: “namque cum ea loca opposita Etruriae et velut claustra inde portaeque essent”.

143 The tufa blocks were laid without mortar and measure ca. 0.058 by 1.16 m. The Medieval circuit wall incorporates three gates that likely correspond to the ancient ones. The walls have traditionally been dated to the fourth century BC, although as in most other cases the date has not been substantiated archaeologically. cf. Blake 1947, 75 and Lugli 1957, 1.277.


146 Blake 1947, 75; Guzzetti 2001, 83.

147 Herod. 1.94.

Rome’s own tradition, and also a few of her kings, stemmed from Tarquinii.\textsuperscript{150} From 397 BC Rome and Tarquinii were enemies\textsuperscript{151}, but truces and wars came and went until Rome founded \textit{coloniae} as Castrum Novum (287 BC) and Gravisca (181 BC), after which Tarquinii appears little in the written sources. Among the most notable ancient remains of the city is the third century BC Ara della’Regina, a massive tufa platform measuring 77.15 by 35.55 m.

\textbf{Veii (Veio)}

Some 16 km northwest of Rome sits the important Etruscan city of Veii on the Cremera River. The community began as a Villanovan center in the ninth century BC and by the sixth century BC was a major city with important sanctuaries, among them the famous Portonaccio temple. The interests of Rome and Veii clashed in the fifth century and, in 396 BC, Veii was sacked after a protracted siege and its territory annexed. After the Roman sack Veii languished, but experienced some renewal in the Augustan period.\textsuperscript{152}

\textbf{Volaterrae (Volterra)}

The city of Volaterrae (originally called \textit{Velathri} by the Etruscans) numbered among the most important of the Etruscan centers. Located in North Etruria, Volaterrae commanded the expanse from the Pesa River on the east to the Cecina and Vada rivers on the west. The city remained influential even after the Roman conquest when it was enrolled in the \textit{tribus Sabatina}.\textsuperscript{153}

\begin{footnotes}
\item[149] Plin. \textit{HN} 35.152.
\item[150] Livy 1.34.1-3; Strabo 5.220.
\item[151] Livy 5.13.
\end{footnotes}
Samnium (Regio IV)

Aesernia (Isernia)

Already a Samnite town by 295 BC, Aesernia received a Latin *colonia* ca. 263 BC. The town served as a center of Roman communication and was situated roughly midway between Venafrum (on the Via Latina) and the Samnite center of Pietrabbondante. The remains of polygonal walls suggest a circuit of fortifications. The remains of a temple podium dated to the third century BC are commonly believed to be those of the Capitolium. By 80 BC the town had the status of a Roman *municipium*.

Alba Fucens

In 303 BC, the Latin *colonia* of Alba Fucens was established in the territory of the Equi with 6,000 colonists. The site of the town, situated on the Via Valeria, lay within the confines of *Latium Vetus*, but closely bordered the territories of the Equi, Marsi, and Hernici. Alba Fucens remained an ally of Rome during the troubles of the third century BC, first the Samnite Wars and then the Punic Wars. During the second century BC Rome sent dethroned kings to Alba because of its remote location. In the historical record Alba Fucens is last

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154 Livy *Per.* 16 “*Colonia Aesernia deducta est*”; Vell. Pat. 1.14.7 “*At initio primi belli Punici Firmum et Castrum colonis occupata et post annum Aesernia*”.

155 Venafrum was the center of the Pentri Samnites and would later become an Augustan colony. The city was known for its cultivation of olives. Its wall was of *opus incertum*, although some polygonal construction, in the form of terraces, is evident in the vicinity of Madonna della Libera. See Festus 262L; *CIL* 10.4876; La Regina 1964, 55-67.

156 Livy 10.1; App. *B Civ.* 3.45.47; 5.30. Some scholars have speculated that the Roman town was established on the site of a pre-existing village of the Equi, as portions of an earlier wall might suggest.

157 These kings included Syphax of Numidia (Livy 30.17.45), Perseus V of Macedonia (Polyb. 37.16); the ally of Perseus V, Bituitus of Arveni, was held at nearby Carsulae (Livy *Per.* 61; Val. Max. 9.6.5).
mentioned by Procopius who relates that Justinian’s troops passed the winter there in AD 537.\textsuperscript{158} The site fell into ruin, and disappears from the sources, although some ancient buildings were co-opted as Christian shrines as early as the sixth century AD.\textsuperscript{159}

**Bovianum Undecumanorum (Boiano)**

Located 210 km east-southeast of Rome, the Samnite city of Bovianum was the capital of the Pentri Samnites from the seventh century BC. The city was involved in the Samnite Wars and the Social War, during which Sulla sacked it.\textsuperscript{160} In the first century BC the city received military veterans, as it did again under Vespasian in the first century AD when veterans of the *Legio XI Claudia* settled there.

**Sulmo (Sulmona)**

Another city of Samnium, Sulmo was inhabited by the Paeligni and was located near the confluence of the Gizio and Vella rivers. Of the Samnite city, few archaeological remains, save tombs, have been discovered. Along with other sites, Sulmo became a Roman *municipium* in the first century BC. The ancient town had an orthogonal plan that is reflected in the medieval layout. The city was said to be the birthplace of the Roman poet Ovid.\textsuperscript{161}

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\textsuperscript{158} Procop. *Goth.* 7.25.34.

\textsuperscript{159} The modern study of the site began with M. Simelli who made sketches of the ruins during a visit in the Marsican area in 1809. Carlo Promis (1808-1872), an architect from Turin, published the first study of the site, *Le antichità di Alba Fucense negli Equi* (1836). In the twentieth century the Belgian school, directed by Jozef Mertens, together with the Soprintendenza alle Antichità degli Abruzzi e del Molise, carried out the excavation and publication of the site, beginning in 1949 and continuing into the 1980s. See Catalli 1992, 3.

\textsuperscript{160} It received status as a *municipium* in 87 BC. Plin. *HN* 3.107 may be referring to this site when he mentions “Bovianum Vetus”.

\textsuperscript{161} Ovid *Am.* 3.15.12.

**Umbria (Regio VI)**

The Umbrian cities are frequently overlooked in surveys that treat the architecture of ancient Italy. The Romans believed that the Umbrians were among the most ancient peoples of Italy, and indeed many Umbrian centers had developed into complex communities prior to the Roman conquest.

**Ameria (Amelia)**

An Umbrian city, Ameria was a *municipium* located on a tributary of the Tiber, purportedly founded in 1134 BC.\footnote{Plin. *HN* 3.114 reports that Cato stated that Ameria had been founded by a certain Amerius 963 years before the war with Perseus (171-167 BC). Pliny uses this to reinforce his claim that the Umbrians are among the most ancient people in Italy, although one wonders if Pliny trusted the veracity of Cato’s date. Pietrangeli and Ciotti 1958, 317; *AA* 85 (1970) 318.} The citizens were assigned to the *tribus Clustumina*.

**Interamna Nahars (Terni)**

Interamna Nahars, site of a major settlement of the late Bronze and early Iron ages, may have received Roman status during the Roman conquest at some point before the Social War.\footnote{Bradley 2000, 129.} A Latin inscription would seem to date the city’s foundation to 672 BC,\footnote{CIL 11.4170.} but this must be treated with skepticism. The Nera (ancient Nar) and Serra rivers encircle the site and from the earliest times it was the starting point for routes running across Italy, including


\footnote{\textsuperscript{163} Plin. *HN* 3.114 reports that Cato stated that Ameria had been founded by a certain Amerius 963 years before the war with Perseus (171-167 BC). Pliny uses this to reinforce his claim that the Umbrians are among the most ancient people in Italy, although one wonders if Pliny trusted the veracity of Cato’s date. Pietrangeli and Ciotti 1958, 317; *AA* 85 (1970) 318.}

\footnote{\textsuperscript{164} Bradley 2000, 129.}

\footnote{\textsuperscript{165} CIL 11.4170.}
access to Picenum, Reate, and the Apennines. The name of the settlement has been taken to be the Latin name, on the basis of the ancient sources.\textsuperscript{166}

**Spoletium (Spoleto)**

The town of Spoletium, located 29 km north-northeast of Terni in the valley of the Clitumnus, rises to 453 m a.s.l. at its highest point.\textsuperscript{167} The earliest human occupation of the site dates from the Iron Age, on the basis of funerary evidence on the site in the area of the Duomo and the Rocca.\textsuperscript{168} A colony was established there in 241 BC and in 217 BC, after the battle of Trasimeno, the town’s inhabitants were able to repel an attack by Hannibal.\textsuperscript{169} The citizens of Spoletium were enrolled in the *tribus Horatia* in 90 BC and the city attained the status of a *municipium* after 82 BC\textsuperscript{170} although later during the civil wars the town would suffer greatly. An earthquake in 63 BC necessitated the repair of the city’s walls, and the repair is recorded in a contemporary inscription.\textsuperscript{171}

**Preliminary conclusions**

This brief, site-based survey of the historical framework of the middle Republic illustrates the complexities of the period, circumstances that also apply to the interpretation of the material record. The survey of sites presented in this chapter outlines the most

\textsuperscript{166} Varro *LL* 5.28: “*oppidum Interamna dictum, quod inter amnis constitutum.*”; Paulus-Festus 16L: “*Unde Interamnae et Antemnae dictae sunt, quod inter amnes sint positae, vel ante se habeant amnes.*”

\textsuperscript{167} C. Pietrangeli *Spoletium (Spoleto)* (1939); B. Toscano *Spoleto in pietri* (1963).

\textsuperscript{168} Fontaine 1990, 135-6. The tombs contained impasto ceramics that have been dated to the seventh century BC.

\textsuperscript{169} Livy 22.9.

\textsuperscript{170} On the foundation, Livy *Per.* 20; Vell. Pat. 1.14. Cic. *Pro Balb.* 21 notes “*colonia latina in primis firma et illustris*”, indicating that in 95 BC the town was still a Latin colony.

\textsuperscript{171} *CIL* 11.4809.
important sites in this study from an historical point of view, focusing on the information presented from the ancient sources. This historical view will be important to keep in mind once the attention shifts to the archaeological material that relates to these same sites and, at that point, one of the most perplexing realities in Roman archaeology will become evident. This is the apparent fact that in most instances where the historical record preserves references to middle Republican cities in Italy, the archaeological record does not provide any substantial evidence. In fact, most sites seem empty in terms of middle Republican civic and domestic architecture. In chapter three an extensive survey of the civic architecture in Central Italy shall attempt to elucidate the situation in hopes that a presentation of the surviving and excavated material will, at least, clarify the landscape in terms of civic buildings. Chapter four will focus on fortification walls that surround some of the sites under study, many of which can be assigned to the middle Republic in chronological terms. These two chapters taken together will present something of a paradox in that many sites have walls that can be dated to the fourth or third centuries BC, but do not have structures inside the walls that can be dated before the second century BC. This is the essential nature of middle Republican archaeology and its difficult qualities have caused other scholars to avoid it altogether or to craft chronologies that allow them to avoid the pitfalls and untidy nature of this period and its material. Scholarship, however, has progressed to a sufficient degree that the time is right to assess this period rather than avoiding it, thus chapter five will present a synopsis of the evidence considered in the preceding chapters and attempt to contextualize it in an effort to situate the urban trends of Central Italy in their proper context. Without a broader and deeper understanding of the urban trends and architectural forms of the middle
Republican period, the urban developments that follow on the heels of the Gracchan period (and inspire much of Imperial architecture and urbanism) cannot be understood fully.
CHAPTER THREE: CIVIC ARCHITECTURE IN ITALIAN CITIES AND TOWNS

Whether located in a small community or a large one, civic buildings serve an essential and vital role. As the focus of official events and communal gatherings, these structures help to define and frame the life of the citizenry, as well protect the community when necessary.¹ In the ancient Mediterranean world this was especially true, as one would find that the civic buildings (usually located in the agora or forum) were the center of activity and a hub of vitality. As such many scholars have studied the civic architecture of both Greek and Romans, as discussed in chapter one, but in the case of Republican Italy, questions remain about the chronology and development of this class of architecture.

Civic architecture and the tangible community

The discussion in chapter two considered the legal and ritual criteria that defined communities in Italy, including those that distinguished Roman citizens from non-citizens, colonists of the ius Latii from those of the ius Romanum. These were important distinctions in the Roman world, as certain legal privileges were of great socio-economic value as they entitled one to participation in the Roman system. One important trend in recent scholarship has been a growing awareness of the survival of local, indigenous identity and practice among those who were incorporated into the Roman citizenry. While scholars continue to debate the usefulness of Romanization studies, for the purpose of the present discussion it is

¹ Livy 10.12.7-8 shows how smaller town dwellers would seek large cities, especially in times of danger “urbibus oppugnandis temperatum, in quas timor Etruscos compulerat”.

important to remark that the establishment of *coloniae* in Italy constitutes an active Romanization process insofar as these foundations entailed the creation of Roman-style political systems and the attendant infrastructure in previously non-Roman areas. This active process, as will be seen, served to create an elaborate and interconnected network of communities of all sizes in Italy, a community base that would prove crucial to Rome’s survival during the crises of the Republican period.\(^2\)

Since the ancient sources provide dates for the establishment of Republican cities, as discussed in chapter two, many scholars – and even some prominent excavators – have assumed that the emergence of a physical community corresponded quite closely to the date of foundation or incorporation. The tendency toward this assumption is understandable in some respects, but it reflects a somewhat antiquated notion of the Roman Republic as well as the scarce archaeological data for the early and middle Republic. The shortage of archaeological evidence relates directly to the physical fabric of Roman settlements in Central Italy, and to the architecture of those communities. One of the prevailing modern mindsets about the Roman world, constructed upon foundations laid by nineteenth century scholarship, frequently focuses upon the iconic image of the forum, bounded by civic buildings on one side and a temple on the other, with the square between used for the commerce and politics of the community. Since this arrangement was observed at numerous ancient sites in Italy, it seemed that this standardized civic center must reflect the ideology of the senate at Rome, with the forum reflecting not only the prerogative of Rome but also the identity of the Romans. The difficulty comes in the fact that, as will be demonstrated, for most Italian cities, the reported foundation date and the chronology of the remains of civic architecture do not correspond to one another. Before assessing what data can be used to

\(^2\) Dyson 1992 presents a new view of communities in Italy.
establish a reconstruction of Republican sites in Italy, it will prove helpful to review the relevant building typologies for this period.

**Civic architecture in Roman towns**

In the study of Mediterranean architecture, the most frequent method for the categorization of buildings is to assign them either to the public sphere or to the private one, and perhaps further divide them into sacred versus profane categories. For the purposes of the study at hand, yet a further categorization is necessary, as it will allow a discrete corpus of architectural remains to be considered in terms of the spread of Roman influence and hegemony during the middle Republic. Thus the architectural forms of direct interest here will be categorized under the label of “civic architecture,” a category that includes public buildings related to the political life of the town (e.g. basilica, comitium, curia), as well as physical infrastructure that helps define the settlement (e.g. fortifications, infrastructure, roadways). One ironic fact concerns the origins of several of the most canonical Roman civic buildings. The triad of basilica, comitium, and curia stands for many scholars as a clear indicator of the Roman civilization, yet the chronology for each of these building types remains unclear, as do the points of influence or origin that introduced them into the Roman vernacular. The question of whether they derive from Greek forms arises often, particularly what the relationship between the Greek *stoa basilike* and the Roman basilica might be. The basilica is commonly included among this standardized set of buildings, but since its architectural genesis in Italian cities seems clearly to be a phenomenon of the second century BC, it will not occupy a major role in the discussion of middle Republican civic buildings.3

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3 See *RE* 3.83ff. The iconic basilica is well known as an architectural form in the Imperial period, yet the Republican basilica remains relatively elusive. In the Roman world the basilica served many purposes, but commercial and judicial ones predominate. By the late Roman period the basilica had become a hallmark
Discussions also persist about the correspondence between Greek bouleuteria and Italic comitia. The inconclusive (and incomplete) study of the architectural morphology of these buildings is startling and, as the following chapter will demonstrate, hampers a full understanding of urbanism in the middle Republic.

Roman building, one whose grandiosity and utility were unrivalled by other structures commonly built in cities and towns. The success of the basilica as a building type may be ascribed to its relatively simple and utilitarian design. The basic ground plan consisted of a nave and side-aisle arrangement, with the nave covered by a high ceiling lit by means of clerestory windows. The addition of covered colonnades to the basilica exterior lent a convenient duality to the covered hall by connecting the interior space with the forum outside. Town planners sometimes chose to situate basilicae along a forum’s long sides, but so many variations exist that no clear principle can be defined. Basilicae were present in many communities in Italy by the first century BC, but the chronology of their development is not clear. The Basilica Porcia was reputedly the first building of its type to be built at Rome; its construction is attributed by the sources to 184 BC under Marcus Porcius Cato (Livy 39.44; Ascon. in Mil. Arg. 34; Plut. Cat. Mai. 19; Plut. Cat. Min. 5; Plut. De Vir Ill. 47). In spite of some archaeological remains that may pertain to a first century BC iteration of the Basilica Porcia, there is not sufficient evidence to reconstruct the original plan of the first version. Welch 2003 approaches the issue of the Basilica Porcia’s position and the origins of the building type, but rather than consider what the actual Italic background of the type might be, instead focuses on presumed Hellenistic antecedents to the Italian basilica. This unavoidably brings to the fore issues of the etymology of the term basilica and its possible connection to the Greek stoa basilike as well as the kingly connotations of the Greek type; cf. Zevi 1991. On the Greek stoa, see Coulton 1976. Unpublished excavation notes of A. M. Colini indicate that investigations conducted in Latumis uncovered remains not of the original Basilica Porcia, but of a Sullan rebuilding of the structure (LTUR 1.187). The reconstruction proposed by Coarelli positions the Basilica Porcia to the northwest of the Republican comitium, but since the position of the latter is not certain after the reshaping of the area by Iulius Caesar, the basilica’s position cannot be fixed with certainty. On the basis of the ancient sources, scholars have reached a consensus that the Basilica Porcia did not adhere to the familiar nave and side-aisle arrangement familiar in late Republican and Imperial basilicae, but was a broad hall open to the square by means of several porticoes. During the funeral of Clodius in 52 BC, the Basilica Porcia was destroyed by fire, never to be rebuilt. The recent reconstruction of the situation by K. Welch attempts to address the topographical issues connected with the “first basilica” in Rome, but instead focuses more on the perceived Greek antecedents for the structure in an attempt to assess public architecture at Rome through a Hellenistic lens. In the end it seems clear that whatever the chronology of the origins of the basilica-type at Rome, and whatever the original morphology might have been, the phenomenon of basilicae in Roman Italy is decidedly one of the late Republic, with well-known examples at Ardea, Cosa, and Pompeii (On the basilica at Ardea, see Wikén 1934 and Morselli and Tortorici 1982, 93-6; for Cosa see Brown, et al. 1993, 207-29; for Pompeii, Richardson 1988, 95-9). The building type seems to reflect the urban trends of its period when public spaces like fora were becoming more defined physically, hemmed in by porticoed structures, and so, in a sense, regularized. As such middle Republican basilicae are not to be found, but an awareness of the basilica type is important to the present discussion because of the role of this building in the formation of the late Republican worldview as it relates to civic architecture. Coarelli and others have made the assertion that the construction of large basilicae at Rome may signal the influence of war booty flooding the city at the end of the Second Punic War, as well as the early wars in the Hellenistic east.
Comitium

In Rome the Comitium was the primary locus of political assemblies, and occupied an area north of the Forum Romanum at the foot of the Capitoline Hill. The Archaic and Republican *comitium* at Rome has long been the subject of scholarly debate and archaeological inquiry (figs. 2, 3). Since the Comitium and Curia were so central in terms of ideology and location to the Republican political process, the scholarly impetus to define, locate, and understand them is understandably great. The impetus is so strong, and the interpretations so potentially far-reaching, that the issue is a contentious one. The most recent attempt to address the Comitium debate, and to reshape it, was made by Paolo Carafa in 1998. Carafa surveys the history of the site and the fieldwork there, and then suggests his own reconstruction of the area, one that differs substantially from those of previous scholars. His conclusions are based, at least in part, on the fieldwork of Giacomo Boni (1899-1900), Pietro Romanelli (1954) and Maria Floriani Squarciapino (1955-1961), but also on his own conception of regal Rome. Carafa addresses issues like the size and shape of the Comitium, with his conclusion on the latter that the area measured 730 m². He also reconsiders the inauguration of the *comitium* and the important adjacent areas of the Curia and Rostra, with

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4 Varro Ling. 5.155; Macrob. Sat. 3.16.15. The ancient sources indicate that the *comitium* was an open area through which troops could march (Livy 5.55); its being open to the sky is reconfirmed by the fact that prodigies of raining blood could be observed there (Livy 34.45). The location of the *comitium* itself was long debated and could not be fixed with any certainty until the *Curia Iulia* was identified by Mommsen (cf. Ann. d. Inst. (1845) 288-318; Jordan 1871-1907 1.2.318, n. 3; Platner and Ashby 1929, 134-5).

5 Major studies of the twentieth century have presented varying viewpoints about the nature and location of the Republican *comitium*. See E. Gjerstad “Il Comizio Romano dell’età repubblicana,” OpusArch 2 (1941) 97-158; E. Sjöqvist “Pnyx and Comitium,” In Studies presented to David M. Robinson v. 1 (St. Louis, Mo., 1951) 400-11; J. Hanson Roman Theater-Temples (Princeton, 1955); C. Krause “Zur baulichen Gestalt des republikanischen Comitiums,” RömMitt 83 (1976) 31-69; Coarelli 1983, 119-60; Coarelli 1985, 11-123 and Coarelli LTUR 1 309-14 discusses at length the *comitium-curia* complex in the Forum Romanum.

the conclusion that the latter two were *templa*, but the Comitium was not. Certainly Carafa knows early Rome well, but (as reviewers have remarked) his combination of the regal tradition advanced by Andrea Carandini with his reading of the topography in the area of the Comitium makes some of his points less than convincing. In spite of methodology, one would be hard pressed to find a more contentious topographic issue than that of the Republican Comitium in the Forum Romanum, as almost nothing in fact is known for certain about its original plan, location or nature. As a result, Carafa’s reconstruction is but one of many available for consideration.

Recent work by Albert Ammerman offers an even more revolutionary picture of the Comitium than does Carafa. Ammerman’s work focuses in part on the landforms of the forum valley and the surrounding hills and in considering the physical terrain he reveals some interesting insights about the early manifestations of this important space. Ammerman discusses a landslide of *cappellaccio* that originated on the Capitoline Hill and was deposited in the area that came to be the Comitium. Ammerman’s fieldwork revealed that the earliest modification of the site probably occurred during the seventh century BC and that the large blocks of volcanic stone were likely incorporated into the functionality of the space. Thus the Comitium, at least early on, was a naturally flat area with rock outcroppings that were apparently suited to the needs of the populace. This demonstrates a propensity for landscape modification to meet community needs and also a willingness to use available space without resorting to the construction of permanent buildings. This insight on the Comitium at Rome will prove useful in considering the *comitia* attested at other sites in Italy, notably Alba

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7 Ammerman 1996.

8 Ammerman 1996, 123 n. 11.
Fucens, Cosa, and Paestum, that will be considered below. The excavators who identified comitia at these sites were keenly aware of the prime status of the Comitium at Rome in political terms, and this awareness has, in some ways, influenced the interpretations of colonial comitia.

**Curia**

In tandem with the debate concerning the Comitium at Rome is another whose focus is the origin, development, and topography of the Curia in Rome. The curia, as the official meeting place of the senate, was an inaugurated space. Rome’s original Curia, the Curia Hostilia, has generally been attributed to the reign of Tullus Hostilius and was situated to the north of the Comitium. Its plan and exact position are unknown, owing to the total reworking of the area during the time of Iulius Caesar. Caesar began the construction of the Curia Iulia in 44 BC as a replacement for the Curia Hostilia; Augustus inaugurated the structure in 29 BC. The Curia Iulia would serve the city for centuries, being restored by Domitian in AD 94 and rebuilt in toto by Diocletian after a fire in AD 283. Both of these structures served, in their respective time periods, as the senate house of Rome.

The building typology consists of a rectilinear ground plan that accommodates an open meeting hall and, on the basis of examples from outside Rome, sometimes a series of three rooms at the back of the hall. The example at Cosa has massive foundations that

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10 Cass. Dio. 44.5; 45.17; 47.19.

11 Suet. Cai. 60; Cass. Dio. 51.22.

12 Hieron. 161 (on Domitian), Chron. 148 (on Diocletian).

13 The curiae at Cosa and Pompeii are reconstructed with such a plan.
clearly show provisions for the three-room arrangement. Clearly the curia is an important Roman building type, but in architectural terms the Republican *curiae* are difficult to locate archaeologically, owing to the destruction of the earliest examples at Rome by later construction. For this reason most considerations of the curia have been those of topographers as they debate the position of the elusive buildings of the early Forum Romanum or studies of the *curiae* in provincial contexts.\textsuperscript{14}

**Survey of Sites**

Since the middle of the nineteenth century, numerous site-based investigations have been carried out in Central Italy. These range from the itineraries written by antiquarians and learned travelers to full-blown excavation and survey by archaeologists. All of these investigations taken together furnish a rich tableaux of material evidence that can be used in establishing reconstructions of life in the ancient period. Many of the sites in Central Italy under study here, as has been discussed in chapter two, were believed to have been founded during the middle Republican period, some as a result of Roman influence and others of their own accord. Since many of these sites were invested with some degree of Roman political rights, it might seem logical to expect that the physical architecture of the Roman political system would appear at these sites, as some excavators have presumed. Indeed some sites do develop both a curia and a comitium, but oftentimes the dating of these structures is more likely than not substantially later than the foundation date; conversely, many other sites never seem to develop these architectural features, a circumstance that may be explained by a variance in modes of political assembly.

\textsuperscript{14} Balty 1991.
At Norba, the area within the fortification walls has been investigated extensively, with major excavations carried out by Raniero Mengarelli and Luigi Savignoni, followed by the work of Lorenzo Quilici and Stefani Quilici Gigli continuing up to the present day. The site was also explored as part of the campaign of aerial survey undertaken by Giulio Schmiedt and Ferdinando Castagnoli in the 1950s. Aside from the massive walls of the site, the visibility of ancient monuments is poor, although two main loci of activity, termed major and minor acropoleis, can be identified. The temples at these two positions attracted a great deal of attention from Savignoni and Mengarelli. From the aerial photography a grid of streets may be discerned (fig. 4). Evidence for substantial middle Republican architecture at Norba is scanty; the most prominent buildings that are not temples date to the late Republic and include a bath complex, several domus, and cisterns. An area that on the city plan is marked as the forum is devoid of the usual architectural remains found in such spaces. The archaeological picture of the middle Republican site, then, is that of a massive fortification wall with gates and several temple complexes.

The hilltop site of Civita di Artena attracted attention during the early twentieth century, and then once more during the 1960s and 1970s. This site is in an upland area, like Norba, and is perhaps even more enigmatic in its nature. The site has walls in polygonal masonry as will be discussed in chapter four, as well as evidence for ritual activity in the form of votive deposits. There is also evidence from the hilltop of Artena of a large,

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15 Schmiedt and Castagnoli 1957.
16 Savignoni and Mengarelli 1901.
17 On the baths, see Quilici Gigli 1997.
18 Ashby and Pfeiffer 1905, Quilici 1968, Quilici 1974; Quilici 1982.
terraced foundation with various cells or chambers built-in, but a function for this structure is not evident. Aside from the remains discussed, the architectural evidence on the site is relatively scanty.

The Pontine sites were, for the most part, foundations of the middle Republic, and thus might be considered ideal for a discussion of civic architecture during that period. The numerous sites of the Pontine region, including Aletrium, Arpinum, Cora, Setia, Signia, and others, are less visible archaeologically than sites like Artena or Norba. These sites are characterized by their positions atop steep, rocky hills and are most often encircled by polygonal circuit walls, as will be discussed in chapter four. Modern habitation results in ancient material being evident in limited quantities. We have little information of substantial structures at these sites, save the examples of several notable temples at Cora and Signia. Inscriptions at some sites, such as the famous Betilienus Varus inscription at Aletrium, record the building activities of magistrates, but these all pertain to the late Republic. For the majority of the Pontine sites, then, it must be admitted that little is known of their architecture or urbanism, save the fortification walls.

In the hinterland region of several Pontine cities the Dutch Pontine Region project has endeavored to identify new sites through field survey (fig. 5). In the surveys the Dutch have identified a range of sites on the basis of surface evidence, including small sites like Colle Gentile near Norba, as well as numerous basis villae sites (see Appendix I). These same areas were scoured by the compilers of several volumes of the Forma Italiae, from which it is quite evident that the hinterlands of the Pontine cities (e.g. Cora) are densely covered with small sites.
Perhaps one of the most thoroughly excavated small sites in Latium is at Borgo Le Ferriere (Satricum) where ongoing Dutch fieldwork has produced an interesting picture of this sanctuary continuing its life in modified form after major shifts at the end of the Archaic period (fig. 6).\textsuperscript{20} The site is substantial and advanced during the Archaic period, but undergoes numerous changes at the end of that period, resulting in a site that is reduced in its status. While there is no evidence for civic buildings on the site, the changes that occur at Satricum are significant in that they may speak to some of the changes that swept through Latium beginning in the fifth century BC and resulted in, among other things, a different approach to architecture in the public sphere.

American excavations at Minturnae during the early twentieth century focused on the area of the forum, as well as on the walls (to be discussed in chapter four). The chief excavator, Jotham Johnson, was attracted to the forum area no doubt by the remains of prominent Imperial remains, including those of a theater (fig. 7). Guided also perhaps by Livy’s account of a lightning strike at the site in 191 BC,\textsuperscript{21} Johnson explored what he identified as the \textit{aedes Iovis} and some nearby \textit{tabernae}.\textsuperscript{22} Johnson admits in his report that any remains of buildings prior to 191 BC were paltry at best (aside from the pre-Roman polygonal walls), and thus he interpreted the temple remains as post-dating the presumed destruction by lightning in 191 BC. If one recalls that the Via Appia bisected Minturnae in 312 BC, the significant position of the site is reinforced, yet it appears that the forum was


\textsuperscript{21} Livy 36.37 describes the events of 191 BC while 27.37 mentions a previous lightning strike in 201 BC.

\textsuperscript{22} Johnson 1935.
largely devoid of permanent structures, although an earlier forerunner of the temple could be reasonably conjectured.

The forum at Alba Fucens occupies the city center and assumes an elongated profile, measuring 171.8 m in length. Two streets – the Via di Porta Fullonica and the Via del Miliario – flank the forum’s long sides, intersecting the *cardo* near the basilica (fig. 8). Located on the forum, the Comitium numbers among the most intriguing archaeological features of the city.\(^{23}\) The foundations of the Comitium are constructed of polygonal masonry and the whole structure measures ca. 20 by 20 m (fig. 9). The circular *cavea* incised within the rectangular building measured 17 m in diameter and was surrounded by two steps made of fine-grained limestone.\(^{24}\) Mertens established the chronology of the Comitium on the basis of several shards of black glaze pottery discovered during the excavation of the building that date to the end of the third century BC.\(^{25}\) But an examination of Mertens’ plan indicates that the structure was only investigated in trenches of limited scope and so a conclusive chronology is not forthcoming for this structure. Among other buildings identified and investigated in the forum area are the basilica and a portico at the southeast end between the square and the basilica and several other monuments (fig. 10).\(^{26}\) The city center, just to the east of the forum, included the macellum and numerous shops, as well as a theater, private houses, and baths.

\(^{23}\) Mertens 1969, 98-101. The Comitium faces the forum on its northwest side and has a frontage of ca. 40 m.

\(^{24}\) Mertens 1969, 99.


\(^{26}\) Mertens 1969, 97-8 compares the dimensions of the forum at Alba Fucens with those of Pompeii (142 by 38 m), Ostia (140 by 25 m), Brescia (139 by 40 m), Lucus Feroniae (103 by 25 m). All of these *fóra* are known in their early Imperial manifestations that include surrounding porticoes, which seems to be similar to the situation at Alba Fucens.
The forum of the city of Paestum also has a Comitum-type structure, although it is frequently referred to as the “teatro circolare” (fig. 11). This structure has suffered from a fairly irregular history of study, as it was explored under Frank Brown in 1955, but the observations from that campaign did not appear in print until 1993. In the meantime the Italian team under E. Greco and D. Theodorescu studied the complex between 1981 and 1984, publishing their report in 1987. The Italian report seems to have been unaware of the American investigation, a circumstance that is wholly understandable given the amount of time that had passed. The two reports are somewhat contradictory with regard to the reconstruction of certain features of the complex, but the conflicting views do not affect the present discussion of the complex as it relates to civic architecture. Given the methodology and timeframe of the Italian investigation, the conclusions reached therein seem more viable.27

On the basis of ceramic evidence, Greco dates the Comitium of Paestum to the second quarter of the third century BC, thus roughly contemporary with the foundation of the Latin colony there.28 The rectangular structure measures ca. 41.52 by 49.72 m and includes a seven-stepped cavea measuring 30.56 m across at the maximum and 26.10 m at the minimum; its capacity has been estimated at 965 persons (figs. 12, 13).29 The American investigation involved soundings on the site, including some exploration of the foundation trench of the Comitium. This trench produced numerous pottery fragments, many of them from the Imperial period, as well as Late Roman B pottery and Ribbed ware.30 The lowest

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28 Greco and Theodorescu 1987, 70. The pottery evidence is mostly Hellenistic black glaze.
stratum produced five black-glaze shards that lay against the footing of the wall. These shards correspond to the “Campana A” type of Lamboglia and are fragments of small cups and bowls. The pottery provides a date in the latter part of the third century BC, and Richardson has used them to date the building to that period on the basis of their discovery in the foundation trench. A note of caution should be raised, however, since the pottery remains across the site of Paestum are profuse, with the earliest shards being Corinthian wares and local products of the latter part of the sixth century BC. The Comitium is a large complex in terms of its footprint and Richardson offers only these few shards as proof of the building’s chronology, not unlike his similarly meager evidence for the chronology of structures in the forum at Cosa. Similarly Greco and Theodorescu provide ceramic evidence from their soundings in the area of the Comitium but it is not eminently clear that the ceramics necessarily determine the date for the building (fig. 14).

Cosa stands along with Alba Fucens as one of the most investigated sites in Italy founded during the middle Republic. While the publication of Alba Fucens has been fairly full and thorough, the same is not true for Cosa. The 1993 publication of Cosa’s forum and its structures is particularly relevant here, although a space of 43 years interceded between the start of excavations in the forum and the publication of the final report. Thus the volume is not entirely coherent in its discussion, as noted by those who prepared it for press after Brown’s death.

One particular area of difficulty with regard to Cosa is the architectural chronology that Brown and his team established for the site, and subsequently used in publication. The

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32 Brown et al. 1993, xxiii-xxv.
chronological scheme itself was influenced strongly by the stylistic scheme constructed for the architectural terracottas from Cosa’s *arx* by Lawrence Richardson Jr.\(^{33}\) This framework seeks to produce an evolutionary model that can be used to establish a linear progression of the fictile decoration for the temples at Cosa and, in itself, is a carefully wrought typology. The troublesome fact is that the excavators too often allowed the aesthetic typology to stand in for archaeological chronology, a problem that affects a substantial portion of the published record for Cosa.

In the forum at Cosa there are several important structures that were associated with the Republican town: the Curia, Comitium, and basilica (fig. 15). This trio of structures, as discussed above, was tied to the civic life of a Republican community in Italy, and so the excavators were not at all surprised to discover their remains at Cosa. The boundaries of Cosa’s forum were delimited by means of boundary stones (*cippi*), one of which was recovered in a sounding beneath the basilica.\(^{34}\)

The Comitium is perhaps the best preserved of this group of buildings and was excavated during 1950 to 1954 and 1967 to 1972 (fig. 16). The structure is situated on the northeast side of the forum in a compact area between the forum and street 7. Upon excavation the Comitium was revealed to be composed of a rectangular retaining wall that enclosed a circular area (8.60 m in diameter) that was surrounded by a three-tiered, semicircular cavea.\(^{35}\) The enclosure wall, 0.60 m in thickness, was built of local sandstone with a rubble core that includes mortar. In the center of the open space a footing for what

\(^{33}\) Taylor 2002.

\(^{34}\) Brown, *et al.* 1993, 7-9. Brown gives the area of the forum as 13,510 m\(^2\) or 154,200 square p.R.

\(^{35}\) Richardson 1957, 51 estimates the capacity of the Comitium at 596 persons.
was presumed to be an altar was discovered and the excavators dug a small, quadrangular sounding in its vicinity (fig. 17, 18). From this 2.0 m$^2$ sounding (dubbed ‘Comitium, Northeast Sounding’ in the report) came some ceramic evidence (fig. 19). While meager in quality and quantity, Brown and Richardson would use the shards from this sounding as they went on to construct the architectural chronology for the Comitium itself, especially in establishing a date for its initial phase. The ceramics that are recorded in the report are meager, consisting of lamp and bowl fragments (fig. 20). The lamp shards are used, in particular, to establish a date for the construction of the Comitium itself, and so, in Brown’s view, the political life of Cosa as well. Even if the chronology for the lamp can be supported, it is far from a conclusive offer of proof for the chronology of the buildings associated with the forum at Cosa.

First of all the lamp shards are not deposited in direct stratigraphic relation to the built structures of the Curia-Comitium complex, thus their deposition cannot be tied unequivocally to the construction on the site. Even if the argument is put forward that since the shards lay beneath the packed earth floor of the Comitium and so predate its construction, it must be recalled that the gathering of the comitia did not require a built space and, in fact, the evidence of sites considered here would seem to suggest that the comitia met for quite a long time in flat, open spaces before permanent buildings were erected.

The shards discovered in the sounding were those of the base of a black-glaze bowl or cup with a splayed ring foot that measured 0.039 m in diameter (inventory no. CG.578) and five fragments of a “truncated cone” lamp (inventory nos. CG.537 and CG.585) (figs. 20,

\footnote{Brown, et al. 1993, 24-5.}
This discovery of these few shards in this sounding is used to substantiate the proposed chronology for the complex, yet neither publication offers any independent discussion that would help to substantiate the dating. Fitch and Goldman place the “truncated cone” lamps at Cosa within the span of 270 to 70 BC, a chronology so broad as to be inconclusive, much less determinative of the conjectured date for the Curia-Comitium complex. It is difficult to accept on this evidentiary basis that the civic complex, together with the city wall, was constructed immediately after 273 BC. While Dyson suggests that the chronology established early on at Cosa is defensible and stands on merit, the attribution of chronology on the basis of a few pottery shards stands as an abiding note of caution when approaching the conclusions offered by the final reports on Cosa’s civic architecture.

The Curia was centered on the long axis of the Comitium and sat atop a podium built in polygonal masonry (fig. 22). Other than its foundations, little is known about the Curia

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37 Brown, et al. 1993, 25 fig. 8. Fitch and Goldman 1994 published the corpus of terracotta lamps from Cosa. The “truncated cone” lamp is one of the main types evident in the corpus, with 45 examples known, and 44 of those assigned to contexts that date between 270 and 70 BC (Fitch and Goldman 1994, 23). These lamps are made on the wheel and formed from micaceous clay grogged with sand that most often yields a buff color upon firing. Most of them have a careless black slip, while seven examples have a red slip. The lamps from the Comitium sounding are recorded in Fitch and Goldman 1994 as CG.533 and CG.585 (n.b. the different numbering in Brown et al. 1993). CG.533 measures P.L. 0.065 m; P.H. 0.037 m; P.W. 0.054 m and is composed of give joining fragments, not six as recorded in Brown et al. 1993, 25. CG.585 measures P.L. 0.024 m; P.H. 0.022 m; P.W. 0.014 m and is composed of two joining fragments.

38 The excavators of the forum at Cosa employed the lamp shards in constructing a chronology for the architectural remains encountered in the forum there during the 1950s, but did not publish the report until the 1990s. By the standards employed in archaeological dating in the present day, the methodology employed by the excavators to fix dates for these buildings on the basis of scant ceramic evidence is not sufficiently reliable. The shards themselves are unsubstantial and poorly documented by the excavators and, moreover, extremely difficult to date even by the standards of ceramics specialists who focus on Republican Italy. The fact is that the chronology of these lamps is quite unclear – while it is true that they could have been produced in the third century BC, it is equally possible that they were produced in the first century BC. Also, it seems quite likely that the lamps would have been produced locally as opposed to imported from Rome, as the Cosa reports suggest.


40 Richardson 1957, 51 comments on the oddity of this technique for the construction of the podium of the curia since the citizens of Cosa had knowledge of mortared construction. This comment is inconsistent with
at Cosa or its specific function. The Cosa excavators draw parallels, as they do in other instances, to similar evidence from Alba Fucens and Paestum.41

Major cities elsewhere in Etruria have also been the focus of intensive archaeological investigation in recent years. Excavations at Caere, Rusellae, Tarquinii, and Veii have revealed significant portions of the ancient settlements, with particularly complex archaeological data that pertains to the archaic phases of these sites. In most cases the city centers are inaccessible, although work at Caere and Rusellae has been able to investigate the ancient city centers.42

At Veii extensive excavations in the center of the ancient city have focused on the Piazza d’Armi where an orthogonal grid plan has been discovered.43 This planned area, dating to the sixth century BC, overlaid the Villanovan settlement that had occupied the site. Bartoloni’s work on the site has revealed the remains of two structures that were built in ashlar masonry that conform to the axis of the main road of the sector. The one building dates between the seventh and early sixth centuries BC, while the other, in three phases, goes out of use by 480 BC. Bartoloni’s team has uncovered well-stratified deposits at Veii from the archaic period, yet by the middle Republic only insubstantial buildings occupied the acropolis, seemingly in confirmation of the famous remark by Propertius.44 While an

Richardson’s insistence that the curia-comitium complex dates immediately following 273 BC, a time when concrete technology was not yet widespread in Italy.


42 See Paoletti 2005 for reports on many of these excavations.


44 Prop. 4.10.27-30. See Ambrosini. 2005. in Dinamiche di sviluppo delle città nell’Etruria Meridionale: Veio, Caere, Tarquinia, Vulci. Atti del XXIII Convegno di Studi Etruschi ed Italicci, Roma, Veio, Cerveteri/Pyrgi,
Augustan colony (*municipium Augustum Veiens*) was established at the site of Veii, the city seems to be devoid of any substantial remains from the middle Republic.\(^{45}\)

During the 1980s Mauro Cristofani’s team conducted extensive excavations at Caere, specifically the Vigna Parrocchiale site (*fig. 23*).\(^{46}\) Cristofani’s excavation is extremely significant as it represents one of the most extensive campaigns yet conducted in the center of an Etruscan city, and as such provides evidence that is unparalleled for other major centers. At the Vigna Parrocchiale site a number of structures came to light, as well as a vast artifact deposit within what the excavators interpreted as a tufa quarry, but which may well have been a *mundus* of some sort, given its proximity to cultic buildings.\(^{47}\) But the chief structure of interest at the site was the so-called ‘elliptical building’ that was discovered during the excavations carried out in the 1980s.

This building, oriented on a northwest to southeast axis, measured approximately 32 by 22 m and was open to the sky (*figs. 24, 25*).\(^{48}\) The excavators suggest that the excavated building, which they date to the early fifth century BC on the basis of ceramic evidence,

\(^{45}\) It should be noted that the sources record an attempt by Roman soldiers to relocate Rome to the site of Veii following the Gallic sack of the former in 390 BC. Livy would have the reader believe that Camillus’ passionate speech (Livy 5.51) helped to convince the citizens of Rome not to abandon the sacred site on the Tiber. It is interesting to note that Livy 5.50.8 claims the *plebs* wished to quit the site of Rome and relocate to Veii because that site was ready (*urbem paratam*) for them.

\(^{46}\) Cristofani 1992; Cristofani 1993; Cristofani and Maggiani 2003; Nardi and Piro 2003.

\(^{47}\) Cristofani 1992; Cristofani 1993.

\(^{48}\) Colonna 1993, 346-7 suggests that originally the interior of the elliptical space was simply packed earth and that the pavement discovered during the excavation resulted from a later (perhaps Roman?) phase.
reproduces the plan of an early structure that rested on a basement room cut in the tufa.  

The earliest phase of the structure was likely wooden, perhaps in the form of a tribunal. Later, blocks of tufa and paving stones in *peperino* came to delimit the perimeter; the whole structure would come to be renovated in the Imperial period with the addition of lime plaster (fig. 26). While the function and interpretation of this building remain open for debate, its position near the urban center of Caere makes it tempting to consider it in light of the already discussed form of the Comitium in Italy. Alternatively, suggestions have been made that the structure might be connected to sacred games, since it had an open-air plan. The proximity of the structure both to the sanctuary investigated by Cristofani’s team and to the later Roman theater may lend some credence to this latter proposition. Nevertheless, the importance of this structure is underscored by the fact that even Colonna can muster few parallels in the record elsewhere in Etruria. Since very few of the Etruscan metropoleis have been excavated (especially the ancient city centers), it is difficult to say that the elliptical structure at Caere is without parallel and simply assign it a sacral function. The form of the building is strongly reminiscent of both Greek *ekklesiasteria* and the Italic Comitium, although its precise shape does not conform to the general ground plan of either building type, or to the Roman *saepta*, as Colonna notes. The elliptical building at Caere must be kept in mind when discussing the development of civic architecture in Central Italy.

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49 Nardi and Piro 2003, 160. On the ceramic evidence, see Cristofani and Maggiani 2003, 249. The evidence includes a range of ceramics, including bucchero and black glaze pottery, that are used to arrive at a date ca. 500 BC.

50 Cristofani and Maggiani 2003, 251. Cristofani suggests the painted scene of a tribunal in the Tomba delle Bighe at Tarquinia as a *comparandum*.

51 Colonna 1993; Cristofani 2000 [2002].

52 Colonna 1993, 345-6.
In this discussion of middle Republican foundations it is important to consider the city of Fregellae, founded in 328 BC. Fregellae is a particularly enticing example of Republican urbanism since it was destroyed in 125 BC, giving it a life span of only two hundred years.\(^{53}\) The site lies along the Via Latina in the valley of the Liris River, positioning it in the middle of several cultural spheres – Greek, Samnite, and Roman. The current archaeological picture of Fregellae, however, does not meet the prima facie expectations. Filippo Coarelli and his team from the Università di Perugia began the modern excavation of the site in 1978.\(^{54}\) While a substantial portion of the site seems to have been excavated, the material has not been published to a sufficient degree, with the exception of a monograph length study of the extramural sanctuary of Aesculapius at the site.\(^{55}\) The site is large, measuring 80 ha within its walls. We know from preliminary indications on the part of the excavators that the forum of Fregellae had a Curia-Comitium complex, but the findings have not been published in full, and the forum area has been subsequently backfilled.\(^{56}\) Still visible, however, is a small area adjacent to the forum itself that includes several domus as well as a spectacular bath complex, with all structures clearly having several stratified phases of construction (fig. 27). While the discussion of private houses and bath complexes falls outside the parameters of our discussion, in the case of Fregellae this evidence must enter in because of the striking nature of the material remains present there, as well as for the fact that given Fregellae’s own peculiar history, it may yet offer a key to unlocking some of the problems and issues that plague the archaeology of the middle Republic. The innovative

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\(^{53}\) Conole 1981.

\(^{54}\) An earlier campaign was completed by G. Colasanti in 1906 and subsequently published. (Colasanti 1906).

\(^{55}\) They only treatment of the site overall by the excavator is Coarelli 1981.

\(^{56}\) Coarelli 1981. See also Coarelli 1979.
construction techniques and advanced urban culture already in the third century BC outstrips many other important sites, even Rome in some respects. If the material from Fregellae were published, it very well could yield important realizations about architecture and urbanism of the middle Republic.

While not of a civic nature per se, brief mention must be made of the phenomenon of Republican market buildings, as exemplified by structures at Ferentinum and Tivoli. Earlier scholars have made much of these structures, particularly as they relate to the chronology of the development of concrete technology in Italy and the distribution of opus incertum. Structurally the buildings are very interesting, and the market hall at Ferentinum certainly deserves consideration in its own right (fig. 28). It would best be discussed together with the development of the Porticus Aemilia at Rome and the trajectory of vaulted concrete construction, but that topic is out of scope in the present context (fig. 29). These market halls are large, oblong buildings covered by vaults that rest on massive piers. It serves to mention these structures, especially because as manifestations of second century BC buildings in Italian towns they demonstrate something of the changing nature (and requirements) of the city center by that time. With currents of change sweeping the Mediterranean, cities and towns began to fill different roles and, as such, to require different architecture and infrastructure. It would be easy to simply claim that with the innovation of Roman concrete, it was simply more feasible to build large, permanent structures and that this explains what happens architecturally beginning in the second century BC. But rather we should see the

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deployment of concrete building technology not as the causative agent but as a solution to changing needs and tendencies.

**Alba Fucens, Cosa, and Paestum: models for *coloniae*?**

Strongly influenced both by twentieth century fieldwork and the quality of archaeological preservation, the Latin *coloniae* of Alba Fucens, Cosa, and Paestum have emerged as the paradigmatic examples of Republican urbanism and so factor large in scholarly thinking and teaching on this subject. The reported foundation dates for this group of sites cluster together closely, with Alba Fucens in 303 BC and both Cosa and Paestum in 273 BC. In geographic terms each colony represents the extension of Roman influence into new territories at the time of foundation – Alba Fucens in the territory of the Aequi, Cosa in Etruria, and Paestum in Campania / Lucania. Among this grouping, Paestum stands as the anomaly since it had lived several lives as a Greek and a Lucanian city that then became Romanized. The monuments of its earlier phases, namely the Greek temples, always stood as a reminder of the admixture of dominant cultural trends that were current in Italy.

Although each of these sites is remarkable in its own right and possessed of phenomenal archaeological data, the utility of considering this trio as highly indicative of Republican urbanism may not be very useful any longer. The supposed unity of this group lies in assumptions made after quick visual scans of the material remains, as each of these three sites has the most obvious trappings of Roman society, namely the buildings involved in the political process. We should notice that a site like Norba, also a Latin *colonia*, is never included in this sort of group, likely due in large part to the absence of permanent, civic architecture there that played a role in the political process. Does the absence of a Curia-Comitium complex make Norba any less representative of Republican urbanism? The most
likely answer is no, but the more complex one is that there is little that can be described as
typical with regard to middle Republican urbanism.

Cosa has influenced greatly the thinking of many twentieth century archaeologists and historians seeking to create models to explain Roman urbanism during the Republic. Cosa, in fact, came to be emblematic of the very notion of the “Roman city” and featured prominently in scholarly treatments and handbooks alike. Thus a generation of students, particularly those trained in the United States, identifies Cosa as the Roman city of the Republic, thanks to treatises by Brown, Salmon, Mackendrick, and Stambaugh, among others.\(^\text{58}\) This circumstance is not without a touch of irony, considering that Cosa was far from being the most successful of Republican communities in Italy. It seems that the appearance of the Curia-Comitium complex at Alba Fucens, Cosa, and Paestum somehow catapulted these sites ahead of others in scholarly terms, perhaps because these buildings were seen as so closely tied to the Roman model, and thus were seen as more emblematic of Roman urbanism than other sites, inasmuch as they fulfilled the current scholarly expectations about Roman Republican urbanism. But since the circularity of Brown’s model, for instance, has been pointed out by Fentress, among others, and since the early phases of Curia and Comitium at Rome are not well known, how reliable is this model in the twenty-first century? If it is set aside, so too is the bias carried with it that favors sites that are perceived as more “Roman” than others. It is only in a fresh discussion that the urbanism and civic architecture of middle Republican Italy can begin to be contextualized.

Preliminary conclusions

In light of the apparent scarcity of civic buildings dating to the fifth, fourth or third centuries BC, it is important to consider how this circumstance might be explained, and why the chronological window of the middle Republic is so empty, whereas the late archaic and late Republican material is profuse at many sites. Given the extensive nature of survey and excavation over such a wide area of Central Italy, it seems quite unlikely that archaeologists have simply missed or overlooked the middle Republic. A likely explanation is that the identity and needs of the middle Republican city were different than those of other periods, and that we should be comfortable accepting the absence of evidence rather than trying to force the remains we do have into ill-fitting chronologies.

One possibility that must be considered is the role of the diribitorium in these communities, as in this case one can witness the Roman political process in action, but in a more-or-less temporary space. Several scholars, including Mario Torelli, have raised the possibility that the voting enclosures, even temporary ones, were the most important installations in any community, aside from temples. A recent debate has focused on the pits in evidence at several sites, including Alba Fucens, Cosa, Fregellae, and Paestum, that may be connected with the posts required for the erection of temporary voting enclosures. Henrik Mouritsen and Coarelli have been debating the interpretations of these pits. Mouritsen has argued for interpreting these pits as being connected with the diribitorium and saepta of the Roman-style electoral process. Under such a system all that would be required for an electoral caucus would be a flat piece of ground where temporary enclosures could be erected. While Mouritsen himself admits that his conclusions can only be considered


60 Mouritsen 2005; Coarelli 2005.
hypothetical at present, when taken together with the above examination of sites in Central Italy that seem to be devoid of permanent civic structures for much of the middle Republic, the argument is tantalizing. Thus a city does not necessarily require a permanent, built curia or comitium, only an open space where citizens could congregate. This challenging view of the middle Republican city may not meet with acceptance by the scholarly community, but Mouritsen is right to challenge the interpretation of these pits as simply for the planting of trees. Since the archaeological record for the middle Republic does not at present hold convincing evidence for permanent civic architecture in any great numbers, we need to look elsewhere to explain how these communities functioned and what their most essential institutions might have been like.
CHAPTER FOUR: FORTIFICATION WALLS AND THE MIDDLE REPUBLIC

Introduction

As a wide survey of sites in Central Italy has demonstrated, the archaeological remains of middle Republican civic buildings are, in large part, elusive. While these structures that the ancient sources lead us to believe should be located in central spaces of these communities seem not to be present, the case of fortification walls does present a slightly different situation archaeologically. Many of the sites discussed in the previous chapter were reportedly founded during the early or middle Republican periods, based upon the accounts presented in the ancient sources. With the reported foundation dates in mind, the archaeologist might reasonably expect to discover the remains of important civic structures dating to the earliest period of settlement, in keeping with the reported date for the site. At most sites, however, this does not prove to be true for civic buildings as a class, although sacred structures offer a different picture. The case of fortification walls differs somewhat, in that in some cases archaeologically attested fortifications can be dated within the same general time period as the reputed foundation date, but material evidence that could help to establish a more precise chronology remains absent or inconspicuous in most cases, thus the situation remains far from certain. An examination of fortification walls of the middle Republican period, taken together with the evidence for civic architecture, can establish a new and challenging picture of urbanism in Central Italy, as the corpus of material as a whole presents some startling archaeological realities.
This chapter will begin with a brief consideration of the background of megalithic construction in the Mediterranean world during the later Bronze Age, and then proceed to a definition of polygonal masonry as a distinct construction technique and a review of the history of scholarship related to it. From that point a discussion of selected examples located outside the geographic core of the sample area will help to illuminate other wall construction taking place in the early and middle Republican periods beyond the “Roman” sphere. Then, in groups defined by geographic region, the evidence that constitutes the core of the sample area will be discussed, detailing the nature of the fortification walls at the sites under study and attempting to contextualize each wall by examining certain features and commonalities in terms of building materials, dimensions, and technical construction methodology. The presentation of this corpus of evidence will then allow for a full discussion of the role of fortification walls in this period, with particular attention paid to the distribution of polygonal masonry in Central Italy.

The fortification walls of Central Italy that can be generally attributed to the fifth, fourth, and third centuries BC constitute the primary focus of this chapter. The preponderance of evidence will come from sites in Latium, where the use of polygonal masonry was prevalent in this period and, as such, a thorough consideration of the role and technique of polygonal masonry construction will be vital to the theories advanced in this thesis. Other sites with walls that lie outside of Latium will also be considered, as will the regional variation evident in polygonal masonry construction, taken alongside an examination of the geographic distribution of instances of this building technique. Even though polygonal masonry is of key importance in understanding Italian urbanism in this period, the evidence of fortification walls built using other masonry techniques will also be a
factor in so far as it establishes a picture of contemporary masonry practices. While the
discussion of polygonal masonry and its prevalence as a construction technique of the middle
Republic represents one of the primary aims of this chapter, it will also be necessary to
establish the cultural and historical context for these walls and the builders responsible for
them, as this contextualization promises new perspectives on architecture and urbanism
during the period of the Roman conquest of Italy. It is important to note at the outset that the
following pages do not purport to be a comprehensive study of polygonal masonry *per se*,
even though there is great need for such a study, as it would represent a massive undertaking
in its own right. Rather this chapter focuses on fortification walls that pertain to the middle
Republic, and while some of those walls are constructed in polygonal masonry, not all sites
with polygonal masonry walls will be considered.

**Why fortification walls?**

Communities frequently define their identities both in physical and ideological terms.
In the ancient Mediterranean world, the establishment of a physical identity for a community
often involved certain architectural features whose presence would help to identify the
community and distinguish it from others. In this process of self-definition, a physical
barrier was often erected around the community, thus delimiting the boundaries of the
settlement and also helping to make it physically separate from adjacent territories. As such,
fortification walls play a vital role in Mediterranean urbanism, and occur over a broad span
of time and space. In the Greco-Roman world the first “fortified” sites are those that make
use of naturally strategic positions, wherein the terrain served in the place of built
fortifications. In Italy these sites were hilltops that were first occupied during the middle and
late Bronze Age, and some of the same sites would remain occupied for more than a
Over the course of the Iron Age many of these hilltops that had started as simple examples of *synoikism* coalesced into full-fledged village communities, with some of them (Rome, notably) developing into complex entities.

During the archaic period the central and eastern Mediterranean witnessed the rise of the city-state, a phenomenon that ushered in a new set of criteria for communal self-definition. As city-states became distinct, they often used what power or influence they had to solidify their identity both locally and regionally, sometimes through feats of arms and at other times through dedications at sanctuaries frequented by a multitude of Mediterranean people. In the Greek world the cities that became powerful during the archaic period maintained a fierce independence, exemplified famously in the conflict between Athens and Sparta. Scholars, especially those of the nineteenth and twentieth centuries, studied the *poleis* of Greece in an exhaustive fashion. The latter twentieth century witnessed an increased interest in the urban phenomenon as it applied to Etruria and to Rome, yielding a great deal of innovative scholarship.\(^1\) The urban communities in Italy and Greece were similar to one another in terms of their organization, their nucleated population, and their basic community aims, but each sought to be distinct and independent where possible. This chapter will consider some of the most important and substantial means by which these communities defined the nucleus of their community’s organization by examining the walls built around cities in Central Italy during the early and middle Republican periods.

While the sites under consideration here are, for the most part, cities of the Archaic and Classical periods, they did not exist without a sense of history in their own time. As circuit walls were not developed *ex nihilo* in this period, consideration must be given to the systems of fortification that preceded the evidence presented here, namely the walls of

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\(^1\) Rendel 1991.
Bronze Age settlements in the Mediterranean, which most often utilized megalithic masonry in their construction.

**Fortifications of earlier periods**

**Megalithic fortifications of the Bronze Age**

Megalithic construction occurs across the Mediterranean world. A fortress defended by a megalithic wall, irrespective of cultural assignation, makes a strong statement to any would be enemy. Such fortification walls, some built in rubble and mud brick, others in stone, are found in Anatolia, the Levant, mainland Greece, Crete, Cyprus, Sicily, Sardinia, and Italy. In chronological terms megalithic construction covers a broad arc of time, stretching from at least the Early Bronze Age down into the latter part of the first millennium BC. Sites fortified in such a manner were already storied in antiquity, as the grandiosity of the fortifications has always impressed enemies and casual visitors alike. Pausanias, writing in the second century AD, describes the construction of the walls of the citadels at Mycenae and Tiryns as “Cyclopean”, based on the assumption that only giants like the Cyclopes were strong enough to lift such enormous boulders and set them in place.2 Following the labels applied by the ancient sources, coupled with the high visibility of Mycenae and Tiryns after the work of Heinrich Schliemann in the nineteenth century, the term Cyclopean has been applied without accuracy to many sites across the Mediterranean.3

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2 Paus. 2.16-56; 2.25.8. Apollod. *Bibl.* 2.2.1 and Strabo 8.6.11 also employ the moniker “Cyclopean.”

Among the earliest instances of construction that has been described as Cyclopean are the compartmentalized walls of Lerna III, and possibly the walls at Raphina, although the latter employ some mud brick and thus do not qualify technically as megalithic. During the early Bronze Age, compartmentalized walls are found at Thermi V on Lesbos and at Alaça Hüyük 5M in Anatolia. These compartmentalized walls continue in late Bronze Age Anatolia as they occur at Alalakh, Hattusha, and Mersin:Yümüktepe level VII.

Walls built using the casemate technique have also been described as Cyclopean. Individual chambers built within the thickness of the walls and embrasures characterize this technique. The embrasures in casemate walls frequently employ mud brick construction. This technique occurs in Anatolia and the Near East and should not be considered Mycenaean. The same holds true for shell walls that occur on Cyprus, that consist of a double wall separated by a rubble fill and not connected by cross walls.

Another megalithic technique of the eastern Mediterranean is that of unit building. Found at Tiryns, Gla, and the early circuit wall at Mycenae, the units are self-contained structures and are set both so as to abut and be adjacent to one another. This technique proved particularly advantageous when building the walls on steep or uneven terrain.

Loader defines true Cyclopean construction as a phenomenon of mainland Greece, thus many of the other so-called occurrences elsewhere in the Mediterranean are not truly Cyclopean with respect to the technique of their construction. Technically the building method can be defined as a wall composed of an inner and outer face of stone with a packing of earth and rubble between the two faces. On average true Cyclopean walls have a

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thickness of ca. 4.30 m, but many of them exceed 5 m.\textsuperscript{5} This definition applies to a discrete number of sites in mainland Greece during the Late Helladic period of the Bronze Age, thus rather than employ the Cyclopean label here, the term megalithic will be preferred.

**Nuragic architecture**

During the Bronze Age in Italy, megalithic construction was also in use, the primary example being the nuragic culture of Sardinia.\textsuperscript{6} *Nuraghe* are rounded, conical stone towers built on hilltops, and those known number about 7,000.\textsuperscript{7} The towers (sometimes referred to as *tholoi*) often have an ogive profile and a flat roof. Their substantial remains demonstrate an affinity with later construction in Italy, as Lugli observed in his treatise. While it is tenuous at best to construct linkages between the middle Bronze Age *nuraghe* and middle Republican circuit walls, the *nuraghe* are important for a study of Republican masonry in that they demonstrate the indigenous nature of these construction techniques. Indeed the widespread occurrence of megalithic construction during the close of the Bronze Age suggests that the tendency toward this building technique was not tied to ethnic, geographic, or cultural concerns, but rather was a behavior that overspread the Mediterranean basin as it was achievable and useful for many cultural groups in many periods.

\textsuperscript{5} Loader points out that in the majority of cases when the wall is a fortification wall, the thickness exceeds 2 m.


\textsuperscript{7} Webster 1996, 91. The average *nuraghe* measures ca. 12 m across at the base and reaches a height of 15 m. The masonry is dry stone and the walls range in thickness from 3 to 6 m. The internal chamber on the ground floor was usually vaulted and was accessed via a corbelled corridor and a post and lintel doorway. Owing to the thickness of the wall, the internal chamber only measured 5 m or less in diameter, with several small niches built into the walls. Recent scholarship has demonstrated that the MBA *nuraghe* on Sardinia have affinities with other false-dome structures in the Mediterranean, including Mycenaean *tholos* tombs, Corsican *torri*, Balearic *talayots*, *motillas* in Spain, and Apulian *trulli*. For further discussion, see Webster 1996, 92-3; Cavanaugh and Laxton 1987.
Defining polygonal masonry: the study of polygonal walls, the *Quattro maniere*, and
Giuseppe Lugli

In Italy a problem of terminological confusion also persists. The problematic
appellation “Pelasgic” persists in some scholarship, yet it ought not occupy any real place in
architectural discourse. Based on a comment in the text of Dionysius of Halicarnassus, a
group of people known as the Pelasgians reportedly migrated to Italy and became the
Etruscans. Since the Pelasgians were reputedly Greek people, the assumption followed that
any megalithic architecture found in Italy descended from the Pelasgians who had in turn
been inspired by Greek models. Since the description of walls as Pelasgian represents an
attempt to assign architecture to a certain cultural group, the term will not be of consequence
in this study.

The incipit of an assembly of a corpus of polygonal masonry walls in Central Italy
stands as one of the primary objectives of this study and, as such, a definition of polygonal
masonry is an important starting point. While some scholars posit contact during the Bronze
Age between the Aegean world and Italy, it is unlikely that architecture was transmitted
through limited commercial contact. Thus, as in many other cases, we can see Italic
populations arriving at similar solutions to those reached in the Aegean world, and this is true
in terms of megalithic fortification walls.

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8 Herod. 1.94 relates the story of the Lydian king Thyrrenos who, along with his people, settled in Umbria. Similarly Dion. Hal. *Ant. Rom.* 1.28 equates the Etruscan *Thyrrenoi* to the Pelasgians, a group of Homeric origin who migrated around the Mediterranean. In this way Dionysius also connects the Etruscans (via the *Thyrrenoi*) to the Aegean islands of Lemnos and Imbros. Since the Pelasgians are mentioned in the Homeric texts, they are a convenient “Ur people” for the population of the Mediterranean, and have even been correlated with the Sea Peoples who enter the Mediterranean at the end of the Bronze Age. The Pelasgian question and its implications for the development of the cultures of the Italian peninsula merit further investigation. See also Strabo 5.2.4.

While *opus quadratum* walls, built without mortar, prevailed as a building technique in the hinterland of Rome during the early and middle Republic, another technique was in use in many other parts of Italy from the sixth century BC onwards. This technique, frequently referred to as polygonal masonry by modern scholars,\(^{10}\) occurs at sites across Italy. In some cases the label of polygonal masonry has been applied, seemingly at random, to some ancient walls. In the context of this study, however, the term will be applied to a discrete corpus of archaeological remains, and thus it is best to establish a working definition before proceeding. As a building technique, polygonal masonry occurs across a broad arc of time and space in the Mediterranean world, although in this study the polygonal masonry found in Central Italy will be the focus.

The ancient sources do not explicitly discuss polygonal masonry, with the exception of the discussion of Cyclopean walls by Pausanias and other authors. Pliny the Elder and Vitruvius give some attention to construction that used limestone (*silex*), but the technical aspects of the construction of polygonal walls go unmentioned.\(^{11}\) This may be partly due to the fact that Vitruvius’ discussion of building techniques commences, for the most part, with a treatment of the various types of Roman concrete, as well as to the fact that relatively few architectural treatises survive from antiquity. Since Vitruvius was interested in the technical achievements of his own day, walls built of rough stones from earlier periods may not have been of consequence to him.

Like ashlar masonry, polygonal masonry is a dry-stone technique, meaning that walls are constructed without the use of mortar or any other bonding agent. The blocks frequently

\(^{10}\) The term polyhedric has also been applied to walls of this type. See Lugli 1957, 1.57.

\(^{11}\) Vitr. *De arch.* 1.5.6; on *silex* 2.8.2; 8.6.9. Plin. *HN* 36.171 “*saxa quadrata, sive silex, sive caementum, aut coctus later sive crudus.*” Lugli refers to the category as “*opus siliceum*”.  

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are massive and, as such, their weight serves to maintain their position. As a masonry technique, polygonal masonry can be identified most easily by an examination of the surface treatment of the wall’s façade. Polygonal walls are those that have blocks whose visible surfaces are dressed so as to assume the shape of a polygon, most often with straight sides or joints.\textsuperscript{12} In Italian contexts polygonal circuit walls frequently consist of a double curtain with a packing of earth and rubble between the two dressed walls. While polygonal walls in Italy have been studied, those in the Greek world have received more attention from scholars. R. L. Scranton carried out an influential study of Greek walls in the late 1930s; among the monuments in Scranton’s corpus were the polygonal or Cyclopean walls of Greece.\textsuperscript{13} In Greek contexts the surface face of the finished wall is almost always the quarry face, although some walls (e.g. Argos) have a “hammer face” on the exterior.\textsuperscript{14} Of Greek polygonal walls with a tool-worked façade, few examples are known.\textsuperscript{15}

During the nineteenth century, Western Europeans and even a few Americans began to travel in “classical lands” and to record the topography and aspect of the ancient monuments they encountered. An American aristocrat, John Izard Middleton, traveled in Italy during 1808 and 1809, visiting the pre-Roman sites in Latium, and sketching their

\textsuperscript{12} Lugli 1957, 1.55-64.

\textsuperscript{13} Scranton 1941, 45. The working definition of polygonal walls in Scranton’s study remains useful today: “…masonry the blocks of which have varying numbers of straight non-parallel sides, usually more than four, which meet at clear-cut angles. It is necessary to exclude from this classification masonry in which the blocks are predominantly tetragonal, the blocks that have corners cut off and triangular plugs inserted in the gaps. In short, the shape of the block to be visualized from the use of the word “polygonal” should be an ideal geometric polygon with five or more sides of approximately similar lengths.”

\textsuperscript{14} Scranton 1941, 46-7.

\textsuperscript{15} At Abai two stretches of well-preserved walls are to be found, and can be dated to the Archaic period. See Scranton 1941, 37-8, 47. At Oiniadai the walls are well preserved, and are some 6.5 km in length. Both polygonal and trapezoidal masonry are in evidence there. The polygonal walls are dated to the period when Athens applied pressure on Oiniadai, which was a friend of the Peloponnesian League. See B. Powell and J. M. Sears. 1904. “Oiniadae I-IV.” AJA 8:137-237.
remains. Middleton’s primary aim seems to have been the documentation of the sites he visited and he did succeed in producing some accurate renderings of the ancient remains. In terms of interest in the fortifications of ancient cities, among the earliest chroniclers was the Frenchman, Louis-Charles-François Petit-Radel, who in 1815 published a study of the topography of Italy. Petit-Radel, convinced that the Pelasgians had built the walls he found in Latium, classified them as Cyclopean, likening them to the walls of Mycenae and Tiryns. The theories of Petit-Radel did not meet with immediate acceptance, as many of his European contemporaries were skeptical about the conclusions he reached. His assignations would be reinforced by the work of William Gell and Edward Dodwell elsewhere in the Mediterranean, leading up to the division of the “Cyclopean corpus” into four categories on the basis of the shape of the worked stones. Petit-Radel and his contemporaries were mainly interested in classifying the walls of sites in Central Italy in Greek terms, hence their

16 In 1812, Middleton published Grecian remains in Italy, a description of Cyclopian Walls, and of Roman Antiquities. With topographical and picturesque Views of Ancient Latium (London). This folio-sized volume included color plates, and had the goal of shedding light on the monuments of Latium that had existed before the Roman conquest. Middleton’s work was pioneering, earning him the moniker of “America’s first Classical archaeologist,” as applied by Norton 1885, 3-9. Middleton’s father, Arthur, had been a signer of the American Declaration of Independence and had been educated at Cambridge, the logical place to send his son for his schooling. After Cambridge Middleton traveled in Europe, especially in France and Italy, where in 1808-09 he sketched the monuments of Latium. Some of his travels were undertaken in the company of the Briton Edward Dodwell, whose 1834 Views and Description of Cyclopean or Pelasgic remains in Greece and Italy (London) eclipsed Middleton’s in the scholastic consciousness, although the two books were, in fact, quite similar. It was Dodwell’s text that would be cited in the encyclopedias of the later nineteenth century, while Middleton’s was largely forgotten.


18 Norton 1885, 4.

19 The topography of Rome and its vicinity 2nd ed. (London, 1846). Gell traveled to Italy with Princess Caroline in 1814. His travels in the countryside resulted in the detailed accounts and drawings in his published work, but he was really more dilettante than scholar.

20 Middleton accompanied Dodwell on his travels in Italy and Dodwell’s own volume, published posthumously, reused drawings made by Middleton without crediting him or referring to his earlier treatise.

21 Norton 1885, 4.
interest in labels such as Cyclopean or Pelasgic. Lugli took his typological cue from the likes of Rodolfo Fonte-a-Nive who, in the 1880s, had written a handbook that designed to serve the learned traveler when he or she happened to visit the sites in Central Italy. 22

Another important contribution comes from George Dennis who made important observations about the interrelatedness of building techniques in Etruria and Latium, drawing upon his first hand observations of Etruscan sites, notably Pyrgi. 23 Even at the end of the nineteenth century scholars had little real notion about the chronology of polygonal walls in Italy, as attested by the correspondence and discussion that went back and forth. One example is the opinion of G. F. Gamurrini who feels strongly that the “Pelasgian” walls in Italy were not later than the seventh century BC, and clearly were evidence of Iron Age cultures. 24 The main accomplishment of the nineteenth century scholars of polygonal masonry was the creation of a typological framework that, to their thinking, helped to sort

22 Sui monumenti ed altre costruzioni poligonie ed epimonolite dette ciclopiche, saturnie e pelasghiche e sui resti di tali fabbriche esistenti nella provincia romana (Rome, 1887).

23 In his 1848 treatise, Cities and Cemeteries of Etruria, George Dennis described the castle of Santa Severa. His keen observation noted that unlike other Medieval fortresses, the castle at Santa Severa rested upon massive foundations: “…To the casual observer, it has nothing to distinguish it from other mediaeval forts; but if examine closely, it will be seen that its walls on the side of Civita Vecchia are based on foundations of far earlier date, formed of massive, irregular, polygonal blocks, neatly fitted together without cement – precisely similar to the walls of Cora, Segni, Palestrina, Alatri, and other ancient towns in the Latin and Sabine Mountains – in short, a genuine specimen of what is called Pelasgic masonry. This wall may be traced by its foundations, often almost level with the soil, for a considerable distance from the sea, till it turns at right angles, running parallel with the shore, and, after a while, again turns towards the sea – enclosing a quadrangular space several times larger than the present fort, and sufficiently extensive for a small town. This is the site of “the ancient Pyrgi.” (Chapter 32). While Dennis did believe in the idea of the Pelasgians as a distinct ethnic group connected with the peoples of the Eastern Mediterranean, he was observant enough to draw a correct connection between the masonry techniques in use at the sites he mentioned. His may be one of the first texts to recognize not only the prevalence of polygonal masonry in Italy, but also to draw connections between geographically disparate sites.

out the corpus of walls. This methodology was of the mainstream, so much so that Thomas Ashby in his work on the Roman Campagna,\textsuperscript{25} carried the practice into the early twentieth century, perhaps influencing Lugli in his own work.

The convention established in the nineteenth century divides polygonal walls into four types (\textit{quattro maniere}), much the same typological methodology that led A. Mau to categorize the styles of Pompeian wall painting (\textbf{fig. 30}).\textsuperscript{26} In the case of polygonal masonry, a rough technique that makes little attempt to smooth or shape the blocks characterizes the first style. The second and third styles, often difficult to distinguish from one another, employ blocks that fit together in a neater and more refined fashion than the crude construction of the first style. The fourth style, by the same reasoning, represents the most refined manifestation of polygonal masonry, as the blocks in this style are well worked and approximate the appearance of ashlar masonry or \textit{opus quadratum}.

Giuseppe Lugli articulated the problem of dating polygonal masonry in an eloquent 1947 paper, asking probing questions about the chronology of these walls and what relationship they might have with the Roman conquest.\textsuperscript{27} He remarks upon the evidence for foundation dates provided by Livy and other ancient writers and discusses the relationship between archaeological material and textual dates. Lugli discusses the \textit{quattro maniere} and states that, “A more accurate and more objective examination of these walls has shown that the differences of technique do not necessarily correspond to a difference in date.”\textsuperscript{28} Lugli’s

\textsuperscript{25} Ashby 1927.

\textsuperscript{26} \textit{Geschichte der decorativen Wandmalerei in Pompeji} (Berlin, 1882). Mau’s typology is an evolutionary one, with the Second style being more developed and complex than the First style, and so on, with the culmination coming with the Fourth style.

\textsuperscript{27} Lugli 1947.

\textsuperscript{28} Lugli 1947, 300.
observation here is prescient, especially as he was then involved in collection the corpus of architectural remains that he would publish in his massive, 2-volume *Tecnica edilizia romana*. In his collection Lugli presents the polygonal masonry divided into categories according to the *quattro maniere* and most subsequent studies have simply adopted these classifications rather than challenging them and attempting to establish a chronology independent of typology, as Lugli did in 1947 when addressing the Accademia dei Lincei. In his 1957 work Lugli comments that the *Quattro maniere* (or, specifically the study of the degree of perfection of worked stones) does not offer and adequate means of establishing precise chronologies. Lugli devotes 113 pages to a systematic study of walls of megalithic and polygonal construction, offering valuable data and details about these walls. In many ways the accomplishment of Lugli’s study remains unrivalled, even after 50 years.\(^{29}\) Yet despite his correct instinct, no scholar has come forward with a method that can be used to establish a more precise chronology for this masonry type. Field archaeology has not contributed any substantial advances either, with many practitioners being content with the fact that the reported city foundation dates are sufficient for establishing a *terminus post quem* for the construction of fortification walls.

While dividing the walls into typological groups may offer a convenient method for organizing a large corpus of material into neat categories, such an approach presents archaeological perils since inherent in the construction of the typology is an evolutionary view that first style walls (the crudest and most simple) are chronologically earlier than the fourth style (the most advanced). In this scheme the first style wall is composed of

\(^{29}\) Not many comprehensive surveys have addressed city walls since Lugli, although Jouffroy 1986 and Miller 1995 both contribute to the study of the corpus. Two recent congresses held at Alatri (see Fiorletta, *et al.* 1988 and Fiorletta, *et al.* 1989), as well as other recent scholarship (e.g. Cifarelli 2003), show that not only does polygonal masonry continue as a topic of important scholarly interest, but also that new interpretations and investigative strategies promise to offer new insights on this architectural technique.
fieldstones piled up to make a wall, without even involving the mason and his tools. The second style demonstrates more working, with corners knocked off so as to fit neatly against the neighboring block, while the third style (the most familiar) results in a geometric pattern of tetra- and polyhedrons. The fourth style, meanwhile, stands as a near approximation of opus quadratum in having nearly regular courses of squared blocks. As many scholars persist in using such typological frameworks to assign dates, I submit that the practice is more likely to lead one astray than it is to bring accuracy to archaeological dating. While plastic art forms may perhaps benefit from a detailed examination of typological development, architecture must be treated differently, owing to vastly divergent circumstances and parameters. The absence of hard chronological evidence for polygonal walls in Italy is striking, but in its place we ought not put an outmoded approach to chronology simply for want of anything better.

Greek and Etruscan fortifications in Italy outside the main sample area

Before exploring in detail the sites and walls that constitute the primary focus of this chapter, it will be helpful to first consider the circuit walls from two Greek cities in Italy, as well as those of two cities in North Etruria. While the techniques in use at these sites may vary with respect to the sites within the main sample area, their inclusion here helps not only to illuminate the context for the middle Republican walls but also situates them better in a wider context.

Greek colonies in southern Italy introduced fortification walls constructed according to Greek practice and the presence of these walls must be kept in view. While an in depth analysis of Greek walls in Italy would be out of scope for the present consideration, the examination of the evidence provided by two significant sites – Velia and Paestum – can help
not only to present the techniques utilized by Greek wall builders, but also to further inform the consideration of Italic walls.

As with the cities of Magna Graecia, Etruscan centers in North Etruria also were engaged in the construction of massive city walls during the Archaic period. The nucleation of Etruscan communities during the end of the Iron Age and the ensuing Orientalizing period resulted in the choice of naturally fortified hilltops as the sites of the nucleated urban centers, as is evident from the modern Tuscan cities that are superimposed on the ancient ones. The advantages of these positions have already been discussed, but many of these Etruscan centers added built fortifications, presumably to augment the advantages offered by the natural landscape. The motives of these Etruscan centers moved beyond the need for defense, however, as we shall see that a phenomenon of urban status seeking was current in the Mediterranean in this period. While an exhaustive consideration of the fortified Etruscan centers would be another study all together, the evidence provided by two key examples – Rusellae and Volaterrae – may prove helpful to the present consideration, especially since the Romans themselves would later engage in wall building within Etruria.

**Elea and “Lesbian” polygonal masonry in Italy**

The circuit walls of Elea, unique in their construction, can be classified as polygonal masonry. R. Martin, who keeps Lugli’s typological scheme in mind when studying this group of walls, has classified the substantial remains of these walls into four groups. But as with other sites where the approach to the polygonal masonry relies upon the typological scheme put forth by Lugli and his nineteenth century predecessors, the interpretation of

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30 Fontaine 1997 suggests that a more comprehensive study of Etruscans walls is overdue. In his brief study he collects 50 walled Etruscan sites, ranging from Veii to Fiesole.

Elea’s walls, rather than being elucidated, remains, to an extent, obscured by this outmoded and impractical approach that derives chronology from typology. Martin discusses the walls of Elea as being representative of a style of construction known as “Lesbian” polygonal masonry, a style attested in the eastern Mediterranean. In studying the walls of Elea from a typological point of view, one must use the same caution as when considering Lugli’s quattro maniere. The styles or traits of workmanship that may be visually evident in the walls of Elea cannot serve as chronological markers or a criterion for assigning chronology. The well-preserved Porta Rosa at Elea shows distinctly Greek tendencies in its construction, particularly with regard to the method of laying the courses of blocks. Several scholars assign the construction of the gate to the end of the fourth century, between 320 and 300 BC. The analemmata of the gate contributes to a discussion about the origins of concrete, as it is constructed in what might be pseudo-concrete masonry.

Polygonal masonry in the “Lesbian” style has been distinguished from other polygonal masonry construction on the basis of the joints between blocks. In the right-jointed polygonal masonry found at sites in Central Italy, adjacent blocks meet along straight lines, while the “Lesbian” type is characterized by the edges of individual stones being dressed along a curved face (figs. 31, 32). The curved borders of individual stones result in

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32 Scranton 1941, 161 provides a list of other walls in the Greek world that are said to show Lesbian influence. These include the first peribolos wall at Delphi (cf. Pomtow Klio 7 (1907) 435ff), the sixth century BC Marmaria peribolos at Delphi (cf. Demangel Delphes 2 (1926) 37ff), the seventh century BC terrace at Eleusis (cf. Wrede Att. Mauern), an eighth century BC wall at Epano Liosia in Attika, the first system of sixth century BC walls at Halai (Lokris) (cf. H. Goldman Hesp. 9 (1940) 381ff); the wall at Myndos (Caria) (cf. G. Guidi Annuario 4-5 (1921-2) 366ff), the late sixth century BC wall of the Piraeus, a sixth century BC wall at Samothrace (cf. Conze Untersuchungen auf Samothrake 1875), the wall across the pass at Thermopylae that dates before 470 BC (cf. AJA 43 (1939) 699ff).

33 Krinziger 1979.


a matrix less compact than is the case with right-jointed polygonal masonry. As a result, small gaps or interstices can be found between the blocks, spaces that were sometimes filled with small stones or rubble. An additional feature of walls in this style is the occasional use of squared corner blocks to strengthen the ends or joins of walls. While its appellation as “Lesbian” stems from a reference by Aristotle, the technique is in fact to be connected with Aeolic culture in the Aegean world.36

The example of the polygonal masonry walls at Elea proves instructive when considering polygonal walls across the Italian peninsula. The walls at Elea demonstrate that the use of polygonal masonry in the construction of circuit walls is not necessarily a Greek technique, nor is it assignable to any other proprietary cultural group. The reason for this is that the occurrence of polygonal masonry at Elea is contemporary with the appearance of similar masonry techniques at other centers in Italy, including cities in Etruria and sites in Latium. Were the polygonal masonry a derivative of Greek culture adopted by Italic peoples, as some nineteenth century scholars believed, there would need to be a lag in time so that the Italic groups could first become aware of the technique and then, by degrees, either learn to execute it themselves or hire Greek masons as contractors. This does not seem to be the case and, in fact, the near-spontaneous appearance here furthers the notion that during the Early and middle Republican periods (in Roman terms) profound changes in urbanism were

36 Arist. Nichom. 1137B, 7 refers to Lesbian builders and the curvature of stones; P. W. Forchhammer was the first modern scholar to assign ancient remains to the category of “Lesbian” polygonal masonry in Über die Kyklopischen Mauern Griechenlands und die Schleswig-Holsteinische Felsmauern (Keil, 1847). Spencer 1995 provides further discussion of the masonry type, as well as a catalog of sites on Lesbos that use it. Spencer’s reading of the remains assign the technique to the archaic period and conjectures that the presence of “Lesbian” polygonal masonry at Elea in Italy may well be the result of foreign influence. Courtills 1998 provides an accounting of sites that should be added to the corpus originally collected by Scranton. In surveying evidence for “Lesbian” polygonal masonry discovered after the publication of Scranton’s 1941 study, Courtills concludes that a clear distinction can be made between this type of polygonal masonry and the more familiar right-jointed style simply on the basis of use and geographic distribution, as the “Lesbian” type is concentrated in a localized area of the Aegean (with the notable exception of Elea). He uses this distinction to state that Aeolic architecture did, in fact, exist as a separate class.
sweeping the Mediterranean and that Italian cities with polygonal walls were participants in this phenomenon.

**Poseidonia / Paestum**

At Poseidonia / Paestum, the implantation of a Latin colony in the third century BC led to changes in the organization of the city, but preexisting Greek infrastructure remained in use. Significant among the Greek infrastructure is the city’s wall, likely built during the fifth century BC. The line of the walls forms an irregular polygon on the ground and sits atop the edge of the limestone plateau on which the city was built (**fig. 33**). The chronology of the walls is problematic, relying in part on the interpretation of mason’s marks on some blocks.\(^{37}\) The circumference of the walls measures some 4.75 km and the walls have an average thickness of ca. 5 to 7 m. Ashlar blocks of limestone, laid without mortar, were used to construct the double curtain wall, with irregular alternations of headers and stretchers.\(^{38}\) Additionally, transverse cross walls connect the two curtains at intervals, while the space between the two was usually filled with earth and rubble. The wall has four major gates: the Porta della Sirena (east), the Porta Aurea (north), the Porta della Giustizia (south), and the Porta Marina (west). A defensive ditch surrounded the outside of the wall, also a common Greek practice. Some defensive towers survive, but they vary in their construction.\(^{39}\) The north and south gates were each originally flanked by towers as well.

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37 P. C. Sestieri. 1968. *Paestum* (Rome). Torelli 1999, 46 n. 32 notes that the German Archaeological Institute carried out work on the walls at Paestum in the 1960s without any conclusive results (*cf.* H. Schläger. 1957. *Das Westtor von Paestum* (Munich)). Other work on the Porta Marina by Rouveret suggests a date in the fourth century BC for that gate; Torelli notes that a more scientific study of the entire circuit of the walls is overdue.

38 Pedley 1990, 77-8.

39 There are circular, semicircular, and square towers, and even one that is five-sided.
The case of Paestum is somewhat unusual. When Rome took control of the city, it was already a well-established Greek city, with clearly established fortification walls. While the Romans were involved in the construction of the forum in the center of the city (see chapter 3) and perhaps the regularization of the city’s orthogonal plan, they did not impose major changes on the system of walls and towers that surrounded the city (fig. 34). This latter fact is not that surprising given the fact that the walls were well built, but what is more curious, perhaps, is the fact that despite the Roman conquest of this city with a very different style of fortifications, the walls of Paestum do not seem to exert much influence on subsequent construction of city walls by the Romans. Many scholars have advocated for a pronounced Hellenistic influence in Italic fortifications after the third century BC, especially with regard to the Hellenistic use of siege engines and artillery and the need for emplacements for these machines and for towers to defend against them.\(^40\) It is true that more towers are built in the third century BC at Italian cities, but the predominant technique of wall construction does not shift so as to resemble walls like those at Paestum, for example. In some cases, polygonal masonry is still used in Italy even after the influence of Hellenistic architecture is felt there, as is evident in cases such as the Samnite center of Pietrabbondante. One might expect that after the annexation of Paestum that the fortification techniques encountered there by the Romans would exert visible influence elsewhere in Italy, but this does not seem to be the case.

**Rusellae**

The topography of the Etruscan city of Rusellae includes two hills, both of which are enclosed by the polygonal fortification wall at the site. The wall measures 3.27 km in length

\(^40\) See Marsden 1969, 1971.
and stands still to a height of 5.0 to 7.0 m (fig. 35). The construction of the wall was carried out using locally quarried stones including a reddish limestone, sandstone, and galestro, a type of local marl or limestone. Five gateways opened in the wall but towers were not part of the defensive system. The polygonal technique employed at Rusellae varies with respect to the polygonal walls of Latium whose façades are most often characterized by the tetrahedron pattern of the blocks (fig. 36). The wall at Rusellae exhibits a construction method that is somewhat more parallelepidal, but can be categorized as polygonal masonry in the broad sense. Study of the stone walls have revealed the remains of a circuit wall built of mudbrick beneath that have been dated to the eighth to seventh century BC.

This mudbrick circuit is particularly important because at Rusellae excavation has produced stratigraphic data that pertains to the polygonal wall, data that is not forthcoming for the majority of sites with circuit walls from this period. Excavations carried out by Laviosa Zambotti at Rusellae have shown that the circuit wall in stone dates to the sixth century BC on the basis of impasto wares and fragments of archaic bucchero dating to the archaic period. This ceramic evidence, and the superposition of Hellenistic and Roman levels, helps to establish a firm chronology for the polygonal walls of Rusellae from the sixth to fifth century BC.

**Volaterrae**

The city of Volaterrae, located in northern Etruria, provides an interesting example not only of the erection of fortification walls, but also of the growth of a nucleated urban

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42 Maetzke 1977, 10.
43 Naumann and Hiller 1959. Various Attic ware sherds also were recovered in the excavations, including a kylix fragment attributable to the Painter of Hegisoboulous (last quarter of the sixth century BC) and other fragments attributable to the Painter of Marlay (430 BC).
center over time. Already in the seventh century BC Volaterrae had a city wall with a circumference of 1.8 km, enclosing an area of about 10 ha (fig. 37).\textsuperscript{44} By the late fourth century BC, the walled area had grown considerably with a circumference of 7.280 km, enclosing 116 ha.\textsuperscript{45} The walls are built of local sandstone known as \textit{panchina}.\textsuperscript{46} Various masonry techniques were employed in the construction of the walls, but polygonal masonry stands out as the predominant one. As is the case at many sites with polygonal circuit walls, a great deal of variation occurs in the working of the individual stones and in their placement in the wall. Some sections of the wall use virtually unshaped blocks, while other sections have polygonal blocks set in a parallelepidal fashion (figs. 38, 39).\textsuperscript{47} It should also be noted that, in some places, the walls are formed not of polygonal masonry but of \textit{opus quadratum} executed in the Etruscan fashion.\textsuperscript{48} It is also worthwhile to note that while stretches of wall at Volaterrae and Rusellae have been characterized as polygonal masonry, their typology may actually belong to another class, owing to the appearance of the blocks that tend to be elongated and fairly thin from top to bottom. The foundations of the walls are often composed of unworked conglomerate stones. Recent discussion of the walls offers the plausible hypothesis that the variation in construction technique and materials evident in the walls must have been dictated both by factors of geomorphology as well as the difficult

\textsuperscript{44} Pasquinucci and Menchelli 2001, 42. See also Cateni and Furiesi 2005.

\textsuperscript{45} Pasquinucci and Menchelli 2001, 42-3. The explanation for the expansion of the walled area is problematic, but may well be related to the incursions of both Gauls and Romans into Etruria during the fourth and third centuries BC. cf. Livy 10.12 and Harris 1979, 175-90.

\textsuperscript{46} cf. A. Marrucci and V. Trinciarelli. 1990. \textit{Le rocce nel Volterrano} (Pontedera) 51.

\textsuperscript{47} Pasquinucci and Menchelli 2001, 44-6 summarizes the details of the various techniques employed.

\textsuperscript{48} A particularly fine example of walling in this fashion can still be seen at S. Giusto in Volterra.
topography of the site; in short, certain techniques are suited to certain situations. Clearly the sandstone of Volaterrae is not as solid as the limestone of the Apennines, but at the same time the presence of what is considered a version of polygonal masonry at Volaterrae (as well as at Rusellae) reflects the fact that within the collective of Italic architecture, this technique of wall building cuts across many different boundaries. On the basis of construction technique and typology, the Porta all’Arco at Volaterrae with its three protome heads, has been compared to the west gate at Falerii Novi, constructed ca. 241 BC.

The evidence from these two Etruscan centers, along with the example of the Greek cities in southern Italy, helps to demonstrate the milieu, both in architectural and chronological terms, within which the wall builders of Central Italy during the middle Republic would have been operating. The proliferation of fortification walls in numerous parts of the Italian peninsula indicates that many cultures and citizen groups are involved in the reconfiguration of community identities via the construction of new walls and, in some cases, temples. A survey of middle Republican walls, many of them built in polygonal masonry, from Umbria, Latium, Samnium, and South Etruria will help to further articulate the situation during the middle Republic, a time when cities were becoming better defined in an attempt to participate in complex and important political interactions. In these interactions, civic status – and the accompanying accoutrements – was a vital entrée into a larger world.

**Fortification walls in Latium and Campania (Regio I)**

The extant polygonal walls in Latium have received perhaps the most scholarly attention of any ancient city walls in Italy, although this is not to say that the walls are well

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49 Pasquinucci and Menchelli 2001, 50-1.
understood in their original context. Central Latium poses some interesting topographic challenges for settlement, as the centrally located Pontine plain is quite flat, while the limestone Monti Lepini mountains that border the plain to the east are quite steep. The terrain of the Pontine region has been characterized in terms of deposits of alluvium that rest at the foothills of the mountains, providing fertile agricultural soils in the plain. In some cases certain mountaintop sites possessed clear strategic value, either to control traffic on the plain below, to control traffic that passed through mountain passes or both. The walls at many of these sites have been documented archaeologically, but for the most part no scholar has carried out a synthetic treatment that not only addresses the archaeological remains of these polygonal fortification walls, but also sets them within their proper context, both locally and globally. Such a survey would allow not only for a better understanding of the walls on a site-by-site basis, but also permit an examination of cross-regional trends on the basis of context and building techniques.

**Aefula**

A substantial amount of polygonal masonry construction remains at the site of Aefula, near Tibur, although the interpretation of the site has been a matter of contention for scholars for some time. On Monte S. Angelo in Arcese, polygonal masonry walls surround the summit on at least three sides, although the walls are poorly preserved. A medieval convent on the summit incorporates ancient blocks into its foundation and may have been the site of an ancient temple.

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50 Attema and Delvigne 2001.
Aletrium (Alatri)

The massive walls of Aletrium provide an interesting case study not only in the methodology of polygonal construction, but also a furnish contrast to the relatively homogenous walls of other citadels in Latium. Aletrium, located in the Monti Ernici, boasts a fortification system whose perimeter measures ca. 4 km, with additional fortifications that surround the inner citadel of the settlement (fig. 40). The thickness varies throughout the structure and the construction utilizes local limestone blocks that are sometimes set into cuttings in the bedrock. The blocks are well cut and fit together tightly, so that the insertion of smaller pieces of stone to fill gaps between larger blocks was required infrequently. The majority of the fortifications are built in the third style of polygonal masonry, but there are some notable exceptions (fig. 41). A portion of the wall in the southeast of the town was built using irregular, parallel courses of blocks in a manner akin to opus quadratum but the blocks are not isodomic or regularized.

Of the original system of five gates, two remain today. In the ancient period, the city’s main gate was the Porta Bellona, now known as the Porta San Pietro. The gate was adorned with rusticated sculptures in local limestone, perhaps serving an apotropaic function. The gateway measures 3.45 m across and it is unclear whether a monolithic architrave covered the gate originally, or if it was spanned by wooden beams. The other four city gates have been heavily reworked, mostly in the medieval period.

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51 Rossetto 1975, 5.
52 Ciancio Rossetto 1975, 7. This tract of wall appears at no. 14 on Ciancio Rossetto’s plan.
53 Ciancio Rossetto 1975, 10. These stone figures were studied in the nineteenth century by Marianna Candidi-Dionigi who described three of them, the first being a standing figure, the second seated, and the third a dancing silenos with a beard. The figures were interpreted as apotropaic devices. See Lugli 1957, 1.132.
54 Lugli 1957, 1.132.
Aletrium and its double system of polygonal walls is interesting, especially since the walls are believed to be contemporaneously constructed. The citadel, surrounded by terrace walls, originally had two approaches, both passing through the walls as rectangular openings. A massive architrave measuring 5.18 by 1.5 by 1.8 m covers the larger of the two, known as the Porta di Civita. The other gate, known as Grotta del Seminario, is much smaller with an architrave measuring 3.25 by 0.80 m, on which three phalloi were carved. At some point the northern approach had a ramp constructed. The wall is well preserved, still standing to 17 m at some points.

In the Medieval period the walls endured extensive reworking, as well as the addition of square defensive towers. Scholars have dated the ancient portions of the wall to various periods. Lugli assigned them to the fourth century BC, based on comparison with the walls of Norba, perhaps ca. 306 BC. Lugli’s chronology is based, in part, on the typology of the gates at Aletrium that are without guardrooms, and thus present the porta scaea-type evident also at Norba. Blake dated them to the second half of the second century BC. Yet other scholars, including Gasperini, use an inscription of the Social War to date the perimeter wall of Aletrium.\(^{55}\)

**Antinum**

Antinum occupies a strong position on a limestone promontory overlooking the valley below. Within the circuit of the defensive wall the terrain is quite uneven with the citadel located the northern end of the walled area. In the center of the settlement a transverse valley cuts across the limestone massif. A separate fortification surrounds the citadel of the city, which would be fortified once more in the medieval period.

\(^{55}\) cf. L. Gasperini. 1965. *Aletrium 1: i documenti epigrafici* (Frosinone). These are the public works carried out by L. Betilienus Varus ca. 120-100 BC. *cf. CIL 10.5807*
The outer wall was built of polygonal masonry using massive stones and the line of the wall conforms to the line of the limestone hill. While the wall did not include interval towers, a natural bastion, upon which walls were built to a height of 12 m, protected the approach to the city. Quilici’s study compares the masonry technique in use at Antinum to Mertens’ B/2 system of walling at Alba Fucens. On this basis, Lugli deems the walls of Antinum to date to the third century BC.

**Anxur / Terracina**

A varied system of polygonal walls surrounds the city of Anxur. Lugli records various extant tracts and divides them into typological groups, with the earliest section (in the vicinity of Montano), dating before the Roman conquest of 406 BC. Many remains of walls in *opus incertum* date to the Sullan period, as do the remains of the podium of the temple of Iuppiter. The original city seems to have been roughly rectangular in plan, with the acropolis enclosed within the walls (the current Castello dei Frangipane); two gates opened in the original walls. Later expansion led to the occupation of several surrounding hills and the foundation of a new acropolis and the construction of the temple of Iuppiter (ca. 329 BC).

**Arpinum (Arpino)**

Two walled areas compose the city of Arpinum – the so-called Civita Vecchia and the lower Civita Falconiera. The space between these two walled areas served as the forum of the ancient city. The original circuit of the wall likely measured ca. 3 km in length, but only portions survive today. The same is true of the original gateways as extensive medieval rebuilding has obscured some of the original details of the city wall. Among the gates and

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56 Mertens and Laet 1951.

57 Lugli 1957, 1.147.
sections of walling stands the famous Porta dell’Arco, an ancient city gate that has an ogive profile and is unique at the site (fig. 42). This gate, subsequently ensconced in Medieval towers, allowed access to the Civita Vecchia. The dating of these walls has varied widely, with Blake assigning a date ranging from the sixth to fifth century BC, while Sommella preferred a date of fourth to third century BC. Archaeological evidence, mostly in the form of ceramic remains, would seem to confirm the chronology, albeit imprecise, offered by Sommella.

**Casinum (Cassino)**

Substantial polygonal walls in local limestone are preserved beneath the sixth century AD abbey of Monte Cassino at the Volscian site of Casinum. The lower town has its origins in the Roman period, but its walls – with a circuit of ca. 4 km – are not built in polygonal masonry. The upper city (identified variously as the *arx* and/or acropolis) corresponds to the Volscian phase of the site and is associated with cultic activity. The polygonal walls are not well preserved owing to the later structures built atop them. A clear section of polygonal masonry is evident near the Badia gardens where the wall originally may have stood to 7 m in height. The position of the site is of strategic value and, as such, the fortifications on the height follow the pattern of sites in Central Italy.

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58 Sommella 1966, 25. The gate was likely blocked up in the thirteenth century when the city came under control of the Vatican state.

59 Beranger 1977, 45.

60 Beranger 1977, 45. The sherds include *ceramica campana* and a stamped Rhodian amphora. See G. Pierleoni *Misecellanea Arpinate* (1929).

Circeii (S. Felice Circeo)

Three centers of habitation distinguish the town of Circeii. The modern town of S. Felice Circeo sits atop one of these centers, and there the remains of polygonal masonry are evident beneath the medieval walls. The construction of these walls is extremely irregular, employing mostly un-worked blocks that have large gaps between them that were filled with rubble and small pieces of stone. The second nucleus of the settlement is the acropolis, located some 600 m from the other walled area. A double wall surrounds the acropolis, with the inner curtain being the less finished of the two, in terms of the degree to which the blocks have been worked. The two curtains were evidently constructed contemporaneously with an interstice of 2.30 to 1.80 m between them. One acropolis gate is well preserved, with an impressive architrave (2.15 by 1.35 m) covering the gateway. Additionally, a tholos-type cistern, thought to be contemporary with the acropolis walls, has been investigated. Another polygonal wall traverses the space between the acropolis and the lower settlement nucleus; in terms of masonry technique, this wall exhibits similarities to the walls of the lower town.

Lugli’s work on Circeii in conjunction with the Forma Italiae led him to form some strong opinions about the chronology of the polygonal walls there. He assigns the walls to the early fourth century BC, as he sees a great deal of similarity with other centers, including Signia, Cora, Setia, and Praeneste. He speculates that the lower town pertains to the sixth century BC.

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62 The third center, the port area, was constructed during the reign of Nero and so is not pertinent to the discussion here.

63 Lugli 1957, 1.149-50.

64 Lugli 1957, 1.150.

65 Lugli 1957, 1.150. The cistern measures 4.75 m in diameter and is about 3.50 m deep.
century BC colony founded by Tarquinius, while the acropolis was a product of the Latin *colonia* founded under Roman influence. From this speculation he then draws conclusions about the place of Circeii in the relative chronology of fortification walls in Central Italy. He feels that the presence of a single curtain wall and the absence of outlying bastions or towers place the walls of Circeii fairly early in time. While this processual argument appeals to the scholar attempting to organize a vast corpus of material like Lugli’s, it should be treated cautiously. It serves as yet another example of how the division of the polygonal masonry corpus into the *quattro maniere* ultimately contributes more confusion than clarity to the chronological problems with polygonal masonry.

**Civita di Artena**

Built on a system of artificial terraces, Artena occupies a rocky limestone hilltop. A circuit wall built of rough polygonal masonry once surrounded the irregularly shaped town. The circuit of the walls measures ca. 2.58 km, enclosing an area of about 30.425 ha (fig. 43). The ancient wall had three principal gates: one to the northwest that was protected by a triangular bastion, a second *porta scaea*-type at the southwest, and the third on the eastern side of the walls. The wall varies in thickness from 1.9 to 2.5 m, and averages 2.1 m. A study of the southern fortification wall produced some ceramic evidence, with the concentration being middle Republican wares, leading Quilici to assign a date to the walls of fourth to third century BC. Although this is by no means a precise chronology, such a date

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66 Lugli 1957, 1.151.

67 Quilici 1982, 32.

68 Quilici 1982, 32.

69 Quilici 1982, 42-5.
shows Artena to be a part of the group of central Italian cities building polygonal fortification walls during the middle Republic.

Cora (Cori)

A circuit of polygonal walls surrounded the town of Cora; they measure just less than 2 km in total length and enclose an area of 22 ha (fig. 44).  Eight gates open in the circuit of the walls. An examination of the town’s ground plan shows that the topography dictated the formation of the settlement, as one nucleus of settlement occupies the top of the hill, while another, less compact area is situated at the foot of the hill. The fortifications surround both areas of the settlement. Scholars have identified various phases of construction in the polygonal walling, ranging from first style sections to tracts in the third style. Palombi remarks that the earliest defenses at Cora lacked towers or bastions, which would become characteristic of later polygonal construction.

Two of the gates – the Porta Ninfina and the Porta Romana – incorporate some elements of polygonal masonry. The Porta Ninfina presents a porta scaea-type gate, similar to the Porta Maggiore at Norba, but the majority of the construction has been carried out in opus quadratum in tufa, with significant modern rebuilding. A bastion in polygonal masonry originally defended the Porta Romana.

Palombi identifies three main phases in the ancient urban development of Cora. The first phase involved the nucleation of the settlement and the construction of the first circuit wall in polygonal masonry, while the second and third phases pertain to further work on the circuit wall, the reworking of the principal gates, and the erection of towers to defend the

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70 Palombi 2001, 92.
smaller, more isolated gates. The data from the *Forma Italiae* seem to suggest that Palombi’s first phase may correlate with the early fifth century BC, while the second and third phases might be assigned to the second half of the fourth century BC.

**Ferentinum (Ferentino)**

The circuit wall of the Hernican city of Ferentinum provides an interesting and unique case in the study of Italian fortifications. Built of local limestone, the wall’s perimeter measures ca. 2.4 km, enclosing an area of 52.64 hectares (fig. 45). The most interesting aspect of the walls lies in the fact that two different building techniques are used to build the circuit – polygonal masonry in the lower courses and *opus quasi quadratum* in the upper courses.

The stone of the courses in polygonal blocks is a hard schistous gray limestone, cut to a thickness of 2.00 to 2.50 m. The blocks vary greatly in their size and shape, ranging from 2.50 by 0.58 by 0.80 m to 1.55 by 1.15 by 1.20 m. The upper portion of the walls, in *opus quasi quadratum*, was constructed using a porous yellow limestone from Tibur. The upper portion has an irregular arrangement, without the expected headers and stretchers. The walls of the lower town of Ferentinum are embankment walls, thus they are wider at the base and taper in thickness toward the top of the wall. The wall originally had six gates and at least six posterns. The wall did not have a regular system of towers, although a massive

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72 Palombi 2001, 98.

73 Palombi 2001, 99-101. Palombi also bases his chronological discussion on the development of the sanctuary of the Dioscuri at Cora, which existed already in the fifth century BC.

74 Ashby 1909, 7.

75 Ashby 1909, 7. The block dimensions of the upper portion average 0.40 by 0.60 by 1.05 m. Also, Lugli 1957, 1.127.
salient in polygonal masonry defends the postern near Porta S. Agata that is known as the Porta Stupa. Several of the gates have been partially or completely rebuilt, but the Porta Sanguinaria is well preserved, with the wall standing to ca. 6 m in height. The gate itself is in phase with the work in *opus quasi quadratum* at the site and measures some 2.30 m across.

The top of the hill on which Ferentinum is built was regularized in a monumental fashion with the construction of an enormous polygonal masonry terrace measuring 91 by 160 m. A wall in limestone surrounded the terrace with a gateway approached by a long ramp. This enclosed area measures ca. 90 by 108 m and, during the late Republic, parts of the wall were refashioned in *opus incertum*. Within the acropolis walls are the remains of a massive polygonal masonry podium that demonstrates some masonry tendencies that may predate the polygonal masonry of the city walls, but the interpretation of the podium remains unclear owing to scarce archaeological evidence and a convent that sits atop the remains. Outside the confines of the acropolis are remains that do seem to be those of a temple, as a massive podium in polygonal masonry measuring 26 m in length can be found in the Via Antico Tempio. Also associated with this edifice is an underground cistern.

The work of Quilici and Quilici Gigli assigns the construction of the extant city walls of Ferentinum to the third to second centuries BC, along with the construction of the acropolis fortifications. The city would see substantial rebuilding in the first century BC when the walls would be repaired in *opus incertum* and a building known as the covered market was built.

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76 Based on Bartoli 1954, these are Porta S. Croce, Porta S. Maria Maggiore, Porta Sanguinaria, Porta S. Agata, Porta della Portella, Porta Montana.

77 Quilici and Quilici Gigli 1995, 201.

78 Ashby 1909, 28-9.

79 Quilici and Quilici Gigli 1995, 234-5.
**Formiae (Formia)**

A circuit of polygonal walls surrounds the city of Formiae and, in addition, a large number of archaeological remains that employ polygonal masonry of various styles have been found in the hinterland of the city. The rugged topography of the Auruncan mountains influences the placement and nature of the circuit walls that must conform to steep terrain. The slopes of the hill received terracing in polygonal construction and, as a result, the city has what amounts to three fortified nuclei.

Numerous structures in polygonal masonry are to be found in the hinterland of Formiae. These structures, numbering at least 30 in the modern territory of the modern Comune di Formia are found not on the coastal plain, but on the hillsides of Campese and Castellonorato. Similar to structures evident in the center of the Pontine plain, terrace walls characterize these polygonal constructions. Earlier scholarship has assigned these structures, on the basis of masonry technique, to the fourth style of polygonal masonry, based on the squared nature of the blocks. Ciccone observes three masonry techniques in the polygonal walling in the hinterland of Formiae. While the remarks about technique should not be used to construct chronological frameworks, or even necessarily typological groups, they are valuable in that they demonstrate further how the execution of polygonal masonry (or most any masonry technique for that matter) can vary considerably from site to site, even within a localized area as in this case.

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80 Ciccone 1997.
Fundi (Fondi)

The site of Fondi assumes the rectangular form of the castrum that was familiar to Roman settlements in Latium. A polygonal wall constructed of limestone quarried from the nearby hills surrounded the rectangular center. In terms of the masonry technique, Lugli felt that these walls belonged to the third style, and so were “late”, on account of their sometimes parallelepidal construction that demonstrates some close similarities with opus quadratum. The remains of the wall are scanty now, although it seems clear that a single curtain surrounded the town. Near the Porta Romana a section of the wall survives, as does a square tower that was built contemporary to the wall. Lugli observed that this tower was likely one of a number of interval towers that were built along with the circuit wall, similar to the system of towers at Cosa. The square towers at Fundi bond with the structure of the curtain wall.

Norba – Monte Carbolino / Valvisciolo

Monte Carbolino, located near Norba and also the site of a medieval abbey, presents an interesting case of the use of polygonal masonry. Archaeological investigations of the steep and rocky hillside revealed a system of large terraces that are still visible today (fig. 46). Walls built in polygonal masonry supported these terraces, but the determination of their actual function remains difficult (fig. 47). It is possible that the terrace system dates to the fifth century BC and some scholars have connected the terracing with the site of Sulmo,

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81 Giuliani 1966, 73. The castrum measures 370 by 360 m.
82 Lugli 1957, 1.153.
83 Extensive rebuilding during the first century BC furnished the wall with additional towers, this time round in plan and built in opus incertum.
84 Quilici and Quilici Gigli 1987.
85 Schmiedt and Castagnoli 1957, 134-5.
although without much in the way of substantiation. Luigi Savignoni and Raniero Mengarelli investigated the walls in the early twentieth century, as Lorenzo Quilici and Stefania Quilici Gigli subsequently did. The conclusion of the former pair was that the terraces were the substructions of a road system that climbed the mountainside in a zigzag fashion, although this hardly seems likely. Subsequent work by Mengarelli and R. Paribeni concluded that the polygonal walling was defensive in nature and should be dated to the seventh to sixth century BC. Castagnoli and Schmiedt published a plan of the walls in 1957, allowing the nature of the site to be studied further. From the plan one can discern that a system of v-shaped walls, forming terraces, have been constructed on the steep grade of Monte Carbolino. There are points where two terraces converge, creating several narrow, controllable points not unlike gateways. The distance from the terrace at the lower end of slope to the uppermost terrace is ca. 850 m on a straight line. The system of terraces seems quite open to the western flank, while cross walls and natural terrain close off the eastern flank.

The walls themselves are massive in their construction and utilize roughly shaped (mostly unshaped) pieces of local stone that are packed together solidly to form the terraces. The field-face of the walls is not dressed and so does not display the attractive polyhedron patterns of the later walls at nearby Norba and Signia, for example. Despite this fact, the walls at Monte Carbolino represent a significant body of evidence that may prove critical to an understanding of the shift toward nucleated, urbanized centers in Central Italy after the

86 Quilici and Quilici Gigli 1987, 259-60.
87 Mengarelli and Paribeni 1909, 260.
end of the Archaic period. Quilici and Quilici Gigli believe that the polygonal masonry in the terraces at Monte Carbolino numbers among the most ancient attestations of this building technique in Latium and may be assigned to the sixth century BC. Ceramic evidence recovered in the Dutch Pontine Regional Survey project shows that the occupation of this site flourished during the Orientalizing and Archaic periods. Attema cites the evidence of dolia fragments recovered in the context of a sixth century BC courtyard house, and so is in accord with the conclusions posed by Quilici and Quilici Gigli. The walling at Monte Carbolino obviously has been informed by a different notion of nucleated habitation than the slightly later walled city of Norba, or others in Latium. Nevertheless, the strategic value of Monte Carbolino, taken together with its system of fortified terrace walls and gates, demonstrates the importance of this site in this period.

**Norba**

The circuit wall of Norba measures more than 2.5 km in length, and encloses an area of approximately 38 ha; in some places the wall still stand to a height of over 12 m (fig. 48). Norba’s walls provide perhaps the best example of the prevailing type of polygonal

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88 The polygonal masonry terraces at Monte Carbolino are not singular occurrences in the archaeological record. Lugli established a class for these terraces (terrazzamenti montani) in his corpus. In addition to the instance discussed here, similar terraces can be found at the following sites: “Gli Stradoni” on Monte Tiutillo near Palombara, on Monte Algido, Monte Massico, and Monte Castellaccio (near Termini Imerese). These walls share common characteristics: they utilize rough blocks of local limestone that tend to be quite large, they occupy steep terrain and individual walls at each site seem to form part of an integrated system. With the exception of the terraces at Monte Carbolino, the other examples cited here have only been investigated superficially, it seems. Both Ashby and Maiuri were interested in these sites, and each published some notes on these types of terraces. Further excavation could help to contextualize better these terrace systems. For further discussion, see Lugli 1957, 1.154-9.

89 Quilici and Quilici Gigli 1987, 272.

90 Attema 1993, 224 n. 29 reports dolia sherds in the following quantities: 1 Iron Age, 16 Orientalizing, 19 archaic, and 20 post-archaic.

construction during the middle Republic, and that is the so-called embankment wall. The technique of constructing embankment walls is very much connected to the tradition of artificial terracing, a strategy that reaches back into the Bronze Age. Artificial terraces were created usually for purposes of land reclamation or cultivation and utilized a crude stone construction behind which fill and soil could be packed, thus creating a level space. The embankment walls built in polygonal masonry follow this same general principle. As most of the centers under consideration here have a double curtain, the field face of the wall generally stands to a greater height than the internal face of the wall, on account of the terrace-type construction that informs the architecture of these walls.

The walls originally incorporated four gates, as well as posterns that were placed in strategic locations. Two towers survive as well, one of them the famous Porta Maggiore (figs. 49, 50), and the other, the so-called La Loggia (figs. 51, 52). The former tower is a heavy bastion of semicircular form that today stands some 13 m in height, although it was presumably even taller originally. Both of the towers fortify the defensive circuit on its most exposed side, that being the eastern part of the plateau. Adjacent to the Porta Maggiore is a postern that may have originally been connected to the Minor Acropolis by means of an underground tunnel. The postern itself measures 0.90 m in width and is 2.30 m high at the point of entry; the tunnel continues for some 10 m, after which it is blocked. Additional posterns can be found in the circuit of the walls, either in connection with one of the main gates or placed at intervals between the gates. The postern provides additional defense for the Porta Maggiore, which is essentially a re-entrant of the walls (figs. 53, 54).

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92 The Porta Maggiore is also referred to as the Porta Romana in some publications.

positioning of the postern would require that any attackers expose their right flank to the defenders, thus weakening their assault.\textsuperscript{94} The main gate is quite large, with jambs over 8 m in height, 4.30 m in width, and with an internal width of 12.8 m. It is possible that a timber roof originally covered the gate and the chamber inside.

The most heavily defended of Norba’s gates is the Porta Ninfina. With an opening measuring 7.70 m in width, the Porta Ninfina is defended by a rocky spur that projects from the rocks.\textsuperscript{95} Additionally, the main city wall meets the gate on the edge of the sheer cliffs of the Monti Lepini, making it extremely unlikely that the gate would be assailed in force. A road issued from the gate and descended to the Pontine plain, in order to link up with the Via Appia.

Further to the west of the Porta Ninfina is the Porta Furba, which is essentially a postern that opens below the platform of the temple of Iuno Lucina, dating to the fifth and fourth centuries BC. Another postern, again further westward, measures 0.75 by 1.60 m and is covered by limestone slabs. Both of these posterns open on such extreme terrain outside the walls that they could not have been the entry points of any major lines of communication.

On the north side of the city, at the point where the road to Cori would have begun, is the poorly preserved Porta Serrone di Bove. The remains of the gate are few and a modern wall blocks the opening. At the northwest corner of the walls lies the Porta Signina, also

\textsuperscript{94} Quilici Gigli refers to this situation as a “\textit{scaea}-type” defense, perhaps making an allusion to the \textit{Scaeva portae}, which were the main gates of Troy at the western side of the citadel; it was thought that as long as these gates held, the city would not fall. It was at the Scaean Gate that Achilles fell, as well as the gate through which the wooden horse entered the city. See Hom. \textit{Il}. 3.96.30; Prop. 3.9; Vergil \textit{Aen.} 2.612, 3.351; Serv. in \textit{Aen.} 2.13; 2.241. The comparison made by Quilici Gigli likely rests on the fact that, in Greek, \textit{σκαεας} means “left” (equivalent to the Latin \textit{sinister}), but also incorporates the idea of threatening or foreboding. The Trojan gates were dipylon in plan, somewhat analogous to the arrangement of the Porta Maggiore at Norba where the bastion flanks the gate to one side, while a strong wall and postern flank the other side.

\textsuperscript{95} To the west of the Porta Ninfina there is a gap in the walls measuring 1.80 by 0.65 m. Quilici Gigli speculates that owing to the sheer topography here, the gap is most likely a sluice or drain rather than a postern.
known as the Porta Testa di Bove. The road to Signia began at this gate, which measures 4.35 m in width and is flanked by two lateral projections, each some 5.50 m in length.\footnote{Quilici Gigli 1998, 28.}

The masonry techniques employed in the defensive works at Norba vary considerably across the site. The blocks that are worked most precisely, having straight edges and a dressed face, are those of the fortification walls that have the highest strategic value, particularly the eastern curtain. Here the walls are both higher and more precisely constructed, while in other stretches the blocks seem to be worked hardly at all and may not have stood to as great a height as the eastern curtain wall did originally. The working of the interior face of the walls was left rough in most places, although this is a trend that is repeated at many other sites and so is not unique to Norba. An explanation of this method is not forthcoming, but may have to do with the lesser importance of the interior curtain, both in defensive and symbolic terms. As discussed above, the interior curtain played an important structural role in the construction of embankment walls, but would not have been particularly visible in most cases, thus it may have been worked less.

**Norba – Poggio di Serrone di Bove**

Approximately 2 km northwest of Norba lies the site known as Poggio di Serrone di Bove (fig. 55).\footnote{Quilici Gigli 1988, 227-32.} This settlement indicates something of the complexity of sites in Norba’s general area. The site at Poggio di Serrone di Bove was investigated by L. Savignoni and R. Mengarelli in the early twentieth century, as well as being included in Schmiedt and Castagnoli’s study of Norba by means of aerial photography.\footnote{Quilici Gigli 1988, 227-32.} The ancient masonry remains
on the site are indeed polygonal masonry, but of a type that differs from the walls of Norba (fig. 56). At Poggio di Serrone di Bove the construction of the walls is more haphazard, and employs smaller, more irregularly dressed stones.99 Built on a hillside, the remains of the polygonal wall suggest an enclosure with a roughly circular form and a diameter of ca. 75-80 m. Only short tracts of the wall remain today, with the thickness ca. 1.20 m and a maximum height of 1.50 m.100 Within the circular enclosure, excavations have only revealed the bedrock of the hill and no structural remains of any kind.101 Little ceramic evidence was found on the site, mostly fragments of tiny, non-diagnostic sherds either in beige or red fabric assigned to the Republican period.102

Not far from the southern point of the circular enclosure lie the remains of a road running east to west. The terracing for the road is of polygonal masonry construction, with blocks that are, on average, smaller than those of the nearby enclosure.103 The road likely originated at Norba and runs in the direction of Cora. Quilici Gigli feels that the masonry techniques evident in the construction of the roadbed have a stronger affinity with the masonry at Norba than they do with the enclosure wall at Poggio di Serrone di Bove, thus suggesting that the road postdates the polygonal masonry enclosure on this site.

98 Schmiedt and Castagnoli 1957. The aerial atlas project relied upon reconnaissance photographs taken during World War Two and, as such, represents an important documentary study of archaeological sites in Italy. The documentation provided by the atlas led Schmiedt and Castagnoli to write important articles, including a study of Norba based on the details visible in the aerial photographs.

99 Savignoni and Mengarelli 1901, 554.

100 Quilici Gigli 1988, 228. The blocks in the wall measure ca. 0.96 by 0.60 m, on average.

101 Quilici Gigli 1988, 228 n. 5.

102 Savignoni and Mengarelli 1901, 554. We must receive the chronology offered in this original report with caution owing to the imprecise approach to ceramic chronology during the period of

103 Quilici Gigli 1988, 229 gives the average dimensions as 0.9 by 0.6 m, 0.70 by 0.47 m and 0.57 by 0.45 m. The thickness ranges from 0.35 to 0.90 m.
An additional construction in polygonal masonry may be found on this site, that on the eastern part of the hill. A system of three parallel terraces constructed in blocks of local limestone was located, with some walls still standing to 3 m. On a northwest axis the terrace wall continues for ca. 30 m. Whether the terrace supported a temple, as suggested by Savignoni and Mengarelli early in the twentieth century, or some sort of isolated building is difficult to discern, especially given the fact that few artifacts are known from the site. In general the site finds peers in the Italic tradition of isolated stone enclosures, a phenomenon evident elsewhere in Latium and also in Samnium. Quilici Gigli feels that the masonry at Poggio di Serrone di Bove shares some commonalities with the terrace work of the minor acropolis at Norba, which would place the site perhaps in the late fifth or very beginning of the fourth century BC.

**Norba – Colle Gentile**

Another site with polygonal walling in the immediate vicinity of Norba is Colle Gentile, located to the southeast. The site is an elevated one, occupying a hill whose maximum elevation is 257 m a.s.l., possessed of a commanding view of the Pontine plain, as is true of the sites of Norba and Valvisciolo. At the Colle Gentile site Quilici Gigli documents three terrace walls of varying lengths; they measure 140, 230, and 210 m, respectively. The walls, constructed of local limestone blocks, demonstrate careful masonry joins. Quilici Gigli interprets these terrace walls in light of comparative evidence.

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104 *cf.* Haller 1978.
107 Quilici Gigli 1991, 158. The maximum height is 3.50 m.
furnished by the nearby polygonal terraces at Monte Carbolino, which she also investigated and documented. Her observation that this group of sites (Serrone di Bove, Norba, Colle Gentile, Monte Carbolino) occupies a rough northwest to southeast axis along the Pontine plain, in positions that dominate the region, is worthy of note. Taken together the two systems of terrace walls that occupy steep hillsides at Colle Gentile and Monte Carbolino may be indicative of defensive urbanism, perhaps analogous to the system of hill forts found in Samnium that have been documented by G. Conta Haller and Stephen Oakley. The Colle Gentile walls, assigned by Lugli to the first style, may join the Monte Carbolino walls in filling an urban role, with a defensive mindset, in the sixth and fifth centuries BC, before the construction of the massive fortifications at Norba.

**Praeneste (Palestrina)**

The walls of Praeneste remain poorly studied, with Magoffin’s 1908 treatment still being the most thorough. Quilici’s more recent (1980) study of the topography is mainly concerned with the plan of the lower city than with the wall of the citadel. The arx did have a polygonal circuit wall surrounding it that may be dated to the fourth century BC. At least one gate with a corbelled profile was also known. While it is difficult to discuss in great detail the particulars of the wall at Praeneste, the fact that it is attested demonstrates that one

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108 Quilici Gigli 1991, 158 provides a range of measurements for the blocks used in the terrace walls. One group measures, on average, 0.60 by 0.70, 0.60 by 0.90, 0.60 by 1.00 m; another, the median group, 0.70 by 0.90 m, 1.00 by 1.70 m; and a third group, 0.90 by 0.90, 0.90 by 1.20, 1.20 by 0.60 m. In the wall located highest on the hillside, blocks measure 1.70 by 0.70 m.


110 Magoffin 1908, 7-101. See also Nibby 1848-1849, 2.511.

111 Quilici 1980.

112 Blake 1947, 95.
of the most important communities in Central Italy was fortified in this manner and even in the ancient period the city was known for its strong walls.\footnote{Strabo 5.3.11.}

**Rocca d’Arce and Castro dei Volsci**


**Setia (Sezze)**

The ancient town of Setia lies approximately 6 km from the Via Appia on a hill that rises 305.60 m above sea level. Among the most notable ruins from the ancient city are sections of its polygonal fortification wall that are interspersed with sections of medieval and modern walls; some of the polygonal tracts still stand to great height, up to 11 m in some places (\textit{fig. 58}).\footnote{Armstrong 1915, 37 mentions that the walls are built of local limestone and that some sections are “quasi-ashlar” in their technique. It seems likely that these sections as described represent either later additions or modern reworking of the Republican walls. For a more up-to-date study of the archaeological remains of the wall, see Bruckner 2001, 103-26.} Due to the steep nature of the site’s topography, some of the city’s defenses were nothing more than the natural terrain.\footnote{Zaccheo and Pasquali 1972, 72.} Overall, irregular construction characterizes the walls of Setia, with several different variations of polygonal masonry...
evident in the wall’s course (fig. 59). As at other sites, the presence of multiple tracts of walls has led some scholars to conclude that they represent different phases of fortification. More likely is the suggestion that the three curtains of fortification evident at Setia represent a unified program of defense that was constructed in a roughly contemporary time frame.

**Signia (Segni)**

A polygonal masonry circuit wall surrounds Signia, measuring just less than 5 km in overall length and enclosing an area of approximately 49 ha (fig. 60). The stone used is the limestone from the hill on which Signia sits, quarried from numerous areas visible along the course of the wall’s circuit. Signia’s circuit stands out in the group of cities with polygonal masonry walls, in that its walls are extremely homogenous in terms of the masonry techniques employed in constructing the wall (fig. 61). That is to say, the degree of variation in technique is low.

A number of gates are included in the defensive circuit, including the well-known Porta Saracena, which measures 2.90 m wide at the base and is covered by a monolithic architrave that measure 3.10 m in length (figs. 62, 63). This impressive gateway has a truncated ogive profile. From the Porta Saracena the circuit wall ascends the mountainside at a steep 45° slope for a distance of about 240 m. The navigation of the steep terrain by the masons building the wall was no doubt a challenging proposition. Observation of this tract of walling shows clearly how the masons would cut down the bedrock of the hill as they planted courses of blocks. The example of this tract also demonstrates the difficulties

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118 Zaccheo and Pasquali 1972, 73.
119 Lugli 1957, 1.88.
120 Cifarelli 1992, 39. The difference in elevation between the lower end of this section of walling (the Porta Saracena) and the upper end is 80 m of elevation.
involved in this type of construction, as the placement of blocks weighing several tons in some cases would have been extremely hazardous on the side of a mountain. Several posterns are located along this section of the circuit wall, although it is difficult to imagine any enemy assailing the city from this extremely exposed and treacherous position. One of the posterns, known as the Porta S. Pietro on account of its proximity to the church atop the acropolis, is interesting in that the gateway has an ogive profile. Although the gateway is now blocked with small pieces of limestone, the opening measures 1.60 m at the base and 1.50 m at the apex, with a total height of 2.50 m.\footnote{Cifarelli 1992, 42.}

Another major gate of the city is the Porta Foca (modern Porta Steccato) and it is integrated into the matrix of the wall; Middleton may have carried out some limited excavation in the area of the gate during his visit in the nineteenth century.\footnote{Cifarelli 1992, 44 n. 152.} The gateway, ca. 2.20 m at the base, is covered by two monolithic architraves that measure 3.40 by 0.90 m. As the area within this gate has not been excavated, little other information is known about its arrangement or plan.

At the southern end of the fortified area is the Porta dell’Elcino, once a substantial gate leading to the road to Anagnia, but now in a poorly preserved state. The salient once measured ca. 8 m, but only one pier of the gate remains today. Cifarelli speculates that the arrangement of the gate was originally quite similar to the plan of the Porta Saracena.\footnote{Cifarelli 1992, 48-9.}

The highest point within Signia’s walled area is the acropolis, whose view of the valley below is commanding.\footnote{Cancellieri 1992, 67-88; Cifarelli 2003.} On the acropolis sit the remains of a monumental complex
connected with the temple of Iuno Moneta that dates between the late sixth and the early fifth century BC (fig. 64). Today a medieval church (S. Pietro) occupies the temple’s podium, adjacent to which lays a circular ritual basin. The focus of the fortified acropolis is the temple podium built in polygonal masonry and measuring 50 by 70 m (fig. 65). The acropolis itself was also created by the use of sections of polygonal walling that form an enclosed terrace, within which the raised temple podium is located. This area measures ca. 80 by 300 m and demonstrates the utility (and strength) of polygonal construction when used to create terraced embankment walls.

**Sora**

The site of the modern city of Sora does not contain any ancient remains, but on Monte S. Casto, overlooking the modern town, are the remains of fortifications in polygonal masonry, as well as those of a temple podium constructed in the same fashion. These remains are poorly published, as the main line of inquiry with regard to Sora has been a study of inscriptions recording the careers of local magistrates. In any case, the polygonal masonry remains on the mountaintop are most likely those that correspond to the ancient Sora of Volscian origin. Additionally, the town’s Republican history is reflected somewhat in the construction of a bridge, known as the Ponte Marmone, that dates to the second century BC.

**Verulae (Veroli)**

At Verulae the advantage of naturally steep terrain as part of a system of fortifications is clearly evident (fig. 66). The hill upon which Verulae sits is quite steep, and is in fact

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125 Cifarelli 2003 provides the most thorough study to date of Signia’s acropolis.

steep enough not to need built fortifications on the western flank of the settlement. The walls at the southern and northern ends, the latter being the site of the medieval fortress of Rocca San Leucio, augment the walls on the eastern side of the summit are augmented by. The Rocca, massive in its aspect, incorporates earlier polygonal walling in its sturdy foundations (fig. 67). The polygonal wall, preserved for about 9.50 m, still stands to 5 m in some places. The ancient polygonal circuit wall incorporated at least five postern gates, one of which is still clearly visible in the walls of the Rocca San Leucio. Also of interest is a section of polygonal walling that now supports the campanile of the Duomo of Veroli. This fragmentary wall, massive in its aspect, was quite likely part of the terrace of a large, public building that stood near the center of the ancient town. Its reuse here is not dissimilar from the situation at Signia where the podium of the temple of Iuno Moneta was reused to support the church of S. Pietro.

**Fortification walls in Samnium (Regio IV)**

The Samnite civilization occupied the mountainous uplands of central and southern Italy, and as such adapted to construction in hilly terrain. Numerous enclosures in polygonal masonry characterize Samnium, and while a comprehensive treatment would be out of scope in the present study, the inclusion of a sampling of relevant pre-Roman examples will be helpful in considering polygonal masonry construction, especially since in the Roman period new walls in polygonal masonry would be constructed in Samnium, notably at the colony of Alba Fucens. The polygonal masonry of Samnium prior to the Roman conquest tends, in its

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127 Quilici and Quilici Gigli 1999.

128 Quilici and Quilici Gigli 1999, 168.

129 Fonte-a-Nive 1887, 168-9 documented the postern gates.

130 Quilici and Quilici Gigli 1999, 206.
construction, to be less refined than the circuit walls of sites in the Pontine plain like Norba and Signia. The stones tend to be worked less and the walls to have a rougher and less finished appearance (fig. 68). Rather than being an indication of poor technical ability, this may simply be a fact of cultural and geographic variation. It is important to remember that even “rough looking” polygonal walls like those of the Samnites still utilized massive stones and required a high level of technical ability to be successfully erected.

**Samnite hill-forts**

During the period of the Samnite Wars, numerous hill-forts were constructed in Samnium, presumably to provide for local defense against the Roman legions. These forts often occupy the peaks of strategic hills and serve as military outposts rather than as places of permanent habitation. While many of these sites remain unstudied, S. P. Oakley’s study does much to collect the class of site and present it in a cogent and convincing fashion. Oakley does comment upon the presence of polygonal walls at these Samnite hill-forts, noting that these forts had walls that included gates, towers, and posterns. Usually the polygonal masonry employed at Samnite hill-forts is of a less-refined technique, wherein the blocks are worked hardly at all, giving the finished walls a rough, overall appearance.\(^{131}\)

As a class, the Samnite hill-forts contribute significantly to the discussion of the distribution of polygonal masonry fortification walls, especially in that they demonstrate how widespread the distribution of this type of masonry was in Italy. However a distinction must be drawn between Samnite hill-forts that employ polygonal fortification walls and urbanized settlements that chose to erect a fortification wall using polygonal masonry. In the Samnite context, these fortified hilltops are little more than outposts where Samnite warriors could

\(^{131}\) Oakley 1995, 11-12.
either hide from or assail Roman soldiers during the Samnite Wars. The forts, in architectural terms, are relatively crude and do not often have permanent structures erected within the enceinte, although Oakley’s survey did reveal some ceramic evidence that suggests habitation at some of the sites. As forts they were no doubt effective, but owing to their strictly functional nature, the Samnite fortifications do not possess the identity of place or community as was the case with cities in Latium and elsewhere that erected fortifications in the fifth and fourth centuries BC. These sites may have erected their walls in order to define better their own communities, thus granting to the walls something of a duality of function.

**Alba Fucens**

A fortification wall in polygonal masonry surrounded the Latin colony of Alba Fucens, established at the close of the fourth century BC. The circuit was massive, enclosing the site that occupied three hills and the intervening valley (Pian di Civita); the original length of the circuit measured ca. 2.93 km (fig. 69). Over the course of the circuit, the walls range in thickness from 2.80 to 3.40 m and demonstrate a slight inclination away from the field face. The excavators noted at least four different building styles used in the construction of the circuit, which they attribute to different phases of construction; however, based on the evidence from other sites one must allow for the possibility of variant construction methodology as part of a more or less contemporaneous project.

In some places, particularly in the vicinity of the Porta Massima, the wall consisted of three curtains, with the outermost being fortified with quadrangular bastions. Given the

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133 Mertens and Laet 1951, 273.
presence of three curtains, the excavators classified each curtain as a separate wall system. The first, system A, is the main settlement wall. Constructed from massive blocks of limestone, the wall varies in thickness from 2.80 to 3.00 m.\textsuperscript{134}

The second system of walls, system B, is analogous to system A in construction, but tends to be less massive, with an average thickness of 2.00 m. Mertens further subdivides this wall system into B/1 and B/2 on the basis of building technique. The latter, B/2, employs blocks that show evidence of metal clamps used during construction, leaving behind small round holes.\textsuperscript{135} The matrix of the wall is formed from rubble and cut pieces of stone that were the waste product of the dressing of the blocks for the wall’s inner and outer faces.\textsuperscript{136} Despite the stated differences between B/1 and B/2, Mertens considers them to be contemporaneous in their construction.

The third system of walling, C, is similar to system B in thickness (ca. 2.00 m) but employs blocks of larger dimensions, here measuring 1.30 by 1.30 m, thus making the wall somewhat more similar to system A in terms of its aspect. Mertens does remark, however, that the blocks of system C are cut in a coarser fashion than those of system A.\textsuperscript{137} The fourth section, system D, ranges in thickness from 1.80 to 1.90 m and has an internal core of \textit{opus caementicium} measuring about 1.10 m in thickness.

Towers did not punctuate the wall, with the exception of the terraced bastion (system C) near the Porta Massima. This terraced bastion adds another curtain to the wall system

\textsuperscript{134} The proportions of the blocks are massive. Ranging from 1.40 by 1.10 m to 1.90 by 1.30 m and, in some places, 2.00 by 0.95 m. Mertens and De Laet 1951, 273.

\textsuperscript{135} These holes measure 0.015 m in diameter and are about 0.02 m deep.

\textsuperscript{136} Mertens and De Laet 1951, 274-5. The dimensions of the polygonal blocks are also smaller, averaging 0.80 by 1.00 m.

\textsuperscript{137} Mertens and De Laet 1951, 276.
close to the city’s main gate, but also serves as an enclosure for a monumental tomb complex that may be connected with the family of the *Scipiones*.\textsuperscript{138} Three rectangular towers reinforce the wall and, on the basis of cement construction, they post-date the construction of the main curtain of the system C wall.

The city wall originally had four gates, the Porta Fellonica (north), Porta Massima (west), an unnamed southern gate, and Porta di Massa (east). Of these gates, the Porta Massima is the principal gate as it is at this point that the Via Valeria enters the town. The gateway measures 10 m across and a round angle tower reinforced the gateway. This tower, constructed with a nucleus in *opus caementicium* was faced with polygonal blocks on the exterior.\textsuperscript{139} An outlying fortification of dry stone (*opera a sacco*) masonry added further protection to the Porta Massima, although the Belgian excavations uncovered little evidence that could be used to date the bastion, save the presence of *opus caementicium*.\textsuperscript{140}

**Aesernia (Isernia)**

The city of Aesernia occupied an important position along several major routes of communication, allowing it to be connected to Rome, Campania, Puglia, and the Adriatic. The layout of the settlement predates the Roman conquest, occupying a peculiar site, causing the walls to follow a curving, sinuous route.\textsuperscript{141} The preservation of the ancient wall is

\textsuperscript{138} Orosius 5.22; 24.16. The consul M. Aemilius Lepidus (cf. *RE* 72), who rebelled against the Sullan party died in 78 BC in Sardinia. His younger son, M. Aemilius Lepidus, the triumvir, adopted by the Scipiones was besieged at Alba Fucens by Pompey and executed. Mertens speculated that the tomb on the northern terrace works at Alba Fucens was perhaps that of this Lepidus and that the complex may have included a Caesareum in honor of the dictator, who had been the colleague of Lepidus. See Catalli 1992, 20-1.

\textsuperscript{139} Mertens and De Laet 1951, 283-4.

\textsuperscript{140} Mertens and De Laet 1951, 285-6. The ‘fortina’, as Mertens calls it, was a large bastion that still stands to 3.60 m. The curtain wall of the bastion was composed of polygonal masonry (blocks measuring 0.55 by 0.60 m, on average); the wall is ca. 0.50 to 0.60 m thick. The interior wall was constructed of *opus quadratum*. The bastion’s footprint measures ca. 8.80 by 6.80 m.
limited, although a section at the southeast of the city still stands at least four courses high. The material used is a local calcareous travertine and scholars have assigned the wall to the third masonry style on account of the fairly regularized treatment of the individual stones. At the southeast corner of the city it seems that a gate once opened, leading to the road to Venafrum. As reconstructed, the gate would have been of the *porta scaea*-type that was used at some sites in Latium, including Norba. Masonry of other types is evident in the city, including instances of both *opus quasi quadratum* and *opus mixtum*. The chronology of the walls may relate to the establishment of a Latin *colonia* there in 263 BC.\textsuperscript{142}

**Bovianum Undecumanorum (Boiano)**

In the territory of the Samnite city of Bovianum are several circuit walls built in polygonal masonry. One, Campochiaro (località Civitella) is preserved to a length of 600 m and is situated at 950 m a.s.l. Within this enclosure are the remains of terrace works connected with a temple. The masonry is polygonal with stones of large dimensions, possibly constructed in at least two phases.\textsuperscript{143} Another circuit wall at Monte Vairano has a perimeter of 2,900 m. A third enclosure, on Colle di Rocco to the east of Guardiaregia, sits at 1,025 m a.s.l. About 110 m of wall are preserved and the site is in a position to control to pass at Vinchiature and control communication with Campochiaro. The wall at Monteverde,

\textsuperscript{141} Pasqualini 1966, 79.

\textsuperscript{142} Pasqualini 1966, 82-3. In addition to the suggestion of the relationship in chronology between the walls and the establishment of a *colonia*, the substantial remains of a temple podium within the walls helps to point to a late fourth to early third century BC date. The temple podium would originally have been quite large and its distinct molding profile demonstrates affinities with the third century BC temple podium excavated near Caccia at Villa S. Silvestro, as well as to the altars at Lavinium, and the temple podium at Ardea. On the temple at Aesernia, cf. F. Castagnoli “Sulla tipologia degli altari di Lavinio,” *BCom* 127 (1959-60) 166 and L. T. Shoe Merrit *Etruscan and Republican Roman mouldings* 2\textsuperscript{nd} ed. (Philadelphia, 2000). On the temple at Ardea, see E. Stefani *NSc* (1954) 12ff.

\textsuperscript{143} De Benedittis 1977, 10-11. The temple in this area has been correlated with the ‘*Herculis Rani*’ of the Peutinger Table. cf. La Regina in *Hellenismus in Mittelitalien* 241-2.
southwest of Monte Vairano, is built of large blocks of irregular stone and is preserved to a length of ca. 600 m. This wall system, of the double curtain type, stands to 1.50 m in height and is about 2.20 m in thickness, measurements that are akin to those of the other enclosure walls in the territory of Bovianum, leading De Benedittis to conjecture related craftsmanship in the construction of the group.\textsuperscript{144} While no towers or gates can be identified at Monteverde, the enclosed area once measured ca. 30-40,000 m\textsuperscript{2}.

**Venafrum**

Polygonal masonry walls also surrounded the Samnite city of Venafrum. The total area of the city within the walls measures ca. 27.4 ha and was divided into a regularized grid pattern, with blocks that measured ca. 70 by 75 m. The most substantial remains of the polygonal walls are to be seen at Madonna della Libera.

**Fortification walls in Umbria (Regio VI)**

As a region, Umbria tends to be less studied by scholars of first millennium BC urbanism, yet a good deal of evidence for urban communities survives from this period. A number of cities have fortifications whose origins date to the period of the Roman conquest or, in some cases, prior to the conquest. Many of these walls are polygonal in nature, although of a different aspect than polygonal walls in Etruria or the Pontine plain. One factor that may account for this difference is the quality of the local building materials that include travertine. The Umbrian walls tend to be characterized by narrow stringcourses with blocks longer than they are tall, giving the walls a somewhat unusual appearance. A survey of the

\textsuperscript{144} De Benedittis 1977, 14-5. The 2.20 m measurement equals eight Oscan feet (27.5 cm).
evidence for fortifications in Umbria will help to contextualize this region during the middle Republic.

**Ameria (Amelia)**

Not far from Ocriculum, the site of Ameria had a circuit of polygonal walls before the Roman conquest. The walls of Ameria were evidently built in several phases. The first circuit of walls is usually dated to the seventh to sixth century BC, while the second dates to the fourth to third century BC and corresponds to the time of the Roman conquest (fig. 70). The walls, built of local stone and sometimes megalithic in nature, still stand in places to a height of 4 to 6 m (figs. 71, 72). The shape of the city and its walls has been described as amoeboid. The first phase of walling employs massive polygonal blocks of local limestone, some of them with maximum dimensions up to 3 m, and surrounds the acropolis of the hill, thus suggesting a nucleated settlement on the hilltop prior to the Roman conquest. After 240 BC the Via Amerina passed directly by the site. Pre-Roman tombs excavated south of the site at Pantanella suggest that a center of habitation existed in the timeframe of the sixth to fifth century BC, thus discounting Cato’s eponymous founder of the twelfth century BC.

The walls of Ameria are of interest and are preserved in three primary sections. The first of these sections, extant for a length of about 60 m, lies on the northwest side of the

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145 On the walls of Ocriculum, see Cipollone and Lippolis 1979 and Fontaine 1990, 57-68.

146 Della Rossa 2002, 45.

147 Fontaine 1990, 65, 72-81; Bradley 2000, 78-80.

town and consists of large polygonal blocks of grey and white limestone.149 The blocks join well and in some cases have smaller stones inserted in the gaps at important joints. The second section of walls, at the southwest side of the site, is more heterogeneous than the previous tract, in that the masonry includes polygonal as well as trapezoidal forms. The wall is thicker here than the previous section (3.50 m), but the same local limestone is again in use.

Cesi and Sant’Erasmo di Cesi (Monte Eolo)

Not far from Terni at the site of Cesi there are polygonal masonry remains to be found, especially in the area of the cathedral of S. Maria Assunta and the church of S. Onofrio (fig. 73).150 Two series of excavations undertaken in this area, first in 1881 and then in 1914, revealed tombs and instrumenta domestica ranging in date from the Iron Age to the end of the Orientalizing period.151

In the territory of Cesi, several distinct areas have been identified that have remains of polygonal walls. One of these areas seems to have been urban in nature, located on Monte Eolo (also known as Sant’Erasmo di Cesi); the other is at the Stada della Pittura (Fosso del Sasso Grosso) and has been identified as a basis villae.152 The walls that remain on Monte

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149 Fontaine 1990, 73. These blocks are quite large, measuring 1.20 by 1.56 m in some cases; others are documented as 0.96 by 0.59 and 1.84 by 1.05 m respectively. The thickness of the wall is ca. 2.50 m. Fontaine reports that the interior face of the blocks has been worked with a pickaxe. Sadly a 20 m long section of the ancient wall of Ameria collapsed during restoration work on 18 January 2006.

150 Renzi 1995, 22.


152 Renzi 1995, 28-9; Della Rossa 2002, 41. This location has nearly isodomic polygonal masonry used in the construction of a terrace that still measures 37 m in length and stands to 6 m in height and has a ground plan.
Eolo (which later served as the twelfth century fortress known as La Rocchetta) measure ca. 400 m in length and enclose an area that is trapezoidal in shape; the walls stand to a height of 6 m in some places.\textsuperscript{153} The enclosed area measures ca. 7,000 m\textsuperscript{2}. The craggy hill reaches 790 m a.s.l. Varying polygonal masonry techniques are employed in the wall’s construction. Two gates originally opened in the walls, one on the north side near the Monte Torre Maggiore, measures 1.4 m across.\textsuperscript{154} Within the circuit of the walls are the remains of a squared, podium-like base in polygonal masonry,\textsuperscript{155} as well as a circular well and cistern that may have been part of a later villa.

**Interamna Nahars (Terni)**

A fortification wall encircled the site of Interamna Nahars, which was most likely a Latin *colonia* (fig. 74).\textsuperscript{156} The remains of the walls have been studied by Fontaine who found that the blocks have been cut to proportions similar to those of the Servian Walls at Rome and the foundations at Nepet and Sutrium, thus indicating that since the Roman foot is in use, Roman builders were responsible for the walls.\textsuperscript{157} According to Fontaine’s study, the intramural area of the settlement was ca. 32 ha and this zone was evidently divided into *insulae*, perhaps another hint of Roman involvement.

\textsuperscript{153} Della Rossa, 2002, 41.

\textsuperscript{154} Renzi 1995, 31.

\textsuperscript{155} Renzi 1995, 31. The podium measures 32 m on a side and may have been the base of a temple; Renzi speculates unconvincingly that the base may have been the *comitium* or the house of the village headman.

\textsuperscript{156} See the discussion in Bradley 2000, 129-30. The colonial status of the town remains unclear because of Late Republican magistrates who still bore the title of *quattorviri*.

\textsuperscript{157} Fontaine 1990, 122-30.
The wall itself is poorly preserved, with some tracts still visible beneath later fortifications, although the original circuit measured ca. 3 km. In terms of building technique, the walls employ blocks of local limestone that have been cut in a fairly regular fashion, thus rendering the aspect of the façade in a style akin to Lugli’s fourth style of polygonal masonry, that is difficult to distinguish from *opus quadratum*.

**Nequinum / Narnia (Narni)**

Nequinum, which became Narnia under the Romans in 299 BC,\(^{158}\) attained *municipium* status in 90 BC. Scant remnants of the fortifications remain and some portions are of megalithic construction in the area of the Porta delle Fiera and near the duomo of the city.\(^{159}\) The remains of polygonal walls are extant at Narnia, but only in two small tracts. Tombs on the site suggest habitation as early as the eighth century BC and during the Roman period the town clearly benefited from its proximity to the Via Flaminia. The remains of polygonal walling show that, like at Spoletium, local limestone was the building material of choice. The walls are assigned to the third century BC, likely after 299 BC in Fontaine’s estimation.\(^{160}\)

**Oriculum (Otricoli)**

While not possessed of polygonal walls, the site of Oriculum may contribute to an understanding not only of middle Republican urbanism, but also of established building techniques prior to the Roman conquest. Oriculum, the southernmost of the Umbrian

\(^{158}\) Livy 10.10.5.


\(^{160}\) Fontaine 1990, 106.
towns, occupies an elevated spur of land overlooking the Tiber valley, and had a system of walling that surrounded the hill. These walls are badly preserved today, but from the remains it is possible to see that the builders cut the blocks on the basis of the Attic foot, as was done at Falerii Veteres and Veii, rather than the Osco-Italic foot. The use of the Attic module is not terribly interesting in itself, but is important on account of what it demonstrates about urban trends in southern Umbria in the mid-fifth to mid-fourth century BC. While the presence of the Attic foot does not automatically demonstrate a direct Etruscan presence in these Umbrian cities, it does show that the influence of Greek culture is felt within the milieu of urban culture, through the mediation of Etruscan cities. Further the use of this measurement may hint at the cultural identity of masons who were at work building walls in Italy. Thus the urban mentality that led to the establishment of some Umbrian centers was that of the Etruscans, and would have been an established set of principles that the Romans would have encountered urban centers when they began to expand into Umbria.

**Spoletium (Spoleto)**

Spoletium, an Umbrian city that became a Latin colony in 241 BC, also has a system of fortifications that include some sections of polygonal walling. The circuit of the walls measures almost 2 km in length and the walls themselves were constructed originally in

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161 The Osco-Italic foot equals ca. 27.5 cm. The Roman foot (*pes Romanus*) measures ca. 29.6 cm and the Attic foot measures from 29.3 to 29.6 cm. On these units, see Röttlander 1993.

162 Fontaine 1990, 65 provides the information for dating the walls to this period. See also the discussion in Bradley 2000, 77-8.

163 Vell. Pat. 1.14.8; Livy *Per.* 20.

polygonal blocks, although the polygonal remains would serve as the foundation for the Late Republican rebuilding in opus quadratum and another type of masonry characterized by long, thin blocks. Some portions of the wall, built of massive blocks, have long been considered to date from the sixth century BC, although little evidence supports this chronology (fig. 75). More recent work posits that the walls postdate the Roman conquest, but this, too, is difficult to prove archaeologically. In appearance these massive sections find peers in the circuit walls at Norba and Signia on the basis of their surface treatment alone. In terms of technique, the walls share some similarities with the polygonal walling at Sant’Erasmo di Cesi, north of Interamna Nahars, which most likely was a sacred site prior to the Roman conquest.

Taking advantage of the local topography, the walls were built in several phases and possess an early phase in polygonal masonry of local limestone that Lugli identified as an intermediary style between the second and third styles. Fontaine’s study, contrary to that of Pietrangeli, identified a fairly heterogeneous pattern in the walls of the city, with the outcome being an attempt to divide the wall into four main phases. The first phase in this scheme was the polygonal phase, followed by a wall in irregular, quadrangular blocks, a third phase in

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165 Di Marco 1975, 22.

166 The walls of Spoletium are among the most-studied in Umbria. They are first discussed in the 1815 and 1841 works of Petit-Radel and would also be published by A. Sansi. 1869. Degli edifici e dei frammenti storici delle antiche età di Spoleto (Foligno) and G. Sordini. 1903. “Spoleto: Avanzi della primitiva cinta urbana, con porta e torre recentemente scoperti” NSA 26:186-98.

167 C. Pietrangeli 1939, 42; B. Toscano. 1963. Spoleti in pietre: guida artistica della città (Spoleti). Fontaine 1990, 144 provides average measurements for the polygonal blocks of 0.85 by 1.12 m.

168 Fontaine 1990, 149-51. Livy 22.9.1 states that Hannibal was unable to capture Spoletium in 217 BC, thus alluding to the city being fortified by that point. Fontaine believes that the earliest walls date to the establishment of the Roman colony in 241 BC.

169 Bradley 2000, 164.
pseudo-isodomic rectangular blocks, and the final phase in *opus vittatum*.\(^\text{170}\) This study of the phases clearly demonstrates that the majority of the circuit utilized the remains of the earliest polygonal wall as a foundation course. The earliest wall is irregular in its nature and construction, clearly following the natural contours of the site of Spoletium. Pietrangeli dated the polygonal walling to the sixth century BC, while Lugli dated them to the time of Spoletium’s incorporation as a Latin colony in 241 BC. Fontaine concludes otherwise, based in part on the fact that Spoletium lacks a regular system of interval towers like those at Cosa, for instance. This causes him to date the polygonal phase of Spoletium’s wall to roughly the same period as those seen at Setia and Norba, thus before the late third century BC when Italy became influenced by the tendencies of Greek military architecture.\(^\text{171}\) Assuming that the pre-Roman settlement relied on the natural terrain as protection, the earliest walls may be assigned reasonably to the period between the foundation of the Latin *colonia* and the thwarted attack of Hannibal in 217 BC.\(^\text{172}\)

**Fortification walls in Etruria (Regio VII)**

As Roman influence spread into Etruria in the third century BC, the archaeological record provides instances of Roman foundations both on the Tyrrhenian coast and inland, often on lines of communication or road networks. Just as new centers were established, preexisting centers underwent modifications and, in some cases, relocation.\(^\text{173}\) Some of the new settlements were situated along the routes of Roman roads, the coast hugging Via

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\(^\text{170}\) Fontaine 1990, 145 fig. 29.

\(^\text{171}\) Fontaine 1990, 150.

\(^\text{172}\) Fontaine 1990, 151.

\(^\text{173}\) Instances of relocation are exemplified by the case of Falerii Veteres and the Roman settlement of Falerii Novi.
Aurelia for instance, while others took advantage of strategic positions on coastal promontories, as in the case of Cosa. One shared characteristic of the sites in this sample is the presence of polygonal fortification walls, although the Roman conquest was not responsible for bringing this building technique to Etruria. Several Etruscan cities employed polygonal masonry fortifications, notably Rusellae and Volaterrae, from at least the Archaic period onward. Other Etruscan cities used *opus quadratum* masonry in constructing their fortifications but, as with Latium, the choice of masonry technique was often dictated by available materials and was not necessarily informed by any inherent cultural bias or predilection.

**Cosa**

The system of walls at Cosa encloses not only the town itself, but also the citadel. The fortification wall and the towers are built from local gray limestone quarried from the hilltop on which the town sits. The walls are embankment walls and consist of two dressed faces with a packing of rubble between them. The walls originally measured about 1.5 km in overall length and enclosed an area of 13.25 hectares (fig. 76). As is usually case with walls of the embankment type, the wall has a battered face that has a slope of about 7 percent, with the wall rising to heights from 8.0 to 10.25 m (fig. 77). The wall seems to have been originally conceived as a basic revetment wall without towers that was built up from the slope.\(^{174}\) The blocks of the inner face of the wall are, for the most part, left with their quarry skin intact, while the outer face of the wall has blocks that are expertly dressed and finished. This outer face displays the hallmark tendencies of polygonal construction – tight joins, a smoothly dressed skin and predominately trapezoidal shapes.

\(^{174}\) Brown 1980, 19.
Brown provides an interesting analysis of the number of blocks used in the field face of the wall. He counted the average number of blocks in a 175 m\(^2\) area of the wall face, finding that the average block measures about 0.75 m\(^2\), suggesting that the average block weighs over one ton. The construction of the city wall at Cosa seems to have been carried out in segments, as there are seams evident throughout the circuit. In spite of this the appearance of the dressed surface is strikingly uniform, leaving the question about as to why the segmentation was necessary, unless there was a feeling of haste or urgency in the construction and that a strategy of unit building allowed for a faster completion of the overall project. The wall-walk atop the fortification measures 1.80 m in width. The inner face of the wall stood, on average, 2.00 to 3.00 m above the surface.\(^{175}\) The town has three gates of the propylon type situated at the southeast, northeast, and northwest of the town’s wall. The streets that enter at the gates all lead to the forum of the town.

Twenty-two interval towers were grafted onto the outer face of the fortifications, most of them square in profile (fig. 78). In Brown’s estimation this system of towers was “cautiously designed” so as to defend the gates, along with the northwest, west and southeast curtains.\(^{176}\) The towers, perhaps designed in the Greek fashion, are positioned so as to be about 30 m apart, or the distance of a bowshot, but overall are distributed in an irregular fashion. The towers are square, measuring 6.80 m per side at the base, and sit astride the fortifications. Brown’s analysis conceives of three separate systems of towers, determined by the interval between adjacent towers. Speculative rationale lies behind this division, taking into account both the vagaries of the terrain of Cosa’s hill, as well as the supposition that it may have been strategically advantageous to have a higher concentration of towers on the

\(^{175}\) Brown 1980, 19.

\(^{176}\) Brown 1980, 19.
western and southern curtains of the settlement wall. In any case, the towers at Cosa are instructive not only in terms of construction techniques, but also because they demonstrate a changing notion of polygonal construction when contrasted with earlier polygonal curtain walls, particularly those at Norba, Aletrium, and Signia. The latter three sites may well belong to an earlier period of polygonal construction, when imposing embankment walls, sometimes with bastions (as at Norba) were the standard, whereas Cosa, whose walls were built in the third century BC at the earliest, evoke a different idea of fortification design, one perhaps influenced by increased contact between Romans and the Greek world. The towers and bastions at Cosa seem to conform more to a Hellenistic philosophy of fortification, one that the Romans would continue to develop and put into practice later in the Republic (e.g. at Falerii Novi) and later during the Augustan period (e.g. Augusta Taurinorum, et al.).

A wall also surrounded Cosa’s arx, and Brown deemed it to be contemporary with the wall of the town. Brown sunk a trench (Trench I) in the vicinity of tower 14 that joins with the arx wall. Brown reports that he encountered limestone spalls and other remains from the construction of the wall, the foundations of which included stones laid on a surface of sea sand and small gravel. A firm packing of soil against the tower, 0.88 m in thickness, overlaid another layer that Brown described:

This level itself was a hard rammed surface. Above it the polygonal blocks of the Arx Wall were tightly joined and dressed smooth with a point. The 0.88 m of fill beneath contained, besides sherds of coarser wares, black-glaze “Etrusco-Campanian” sherds of three fabrics, which may be dated approximately to the first half of the third century BC (1951, 53).

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177 Brown 1951, 51. The trench (labeled Trench I) measured 4.40 m in length, was 1.60 m wide at the top and 1.20 m wide at the bottom. Brown placed it between the inner face of tower 14 and the arx wall. The bedrock was reportedly reached at 3.32 m below the ground level.
Another trench (Trench II) was sunk near tower 10-AP and outer face of the Arx Wall. Here the bedrock was shallower at 2.63 m in depth and Brown again reports the discovery of “Etrusco-Campanian” sherds similar to those from the previous trench. He dates these sherds to the first half of the third century BC, but does not provide any more information about the ceramic evidence, not even profile drawings. The discussion offered focuses mainly on the dressing of blocks and the bonding of the towers to the wall, leading to the conclusion that the “continuous process of construction” occurred during the mid third century BC, although the material evidence that supposedly substantiates this chronology is, in fact, quite meager and poorly documented. This situation is more than lamentable, given the fact that the excavation of Cosa posed a unique opportunity to provide a pristine stratigraphic sequence for a Roman settlement of the third century BC.

**Orbetello (Old Cosa)**

At Orbetello, which Frank Brown referred to as “Old Cosa,” another wall was built in polygonal masonry with a perimeter of 1.93 km, almost one-third longer than Cosa’s wall. This wall, perhaps pre-dating the fortifications at the site of Cosa, enclosed a sandy spit of land near the lagoon of Orbetello (fig. 79). The wall near the lagoon resembles the wall of Cosa with respect to its technique, perhaps suggesting that the same team of builders may have erected both walls. The sandy soil of Orbetello necessitated timber pilings to support the walls near the lagoon, and likely prevented the construction of towers or bastions. Little survives in the way of archaeological material that could help to assign a chronology to the walls at Orbetello, but since Brown believed in a pre-Roman occupation of the site of

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178 Brown 1951, 57.

Cosa by the Etruscans, the speculative convention seems to be to date the wall at Orbetello to
the period immediately before the Roman conquest.

**Pyrgi (Santa Severa)**

As the main port city of Caere, Pyrgi was important as a point of commerce and
communication. In the early third century BC the Roman established a *castrum* on part of
the Etruscan site (fig. 80). While modern archaeological investigation at the site has focused
largely on the remains of the two Etruscan temples, some inquiry has focused upon the
remains of the *castrum*, the majority of which lie beneath the castle of Santa Severa located
directly on the coast. The castle utilizes portions of the megalithic polygonal wall that once
surrounded the *castrum* in its foundations, as do a number of small outbuildings (fig. 81).
The northwest wall of the castle lies atop a well-preserved tract of polygonal walling that
measures ca. 100 m in length and stands to 3.20 m, while the thickness varies from ca. 2.50
to 3.00 m.\(^{180}\) The original number of gates remains an object of scholarly contention. On the
eastern side, very close to the modern seashore, one gate has been identified, as observed by
G. Dennis and Luigi Canina and studied by F. Castagnoli and Lucos Cozza. The opening of
the gate measures about 3.50 m across and some 2.90 m in depth. From studying aerial
photographs Castagnoli and Cozza calculated the original length of the polygonal circuit wall
of the *castrum* at ca. 245 by 220 m. J. P. Oleson, together with the American Academy in
Rome, studied the remains of the port facilities in 1974, hoping to understand them better and
to address the question of whether the *castrum* originally had a seaward curtain wall and
concluded that there likely was such a wall.

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\(^{180}\) Castagnoli and Cozza 1957, 16-7.
Beneath a building commonly known as Casa della Legnaia, the polygonal walling is exceptionally well preserved. The wall here, measuring some 2.60 m in height and 4.22 m in length, runs parallel to the northeast side of the *castrum* and is analogous in construction to the northwest wall.\textsuperscript{181}

Scholarship seems to have accepted the proposition that the polygonal walls at the site of Pyrgi were constituent parts not of the Etruscan port and temple facilities, but of the Roman *castrum* established during the third century BC. The fact that the area enclosed by polygonal walling occupies only a small part of the earlier Etruscan site seems to be in accord with this conclusion. While some sections of tufa walling have been uncovered in excavation, no consensus exists as to whether the Etruscan site was walled prior to the Roman conquest.

**Fortification walls in the *Ager Romanus***

While many of the sites discussed in the preceding pages were established or substantially modified under Roman influence, other sites in the hinterland of Rome were also being established and, in some cases, surrounded with fortification walls. While the discussion of polygonal masonry is of paramount importance here, the evidence offered by contemporary construction in other methods – primarily *opus quadratum* – must also be introduced in order to provide a full picture of the period in architectural terms. The Romans themselves were involved in the erection of a stonewall surrounding their own city, as well as in the establishment of sites like Ostia. The walls at Rome and the other sites in the hinterland of the city further inform the discussion of architecture and urbanism in the middle Republic, in part because they help to illustrate the degree to which geologic circumstance

\textsuperscript{181} Frau 1989, 312.
may have dictated architectural choices. The enigma of the early walls of Rome herself provides perhaps one of the most salient and symbolic instances of civic foundation in all of Mediterranean history and, not without some irony, the archaeological realities of those storied walls pose nearly as many challenges as the foundation legends themselves.

**The Servian Walls**

The chronology of Rome’s walls during the Archaic period and the ensuing Republican period remains a point of great scholarly contention. This discussion has been influenced by recent archaeological discoveries that have forced archaeologists and topographers alike to reassess the nature of the “city of Romulus” and our understanding of it.\(^{182}\) The Romulean discussion notwithstanding, Rome did have fortification walls during the Republic that are relevant to a discussion of middle Republican urbanism.\(^{183}\)

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\(^{182}\) In 1988 excavations on the north slope of the Palatine Hill uncovered the remains of an early wall that may have surrounded the hill. The remains of a series of fortifications were discovered, with the earliest being dated ca. 730-720 BC on the basis of associated material finds. The Archaic walls were constructed in large slabs of tufa, while the earlier walls employed wood and other non-permanent materials. In addition, associated with this fortification is an area that is free from construction that may have been the original *pomerium* of Romulus’ city. See N. Terrenato. 1996. “Murus Romuli.” *LTUR* 3:315-17 and Carandini and Carafa 1995 and Carandini 2006. For a discussion of the historical implications of Carandini’s discoveries, cf. A. Grandazzi. 1991. *La fondation de Rome: Réflexion sur l’histoire* (Paris) and the abridged, but updated, version *Les origines de Rome* (Paris, 2003). The evidence dovetails with the agenda of Carandini, who numbers among those that argue for the historicity of Romulus. See A. Carandini. 1997. *La nascita di Roma: déi, lari, eroi e uomini all’alba di una civiltà* (Turin); also see the subsequent review by T. P. Wiseman in *JRS* 90:210-2.

\(^{183}\) Information pertaining to the walls of Rome prior to the reign of Servius Tullius (r. 578-535 BC) is transmitted mostly via the written sources and the historical tradition of early Rome. The Rome of Romulus reportedly had three or four gates (Plin. *HN* 3.5.66) and Romulus himself had added to the fortifications, including within the *agger* and palisade both the Capitoline and Aventine Hills (Dion. Hal. *Ant. Rom.* 2.37.1). Following Romulus, Numa Pompilius brought the Quirinal within the walls, and Tullus Hostilius the Caelian (Dion. Hal. *Ant. Rom.* 2.62.5; 3.1.5). Ancus Marcus, the purported founder of the *colonia* at Ostia, tried to further unify the city by improving the walls and including the Ianiculum inside them (Livy 1.33.6; Dion. Hal. *Ant. Rom.* 3.45.1; *Vir. ill.* 5.1; Flor. 1.1.14) as well as the Aventine (Dion. Hal. *Ant. Rom.* 3.43.1-2). Tarquinius Priscus is said to have conceived the idea of fortifications in stone (Livy 1.36; 38.6; Dion. Hal. *Ant. Rom.* 3.67.4; Strabo 5.3.7), and Servius Tullius worked further on the walls. M. Andreussi “Murus Servii Tullii; Mura Repubblicana.” *LTUR* 3:319-24 summarizes the textual and topographical evidence for Rome’s earliest walls. One of the most recent synthetic studies of the issues relating to the walls of Rome in the Archaic period is Cifani and Fogagnolo 1998.
The tradition holds that Tarquinius Priscus was the original builder of Rome’s walls in stone. Later Servius Tullius incorporated the Esquiline and Viminal hills within the fortified area and he then divided the city into four administrative regions. In the nineteenth century, scholars like R. Lanciani accepted the veracity of the ancient annalists who had upheld the tradition that the kings had constructed the walls. But in the twentieth century many scholars have denied the historical reality of the Rome of the Tarquins, and have sought to down date Rome’s walls to the fourth century BC.

The work of Tenney Frank advanced the argument for dating the Servian Walls to the fourth century BC based upon the building materials employed in the still visible section of the walls. Frank discovered that the Servian Walls are, for the most part, constructed of tufa from Fidenae and also the Grotta Oscurra quarries. Since these quarries would have been inaccessible to the Romans prior to the conquest of Veii in 396 BC, it stands to reason that the Servian Walls (or at least the construction of the walls in stone) would post date the conquest of Veii. Since Frank’s studies in the early twentieth century, many other scholars have added to the debate about the Archaic walls of Rome. Some denied the existence of the

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184 Dion. Hal. Ant. Rom. 3.67.4-5. An allusion is made to Rome’s earlier walls being of “temporary and careless construction,” perhaps a reference to walls and palisades constructed of wood.

185 Servius Tullius joined the Esquiline and Viminal hills by constructing an *agger* with a wall and ditch (Livy 1.44.3; Dion. Hal. Ant. Rom. 4.13.2; Strabo 5.3.7; Aur. Vict. Caes. 7.6). Further work on the Servian Walls has been attributed to Tarquinius Superbus, including a normalization of the walls’ height and an expansion of the *agger-fossa* system (Dion. Hal. Ant. Rom. 4.54.2; Plin. HN 3.67).


187 Frank 1918, 181-8; Frank 1924, 68-9; Andreussi 1996, 319. Andreussi notes that a Livian reference to a new tax imposed in 378 BC may also help assign the construction of Rome’s stone walls to the fourth century BC: “*in murum a censoribus locatum saxo quadrato faciundum*” (6.32.1). This passage has been interpreted in various ways, however, as some scholars, including B. O. Foster, consider this censorial levy to be a contract for repairing a portion of the city walls destroyed by the Gauls and not necessarily an indication that the Romans were building new walls in this period. Cornell believes that the Livy passage should be taken as an historical fact, and that 378 BC did mark the beginning of the walls’ construction; Livy then records further construction, and perhaps the completion of the project, at 7.20.9 (353 BC). Kraus 1994, 114-5 reads the wall being built here as the Servian Walls and comments that Livy lists this project in his category of *res internae*. cf. Plin. HN 36.104.
Archaic walls, while others pointed out tracts built in cappellaccio, thus supporting the possibility that Rome did have a stone wall in the sixth century BC.\textsuperscript{188} Noteworthy among these are the studies of Scott, Säflund, Lugli, Poucet, Pallottino, and Cornell.\textsuperscript{189} In most cases scholars have attempted to confront the issue of Rome’s Archaic walls from the perspective of the historical sources, trying to make the written evidence and the material remains match up neatly. Since this match has not been achieved, the prudent approach carried out by Gabriele Cifani was to examine the archaeological remains without allowing the annalistic tradition to impede the discussion, and as a result Cifani’s study of the archaic walls is quite lucid. He finds that, in most cases, the 21 tracts of wall that he has identified are homogeneous with respect to their technical aspects (opus quadratum), building material (granular gray tufa), and their use of multiples of the Osco-Italic foot.\textsuperscript{190} Furthermore, 17 of the 21 tracts were erected on virgin soil, suggesting a uniform pattern of construction (fig. 82).\textsuperscript{191}

Problems remain, however, in assigning a definitive chronology to the tracts of the Servian Walls, as certain factors, including building technique and materials, suggest a wide

\textsuperscript{188} Säflund 1932 denies the possibility of a sixth century BC wall constructed in stone, stating instead that the existing portions of the Servian Walls postdate the Gallic sack. Lugli’s work in the 1950s, however, attributes numerous portions of the walls to the sixth century and subsequent research supports these conclusions. Lugli also argued that since other sites in Latium (e.g. Ardea, Satricum, Lavinium) had stone walls in the sixth century BC, it would follow that Rome would be likely to have them as well. Some blocks in cappellaccio are visible at various points along the wall built in Grotta Oscura tufa. Conventionally the cappellaccio blocks are assigned to a sixth century BC wall built by Servius Tullius. cf. Jordan 1.1.252-3.


\textsuperscript{190} Cifani and Fogagnolo 1998, 377.

chronological timeframe, from the middle of the seventh century to the beginning of the third century BC (figs. 83-85). Obviously this broad window does not help to determine the nature of Rome’s walls in the archaic period, but Cifani feels that on the basis of his study, including considerations of topography, that the walls can be dated to the sixth and fifth centuries BC. Cifani’s careful work has clear repercussions for an understanding of archaic Rome as a complex urban community, one complex enough to have a circuit wall built in opus quadratum.

Whatever the specific chronology of the Servian Walls, their aspect was imposing. The walls stood to a height of ca. 11 m and were 4.0 m in thickness originally. The circuit measured 11 km and enclosed an area of about 426 ha, on par with the largest walled areas in the contemporary Mediterranean world. The labor involved in the construction of the walls and the construction materials required for the project represent massive outlays of capital on the part of the city and such an investment in the construction of the city wall demonstrated a commitment to the city’s image and status during the fourth century BC.

**Castra in the hinterland of Rome**

At about the same time that the Romans were at work on the walls surrounding their city, it also seems that they were at work constructing fortified outposts in the hinterland of the city. These castra represent an interesting phenomenon in the context of fourth century BC urbanism, especially since it remains unclear what function these outposts may have served. Some scholars have identified this group of castra as obviously strategic

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192 Cifani 1998, 380. Colonna’s study of tombs on the Esquiline Hill help in this matter, as the displacement of certain tombs to make way for the wall (in the area of Piazza Magnanapoli) helps to assign the building activity to the Archaic period. cf. Colonna 1977, 131-65.

193 The enclosed areas of other large cities matched Rome’s in grandiosity: Agrigentum had an area of 450 ha; Syracuse 315 ha; Tarentum 510 ha; Croton 615 ha.
encampments, aimed at securing borders and routes important to the Romans. Beyond the walls surrounding the sites and their military layout, Brandt also cites the 5-mile and 8-mile limits that are mentioned in the ancient sources. This argument advanced by Brandt is very convenient, and perhaps too much so. The Roman mindset in the fourth century BC does not seem to be a defensive one, demonstrated most clearly by the fact that Rome herself possesses extremely inadequate defenses, perhaps one of the factors that allowed the Gauls to attack and damage the city in 390 BC. According to Livy the city lay in ashes after the defeat of the Gauls, but it is most likely that Livy overstates the reality of the Gallic sack, perhaps in order to lend more importance to the role of Camillus in the rebirth of the city. Whatever damage the Gauls did inflict upon the city, the Romans were busy with the improvement of the Servian Walls. After the Gallic sack, the Romans were again on the offensive, especially with their involvement in the Samnite Wars. Rome would fight a series of engagements against the Samnites and other groups federated with the former. Given

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195 The discussion of these limits pertains to the issue of the boundaries of the Ager Romanus antiquus; generally, cf. Alföldi 1962. The archaic agger most likely extended ca. 8 km from the city itself. This limit is conjectured, in part, on the basis of sanctuaries, such as that of the Fratres Arvales that lies on the Via Campana at the fifth milestone; this initial 5-mile limit is most often considered to date from the regal period. According to Livy 7.39.16, another boundary lay at the eighth milestone, as it was at this point that the Romans stopped the Samnites in 342 BC, on the line of what would become the Via Appia. Alföldi dates the 8-mile border to the years 426-400 BC when new rural tribes were established. Other instances in Republican history, including Hannibal’s choice for a campsite en route from Gabii to Rome seem to reinforce the efficacy of these boundaries in Rome’s sacred and political makeup. Despite the evidence that reinforces the presence of these boundaries, and their sacrosanctity, they do not, in themselves, make a case for the establishment of a strategic system of castra in the Middle Republican period. Additionally, we should be careful in accepting Moltesen and Brandt’s idea that since the Athenians had fortified rural Attika in this period against the threat of Macedonians, that the Romans were doing the same thing to their hinterland in order to defend against Samnites and Volscians. In short, fourth century BC Attika does not necessarily represent a logical analog for Rome and Latium in the same period. For further discussion, see Moltesen 1994, 154.

196 Livy 5.49.8.

197 Generally the Samnite Wars are grouped into three periods: the First (343-341 BC), the Second (327-321; 316-304 BC) and the Third (298-290 BC). The Samnites won a victory at the Caudine Forks in 321 BC and the Romans decisively defeated an alliance of Samnites, Gauls, Umbrians, and Etruscans at Sentinum in 295 BC.
that the Samnites fought a highly mobile type of warfare and that they hailed from
mountainous country within Italy, it seems somewhat implausible that the Romans would
construct these small, static encampments for purely strategic reasons. These sites do exist,
however, and some of them are short-lived. Could the defeat at Sentinum at the hands of the
Samnites in 321 BC have prompted the Romans to adopt a defensive mindset, if even
briefly? It is more likely that the explanation for the construction of these sites can be found
more plausibly in an examination of urban trends of the fourth century BC rather than in
reactions that might have encouraged the fortification of critical positions in the Roman
hinterland. Among these fortified “garrison sites” that were built in the fourth century BC
are Ostia Antica, Ficana, La Giostra, and località La Rustica.

**Ostia**

The *castrum* at Ostia may provide something of an exception to this line of reasoning
since its placement at the Tiber’s mouth has implications for controlling traffic on the river
and safeguarding Rome’s commercial interests, not to mention the protection of the nearby
saltpans of the Tiber ([fig. 86](#fig86)). The foundation of Ostia may have come at a time when the
Romans were establishing *coloniae maritimae* to deal with threats on the seacoast that would
undermine their strategic and economic control of their own hinterland.198

The foundation of the *castrum* wall at Ostia consisted of a string of tufa blocks laid
without mortar.199 These were laid in sandy soil that had not been leveled prior to the

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Despite decisive defeats at the hands of the Romans, the Samnites continued to resist, siding first with Pyrrhus
and then with Hannibal, during the Second Punic War. After the defeat of the former, Rome subdivided
Samnium by placing colonies at Beneventum (268 BC) and Aesernia (263 BC). The Samnites continued to
fight against Rome during the Social War and during the Civil War, when they took sides against Sulla. See
Salmon 1967.
construction. Atop the foundation courses of roughly squared tufa blocks were laid; these blocks did not conform to any standard measurements, ranging in length from 0.51 to 1.30 m.\textsuperscript{200} The latest archaeological data for the \textit{castrum} reconstructs original dimensions of 125.70 by 193.94 m, covering ca. 2.5 ha.\textsuperscript{201} The area inside the \textit{castrum} wall was divided orthogonally into four quadrants, with the two principal streets being dubbed \textit{cardo} and \textit{decumanus}. While some architectural decoration of Archaic mien on the site might suggest the presence of a sacred building in that period, the construction of the \textit{castrum} wall most likely occurred in the last years of the fourth century BC (fig. 87).\textsuperscript{202} The outline of the \textit{castrum} would remain a part of Ostia’s urban design throughout its life, as the space that was enclosed within the walls would eventually become the site of the Capitolium and forum complex of the Imperial period.

**Ficana**

Excavations at Ficiana, located on the hill known as Monte Cugno, revealed an \textit{agger} that can be dated to the second half of the eighth century BC.\textsuperscript{203} This \textit{agger} surrounded a settlement of approximately 5 ha, composed of simple huts constructed in wattle-and-daub. The settlement grew considerably during the seventh and sixth centuries BC, reaching about 11 ha in area.\textsuperscript{204} Later developments on the site resulted in the \textit{agger} being filled and

\begin{footnotesize}
\begin{enumerate}
  \item[199] The tufa has been identified as coming from the quarries at Fidenae.
  \item[202] Zevi 2001, 12 n. 17. The discovery of a fragment of a red figure kylix of Etruscan/Faliscan style helps confirm the dating of the \textit{castrum} wall. The sherd (Ostia Antica inv. 5559) depicts a scene of Europa and the bull and was dated by Beazley to the second quarter of the fourth century BC. \textit{cf.} Meiggs 1973, 471 and Adembri 1996, 36-67.
  \item[203] Brandt 2002, 29.
\end{enumerate}
\end{footnotesize}
replaced by an ashlar masonry wall constructed of local gray tufa ca. 1.50 m in thickness and preserved to a height of ca. 2.0 m. This wall has been dated to the fourth century BC and represents one of the final phases of occupation on the site, as it is abandoned and disappears sometime in the third century BC. This wall may have been a fortification, but the remains are too insubstantial to be certain.

**La Rustica**

Another possible *castrum* was discovered at località La Rustica in the late 1970s. During rescue excavations the Soprintendenza Archeologica di Roma uncovered a portion of a necropolis consisting of more than 80 tombs, as well as evidence for defensive works and structures in *opus quadratum*. The defensive works are preserved only in part, but a *fossa* was documented, some 4 m in depth, as well as an ashlar wall of 3 m height. This wall was constructed of large blocks of tufa.

**La Giostra**

At La Giostra, at one time identified as the site of Tellenae, an ashlar fortification wall was excavated in the 1970s and 1980s. Like the *castrum* wall at Ostia, the wall is 1.5 m thick. A defensive ditch that was 7 m in depth and 20 m in width surrounded the wall.

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208 The remains of the defensive walls have not been published fully, however Brandt asserts that the excavator, Stefano Musco, confirms a late fourth to early third century BC date for the walls at La Rustica. Brandt does not indicate what evidence Musco uses to confirm his chronology.

209 Moltesen and Brandt 1994, 139. The excavators of the site calculate the overall length of the fortification wall to have been ca. 720 m originally, while they reconstruct its height at ca. 6 m. Based on the average block
Traces of postholes inside the circuit of the walls suggest the possibility that a wooden sentry walk was in use at the site.\textsuperscript{210} An opening in the wall that likely represents a gate measures 3 m in width, although the overall configuration of the gates at La Giostra remains unclear (fig. 88).

The size of the wall can be reconstructed to a certain extent. When Antonio Nibby visited the site in 1824, he recorded a wall that still stood to a height of seven courses of blocks (fig. 89).\textsuperscript{211} While the wall at La Giostra does not stand to that height today, Nibby’s observation allows some comparison with other contemporary walls. The Servian Walls of Rome in the Piazza dei Cinquecento at Stazione Termini are preserved to a height of 17 courses (ca. 10 m) while the Republican wall of Ostia still stands 10 courses in height in some places.

On the hilltop of La Giostra the excavators found evidence of an area of occupation inside the fortification wall. The excavators discovered an arrangement that they liken to a grid pattern within the walls, composed of two streets that meet at right angles and four corresponding corner buildings.\textsuperscript{212} The street identified as the \textit{decumanus maximus} has a maximum length of 274 m. The central structure (building F) seems to be of some importance, leading the excavators to posit that its centrality suggests either a cultic or administrative function (perhaps the \textit{praesidium}). The apparent paucity of material remains does not allow further elucidation of this point. Also present within the walls is a circular feature identified as a cistern built in tufa blocks. In terms of material remains that might

\textsuperscript{210} Moltesen and Brandt 1994, 140.

\textsuperscript{211} \textit{cf.} Nibby 1848-1849.

\textsuperscript{212} Moltesen and Brandt 1994, 145.
help to establish a chronology for the site, the excavators present a range of fictile and ceramic evidence that seems to support a date for the site in the range of the fourth to third centuries BC. Among the diagnostic objects discovered are architectural terracottas\textsuperscript{213} and black glaze pottery,\textsuperscript{214} both of which find comparanda in material from other sites for which typological schemes have been devised.

These sites have several things in common. All of them are established in the later fourth century BC, and at least two of them – La Giostra and Ficana – are short-lived, going out of use by the third century BC. Each is relatively small in size and each has a fortification wall built in ashlar masonry. As a group these sites are indeed curious, not least of which because of the fact that Ostia is the only site that flourishes after the third century BC. Some scholars have drawn parallels with the system of fortifications built in Attica during the same period\textsuperscript{215} This comparison does not hold true within the context of Roman urbanism. In Attica, the archons of Athens are directing the construction of the outlying forts, in a concerted effort to stop the Macedonian advance on their city. To carry this analogy to the hinterland of Rome is problematic, since there is not even a suggestion that the

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\textsuperscript{213} One example, a terracotta antefix discovered in topsoil along the northeast fortification wall, finds parallels in other sites in Latium. This antefix, with the head of a \textit{silenus}, is similar to an antefix from the \textit{castrum} at Ostia (Ostia Ant. In. 3383) and another from the Via Laurentina (Ostia Antica inv. 3314) and a third in the Museo Nazionale Romano (IN 264014). Various dates have been proposed for the Ostia examples, ranging from the early fifth century BC (P. Mingazzini) to the late third century BC (A. Andrén). Moltesen accepts Andrén’s third century BC date for the \textit{silenus} with a double wreath (the La Giostra example has a single wreath around his head) and believes that the La Giostra example, like its comparison from Ostia, should be dated to the fourth century BC, seemingly on grounds of technical complexity, with the implied conjecture that the double-wreath \textit{silenus} is later than the single-wreath type since the former is more complex. This evolutionary argument is often applied to the analysis of fictile decorative schemes. \textit{cf.} Moltesen and Brandt 1994, 81-2.

\textsuperscript{214} Among the pottery assemblage are some bowls of Morel series 2621 (form 96) that may prove more conclusive in chronological terms than the fictile revetments. These bowls, whose rounded rim and distinctive profile are known from the vicinity of Rome, are dated to the early third century BC. Identification of the bowls is aided by the distinctive color that results from poor firing. \textit{cf.} Moltesen and Brandt 1994, 101-2.

\textsuperscript{215} For these Athenian forts, see Ober 1985. The stone used is a yellow-brown tufa and the blocks measure ca. 0.58-0.60 m.
Samnite armies ever contemplated sacking Rome, or that the Romans were concerned overly about this. Further, with the exception of the claims that Ancus Marcius founded Ostia, we have no evidence for the senate or consuls at Rome mandating the construction of fortified outposts. While the evidence supports the fact that fortified outposts were built in this period, we should be cautious to join Brandt in seeing these sites as part of a systematized, strategic plan. The *castra* are important for understanding the urbanism of Latium during the middle Republic, however. A vital piece of evidence lies in the building techniques employed in the construction of the fortifications, namely ashlar or *opus quadratum* walls built using local tufa. Local geology dictates the choice of building material, for the most part, but it is possible that cultural predilections dictate the technique that is used; that is, Roman builders in this period prefer ashlar construction.

**Preliminary conclusions: chronology, context, and distribution of polygonal masonry**

Architectural remains in Central Italy that can be dated with surety to the early and middle Republican periods are often difficult (or even impossible) to identify. As the remains of public structures and domestic buildings are scarce, it is fortunate that so many fortification walls remain extant. The high visibility of these walls, and their generally good preservation, offer an opportunity to examine an important feature of urbanism in this period. The walls, however, are not easy to date with precision and, in most cases, a range of several centuries is assigned as the chronological range for a circuit wall. Despite these imprecise chronologies, several preliminary conclusions help to situate them better within their appropriate cultural and historical context.
Building techniques and local geology

Relevant site-based geology is of importance in an examination of architecture in this period. While the focus of the sample presented in this chapter has been the prevalent fortification walls built in polygonal masonry, the conclusions offered here do not apply only to architecture of this technique, but rather should be construed more broadly. This is particularly true with respect to the relationship between geology, building materials, and building techniques. This correlation can be applied more widely to sites in Central Italy, and thus reveal patterns of construction technology that are both broad and complex, and offer an opportunity to contextualize the architectural situation of the middle Republic with a greater degree of clarity than other studies have offered.

At the sites under study an important relationship exists between the geology of the sites and the walls and other structures erected there, and so it is important to consider what building materials would have been available to the architects and builders responsible for the construction. In most cases building materials were sought locally, as opposed to transporting materials over great distances; this is especially true of upland sites like Norba and Signia. As noted above, many sites show evidence for quarrying at the site of the city walls, so that the walls were, in effect, built from the very stone on which the settlement rested. This logical practice affects the type of construction on a site-by-site basis, such that the geology of the place determines, at least in part, the building technique(s) that could be employed.

Limestone karst massifs characterize the Apennine mountain range that forms the spine of the Italian peninsula. These high mountains (the tallest, the Gran Sasso, reaches 2,912 m a.s.l.) are rugged both in their nature and composition. The mountains divided
human populations, perhaps leading to the development of different cultural and tribal groups in a relatively restricted area. The valleys are deeply incised and some of the hills form large, upland plateaus suited to settlement. In the Monti Lepini of Latium, many such sites proved conducive to occupation from the Iron Age onwards, due in large part to the natural defensive advantages of the terrain. The Monti Lepini border the Pontine plain to the east and their foothills, along with the plain, are composed largely of alluvial deposits.

The site of Rome sits atop part of a large tufa plateau, a sedimentary area that is a result of the volcanic activity of the Alban Hills and the Sabatini volcanic fields.\textsuperscript{216} The eruptions of these volcanic fields northwest and southeast of Rome created two plateaus extending toward the Tiber River. These lava flows even affected the course of the Tiber itself, as well as created the hills of Rome.\textsuperscript{217} The Tiber and its tributaries have, in turn, altered the topography of the tufa plateau, in part by carving valleys in the tufa and so producing the hilly terrain of the lower Tiber valley. Additionally the Tiber’s seasonal inundation of the valleys has added deep alluvial deposits in certain areas of the city center. The tufa plateau on which Rome sits is bordered to the east and southeast by varying geologic formations. The Pontine plain that makes up the majority of \textit{Latium Adiectum} is characterized by alluvial deposits, while the Monti Lepini are calcareous. Since Rome sits squarely on the tufa formations, when the move toward monumental architecture in stone occurred in the archaic period the Romans had no choice but to utilize the local gray tufo lionato, as well as a darker volcanic stone \textit{cappellaccio}, for building.\textsuperscript{218} Both of these stones

\textsuperscript{216} Heiken, \textit{et al.} 2005, 8.

\textsuperscript{217} Heiken \textit{et al.} 2005, 11. The most recent eruptions in the Alban Hills are dated ca. 3,500 years ago.

\textsuperscript{218} Cappellaccio is a grayish tufa with dark scoriae that is found in and around Rome. As a building material it was used during the Archaic period on both the Palatine and Capitoline Hills, and in the Forum Romanum in the construction of the Cloaca Maxima. While abundant, cappellaccio is a notoriously poor building material that
are effective building materials, so long as the technique employed is that of *opus quadratum* or ashlar masonry. While the two stones can be cut into squared blocks with a fair amount of success, their longevity is not great as they are prone to fractures and erosion. It would seem that the Romans were not pleased with the locally available tufa since once they sacked Veii in 396 BC a swift shift to Veii’s superior *grotta oscura* tufa takes place, with *cappellaccio* falling completely from use for new construction in the *Ager Romanus*.

As the Romans were acutely aware, the quality of the stone employed in construction was vital to the success of the building project in the long term. It is true that *cappellaccio* was used effectively in the construction of the most important structures of Early Rome, chief among these the podium of the Temple of Iuppiter Optimus Maximus. But the alacrity with which the Romans switched to the use of Veientine tufa in the fourth century BC demonstrates their dissatisfaction with the local *cappellaccio*. Herein lies an important piece of evidence for the discussion of building materials and local geology. The shift in building materials was, of course, made possible only by Rome’s conquest of Veii and was further facilitated by the proximity of the Tiber River for the transportation of building materials. In general terms, before the time of the Roman Imperial period, ancient sites were accustomed to using the building materials that were closest to hand, thus no construction in limestone is to be found in Republican Rome just as no construction in tufa occurred at Norba in the same period.219 While this observation seems rudimentary and obvious, resting on the most basic principles of supply, it still has yet to be comprehensively applied to a consideration of civic

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219 Coarelli 1982, 388-91 presciently remarks upon the correlation between polygonal masonry construction and limestone bedrock. His comments, while forward looking, do not seem to have inspired any comprehensive study of the distribution of polygonal masonry as it corresponds to the geology of Italy and his reference to an as yet unrealized distribution map supports the cause for further study of this architectural corpus.
construction during the Republican period, in spite of telling observations by Lugli and Coarelli.

**Mapping building techniques and local geology**

An examination of a distribution map of sites in Central Italy with polygonal masonry walls is instructive in that it illustrates the correspondence of polygonal masonry and limestone in a striking fashion (fig. 90). The geology of the Italian peninsula is diverse and one quickly notices the large fields of tufa that surround Rome and the calderas-turned-lakes to the northwest. At the edges of the tufa plateaus, and cutting through them, are areas of alluvial deposits, as is also the case for the Pontine plain. Bordering the alluvial zones and, in some cases, abutting on tufaceous areas, are varying types of turbiditic sandstones and marls, as well as mountainous areas composed of skeletal, dolomitic limestone. These areas of sandstone and limestone are precisely those where the sites fortified with polygonal walls can be found, demonstrating the clear connection between site-based geology and building techniques. This observation has not been considered by scholarship to this point, yet holds considerable implications for the interpretation not only of construction technology during the middle Republic, but also for discussions relevant to an appraisal of the Romanization of Italy during the Roman conquest. Some scholars persist in viewing *coloniae* as miniature versions of Rome, with the architecture and institutions of these outposts dictated by the center. Yet in Rome, a city whose myriad monuments and works reach back into the eighth and seventh centuries BC, there is no evidence for polygonal masonry walls in any period. Considering that Rome was the most cosmopolitan city of the ancient Mediterranean, this is not a coincidence. The dictates of local geology determine the use of building techniques in Italy, not the constraints of culture, ethnicity or mandates from the senate at Rome. The
prevalence of polygonal walls in the limestone rich areas of Latium, Umbria, and Etruria demonstrates that local strategies were kept in use, even after the arrival of Rome’s influence. This is not to say that polygonal masonry occurs everywhere that limestone (or sandstone) is geologically present. Rather, and more significantly, polygonal masonry can only occur when limestone (or sandstone) is geologically present and never occurs when the underlying bedrock is volcanic. Thus the determining factor for the occurrence of polygonal masonry is twofold, in that it represents a local choice, perhaps influenced by cultural practice, but also one that is determined on the basis of the available types of building materials. Indeed it has been shown that on the basis of the latter, different strategies were employed, ranging from the modified polygonal masonry of Etruria (e.g. Rusellae and Volterra) to the Samnite hill-fort sites in the south of Italy.

**Local choices and building techniques**

At Rome, the prevailing method of construction was ashlar masonry or *opus quadratum* masonry, for which technique both *cappellaccio* and all the subsequently used tufas are well suited. The blocks are cut carefully and fitted together with precision. Limestone, however, behaves differently since it is a harder sedimentary rock while tufa is igneous and softer. The limestone of Central Italy, because of its natural fracture patterns, cannot be easily cut into the ashlar blocks such as can be found in the Servian Walls of Rome or the podium of the Temple of Iuppiter Optimus Maximus or in the Cloaca Maxima, thus sites whose geology was sedimentary in nature had to choose a different construction strategy appropriate to their geological circumstances.

It should be remarked upon that the building program of Augustus employs a large quantity of travertine, both in structural roles as well as in architectural details (e.g. the
Mausoleum of Augustus). Geologically travertine is calcareous but is quite soft before exposure to oxygen. Roman builders had a good deal of experience with cutting the soft tufa in Rome, thus cutting the travertine from Tibur would have posed few challenges. Clearly the architects of the first century BC were possessed of the technical ability to finely cut and shape travertine blocks for building projects, but it should be noted that in these instances of travertine use in the Augustan period the projects are those of the highest level and not hampered by any consideration for cost or labor. Additionally, the Augustan use of travertine was both specific and targeted in that it was intended for specific Imperial projects. In the case of polygonal circuit walls in Latium and other parts of Italy, the issue that dictates the ultimate form of the wall is more one of feasibility and practicality than it is one of construction technology. The dressing of the field faces of walls at Norba, Cosa, and Aletrium, just to name three, shows that the masons had the ability to cut and shape the local limestone in a precise fashion. The situation is fairly clear, then, that the technique of

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220 The ancient authors make some references to travertine (Tiburtinus lapis), often remarking on its lode-bearing properties. See Vitruv. De arch. 2.7.1-2; Plin. HN 36.48.167. In Imperial projects travertine was important both for veneers and for structural uses. See L. B. van der Meer and N. L. C. Stevens. 2000. “Tiburtinus lapis: the use of Travertine in Ostia,” BABesch 75:169-95.

221 In geologic terms, travertine from Tibur is characterized as Holocene deposits that are resultant from colluvial deposition, while the limestone of the Monti Lepini, for example, is of a greater hardness and compactness.

222 Vitr. De arch. 2.7.1-5. See also Jackson and Marra 2006, 485-510.


224 On the tools and techniques of the Roman mason, cf. F. Kretzschmer. 1958. Technik und Handwerk im Imperium Romanum (Düsseldorf); T. F. C. Blagg. 1976. “Tools and techniques of the Roman stonemason in Britain,” Britannia 7:152-72. Blocks were most often cut using percussion tools, primarily the mason’s pick and adze (tētu), whether extracted from a quarry or directly from the building site itself.
polygonal masonry was well suited to local needs and that its employment does not necessarily signal a lower level of technical ability.

The builders of polygonal walls were influenced by numerous factors, including the availability of building materials, manpower, and finances, all factors that are important in construction procedures before modern mechanization. Janet DeLaine’s studies of building practice and materials in Imperial Rome tend to show that Roman builders relied upon waterways for the transport of stone to the capital when possible. DeLaine’s work demonstrates also that even by the beginning of the Imperial period a cadre of professional builders executed Imperial projects with a precision and sophistication that likely would have outstripped even the most able middle Republican predecessor.

In areas resting on limestone and sandstone, polygonal masonry walls were the logical choices, since the limestone did not easily lend itself to isodomic cutting. The construction of these walls was a complex undertaking that required great technical skill and no small expense. The walls had to be constructed carefully, employing blocks that sometimes weighed several tons. Additionally, provisions had to be made for the walls to breathe and drain properly, so that collapses would be prevented. In all, it was a difficult prospect, especially for small cities with limited resources. Yet many cities chose to construct these walls, the symbolism of which will be discussed below. The choice of polygonal masonry at many sites (e.g. Praeneste) would persist until the first century BC when advances in other construction techniques (concrete, notably) and quarrying tools made

225 Fitchen 1986.

polygonal masonry obsolete. One marked exception must be noted, however, and that is in the area of road construction. Into the Imperial period the Romans continued to use hard, volcanic basalt paving stones for roadways and these stones did not lend themselves to being cut and neatly dressed, even with more advanced masonry tools. Thus polygonal masonry technology prevailed in this area for some time as the most feasible and pragmatic choice.

In technical terms the embankment wall is the prevailing construction method employed in polygonal masonry fortifications. This method has the advantage of stability and is closely linked with the technology of terrace construction that was evident in Italy from at least the Iron Age. The construction of a basic terrace was, in technical terms, uncomplicated, but the effectively built terrace was extremely useful for a range of tasks, from reclaiming steep areas for habitation to the use of terraces to create agricultural areas. Many sites (e.g. Signia and Civita di Artena) have substantial terrace constructions that were realized via polygonal masonry. The embankment technology may be contrasted with the construction of walls in *opus quadratum* that were most often freestanding as exemplified by the Servian Walls of Rome. Additionally most centers in Central Italy that are surrounded by a circuit wall in polygonal masonry also have at least one temple podium built using the same technique. The building material of choice was almost always local calcareous stone and was frequently quarried from the building site itself. Polygonal masonry construction was employed in a range of other building types, all of them linked in concept to the technique of terracing; these include retaining walls, basins, road beds, *basis villae*, and unexplained structures such as the circular redoubt at Poggio Serrone di Bove discussed earlier.

While the study of building materials and the distribution of polygonal masonry construction offers important new perspectives on this technique and its use, these two lines
of inquiry cannot, at this point, sharpen or refine the available chronologies for these walls to any great extent. However, one important conclusion that can be applied to the chronological quagmire of polygonal walls is that the system of the *quattro maniere* must be discounted and considered as an outmoded typological system that can no longer be used. This scheme relies on assumptions that cannot be substantiated by the material record, a system constructed simply to classify and organize an unruly body of archaeological material. The system of the *quattro maniere* is processual in nature and believes that construction technology naturally evolves from cruder, less refined techniques to those that are more refined and finished. This artificial typology was used to establish a chronological framework for polygonal walls and this framework has misled and misdirected scholarship, certainly during the latter half of the twentieth century. Rather than studying and testing evidence that could help to assign more precise chronologies to polygonal masonry circuit walls, many scholars have simply classified them on the basis of the *quattro maniere* and accepted the dating that is attendant upon the typology. The abandonment of this approach is past due as our understanding of these fortified centers needs to move forward rather than rely on inherited confusions.

While the *quattro maniere* cannot be used any longer to classify or date polygonal walls, that does not mean that all of the observations made by nineteenth and twentieth century scholars (all supporters of the *quattro maniere*) should be ignored; in fact the careful observations of scholars like Mengarelli and Savignoni, Ashby, and Lugli represent some of the most important data available for studying polygonal masonry. One of the technical areas that these scholars observed was the dressing and shaping of the blocks used in the polygonal walls. The field face of the wall is most often the best worked, with the face and
edges being dressed, while the interior face of the curtain tends to be less worked. This treatment tends to give the façade its trademark appearance, with various polygonal and tetrahedric shapes that most often characterize these walls. Some polygonal walls take on an appearance similar to *opus quasi quadratum*, and it was to these walls that the label of “fourth style” was applied. We must take into account that there are variations in the various limestone deposits found in Italy and that different types fracture in different ways. Thus limestone that tends to fracture along planar lines may well take on the appearance of a nearly squared block, but it could very well have been laid contemporaneously to other blocks that were less worked or unworked.

The landscape of Central Italy changed dramatically during the middle Republic period, not only because of the fact that the Roman sphere of influence was expanding but because urban centers in Italy became better defined both politically and architecturally. The move toward urban centers was not a localized occurrence, but rather a cultural trend that prevailed across a wide swath of the Mediterranean world. Over the course of the last 30 years excavation has revealed a great deal of archaeological evidence for the seventh and sixth centuries BC in Italy, allowing scholars to gain new understanding about the development of cities in Italy during the Orientalizing and Archaic periods, yet our archaeological evidence for the same trends in the middle Republic remain strikingly incomplete. One question that results from this realization deals with whether or not the problem relates to a shortage of archaeological investigation or to some deficiency in the archaeological record itself, an issue that will be addressed in the following chapter. Before questioning the nature of the evidence, it is important to examine the role that the construction of fortification walls played in this period.
One of the best-attested manifestations of this period of change is a shift toward nucleated urban centers, a phenomenon that manifests itself in the archaeological record quite clearly. While these cities are still evident (and in many cases still inhabited), it is difficult to gain any comprehensive understanding of their urban makeup and infrastructure. However, ancient fortifications still stand, at least in part, at many of these sites and although examining the walls does not provide a full understanding of the nature of the ancient city, it is an instructive body of evidence all the same. The construction of fortification walls plays a large part in urbanism in Central Italy during the Republican period. After the Archaic period there was a shift toward nucleated settlements – cities – across the Mediterranean. The peoples of Italy were no different and took part in this phenomenon. The examination of wall building in this wider context can be instructive for considering broader patterns of urbanism and settlement change during this time period. An added advantage of an inquiry with a broader scope is that it quickly becomes apparent that the Romans are not the only actors on the stage and that their impressive dominance notwithstanding, they, too, are taking part in large cultural movements like everyone else. There is no question that the Romans were quick to become deft manipulators of urban ideas and infrastructure, a skill that was certainly one of the key reasons that their conquest of Italy and the Mediterranean was both effective and long lived.

During the middle Republic archaeology shows that the distribution of fortification walls built in polygonal masonry becomes widespread in Central Italy, but that it is not limited to any single region or area. The material remains show clearly that a number of cultural groups are actively engaged in the construction of this masonry type, and in contemporaneous terms with respect to chronology. The importance of this observation is
twofold. First, the fact that numerous groups employ polygonal masonry shows that this construction technology was not restricted to a single cultural group, and that the source of influence was not necessarily Greek or Roman. The second consideration here is the fact that this complex and expensive building technique is being applied at sites large and small, suggesting perhaps that more than simple functionality lies behind the selection of this method.

The systems of fortifications that belong to the earlier period (later fifth and fourth centuries BC) of construction (Norba, Signia, Aletrium, et al.) tend to not have systems of towers reinforcing the curtain of the wall. Rather they rely on the use of posterns, *porta scaea*-type gates, and bastions, in some cases. Later during the third century BC, perhaps in reaction to the influence of Hellenistic tactics, towers become more prevalent, perhaps best exemplified by those at Cosa where posterns and bastions and *porta scaea*-type gates are not components of the defensive system. Due to the nature of the construction of polygonal circuit walls, the bonding of additional structures (e.g. towers) was problematic. Since the matrix of the curtain wall consisted of two skins with a packing of loose material between them, towers were most often “grafted” on to the field face of the wall. This was not always an easy feat for the mason, and it could result in awkward looking towers, as is the case at Cosa. This may explain the reason why earlier systems of fortifications did not incorporate interval towers, but relied instead on the construction of bastions (i.e. Norba) or salients (i.e. Signia) to strengthen the defensive systems, as these were simply extensions of the walls and not independent structures that needed to be incorporated.

Traditional interpretations of the fortifications discussed in this chapter, including both polygonal masonry and *opus quadratum* construction, have tended to view the walls,
and the motives of those who built them, in what seems an uncreative manner. That is to say, most scholars have interpreted the walls and the factors that led to their construction and maintenance as having to do purely with military concerns, that the erection of these walls was always a defensive response to potential threats. This argument has been applied to Etruscan centers that built walls in advance of the Roman conquest or Gallic incursions, as it has also been applied to centers in Latium established under Roman influence. The rationale for these latter sites has been that either the Romans wished to defend against enemies on their borders (e.g. Samnites, Privernates) or to project something of their own power and status by erecting walls at imposing positions, as is the case at Norba and Signia, among others. The nature of warfare in this period is that of tactical mobility rather than protracted sieges. It comes as little surprise, then, that the ancient sources contain few instances of extended siege warfare during the middle Republic. The historical record seems to offer little support to the conclusion that the spate of wall building during the early and middle Republican periods can be explained solely on the grounds of defensive needs.

But were the walls built in this period purely defensive in nature or can other functions be assigned to them? The majority of the sites considered here are small in size, yet come to be possessed of grandiose fortification walls. These walls were impressive in their aspect, complex in their construction, and almost surely costly to the citizens that erected them. Did a small city such as Aletrium or Verulae really warrant, in strategic terms, the erection of massive polygonal walls? Without direct evidence for the functionality of the walls, and the motivation(s) that lay behind their construction, definitive answers will not be forthcoming. However, as scholars seek to unlock the Roman Republic and to understand
the middle Republic, simply posing questions about these walls represents advancement over
the situation in recent years.

Considering the evidence offered by fortification walls in tandem with the case of
civic architecture will allow for a further explication of the dynamics at work in this period.
Obviously some of these cities must have relied on the defensive advantage of their walls at
some point, but if meaning is sought beyond the purely functionality of these walls, these
cities and their agendas will make more sense in the context of this period than by simply
explaining away the walls as simple defensive works. The act of looking beyond the
defense-only explanation also will be revelatory in terms of situating urban centers, and their
architecture, in the context of middle Republican Italy.

**Toward a chronology for polygonal masonry**

If we consider the typological scheme offered by the *quattro maniere* as an
insufficient means for dating polygonal masonry construction, it would seem desirable to be
able to replace it with a more viable method for establishing the chronology of this
architecture. Since this typological framework attempted to impose both chronology and
order on the material remains, it in turn obscured what reliable data is available for dating
polygonal walls. Livy and the other ancient authors record many of the sites with polygonal
circuit walls in the form of colonial foundation dates. These authors cannot be used to
establish precise chronological timeframes for these sites, mostly because the sources do not
explain anything about the relationship between the date of foundation and the actual
physical construction of the colony. Frank Brown and his team thought that at Cosa
construction of the town and its infrastructure began almost immediately after 273 BC,
starting with the *mundus* of the Capitolium and proceeding from there, although additional
fieldwork and reconsidered viewpoints call into question aspects of Brown’s chronology.\footnote{227 Taylor 2002; Fentress 2003.}
The dates provided by the ancient authors can be used as \textit{terminus post quem} for colonial foundations, but beyond this the dates are limited in their utility from an archaeological point of view. In a later paper Lugli himself debates the chronology of the polygonal technique, finding that what started as an indigenous tradition moved into the mainstream of Roman construction and that the precise dating of the various styles is not easily achieved.\footnote{228 Lugli 1966.}

The discussion of the factors in establishing a chronology for polygonal masonry would seem to be one that offers little in the way of concrete conclusion and a good deal in terms of speculative conjecture. However, some general conclusions can be reached if the various points are considered collectively. The changes in settlement patterns evident in Central Italy after the archaic period led to the concentration of more densely populated centers, especially after the \textit{foedus Cassianum} and the establishment of the Latin League. Attendant upon this increasing trend of urbanization was the development of civic architecture and infrastructure that, over time, came to include fortification walls.

The archaeological situation relating to polygonal masonry does not allow for any easy solution to this problem, but the record does preserve enough material and clues to allow the establishment of a broad chronological framework into which polygonal masonry construction may be set. Norba, often one of the most emblematic sites for a discussion of polygonal walls, does offer some historical clues that can begin to frame the parameters of a polygonal masonry chronology. The historical sources report 492 BC as the foundation date of the city of Norba, a date that roughly coincides with the abandonment phases of the nearby terraced settlement at Monte Carbolino / Valvisciolo. The archaeological data does not offer
a clear picture of Norba in the fifth century BC, but the natural advantage of Norba’s mountainous position might plausibly suggest that the walls were not built straight away. The work of L. Quilici and S. Quilici Gigli at Norba has followed on the earlier excavations of Mengarelli and Savignoni. Their careful study of the architectural remains and the plan of the site led them to propose a mid fourth century BC date for the walls and urban layout at Norba. Whatever date one can assign to the remains at Norba, the historical record indicates that the city was sacked and burned during the Sullan crisis and registered as one of Latium’s extinct cities by the first century AD.

In essence the walls of Norba, for example, could be dated at any point between ca. 492 BC and ca. 80 BC. Most scholars have, rightly, avoided both extremes of this span, choosing to situate Norba’s polygonal masonry walls in the fourth or third centuries BC. While this assignation cannot be substantiated in solid evidentiary terms, based upon our knowledge of urban patterns and architecture in Italy, the fourth and third centuries BC are the most likely periods for construction of this type for two primary reasons. The first is purely political – during the time of the Roman conquest, many other communities were also engaged in the processes of urbanization. Nucleated settlements became more densely populated and monumental architecture, including city walls, was often constructed. In the outlying areas of these communities, rural habitation was also on the rise, with more farms and villages evident in the record. It is not surprising that many of the cities and towns under study here turned to their common and well-known architectural vernacular for erecting their city’s walls. From the evidence offered by sites like Monte Carbolino and Colle Gentile, as well as from sites in Samnium, it is evident that the traditional approach to

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229 Quilici and Quilici Gigli 1988, Quilici and Quilici Gigli 2001, 243. The authors speculate that the Roman reorganization of the Pontine region following the Gallic sack of Rome, together with the renewal of a treaty with Carthage in 348 BC, may be appropriate for contextualizing the construction of Norba’s walls.
megalithic/polygonal construction can be traced back in to the archaic period, and perhaps a bit earlier. Clearly the Romans were not the ones teaching the other Italic peoples to build polygonal walls, as Brown once suggested. The second reason that helps to support this chronological framework has to do with Roman engineering the development of concrete construction. While the precise chronology of concrete is nearly as complex a problem as polygonal masonry, one can safely observe that it had not been employed in Roman contexts before the second century BC, thus stone masonry still prevailed. Once concrete was commonly in use, stone masonry construction declines as has been discussed previously. Excavations at the Sanctuary of Fortuna Primigenia in Praeneste have revealed terrace walls in polygonal masonry that are part of the rebuilding of the sanctuary in the first century BC, adding to those polygonal walls that were part of the pre-Sullan sanctuary. Polygonal masonry construction continues in the first century AD with the construction of the amphitheater at Alba Fucens.

Thus on the basis of the conjectural dates for Norba’s walls and associated structures, it is not unreasonable to posit that while Livy and the other historians record the “foundation” of many of these cities in the fifth century BC, their architectural foundation – at least in terms of the archaeologically attested remains – may be dated to the fourth and third centuries BC. It should be kept in mind that establishing a date for a construction type at one site and applying it broadly to others is not necessarily viable. However, the case of Norba may be taken as indicative of the trends in polygonal construction and its chronological framework can be used, with caution, to place other polygonal walls in Italy with a broad span of time. It does seem likely that some refinements in polygonal masonry construction did take place over time, but the fact of regional (and possibly cultural) variation also must

be kept in view. While a tidy chronological scheme cannot, on the basis of the available evidence, be established at this point, it is safe to situate the construction of polygonal masonry fortification walls as a phenomenon of the middle Republic, with early walls being built in the second half of the fourth century BC and the latest walls in the first century BC. The high time for this construction technique, then, was the later fourth and third centuries BC, and as such the implications for Italic urbanism in the middle Republic are substantial. The technique continued into the late Republic and early Imperial period, often occurring in tandem with other techniques in its later stages, as demonstrated by the polygonal masonry found at Praeneste or Pietrabbondante. The advances in construction technology at the end of the Republic surely contributed to the decline of polygonal masonry for the construction of circuit walls, but as has been evident in the discussion thus far, the factors that influenced the choices of building technique during the Republican period were neither wholly technical nor cultural, but rather an admixture of factors. Perhaps the most important aspect of this consideration of fortification walls – whether built in polygonal masonry or in some other technique – is that the spate of middle Republican wall building highlights the importance of urbanized communities across Italy and that those communities were as likely to be outside the Roman sphere as they were to be within it. Wall building and urbanization both represent the activities in which Italic societies were engaged during this time period.
CHAPTER FIVE: ANALYSIS AND CONCLUSIONS

Most often the goal of the archaeologist is the establishment of a reconstructed view of antiquity, using artifacts and other remains as a vehicle for gaining insight into the life-ways and customs of human populations. In some cases it is possible to reconstruct the nature of societies and to glimpse something of the mechanisms that made them work; this is certainly true for certain periods in the ancient Mediterranean, when archaeological remains, taken together with texts, afford a well-founded idea of what life was like in antiquity. The middle Republic, however, cannot be counted among those periods for which near comprehensive reconstructions are possible. The preceding chapters have attempted to shed light on the problematic nature of this period by both collecting the evidence (and lack of evidence) that pertains to middle Republican Italy, and also by challenging the received scholarly worldview of this crucial period. In the following chapter it will be useful to reflect upon the evidence that has been presented and also to integrate the evidence into a context that may help to reveal the implications of this evidence for the archaeology of Roman Italy and, in particular, the study of urbanism and architecture during the Roman conquest.

Vagaries of the early Republic: the fifth century BC

A good deal of the murkiness that clings to the middle Republic originates in the fifth century BC, a period when it is not altogether clear what was happening at Rome, and one for which the scanty sources do not provide a coherent or consistent picture. The ancient sources are useful, but are so far removed from the reality of the early Republic that it is
often difficult to sort out the actual nature and importance of events, even though some ancient historians rightly urge us to remember that Livy and his contemporaries built their narratives on an armature of fact.\textsuperscript{1} This experiment in republicanism that began at the end of the sixth century was nothing more than oligarchy in democratic clothing, it would seem, as a select set of aristocrats maintained control of the consulship for the first half of the fifth century. This oligarchic tendency was resultant from the clan structure that dominated Roman culture, and office holding was a means by which to exert the influence of a certain clan and carry out its affairs.\textsuperscript{2} It may even be possible that the aristocrats wished for the expulsion of the kings so that they could pursue their own agendas more freely, and anti-monarchical sentiments may have led to the fiery destruction of the Regia and the Sant’Omobono temple.\textsuperscript{3}

As a result of the dominant power structure, some internal unrest came about, but again, it is not easy to understand fully the import of the reported string of events involved in the so-called “Conflict of the Orders”. The sources treat the secession of the plebs to the Mons Sacer as a serious crisis, an “ingens seditio”,\textsuperscript{4} yet the Licinio-Sextian laws worked to right the wrongs done to the plebs at the hands of the patricians. Beyond the grave crisis of mutiny, Livy reports that since the plebs were not tending their fields, a famine resulted at Rome, and grew so serious that the consuls sent envoys as far as Sicily in order to purchase

\textsuperscript{1} Cornell 1995, 1-30.
\textsuperscript{2} Terrenato 2006.
\textsuperscript{3} Cornell 1995, 237-8.
\textsuperscript{4} Livy 2.29.1.
grain stores. From these episodes described by Livy and other authors, historians diagnosed the fifth century as a time of crisis at Rome, both internally and externally. The external troubles were resultant from instability caused by the migration of new peoples into Rome’s sphere, and although Livy and other writers record these events with some gravity, it is difficult to know what threat these movements really posed to the Romans. Additionally it is unclear to what extent we should believe Livy when he states that Norba, for example, was established in 492 BC as a defensive bulwark against the Volsci in the Monti Lepini. As neither the textual sources nor the archaeological record offer any answer on this point, we may never have a clear picture of the situation.

While tangential to the material under discussion here, the record of temple building at Rome is instructive as to the circumstances surrounding construction during the early and middle Republican periods. The excellent study by Adam Ziolkowski collects the information pertaining to the dedication and construction of aedes publica in Rome, and the statistics are quite revelatory. Ziolkowski finds that during the early Republic only five such temples were built, while more than 50 were erected between 396 and 219 BC. In the following period some 35 temples were constructed, most of them funded from the manubiae of the general. These findings seem to indicate that during the early Republic the hardships reflected in the scanty archaeological record extended even to the dedication of new cult

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5 Dion. Hal. Ant. Rom. 2.1 and 7.1.3; Livy 2.34.3; Gellius fr. 20 and Licinius fr. 12 (Peter). The envoys of 492 BC were P. Valerius Poplicola and L. Geganius.

6 The Volsci, for instance, occupied numerous sites that had been under Roman control, including Antium, Velitrae and Terracina.

7 Livy 2.34.6.


9 Orlin 1997.
places for the gods, while the boom of middle Republican temple building might suggest that after the oligarchic control of the magistracies eased, more freedom existed to make dedications and express prerogatives through construction.\textsuperscript{10} Evidently the construction of temples was an important outlet for the expression of munificence in the community, thus making temple foundations the most abundant category of construction in the city of Rome during the middle Republic. This abundance of temples may also serve as a possible explanation for an archaeological record that is otherwise relatively silent in terms of civic buildings.

Having briefly surveyed the historical circumstances of the early Republic, it is evident that the best chance of illuminating the situation of the middle Republic comes from the archaeological record. The preceding chapters have presented the evidence from the sources, both textual and archaeological, for the middle Republican sites under study. It has become clear as a result that the nature of the middle Republican city is not as well understood as many scholars would have us believe and that it was not very similar to one of the late Republic. With that in mind, the situation can be assayed profitably, in that the corpus of material presented here allows for a consideration of middle Republican urbanism that is free from the assumptions (and presumptions) of late Republican ideological baggage. Once liberated, the fragmented picture of the middle Republic becomes clearer and allows for a consideration of the development of Roman institutions and their architecture across a broad arc of time.

\textsuperscript{10} Ziolkowski 1992, 308 discusses how any magistrate invested with \textit{imperium} could vow an \textit{aedes publica} and his vow could not be ruled invalid.
Central Italian urbanism in the middle Republic

During the middle Republic many sites in Central Italy assumed many of the physical manifestations of urban communities. It was in this climate of urbanization that the Roman expansion gained momentum and exerted influence in new areas by establishing relationships with existing communities and effecting the foundation of new ones. This period of expansion and urbanism was seminal for the development of Roman culture, as Rome grew from a community with local reach to a global entity. While the conceptual and institutional aspects of middle Republican urbanism may be discussed, it is difficult to find the material correlates for these phenomena as has been demonstrated in the preceding chapters. The Roman city that is most familiar dates, in general terms, to the post-Gracchan or, more likely, post-Sullan period. The urban communities of the later second and first centuries BC embodied many of the urban manifestations that were fundamental to the Imperial city, notably monumental civic architecture and self-aggrandizing monuments. While late Republican and Imperial cities hearkened back in some ways to their middle Republican forerunners, it must be admitted that in many ways the Roman city from Sulla’s time onwards was a different beast both conceptually and physically.

The written sources provide what turns out to be a remarkably uniform body of information as it relates to the vast majority of sites in Republican Italy. The texts tend to record the dates and circumstances of foundation, any relevant involvement in large events, and, in some cases, information on the site’s decline or destruction. Very few sites receive much in the way of individual characterization from the annalists, with the exception of Rome, Capua, Veii, and a few other notable cities. In short, it is difficult to glean much of a picture of the physical nature of most sites by simply reading the sources. This may be
resultant from the fact that most, if not all, of the ancient authors had little first-hand experience with the places they recorded in their texts. Thus it is important to look beyond the written sources for Republican Italy, although taking the information offered by the sources in hand can aid in a reading of the material record.

One meets with consternation, however, when attempting to match the written sources to the archaeological evidence since, in the vast majority of cases, there is little direct correspondence between the two categories. In documentary terms it is important to approach the archaeological material independently from the textual record, particularly for the early and middle Republican periods. Yet many scholars have approached a reading of Republican archaeology relying closely on the ancient texts, choosing to believe the veracity of the reported information and allowing it to influence their analysis of the material remains. Having surveyed the archaeological evidence for middle Republican sites, it is evident that while textual sources can help to illuminate the history of certain sites and the traditions of the Roman expansion, they cannot be employed literally to obtain anything resembling an objective chronology. But the pitfalls of methodology are not limited to those scholars who have approached Italian archaeology from a textual bias.

In this regard scholars who used artificially constructed cultural periods or stylistic typologies to date architectural remains fell into a similar trap. This is especially true of the situation at Pompeii, the site so well-preserved that one might reasonably expect a stratigraphic sequence that would put to rest many chronological discrepancies, but, in reality, the opposite is true. While the case of Pompeii has not been central to the discussion presented thus far, the current state of Pompeian studies is illustrative of this very important trend. For many decades the scholarship of Pompeian architecture relied upon conclusions
drawn about the chronology of certain houses during the late nineteenth century that, in the light of the evidence, cannot be supported any longer.\textsuperscript{11} Yet the length of time that this high chronology was embraced has made it particularly difficult to shed, and thus the chronology of buildings at Pompeii remains a hotly debated issue.\textsuperscript{12} But the more sensible, low chronology for Pompeian architecture is in accord with trends from elsewhere in Central Italy, and thus seems the more reasonable choice.

How should the archaeology of middle Republican cities be approached? It is not always clear whether a high chronological footing is best, or a low one, or perhaps some median approach. What is clear is that Republican cities in general, and especially those of the middle Republic, cannot be treated so confidently as they have been in many published works (and in even more numerous classrooms). While it is less than clear how to proceed with regard to the archaeological material itself, possible ways forward exist, in spite of the scarcity of available data. One approach is to reflect upon the preserved remains as they relate to the role of the city both in the middle and late Republic. Other scholars, like Brown, arrived at the study of the middle Republic with a priori assumptions already on board, and the chronology for sites like Cosa suffered as a result. Even if the preserved remains do not

\textsuperscript{11} Mau 1882. Numerous scholars, including Boëthius, embraced Mau’s chronology for determining a chronology for domestic architecture in Italy. It was also fashionable to use the portions of Vitruvius’ treatise that refer to domestic architecture (as well as the assertions of Varro that atria derived from Etruscan tombs) to ‘read’ the archaeological evidence from Pompeii and Herculaneum. The result was that houses such as the House of the Surgeon and the Villa of the Mysteries were dated to the third century BC, yet modern, scientific excavation continues to refine the chronology for Pompeii and finds that the former dates are not in keeping with the evidence offered by the stratigraphic record.

\textsuperscript{12} Coarelli and Pesando 2006. This recent publication of a portion of the fieldwork carried out by Filippo Coarelli and his team in Insula 10, regio VI promises to begin to document the archaeological data that may help to unravel and clarify the situation at Pompeii, although given how contentious matters Pompeian can be, it stands to reason that even this newly published work will not find total acceptance. See also Bon and Jones 1997, Pesando 1997, and Guzzo and Guidobaldi 2005 for discussion on the current state of Pompeian chronologies. Other fieldwork at Pompeii has begun to address the chronology for various phases of the city. One particularly revealing study is that of Martelli 2002 which publishes an inscription from the precinct of the temple of Apollo that name Lucius Mummius but is written in Oscan characters.
pertain to the period of the colony’s birth, valuable observations about architecture and urbanism can still be made. In short, even if the expected evidence for civic buildings is not present, all is not lost for a discussion of the city in this period.

**Elusive Civic Buildings and Shifting Urban Paradigms**

In the Roman mindset the city center was one of the most crucial and defining constructs, both figuratively and physically, in their daily life. In the forum, as famously described by Plautus, one could find all sorts of individuals and experience the myriad affairs of Roman life, from politics to prostitution.\(^{13}\) Since the center was such a vital place with many functions, it is not surprising that many scholars, both those studying texts and those studying material remains, have tried earnestly to reconstruct and understand Roman *fora*, and especially the Forum Romanum. The excavations of the latter carried out by Giacomo Boni had the ostensible goal of revealing the forum of Augustus, perhaps in hopes that the ruins themselves would still hold some of the reflected light of Rome’s golden age. Boni achieved admirably the goal of finding the Augustan levels of the Forum, but as a result of his excavations the exploration of pre-Augustan levels was severely (and permanently) limited, except in those notable cases where he did carry through to early layers (e.g. the *comitium*, and the *Lapis Niger*). Thus, given the constraints of archaeology, the middle Republic (not to mention the archaic period) is only visible in small windows in the center of Rome. Thus it seemed practicable to look to other sites without the constraints of Rome’s stratigraphic overburden in order to locate the middle Republic archaeologically. But this strategy has not been overly successful either, as the discussion in chapter three has demonstrated. Since so many major and minor sites have been excavated in an extensive

\(^{13}\) Plaut. *Curc*. 467-85.
fashion, perhaps it is time to admit that the object of the search is not to be found. The yawning gaps in the archaeological record for the fifth through third centuries BC cannot be coincidental when they occur again and again in Central Italy. The fact that the paradigmatic cities of Alba Fucens, Cosa, and Paestum seem to suffer from the same problems is more than suggestive of an overarching problem both in methodology and understanding of these ancient cities. But since the known architectural evidence appears, on archaeological grounds, to post-date the foundation of the colonies by a half-century or more, these sites require reevaluation.

The down dating of the chronologies for Pompeii may prove to be an instructive example in the search for the middle Republic. The low chronology reinforces the idea that during the middle Republic many cities and towns were not monumentalized in the sense that late Republican towns would be, rather they were places of communal gathering for purposes of cult practice, economy, politics, and common defense. The construction of large, permanent buildings does not seem to have been mandated by the community and its functions, with the already noted exception of temples, as would become the case by the late Republic. Conversely we must allow for the possibility that, prior to the advent of concrete in Italy, the construction of large buildings using permanent materials was both difficult and cost prohibitive, with the noted exception of sanctuaries. Rather no structures, as in the case of political gatherings and diribitoria as discussed in chapter three, or non-permanent structures (e.g. for markets) were likely the preferred choice. This choice seems to be reinforced by textual references to the long tradition of purpose-built temporary structures at Rome. These buildings usually are mentioned in the context of games, such as gladiatorial games in the Forum Romanum, or were used as temporary theaters and stands in the Campus
Martius for festivals or triumphal parades.\textsuperscript{14} This was also true of the \textit{saepta}, as the voting enclosure itself was conceived of as a temporary structure. All of this would change when, over the course of the second century BC, the rise of charismatic individuals in the Roman state resulted in the implementation of a new architectural phenomenon in the form of public buildings and monuments that served to advertise and commemorate the accomplishments of important families.

For the middle Republic, then, the overwhelming bulk of archaeological evidence pertains either to the numerous temples and sanctuaries in Central Italy or to the phenomenon of city walls and infrastructure. In some ways, then, this renders the city as a relatively empty box or, rather, one that contained very little in the way of permanent architecture, as even the evidence for domestic buildings is scarce. The city walls themselves stand as the counterpoint to the absence of architectural evidence in city centers and embody the most important messages of middle Republican urbanism. Thus a brief excursus that considers the symbolic efficacy of city walls and their role in Roman culture is warranted as it will help to situate better the urban advances of the middle Republic within a broader context.

\textit{Urbs ipsa moenia sunt}\textsuperscript{15}

In chapter four the evidence for urban fortification walls was presented, including examples in polygonal masonry as well as others in ashlar masonry and \textit{opus quadratum}. One striking conclusion that is revealed by setting the evidence for civic architecture and that for city walls side-by-side is that the former category contains very few examples that can be

\textsuperscript{14} One extravagant example was the \textit{Theatrum Scauri}, built in the Campus Martius in 58 BC at great expense. Plin. \textit{HN} 36.24.112-15; \textit{cf.} Vitr. 5.5.7. Tarquinius Priscus introduced covered stands to the circus, for instance. See Vitr. \textit{De arch.} 5.1.1-3; Dion. Hal. \textit{Ant. Rom.} 3.68.1; Plut \textit{Gaius Gracchus} 12.3; Purcell “Forum Romanum” \textit{LTUR} 2:3235-36; Golvin 1988, 19; Welch 1991 274-5. In Etruscan contexts a great many temporary structures or stands may be connected either with Etruscan public buildings (see chapter three above on the Vigna Parrocchiale site at Caere) or to the rites of the funeral. See Pallottino 1952, 82 and Holloway 1965, 344-6.

\textsuperscript{15} Isid. \textit{Etym.} 15.2.4-5.
securely dated to the middle Republic while there are numerous instances of the construction of city walls that are assignable to the fourth and third centuries BC. While in archaeological terms this lack of congruence is both frustrating and perplexing, it does serve, at the same time, as a window into urbanism during this period; the view through the window suggests that the current, dominant paradigm needs to be reassessed.

Among ancient Mediterranean cultures, the mere idea of city walls was a powerful notion, both in literature and art. The depiction or description of the walls of a city served to emblematize and evoke the city itself in a way that, more than any other, managed to encapsulate the civic identity of the described place. These depictions served as surrogates for the boundaries that played important roles in the daily life of Mediterranean people, chief among these the limits of individual households, as well as the physical limits of communities. The walls that surrounded a city or town afforded not only protection from threats, but also a means of establishing community identity; in the parlance of Pierre Gros, walls afforded the city “securitas et dignitas.” These two ideas lie at the root of a community’s identity, for they embody both the concept of a collective consciousness and also of political autonomy. The concept of the city’s walls was also important in distinguishing one city from another. Mauro Cristofani commented on the way in which the physical aspects of the walls of certain south Etruscan cities helped to set them apart as centers of clear importance, and that the monumentality of the walls helped to reinforce the identity of the community. The walls of a city were so vital to its identity that even when the Romans forcibly relocated a settlement, as in the case of Falerii Veteres being moved to

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16 Gros 1993, 211.

17 Cristofani 1979, 435. This is reinforced by the prevailing Italic funerary customs that dictate burials should lie outside the city’s pomerium, serving as another layer of physical definition for the community and its space.
the site of Falerii Novi, they took care to provide a new city wall (fig. 91). From a certain point of view it seems incredible that the Romans would go to great lengths to relocate the people of Falerii, and then proceed to build a strong system of fortifications around the new city. Even though this episode is debated from the standpoint of Roman imperialist tactics, the relevance to a discussion of the visual efficacy of a city wall cannot be overlooked.

While a city’s walls held fast, the city was a vital center of activity and identity. But once a city had fallen, its empty walls often stood as hollow reminders of what the city once had been, of the strength and vitality that once filled them and that was no more. This circumstance is reflected poignantly by the poet Propertius, who in writing of Veii laments how the once proud city had been reduced to a place filled with flocks of sheep. The poet’s lament is idyllic yet poignant, for Veii had once been a great city before its powerful walls were breached and taken by Rome’s armies. In an example of Romanized Etruscan art, a sarcophagus from Volterra depicts a version of the story of the ‘seven against Thebes’, and the central scene of dramatic tension in the city gate and walls (fig. 92). In Imperial Roman literature and art the image of captured walls often serves as an analogy for military victory, a trope especially evident on Imperial monuments like the Column of Trajan and the Arch of Septimius Severus in the Forum Romanum.

In the first century BC the aftermath of the civil wars left Augustus, as victor, to deal with the realities of rebuilding the Roman state on a number of levels. One area that occupied a great deal of Augustus’ attention (as his Res gestae attests) was the physical reshaping of Rome itself, as well as the foundation of numerous new cities across Italy and

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18 Zonaras 8.18; Harris 1971, 112; Potter 1979, 99.

19 Prop. 4.10.27-30, “heu Veii ueteres, et vos tum regna fuistis et uestro posita est aurea sella foro: nunc intra muros pastoris buicina lenti cantat, et in uestris ossibus arua metunt.”
the empire. The lines of the *Res gestae* indicate that Augustus placed a great deal of importance on the maintenance of the physical city, both in order to appease and honor the gods, as well as to provide new public complexes by which he could aggrandize his own name and its attendant Iulian heritage.\(^{20}\) In short, the building of cities was very much at the forefront of the Augustan program. With this in mind it comes as no surprise that writers of the Augustan circle, especially Horace, Livy, Propertius, and Vergil, were also thinking about cities in this time and focusing on the fundamentals of the city of Rome herself.

In Vergil’s *Aeneid*, the theme of civic identity plays a central role in the story, as Aeneas has lost the city of his birth (Troy) and must, by divine mandate, establish a new one that would ultimately lead to Rome’s foundation. On first seeing Carthage, Aeneas and his companions were awestruck at the monuments of the city, and the activity of the citizens building them yet higher. Among the sites that captured Aeneas’ mind the most were the gates and walls of Carthage, something that he and the other Trojans had longed for since their city had fallen to the Greeks. Approaching the city, Aeneas marvels at the height of the walls and comments that it is a propitious sign that they stand so tall.\(^{21}\) Aeneas was impressed with the city of Carthage (and even more impressed by its queen, Dido). His longing for a new city to call his home, he was led, for a time, to disregard the sanction of the gods that had told him to seek Hesperia. To remind him of his obligation, Mercury was sent to Carthage to call Aeneas back to his task.

Vergil, as poet, crafts a profound scene that shows Aeneas carrying out his mandate, but simply in the wrong place. For when Mercury arrives he finds Aeneas, in Punic dress,

\[^{20}\text{Aug. } RG\text{ } 20,1-5,\text{ }21,1-3;\text{ App. } 3\text{ records the restoration of eighty-two temples.}\]

\[^{21}\text{Aen. } 1.437-8. \text{ ““O fortunati, quorum iam moenia surgunt!” Aeneas ait, “et fastigia suspicat urbis.””}\]
endeavoring to build higher and stronger the walls of Carthage, the city that, in his romantic stupor, he dared to think of as his new home.\footnote{“Ut primum alatis tetigit magalia plantis, Aenean fundantem arces ac tecta novantem conspicit. Atque illi stellatus iaspide fulva ensis erat Tyrioque ardebat murices laena demissa ex umeris, dives quae munera Dido fecerat, et tenui telas discreverat auro. Continuo invadit: “Tu nunc Karthaginis altae Fundamenta locas pulchramque uxorius urbem extruis? Heu, regni rerumque oblite tuarum?” (Aen. 4.259-267).} Especially of interest is the activity in which Aeneas is engaged when Mercury finds him – he is working to build the walls of Carthage, a noble effort in itself, but in this case Aeneas neglects his duty to build walls in Italy, not Carthage. The symbolism in this passage is poignant, but especially when the passage, and the epic as a whole, is considered in the context of Augustan Rome.

Walls also played an important role in the essential representation of a city’s identity. Beginning in the Hellenistic period, and perhaps with the city of Antioch, Mediterranean cities often would embody the identity of their community in a tyche statue. The famous Tyche of Antioch, perhaps the best known of this typological group, embodies her city in a symbolic fashion (fig. 93). Additionally, she wears the corona muralis\footnote{The mural crown also served as a military decoration of distinction, as the commander would award it to the first soldier to scale the walls of a besieged city. The decoration was made from gold and had turrets (muri pinnis) adorning it. \textit{cf.} Gell. \textit{Na} 5.6.4; Livy 26.4; Suet. \textit{Aug.} 25. The use of the corona muralis as a military decoration further confirms the visual poignancy of the emblematized identity of a city in Roman iconography. \textit{cf.} W. Deonna. 1940. \textit{“La Couronne murale des villes et des pays personnifiés dans la antiquité.”} \textit{Geneva} 18:127-86.} and is depicted with other attributes that help elicit the identity of the city she protects, notably the river Orontes. The fact that the crown depicts the walls of the city is not insignificant, for in the shorthand of an artist’s iconographical palette, the walls are clearly the most essential and emblematic choice to stand in for the city as a whole.
The use of the walls to represent the essence and identity of the city was not limited to relief sculpture or sculpture in the round. A range of other ancient art forms relied on this same convention, from wall paintings to mosaics. A relief sculpture from Avezzano depicts a scene of the Roman countryside, with a *villa rustica* on a hillside, adjacent to a strongly walled city (fig. 94). Within the city’s walls the viewer may glimpse some small buildings shown in a three quarter profile, but the walls are clearly the focus of the relief. The fragments of a remarkable fresco of the first century AD that came to light on the Oppian Hill in Rome in 1998 demonstrate a similar tendency. The so-called Colle Oppio fresco shows an Imperial city surrounded by a fortification wall with interval towers (fig. 95). The cityscape is painted on a megalographic scale, quite unlike any other known examples of Roman wall painting. The artist treats the urban landscape as tableaux within which it is possible to depict the essence of the city, which seems surprisingly minimalist, at least in the surviving fragments. The city, obviously a coastal one, has a few large public buildings within its walls, but these are spread out and separated by broad expanses in which nothing is depicted. These public buildings seem to include a *quadriporticus*, perhaps a forum, a theater, and several statues. Nowhere does the artist paint domestic buildings or much detail. In short, this is an essentialist representation that provides enough elements for the viewer to recognize that a city is being depicted, but not enough specific clues (at least for the modern viewer) to discern whether the city is actual or idealized.

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24 cf. LaRocca 2000. The depicted scene has been variously identified as Rome, Ostia, London, and Arles. Varro’s (*De re rustica* 1.2.1) reference to a painting in the Temple of Tellus (*Italiam pictam*) is called to mind, but surely predates the example in question here. Nonetheless both serve as reminders that it was not unusual for large, public buildings in Rome to have large-scale paintings installed in them.
This convention of representation appears yet again in the illumination of manuscripts.\textsuperscript{25} Based on the surviving evidence, the texts of the Roman land surveyors may also have used essential representations of cities that consisted of a depiction of the walled area and any relevant landmarks to help locate the city in a region.\textsuperscript{26} A manuscript of Hyginus from the ninth century includes an illustration of the city of Minturnae on the Liris River in Central Italy, demonstrating clearly how walls represent the essence of a city, and in this case, serve as a graphic shorthand that has the capacity to reveal to the viewer the specific city being illustrated (fig. 96).\textsuperscript{27} In the manuscript the artist shows the walls of Minturnae with the Liris River flowing through the city. The city is labeled, as is the river. Outside the walls one sees a depiction of Mons Vescini, as well as a centuriated area marked as “Assignatio Nova.” Three structures can also be seen outside the walls – one hexagonal, one vaulted, and the third crowned with a statue. It is likely that these three constructions serve to confirm that this is Minturnae, as travelers would have recognized these extramural elements.\textsuperscript{28} For scholars studying the illumination of these manuscripts, the picture of the “empty” city is an ideogram that stands in for the city itself,\textsuperscript{29} in some ways not unlike the Hellenistic Tyche statues.\textsuperscript{30}

In iconographic terms the walls of a city clearly carry great visual efficacy, and by depicting them, often with little inside the walls, the viewer can easily identify the city in

\textsuperscript{25} cf. Cavallo 1989, 267-300.

\textsuperscript{26} Castagnoli 1944; Dilke 1967; Ehrensperger-Katz 1969.

\textsuperscript{27} Hyginus, Codice Palatino degli agrimensori latini; Vat. Palat. lat. 1564, f. 88r.

\textsuperscript{28} Cavallo 1989, 274.

\textsuperscript{29} Cavallo 1989, 267.

question. The ideogram of iconography is effective, but the same concept can be seen manifested in concrete terms as well. In the simplest terms the construction of a fortification wall offers protection to the inhabitants of a settlement. What, then, might motivate a community that perceives no military threat to build massive walls? This also seems to be true of veteran colonies founded in Italy by Augustus after the battle of Actium.\textsuperscript{31} Established in 24 BC, \textit{Colonia Augusta Praetoria} (modern Aosta) was the final military colony founded in Italy. The city was laid out according to the by then customary grid pattern and a strongly built fortification wall, with interval towers, surrounded the city. \textit{Augusta Taurinorum} (modern Torino) founded ca. 25 BC was also fortified, and even more strongly than \textit{Augusta Praetoria}, with sixteen-sided brick towers flanking the Porta Palatina (fig. 97).\textsuperscript{32} At the time these two cities were established, Augustus was the uncontested master of Italy, yet substantial fortification walls were erected at these sites, indicating something about the connection between the city, its walls, and its identity, since neither city lived under any military threat.

The Roman mindset of the late Republic regarded the walls of a city as both emblematic and functional. In a way the walls were icons that could represent the city in shorthand, serving as a metonymic expression of the city’s identity.\textsuperscript{33} This shorthand was convenient in concept, although Favro rightly points out that iconological studies show that Rome was particularly difficult to represent in such a pictorial and encapsulated fashion, owing to its own vast identity. Still, the depiction of walls was a practical way to represent a city, not just for artists but also for anyone thinking about a city in particular, or the general

\textsuperscript{31} Keppie 1983.

\textsuperscript{32} Ward-Perkins 1981, 174-5.

\textsuperscript{33} Favro 2006.
idea of one. In keeping with the ancient traditions of the disciplina Etrusca, Romans of the first century BC considered a city’s boundary to be sacrosanct and inviolable, and since the walls usually demarcated that boundary, the symbolism of the foundation becomes paired with the physical reality of the city’s manifestation. Partly for that reason artists and writers alike would incorporate images of city walls, and stories about them, into their work. During the late Republic few stories were as of great interest as the Iliupersis, a story in which walls (and their destruction) play a leading role. The Tabula Iliaca Capitolina, the best-preserved example, uses the walls of Troy to frame the narrative action in the main scene, as well as in the vignette episodes that define each border (fig. 98). One can argue that the walls are the defining element of the scene and that they instantly make the fact that the scene is Troy recognizable. Beyond the figurative and artistic connotations of city walls, there were further reasons that walls played such an important part in the Mediterranean world. The walls of a city made clear to anyone approaching – friend or foe – the identity of a city, and the strength of its citizenry. Many cities in Italy that built walls during the middle Republic were likely conscious of the visual efficacy of strong fortification walls. Additionally, the forces that motivated these cities to build such walls may have been as much about peer polity interaction as they were about actual defense.

**Twilight of the middle Republic and a new Roman city**

During the second century BC the Mediterranean world underwent sweeping change, as the material and historical records bear witness to major cultural, economic, and social events. Central Italy was caught up in this period of change as well, and the outcome of the second century would, in part, lead to the disintegration of Rome’s established system of

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34 The defining treatment of these intriguing objects remains that of Sadurska 1964.
governance that could not withstand the turmoil of the times. While the characterization of factors involved in this period would be out of scope in the present context, it is important to comment briefly on some of these events as they lie at the bottom end of the period under consideration here and, above all, have major implications for architecture in Italy.

Among the symptoms of change in the second century BC is a boom in agriculture (particularly viticulture) with a boom in wine and oil production, something that is evident in the corresponding record of ceramics. Since the early third century BC the predominant amphora type in Italy and the western Mediterranean was the so-called ‘Greco-Italic’ amphora. The Greco-Italic typology gives way to the Dressel 1A and Lamboglia 2 amphorae by 135 BC, with the Dressel 1A eventually becoming the most widely distributed amphora type in the Mediterranean basin. While it may seem out of context to mention the typology of amphorae in a study that primarily concerns architecture, the amphorae themselves stand as one of the most important signs of sweeping change in this crucial period, for they are the end product of major developments that changed productive agriculture and all of the socio-economic mechanisms that pertain thereto. It was in this same climate that architecture in Italy also experienced a transformation that would render it almost unrecognizable to a Roman citizen from the fifth century BC. During the second century cities in Latium built (and in some cases, rebuilt) sanctuaries along what seem to be Hellenistic lines, incorporating theater spaces, porticoes, and terraced plans. This also took

35 Will 1982. The Greco-Italic amphora is a widely distributed type and is in use at least until the middle of the second century BC. The origins of its typology are not certain, but it is possible that the Adriatic city of Spina influenced the development of the type, based on the evidence of some late fourth century jars from a funerary context there.

36 See Dressel in CIL 15 (Berlin, 1889). Other, more recent scholarship has focused on subdividing the Dressel 1 category into various subtypes, owing to the many variations evident in the record (on this, see the recent article by Loughton 2003). Questions also have been raised about the production sites of these amphorae, with it becoming increasingly clear that a great many of these amphorae were produced in Italy.
place at the major Samnite sanctuary at Pietrabondante (Bovianum Vetus), suggesting that the cultural movement at work is not simply a Roman appropriation of Hellenistic material culture by means of eastern conquests, a model that has been embraced by many scholars.  

Along with the new building types and executions, new building materials also came into use, with opus incertum becoming more widely distributed and used. In this context various sorts of buildings become more feasible, including vaulted structures like the Porticus Aemilia at Rome and the so-called market buildings at Ferentinum and Tivoli that were discussed briefly in chapter three. The learning curve of Italic architects was steep, as by the middle of the first century BC they would understand the concrete vault technology well enough to execute massive structures like the Theater of Pompey in the Campus Martius. By the late first century the technology seems even more perfected, as demonstrated by the Theater of Marcellus at Rome, a building that clearly foreshadows the Flavian amphitheater. It was through the process of Hellenization that the Romans defined their own culture, as has been eloquently argued by Erich Gruen. But, like the amphorae, what do all of these advances and redefinitions have to do with middle Republican architecture and urbanism?

Indeed the connection has a great deal to do with our understanding of the Republican period itself. Some choose to view the period that stretches from the expulsion of the kings to the rise of Sulla in the first century BC as a fairly homogeneous period in cultural terms, yet the stark contrast demonstrated by this study suggests that some reconsideration is in

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37 On Pietrabondante, see Strazzulla and di Marco 1971.


order. On the grounds of architecture and urbanism, the middle Republic appears quite different from the post-Gracchan period.

It is without question that the late Republic built upon what had come before, especially the great spate of city foundation in the middle Republican period and the establishment of Roman road networks in Italy. Also, since the first century BC proved bloody and chaotic in political terms, many writers (and especially Augustus) sought ideological refuge in the ‘good old days’ of the earlier Republic, and so in their constructed imagination those times and events stood for good Roman values, as opposed to the darkness of their own times. Whether or not these were merely flights of fancy, they gave rise to concrete reality and affected greatly the way the Roman world viewed the city and its accoutrements.

The case of Fregellae, discussed already in chapter three, is indicative of the need to reevaluate the traditional models for cultural diffusion and contact across the Italian peninsula during the Republican period. Poised between the spheres of Latium, Campania, and Samnium, and in close enough proximity to Magna Graecia, Fregellae by the time of its destruction in the second century BC, seems to have been more advanced even than Rome in some respects. One of the clearest signals that the architecture of the community of Fregellae is advanced for the middle Republican period comes from the public bath complex. While still unpublished, this remarkable complex is indicative of a date perhaps in the late third to early second century BC, well before the city of Rome had any public baths whatsoever. Since some scholars view Rome as pioneering the public bathhouse in Italy, this case in point suggests that perhaps the models for cultural diffusion that seek innovation always moving

40 A poignant example comes in the Praefatio of Livy’s history, wherein the author cites the dismay of his own times as a motivation to write history.
from core to periphery are not so effective. To some traditionalists the notion of a colonial foundation outstripping the capital might be abhorrent, but the fact remains that Fregellae was far from being a colonial backwater, and was rather living at the forefront of Italian urbanism in its day.

Having outlined many of the difficulties that beset the archaeology of middle Republican Italy, it only seems appropriate to suggest a way forward that might help to clarify points of uncertainty. One route that can be followed is a thorough reevaluation of the key sites that have been used to construct the chronological framework for this period, examining excavation reports and material finds in light of current ceramic chronologies. While this approach would be fruitful in some cases, it is fraught with the difficulty of working from previously offered interpretation, and perhaps scanty documentation of the evidence. Thus it seems clear that there is a great need for the excavation of new urban contexts in Central Italy, in an attempt to discover and document a pristine stratigraphic sequence for the middle Republic, and to study an undisturbed artifact sequence. Such an excavation would hold enormous potential for refining (and re-defining) the middle Republican sequence in Central Italy. The benefits of such an undertaking would extend beyond internalized chronologies, however, as modern methods and approaches (e.g. more developed ceramic chronologies) could be brought to bear, thus revealing even more about middle Republican urbanism. While urban excavations of middle Republican layers continue in Rome itself, the difficulties posed by Rome’s pluristratified nature make the archaeological windows on the middle Republic quite small, thus a site outside the immediate constraints of Rome would be ideal for such an inquiry.
In the end, the middle Republic remains elusive from the archaeological point of view. In spite of this, some important new observations stand clear from the darkness of this crucial period in Rome’s history, and they suggest a way forward and a new dialogue about the city and the Roman expansion. The first of these is a caveat to the archaeologist and the cultural historian alike, and is an admonition to approach the middle Republic free of ‘Roman’ baggage acquired in other periods, as this period demands an unburdened mind. If one arrives in the middle Republic wanting to find that the situation is more or less the same as that of the Augustan city, then the outcome can only be muddled.

The second proposition relies on acceptance of the fact that the Roman world prior to 150 BC was a very different place from the Rome of 50 BC and we should not be so surprised to find such a stark contrast. Rather this contrast should be embraced, for in it lies a chance to break open the very nature of the nascent Roman empire and examine it not as a monolith, but as another important piece of a large and shifting puzzle. We should examine it not in the reflected glory of what it would become, but in the light of its actual context and surroundings, by considering the myriad cities and peoples that were in contact with Rome. The case of middle Republican fortification walls that rely on local practice and materials speaks to this quite aptly. So many city walls were erected during the middle Republic that the notion of the wall became inseparable from the notion of the city itself, as we have seen that the symbolism of the walls occupied an extremely prominent place in late Republican iconography and ideology.

The third proposition put forward in this discussion deals with an awareness of the changing role of the city from the early to late Republican period. While the middle Republican city was a locus of community gathering, cult function, and electoral processes,
the late Republican city became a much more frequented place and one that served as a tableau for the advancement of charismatic leaders and their agendas. The late Republican city had greater need of monumental, permanent buildings, and the advances in construction technology made the construction of numerous such structures more feasible. But the essential kernel of Italian urbanism stems from the middle Republic when the city came about in ideological terms, even if the physical trappings were slow to catch up with them.

A fourth proposition deals with the various cultural groups that were involved in (and affected by) the Roman conquest of Italy. This survey of architecture and building techniques reveals many commonalities that cut across cultural and geographic boundaries, suggesting that Italic peoples as a group have a tendency to address common needs with similar techniques, taking into account the occurrence of some regional variation. Further, the fact that the Roman and Latin colonies of the middle Republic are often “empty boxes” with temples inside them, in archaeological terms, argues for a renewed consideration of indigenous cities and towns, as in some cases the ‘periphery’ outstrips the ‘center’ in terms of complexity. In short, this study of the middle Republic has shown that Rome was an important participant in the cultural (and urban) milieu of this period, but that Rome herself was still developing and growing and so was not yet the dominant force in Italy.

The ideas advanced here are merely the beginning of a new consideration of the middle Republican period. They stand as an invitation to reopen scholarly dialogue focused on this important period in hopes that others will recognize the need to understand in a more complete fashion the crucial period of the Roman expansion and, in some respects, the genesis of a distinct Roman culture. Central to the process of expansion and self-definition was the urban community and its physical and institutional manifestations. It was by means
of the urban medium that Roman and non-Romans interacted, although we have clearly seen that the city served different roles at times during Rome’s history, but that in each manifestation the urban context was an instrument essential to Rome’s success. By the Imperial period Latin authors deride the city for its excess and squalor, criticizing both the people and those in charge of them. In spite of the criticisms, the Roman city was a vital place in its multitude of iterations across the Mediterranean. It is important to recall that Roman urbanism is extremely nuanced, as we have seen, and influenced by local circumstances and traditions and that it is not a monolithic phenomenon of cultural domination. Rather the city was both a filter for cultural contact and diffusion and also a mirror by which one could reinforce one’s own identity and also demonstrate it to others. Urban status afforded many advantages, not least of which was a greater stake in networks of trade, communication, and polity interaction, thus the advantage in becoming urbanized far outweighed the costs. As Rome expanded, it is clear that other Italic peoples moved toward urban communities as well, reflecting not just the cultural importance of the Roman conquest but also the interconnectedness of Mediterranean peoples.

While the middle Republic does not offer any easy answers, it is far from being a dark age. During these centuries a great deal transpires in Italy, much of it to do with Rome’s expansion, as well as with a trend of urbanization. Cities come to define Italy more so even than in the archaic period and the status of those cities was reflected in their outward, physical manifestations. As the aims, goals, and needs of cities changed over time, so too did their civic architecture, so that by the time of the Republic’s fall the standard set of buildings was developed almost to the point of codification. The middle Republic, then, is not simply a period to pass through when considering Rome’s beginnings and then Rome’s rebirth, but a
place to pause and reflect on the essence of *Romanitas* and the defining aspects of ‘Roman’ culture. Vagaries and all, much remains to explore in the middle Republic, with the promise of gaining a greater understanding of the Romans whose determination propelled a small village to become the center of a global empire.
APPENDIX I: ADDITIONAL POLYGONAL MASONRY STRUCTURES

The occurrence of polygonal masonry in the archaeological record for Central Italy is not restricted to the circuit walls of the cities and towns under study here. In fact, contrary to the picture provided by the record of scholarship on polygonal walling, the vast majority of individual instances of polygonal construction are not connected with nucleated centers, but rather with dispersed, rural sites. The collection of an exhaustive corpus of polygonal walls and polygonal masonry construction remains an unrealized goal for Italic archaeology.¹ Many sites with extant polygonal masonry have been folded into the Forma Italiae project, but as it is still in progress, it offers incomplete coverage. One area in need of compilation relates to the use of polygonal terrace walls in the construction of Roman roads, a topic that was of interest to Thomas Ashby as is reflected in his work on the Roman countryside. Another is the category of basis villae, addressed in a cursory fashion by M. Andreussi in 1981.² Based on these two categories, it seems safe to state that a potentially vast number of structures in polygonal masonry lurk mostly unstudied, either within the volumes of the Forma Italiae or completely undiscovered in the field.³ While the catalog of basis villae compiled by Andreussi was limited in its scope and provided little more than a list, the motivation behind that work, to recover subsets of archaeological data from within the Forma Italiae, may be a model to keep at hand in further work on this masonry type in Central Italy.

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¹ It should be noted that some regional studies have advanced admirably the goal of collecting such a corpus. See, for instance, the excellent work of Haller 1978, as well as Oakley 1995 and De Gennaro 2005.

² Andreussi 1981.

³ Crimaco 2006.
The following pages present a selective corpus of polygonal masonry structures. Two basic classes of remains have been selected, the first being architectural remains that pertain to the category of *basis villae* while the second group contains miscellaneous structures in polygonal masonry.

**Bases villae**

Lugli deployed the architectural category *basis villae* during the compilation of the *Forma Italiae* volume for Anxur-Terracina in 1926. Lugli grouped remains into this category that shared some general characteristics, but in a certain sense it became something of a catchall for sites that were otherwise difficult to define. The basic criteria of distinction include a rural location, the use of polygonal masonry to construct podia or terraces, often the presence of later construction reusing the earlier masonry, and a general shortage of substantive architectural remains contemporary to the polygonal construction (fig. 99). The association with villas may have come from the fact that some of these rural platforms do, in fact, support villas, but these usually date to the late Republic or early Imperial period (figs. 101, 101). Such interpretations may also be influenced by the *cryptoporticus* structures present at some villas (e.g. the Villa of the Mysteries at Pompeii), as the Republican *bases villae* may be considered as antecedents of the *cryptoportici* built in concrete. Although one might draw this connection on the basis of similarity in typology, there is little direct archaeological evidence to connect these two classes of structure either in terms of their development or their chronology.

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4 Lugli 1926.

Archaeologically the *basis villae* category is enigmatic. The presumption of the categorization is that these massive platforms – some in excess of 500 m$^2$ in area – supported villas in antiquity, thus giving this category a title that may not be wholly accurate (fig. 102). This assumption begs the question in turn concerning villa typologies. The debate over villas, reinvigorated by recent fieldwork and scholarship, causes further consternation when it comes to *basis villae*, not least of which because of the considerable terminological confusion that persists in the use of the term “villa” to describe an ancient site. Diverse sites, ranging from crude farm hovels to immense pleasure homes, have been grouped under this heading, causing skeptics to wonder whether the term is capacious enough to contain all of these assignations. Whatever the case in terminology, many of these sites do not seem to meet the evidentiary burden placed on them, as most simply do not have any evidence at all for structures in masonry or concrete atop the platforms. Rather the archaeological evidence usually consists of a myriad of ceramic remains, often including roof tiles. Some *basis villae* have structures (usually rectangular) or cisterns built in *opus caementicium*, but these are virtually impossible to date and could well have been constructed long after the actual platform itself. We must entertain the possibility that buildings of mud brick or wood or even wautle-and-daub once sat atop these masonry platforms, but this again seems contraindicated as polygonal masonry was difficult and expensive to execute and thus it may not be the most likely partner for crude buildings in impermanent materials. Likewise, the theory that the platforms were not residential at all, but served as agricultural terraces, seems to run counter to our understanding of polygonal masonry as a prestige building technique. However, in general terms, this theory that the *basis villae* were agricultural in nature seems most plausible in light of the archaeological evidence.
These *bases villae* have been the focus of renewed archaeological interest as they have been investigated in recent field surveys carried out by the Dutch Pontine Region Project, beginning in 1987. As a result of field survey findings, the Dutch team has developed a theoretical framework by which they attempt to explain the phenomenon of *basis villae* as it relates to the development of the landscape in Central Italy. Attema and his colleagues believe without reservation that villas were, in fact, built atop the so-called *basis villae*, and thus their method belies their conclusions. They conclude that these dispersed villas were part of a system of regional control imposed upon Latium by the Romans after the Roman conquest and that the function of the villas in the plain can be likened to the fortified upland settlements such as Norba and Signia in strategic terms. Yet the theory offered by Attema does not seem to meet its evidentiary burden, as he offers little explanation why such a marked garrison presence would be required in these areas of Latium, nor is there documented evidence for military activity in connection with these *basis villae* sites. Equally absent is any evidence to suggest that Rome was involved in establishing rural settlements of this type as part of an integrated plan for conquest. Even if these platforms did support villas of some sort, the likelihood is that they were small, isolated, agricultural establishments, neither connected to one another nor to Rome.

The following catalog of sites includes a number of those categorized under the *basis villae* heading. In many cases these sites have not been excavated or even studied fully, but rather appear in the catalog compiled for certain volumes of the *Forma Italiae*. Since many of the

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6 P. A. J. Attema and the University of Groningen’s Institute of Archaeology direct the project.

7 The first substantial report on the survey’s findings is Attema 1993. Here Attema advanced the theory of the *basis villae* as part of an hierarchical Roman colonial system of landscape control, to which Leusen 2002 (chapter 9) also subscribes. See also Attema 2004a, 86-100; Attema and van Leusen 2004b, 157-195; Attema and De Haas. September 17-18, 2004; Attema 2006, 55-67.
sites here are extracted from the *Forma Italiae* corpus, the relevant catalog number is provided for convenience.

**Villa at Monticchio (Terracina)**

This platform, situated on a small hill, is comprised of a rectangular polygonal masonry structure that employs blocks of relatively small dimensions (ca. 0.60-0.80 m) (fig. 103).\(^8\) Within the structure of the platform are some small rooms that are covered by vaulting. Lugli firmly states that the platform was for a Roman villa that must date between 325 and 80 BC, with the period of the Gracchi as the most likely for its construction (fig. 104). Such a broad potential chronology is indicative of the scarcity of reliable archaeological material.

**Villa rustica near the Via Appia (near the Piazza dei Paladini)**

This rectangular polygonal masonry terrace is situated near other remains, including those of a cistern, built in *opus incertum*.\(^9\) Three sides of the platform are built of polygonal blocks of small dimension that are cut in a uniform fashion; the façade measures 19 m and the surface of the blocks there seem to be rusticated. Lugli dates the platform between the end of the third and the beginning of the second century BC, but does not cite any material that helps establish this date.

**Villa Prato (Sperlonga)**

The French School at Rome carried out extensive excavations of this seaside villa near Sperlonga. The villa was found to have a podium built in polygonal masonry, as it

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\(^8\) Lugli 1957, 1.161.

\(^9\) Lugli 1957, 1.162.
conforms to the “open-front” type of maritime villas.\textsuperscript{10} The villa lies close to the Via Flacca (constructed ca. 184 BC), thus the villa has been dated to the latter second century BC on the basis of the road construction.\textsuperscript{11}

**Villa at Nocelle (Tivoli)**

This large, well-built platform is divided into two terraces.\textsuperscript{12} The terrace is built in polygonal masonry with rusticated blocks at the corners that Lugli compares to the masonry at the Porta Maggiore in Rome.\textsuperscript{13} Ruins in *opus incertum* atop the platform may be suggestive of a late Republican date.

**Substruction at Lago Albano**

Southeast of the Alban Lake, Thomas Ashby documented this platform measuring 14 m in length and 3-4 m in height. Constructed in rough polygonal masonry, it may pertain to a *basis villae* site or to structures connected with the lake and its *emissarium*. A date is not forthcoming for this structure, although it has recently received attention from amateur spelunkers whose interest focuses on the ruins of ‘underground’ Rome.\textsuperscript{14}

**Villa “Grotta di Torri” (Southern Sabina)**

Near the station of Dar Sabina is a rectangular enclosure that measures 95 m to a side and is composed of polygonal masonry walls of imposing aspect. This platform contains

\textsuperscript{10} See Marzano 2004.
\textsuperscript{11} See Broise and Lafon 2001.
\textsuperscript{12} Ashby 1906, 167.
\textsuperscript{13} Lugli 1957, 1.163.
\textsuperscript{14} See the popular article “Underground Rome,” in *National Geographic* (July 2006).
within it a *cryptoporticus* built in *opus incertum* that uses large pieces of stone and mortar and probably post-dating the original construction of the platform.

**Territory of Anagnia**<sup>15</sup>

**Villa rustica at Concervino** [72]

The ruins are located on part of the eastern summit of the hill. Facing the valley are the remains of a vast terrace in polygonal masonry, which can be distinguished from its west and south side, and also the southeast corner. There are groups of rooms visible in the foundation courses, and these can be divided into two nucleated groups. The western group has foundations executed in large, squared blocks of sandstone and some *opus caementicium*. The other group, about 40 m from the first, is better preserved with walls preserved to ca. 50-60 cm in height. The curtain of these walls is of *opus quasi reticulatum* formed from large blocks of tufa.

**Villa rustica (Collina La Forma)** [81]

The ruins of this villa are situated on the summit of the hill. A terrace built in polygonal masonry survives, in connection with a courtyard of cement, using *opus incertum*. Some fragments of painted wall plaster were discovered here; a find such as this was deemed an exceptional one for this area. Other finds included ceramics (*figulina*, *sigillata*, and *ceramica campana*).

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<sup>15</sup> Mazzolani 1969.
Terrace of ‘Fosso degli Otteri’ [83]

A terrace wall in polygonal masonry is oriented in a northeast-southwest alignment (l. 14.5 m; h. 1.6 m). The terrace has an area of about 150 m$^2$.

Terrace at ‘Ara del Serrone’ [87]

On this site the scanty remains of a large, quadrangular terrace were discovered, although the state of preservation is poor overall.

Villa rustica in località Cisternola [88]

Remains of a small villa were discovered on the Costa del Serrona, at about 400 m a.s.l. An open cistern was situated in a fissure in the bedrock. Close to the cistern are limestone blocks that were once part of the terrace, part of which was built in polygonal masonry.

Villa rustica and agricultural terrace at Serrone [89]

A large terrace built using polygonal masonry terrace was found at this site; two visible tracts of wall on the top of the hill, each about 2 m in length. The stone blocks employed in this construction are rough and relatively unworked. On the southern part of the site were the remains of walls that probably belonged to a house; these are centered on a courtyard and are constructed a secco. The terrace likely formed an area for farm activity. Numerous common ware shards were found, along with a fragment of the handle of a large pythos, drinking cups, and roof tiles. Also present on the site were several squared blocks of travertine.
Villa rustica at Monte S. Giorgio [162]

A villa situated on a hill was constructed using high quality *opus caementicium*. The structure had columns with a pettinate profile as well as a cistern. Additionally, the remains of a terrace constructed in limestone blocks lie 20 m distant from the residential structure. The blocks are small and regular, measuring 0.40-0.50 m in length. A polygonal wall of the second style is preserved at 1.80 m in length.

Territory of Cora16

località ‘Locca e Pellecini’ [11]

This site is related to the masonry remains leftover from the construction of the temple of Herakles at Cora; the common conjecture is that the working debris are from blocks that yielded certain architectural elements of the temple. Also on the site are several polygonal terraces of ca. 10 m in length that run along a modern roadbed.

Località ‘Locca e Pellecini’ [13]

Preserved remains of a villa on a small hill with remains of some terraces constructed in polygonal masonry. The preserved wall now consists of only one line of blocks. The surface finds on the terrace included roof tiles, shards of cups, and common ware pottery, as well as the remains of terracotta architectural decorations. The remains of worked stone were found at the site, including one block of a limestone column and another hollowed block of stone.

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16 Vittucci 1968.
Località ‘Locca e Pellecini’ [14]

On this site are the remains of roadbed construction on Colle Gaetano that employs polygonal masonry. This was likely a road leading to the villa at #13.

Località ‘Vallecchia delle Rose’ [20]

The remains of several terraces built in polygonal masonry. One of these, which is found at the southern edge of the depression that characterizes this locale, was in polygonal masonry, but consists now of only a few blocks. Another terrace, also probably in polygonal masonry was on the crest of the hill. There was likely a cistern here as well.

Località ‘Prato Pisciarello’ [30]

At this site are the remains of a villa; one wall in opus caementicium measures 2.50 m in length and 0.60 m in thickness. Also on the site were some fictile fragments.

Località ‘Prato Pisciarello’ [31]

Remains of an agricultural terrace constructed in polygonal masonry. It consists of two tracts of walls in the second style. The two walls are some 100 m apart from and are situated at different levels. The higher tract, constructed of mid-sized blocks, extends for about 6 m and is preserved at 2.50 m in height. The lower tract is constructed of blocks of varying dimensions and runs in a longitudinal sense for about 50 m and is at least 4.0 m in height. The report states that no material remains were found on the terrace.

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17 Vittucci 1968, 113 fig. 239.
Località ‘Livastrio’ [32]

On the slope of the hill the remains of a villa were discovered, as was a large villa rustica. At the lowest level is a terrace in polygonal masonry about 8 m in length. A number of aligned blocks are situated perpendicular to this wall, perhaps remains of a destroyed terrace. At a higher level, 21 m. distant, a wall in opus caementicium constructed from pieces of limestone and rough mortar. The longer side (the one facing the valley) uses more mortar in the matrix of the wall. A third terrace on the site was built in opus incertum.

Località ‘Casale’ and ‘Costa Casale’ [33 and 34]

This site has the ruins of a villa with remains of a wall built in opus caementicium. The terrace was constructed in polygonal masonry of the second style. The first wall, at the lowest level, is 11 m long and 1.6 m tall. A parallel set of aligned blocks is found at 4.45 m distance, running for 7 m. Another wall, at a higher level, has a length of 9.6 m and demonstrates the same masonry techniques as the first set of walls.

Località ‘Pezze di Ninfa’ [50]

The ruins of a villa rustica composed of the remains of a terrace and those of a rectangular cistern. The terrace (1. 30 m), constructed in polygonal masonry meets the remains of a less well-preserved wall at a right angle.

Località ‘Fossateglio’ [59]

The remains of a wall in polygonal masonry (1. 20 m) were found on this site. The blocks are of large dimensions and are laid in nearly horizontal fashion. Other remains on

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18 Vittucci 1968, Fig. 240
the site include those of a cistern and numerous remains of later architectural elements in limestone.

**Località ‘Castellone’ [64]**

This site sits atop a tufaceous hill near the confluence of two streams and was characterized by Vittucci as either a villa or an agricultural center. Two ancient buildings were found at the site, constructed of *opus caementicium* with ciottoli of limestone and mortar. One of the buildings was of circular plan (7 m in diameter) and the other quadrangular. Numerous archaeological finds come from the site, including the remains of architectural terracotta decorations, *ceramica campana*, and a carved marble head. While no polygonal masonry is evident at the site *per se*, the site is an interesting one in this category of settlement and it occupies an interesting position topographically.

**Località ‘Filippani’ [136]**

Along the road from Giulianello to Cora lie the remains of a wall in polygonal masonry that served as the substructure for a building constructed in *opus caementicium*. The wall is preserved to 15.30 m and stands to 3 m in height. Perpendicular to the first wall is a second polygonal wall of 2.20 m in length. Yet another wall, this one having been excavated, measures 4.50 m in length and is parallel to the first wall. All three are similar with respect to the masonry techniques, although the third wall uses blocks of smaller dimension than the other two. These walls appear to provide terracing for the hillside below a structure – perhaps a villa – constructed in concrete. In terms of material finds, some *ceramica campana* and numerous fragments of painted wall plaster were recorded.

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19 Vittucci 1968, 131.
Località ‘Costa S. Nicola’ [174]

At this site there are two tracts of polygonal walling situated at different levels. The lower wall (l. 10.80 m; h. 2.15 m) is composed of a rougher type of polygonal masonry employing blocks of small dimensions. Further up the hillside 8.60 m from the lower wall is evidence that the hill has been cut in a uniform fashion along a line running parallel to the lower wall. Some 60 m up the hillside from the first wall is another polygonal wall (l. 29.80 m; h. 3.0 to 5.0 m). The remains of a quadrangular building in *opus incertum* were discovered 5 m from the lower wall. These terraces may have served a dual function, providing terracing for a tract of roadway that would have linked Cora and Norba and also serving as agricultural terraces in a secondary capacity.

Località ‘Colle Perunio’ [175]

At this site are the remains of a massive polygonal masonry terrace (l. 43.50 m). The terrace likely served as part of a cutting for a roadway but came also to support a villa and likely an olive grove.

Località ‘Costa Campana’ [183]

The remains of a *villa rustica* were discovered here. Two terraces in polygonal masonry support a square building of two rooms (11.90 by 3.50 m). There also appear to be the remains of another building in polygonal construction near to the square building, but few blocks remain.

Località ‘Monte la Rocca’ (Archi Pende, Croce Pastore) [189]

The impressive remains on this site still have not been fully interpreted. On the site, at the crest of a hill that is part of Monte S. Angelo (657 m a.s.l.), the remains of
fortifications and some buildings were discovered. Within the walls are the remains of a rectangular *opus incertum* structure built of pieces of limestone with a small quantity of mortar. The placement of the blocks is extremely accurate. The remains of terrace walls in polygonal masonry were also found at the site.

**Località ‘Capo la Mora’ (Valle Ampapa) [195]**

This site has evidence of terraces constructed in polygonal masonry. One of the terraces forms a right angle (6.30 by 1.70 m) and is situated 20 m down slope from a quadrangular structure that was covered by a vault.

**Territory of Praeneste**\(^{20}\)

**Ponte delle Pantana [196]**

The remains of a terrace wall in polygonal masonry was discovered in this location, along with numerous remains of roof tiles.

\(^{20}\) Muzzioli 1970.

Along the road leading from the Porta del Sole at Praeneste are the remains of a villa with a system of *cuniculi* and cisterns. Several terrace walls in polygonal masonry are evident in the substructures of the villa.
**Territory of Tibur**

**Ruderi di S. Pietro (i Mammalocchi) [46]**

This community, situated on the Via Valeria, rises to 327 m a.s.l. Dodwell was the first to record the ruins, and Nibby, Gell, and Fonte-a-Nive studied them subsequently. The inclination of each of these scholars was to correlate them with a lost *oppidum.* Giuliani believes that the ruins are those of a Roman villa supported by a massive terrace platform in polygonal masonry. The terrace (1. 60 m) is impressive in its construction and supported several buildings, one of which has a quadrangular plan.

[51]

Near Casale Carignano are the remains of a large podium in polygonal masonry (l. 90 m) that has been interpreted as a *basis villae.* Numerous tile fragments were discovered here and assigned by Lanciani to the Republican period.

[57]

Investigated by Rodolfo Lanciani in February 1908, this site is located near Colle Ottati and the Via Valeria. A good deal of terrace work in polygonal masonry is evident here and Lanciani interpreted the site as a village, but it is most likely that the site was a Republican villa instead.

[79]

Near the Mola del Ricupo lies a platform in polygonal masonry (l. 31.20 m). The platform still stands to a height of three courses of blocks.

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21 Giuliani 1966.

Near the medieval ruins of the “Casa della Signora” are masonry remains in polygonal technique that likely formed several terraces. A number of lead pipes were discovered here, leading to its identification as a villa site.

Excavations in November 1948 explored this site. It was interpreted as a villa platform supported by terrace walls in polygonal masonry.

This polygonal masonry podium sits close to the Via Empolitana and is preserved to a substantial degree (1.35 m). The terraces, vast in scope, do not show any evidence for permanent structure built on top.

A large villa built in opus incertum was situated in this location; the villa’s frontage measures 74 m. Tracts of polygonal walling are evident below the construction in opus incertum.

Also close to the Via Empolitana are the remains of this rectangular villa platform that was built of polygonal masonry (Bugnato Grezzo) and has been dated to the period of the Gracchi.23

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23 Giuliani 1966, 120.
Terrace walls in polygonal masonry support this rectangular platform (l. 24 m). To the southwest of the platform is another polygonal wall (l. 10 m) that is parallel to the others. Some ceramic remains and roof tiles were found on the site.

Località ‘Ara Patana’ [156]

On the southern slope of Colle Cimino are two platforms situated 10 m from one another. These polygonal masonry structures are of local limestone executed in a rough technique. Numerous shards and roof tiles were found on the site.

Upslope from the platforms at #156 are the ruins of another structure in polygonal masonry. This structure consists of three terraces executed in polygonal masonry with the lowest wall being 12 m away from the uppermost wall.

Discovered in connection with an ancient roadbed near the cemetery of Ciciliano, this site has the remains of a polygonal wall. The blocks vary in their dimensions with one tract of walling preserved to 30 m. A dry stone structure was also identified on the site. The purpose of the wall may have been an agricultural terrace system or perhaps a defensive bulwark for a small village.

Near a ruined structure in opus incertum lies a site classified as a basis villa. The structure measures 50 m across the front and forms a rectangular area. Within this terrace a
rectangular feature (3 by 6 m) in concrete was discovered. A second terrace situated along a different axis measures 45 m across the front.

[177]

A rectangular platform in polygonal masonry measuring 30 by 20 m was discovered on this site. The construction employs large blocks worked in a rough fashion. The platform is devoid of any evidence of built structures, but numerous fragments of rough tiles, common ware pottery, and coarse ware pottery were discovered on the site. Giuliani speculates that the platform supported a wooden structure with a tile roof that would have served as a farm building. This particular site is situated at the edge of a rocky floodplain, adjacent to a nearby stream.

[179]

A rectangular platform in polygonal masonry was discovered at this site, not far from the Via Valeria. The platform is preserved for at least a length of 30 m. Numerous fragments of bricks, tiles, and large dolia were found at the site.

**Ruderi di S. Silvia [205]**

The ruins of the church of S. Silvia on Colle Zappacenere were first investigated archaeologically in 1717. A tract of polygonal walling was documented in a photo taken by Thomas Ashby ca. 1905, but the wall cannot be traced on the ground today. It is assumed that the ancient material on the site may be related to a *basis villae* structure.

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This site, on the southern slope of Monte S. Angelo in Arcese, preserves the remains of an ancient road as well as a platform in polygonal masonry. Lanciani studied and sketched the site, including a study of the section of the roadbed.\textsuperscript{25} The substructure of the road was built of polygonal masonry and upslope from the road sits a square polygonal masonry platform.

A villa platform sits along the road of S. Gregorio and has a surface area of about 500 m\textsuperscript{2}. Within the terrace are the remains (8 x 4 m) of a structure in \textit{opus caementicium}.

\textbf{‘Villa of Atticus’ [232]}

Also on the Monte S. Angelo in Arcese, near the Casale Sivestrelli, sits another villa platform, commonly referred to as the “Villa of Atticus”.\textsuperscript{26} The platform measures roughly 8 by 50 m, but is poorly preserved overall. The stones used in the construction are massive blocks of limestone, most seemingly worked hardly at all.

\textbf{Miscellaneous structures in polygonal masonry}

Polygonal masonry demonstrates its utility as a building technique since it can be employed in numerous situations. The versatility of this type of masonry is evident in its continued use in the construction of Roman roads, even in to the Imperial period, as well as terrace structures for securing or reclaiming land. Polygonal masonry offer great advantages

\textsuperscript{25} Giuliani 1966, 204 fig. 241; Lanciani 1891, 153.

over other techniques when constructing terraces, not least of which is its strength and stability.

**Agricultural terraces (after Lugli)**

Among the categories into which Lugli divides structures in polygonal masonry is this group of agricultural terraces. These terraces tend to occupy hillsides or uneven terrain and consist of polygonal masonry retaining walls behind which landfill presumably permitted farming where before the terrain would have made it difficult.

**Roja plain, near Terracina**

Four parallel walls in polygonal masonry are found at this site, constructed of small blocks with a rough surface treatment. The lowest wall, whose thickness is 1.50 m, serves as a support structure for an ancient roadbed 2.90 m in width for about 1 km distance. Within the system of terraces are the remains of a villa in polygonal masonry, measuring 25 m in length. Lugli draws a direct link between the farm activities that presumably took place on the terraces and the villa.

**Territory of Amiternum – Terraces of San Vittorino**

N. Persichetti investigated this site and discovered a system of walls built in polygonal masonry.\textsuperscript{27} The first wall measures 39.60 in length and 4 m in height; the second 10 m in length; the third 20 m in length, 8.50 m in height. The walls are massive in terms of their construction, but as is often the case, little in the way of material evidence can help establish a secure date.

\textsuperscript{27} Persichetti 1902, 134.
**Guardea**

At Guardea, a site located along the Tiber valley, a series of extant polygonal walls may have served to channel water or cause it to accumulate. The dimensions of the original structure are difficult to estimate, due in part to substantial reworking and restoration. However, significant tracts of wall remain, with one measuring over 45 m in length and about 0.70 m in thickness; another tract measures about 84 m in length and has a massive thickness of 3.20 m.²⁸ Four main tracts have been identified and are positioned in a valley so as to obstruct the path of a stream flowing toward the Tiber, perhaps creating an artificial reservoir (figs. 105, 106). The masonry has been termed polygonal, but like many other occurrences in Umbria the blocks are laid in string-courses, for the most part, and lack the polyhedral appearance of the walls evident in the Pontine plain at sites like Norba and Segni. A bronze figurine of Mars was discovered here and has been dated to the fourth century BC.²⁹

**Scoppieto (Comune di Baschi)**

At Baschi a section of polygonal wall came to light in recent excavations carried out by M. Bergamini at the site of Scoppieto.³⁰ The site is elevated, situated some 470 m a.s.l.³¹ A wall of the fourth style, built of local travertine, has a length of over 28 m and still stands to 1.50 m (fig. 107). The blocks vary with respect to their dimensions and have been laid in

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²⁸ Della Rossa 2002, 22.

²⁹ Della Rossa 2002, 23 n. 36. The figurine measures 0.73 m in height.

³⁰ Della Rossa 2002, 26; M. Bergamini “Risultati dello scavo archeologico a Scoppieto.” Archeologia (2001), 2ff; Bergamini 2001, 163-78. The site of Scoppieto is located on the left bank of the Tiber between Todi and Orvieto, some 13 km from Todi. In the Roman period the site lay within the territory of the Colonia Iulia Tuder. For the location, see IGM F 130 II SO (Baschi).

³¹ Bergamini 2001, 163.
an irregular fashion (fig. 108). The excavators have preliminarily identified this tract as a terrace wall or a retaining wall, and have discovered a channel running along the base of the wall’s length.

**Comune di Giove**

A tract of polygonal walling in the Comune di Giove is not well documented, and as such little can be said about it. However, on the basis of a large tile fall discovered at the site, the suggestion has been made that the polygonal wall should be associated with a *basis villae* site.

**Comune di Lugnano in Teverina**

Not far from Guardea lies the Comune di Lugnano, where several tracts of polygonal terrace walling have been documented. The use of the walling demonstrates similar characteristics as the walls at Guardea, possibly serving to divert watercourses in order to create a reservoir. One tract, assigned to Lugli’s second style, curves slightly for a length of 17.70 m and height of 8.50 m.

Another tract at località san Valentino is most likely part of a terrace; the extant walls measure some 44 m in length, with a height of up to 2.10 m and a thickness of 3.00 m. This terrace conforms to Lugli’s third style and, on the basis of ceramic evidence, can be dated to

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32 The blocks range in size, with some measuring 0.28 by 0.40 by 0.64 by 1.04 m, while others measure 0.18 by 0.22 by 0.24 by 0.52 m. See Bergamini 2001, 167.


34 Della Rossa 2002, 40. The wall, located on private land, is preserved at 7 m length and was only documented in 1990 (cf. *Archaeologia* 11 (1990) 6ff). The wall appears in a note in Fiorletta, *et al.* 1989, 98.

35 Della Rossa 2002, 33.

36 Della Rossa 2002, 34.
the late fourth to early third centuries BC. The case of interpretation is difficult here, as with most other polygonal masonry substructures in Italy that are not obviously connected to fortification walls or temple podia. The generic assumption is that these structures are either agricultural terraces, terraces for road construction or basis villae, although in most cases little evidence can confirm the assignation to any of these categories.

**Latium**

**Santa Balbina**

The site known as Santa Balbina is located along the road from Tivoli to Vico Varo and at the site William Gell observed the remains of structures built in opus reticulatum that incorporate the remains of earlier construction in polygonal masonry.

**Tusculum – bastion**

At Tusculum, close to the piazza of the current theater, stands an opus quadratum wall built of porous tufa that is connected with a well known castellum aquae that has an ogive profile. The tufa wall abuts another, perhaps earlier wall, constructed in polygonal masonry that was composed of extremely rough blocks. A determination of any chronology for this latter wall, or its relationship to the tufa wall, seems unlikely, although some scholars have posited a date in the fifth century BC. It is possible that the stretch of polygonal wall was part of the earliest acropolis of the settlement.

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37 Shards that have been dated as late Archaic were found on the site. See *Archeologia* 5 (Feb. 1988) 9ff.

38 Lugli 1957, 1.164.
Territory of Atina (Province of Frosinone)

In the cemetery of the town of Atina are the remains of a terrace wall in polygonal masonry that was reinforced with opus latericium construction. Close to this terrace wall are the remains of a villa found to have a mosaic-paved forecourt when excavated in 1886. The remains of the villa were substantially damaged first by an earthquake in 1915 and then by aerial bombardment in 1944 during World War Two.

Samnium and Lucania

The remains of many circuit walls built in polygonal masonry lie within the regions of Samnium and Lucania. Both regions are mountainous and, as such, many settlements and outposts may be found in the uplands with polygonal walls. The walls in these two regions demonstrate the same degree of regional variation evident elsewhere in the study area, reinforcing the notion that local people made choices based on available materials, topography of the site, and other similar considerations. As a result many of the walls in Samnium and Lucania tend to be rough in their appearance, what Lugli would have considered the first style of polygonal masonry. Stephen Oakley has studied the walls in Samnium, while a recently published study by Roberto De Gennaro addresses the fortifications in Lucania. Both of these studies are excellent local treatments of the masonry and the archaeological remains, but for both Samnium and Lucania the task remains of considering these circuit walls in broader contexts.

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39 Beranger 1980, 81.

40 Oakley 1995; De Gennaro 2005.
Table 1. Statistics for sites with polygonal circuit walls

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<th>HEIGHT (IN METERS)</th>
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<td>Spoletium</td>
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<td>-</td>
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<tr>
<td>Venafrum</td>
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<td>Verulæ</td>
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<td>-</td>
<td>5</td>
<td>-</td>
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<tr>
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