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**ROUND TEMPLES IN ROMAN ARCHITECTURE
OF THE REPUBLIC THROUGH THE
LATE IMPERIAL PERIOD**

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VOLUME I

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CHAPTER I: INTRODUCTION

I PURPOSE AND BACKGROUND

This thesis will address the history and development of round temples in an effort to both define the round temple as an architectural type and situate it within the repertory of Roman architecture. Round temples, first attributed by Roman literary tradition to the seventh century BC, become popular from the late Republic, when Rome gains access to the architectural and artistic legacy of Greece. In the Imperial period, the type appears widely throughout the Empire. Outside of Rome and central Italy, round temples are most frequent in areas that formed part of the Greek world. The round form continues to be used for Roman temples into the reign of Constantine, when it begins to appear in Christian churches and baptistries. His reign will serve as the endpoint of this thesis, which will start with the earliest round temples of Archaic and Republican Rome.

The history of round temples has not been studied in a comprehensive way since B. Altmann's fundamental *Die italischen Rundbauten* (1906). Altmann's work amassed all the evidence available at the time on prehistoric to Imperial round buildings used for domestic, public and religious purposes. To some extent, it has been supplemented by M. Weber's *Baldachine und Statuenschreine* (1990), which discusses Roman round buildings that displayed statues in both sacred and secular contexts. Round temples also appear in collected works on Greek round buildings or tholoi. Since K. T. Pyl's 1861 publication, *Die griechischen Rundbauten in Zusammenhange mit dem Götter- und Heroencultus*, tholoi have been examined with regard to their form, function, and development from the Archaic through the

Hellenistic periods. Discussed by numerous authors,¹ tholoi have been addressed most thoroughly by F. Robert (1939), who assigns them a chthonic function,² and more recently by F. Seiler (1986) and G. Roux (1992), who conclude that they played a variety of roles from the sacred to the secular.³

Many authors have sought to extrapolate from tholoi to Roman round temples, suggesting that they honored hero gods as well as goddesses like Vesta, the patron of the hearth.⁴ In their studies of Roman round buildings, Altmann and Weber do not address the religious functions or attributions of round temples. This aspect, like the design and decoration of individual round temples, forms the subject of numerous articles. A few round temples even receive lengthy monographs like the Temple of Hercules Victor *ad portam Trigemina* (#44), which is examined by F. Rakob and W.-D. Heilmeyer in their *Der Rundtempel am Tiber in Rom* (1973).

Previous studies of Roman round temples either discuss them in the context of other round buildings or on a case-by-case basis. This thesis will aim to fill the gap in round temple scholarship by examining them both individually and in unison as examples of an independent architectural type.

II QUESTIONS TO ADDRESS

To define the round temple as an independent type within the context of Roman architecture, it becomes necessary to examine evidence from individual

¹ For a comprehensive list and a summary of their arguments, see Robert 1939, 14-108 and 180-3, to which may be added Will 1951, Hauteceur 1954, van Essen 1960, Roux 1984 and 1992, and Seiler 1986.

² Robert 1939, 155 and 423-5; cf. Pyl 1861 (as *heroa*) and Leroux 1913.

³ Seiler 1986, *passim*; Roux 1992, 177-8; cf. 1984, 170-1, and Weber 1990, 111. They have also been identified as *prytaneia* (Frazer 1885 and Charbonneaux 1925, 158-78) and *odea* (Thiersch 1908-1909, 27-50 and 67-95), while their form has been derived from hearths (Pyl 1861, Pomtow 1910, 52 fol. and 66, and Fiechter 1937, 314-5), huts (Pfuhl 1905, 331 fol., Leroux 1913, Rider 1916, and Hauteceur 1954, 19-22), and tombs (Leroux 1913 and van Essen 1960, 96).

⁴ Frazer 1885; Pomtow 1910, 52 fol. and 66; Fiechter 1937, 314-5.

examples with a view to answering questions that pertain to the type as a whole. Foremost among them is simply, 'Why build a round temple as opposed to a rectangular temple?' Though not uncommon, round temples are vastly outnumbered by rectangular temples in both Italy and the provinces. This fact would suggest that round temples had some intrinsic appeal which motivated their founders to employ the round form. This appeal could be aesthetic or, as Seiler and Roux have suggested in connection with Greek tholoi,⁵ could be explained by religious, social, or topographical factors.

To determine which, if any, of these considerations played a part in the development and use of Roman round temples, this thesis will examine how ancient Romans viewed the round form, specifically round temples, as well as how they founded and located them to see whether this process had an impact on the temples' design. Additionally, it will ask if any particular gods received round temples and if their cult requirements stipulated the use of the round form. As patrons played a significant role in determining the appearance of their temples, their aims and agendas will be addressed in so far as these may shed light on their choice of form. From a topographical perspective, the settings of round temples will be examined to see if they were better enhanced by round than rectangular buildings.

Moreover, the materials, techniques and ornaments employed by round temples will be evaluated to determine whether they are comparable to those used in rectangular temples. How well they adhere to contemporary trends in construction may help to situate them within the context of Roman architecture. Moreover as size and proportions are important parts of the design process, these will be discussed with regard to round temples, and when possible, Roman architecture as a whole.

⁵ Roux 1984, 170-1, and see above.

Coupled with an analysis of their design, how the type developed both chronologically and geographically may show whether a single consideration determined their use throughout the millennium in which round temples are known or attested. If not purely religious, social, topographical or aesthetic, this study may show what factors came together in promoting the construction of round temples in Italy and abroad.

III COVERAGE

To best address the questions surrounding the use and development of Roman round temples, this thesis will examine all Classical round temples attested in the Roman world from the Archaic period through the early fourth century AD. Excluding Romano-Celtic *fana*, which owe much of their form and ornament to Celtic traditions,⁶ the round temples addressed in this thesis may be defined as round buildings, to which religious functions can be or have been reasonably ascribed. They take the forms of monopteroi, peripteroi and drums, occasionally preceded by porches.

The accompanying map reveals the distribution of round temples throughout the Roman empire, showing the highest concentration in Rome and central Italy followed by Greece and Asia Minor. Chronologically speaking, round temples are attested in Italy throughout the millennium covered by this thesis and in the provinces from the first century BC. Tholoi, studied as comparanda for their form and design, appear throughout mainland Greece between the sixth century BC and the late Hellenistic period.

⁶ For an overview of these round, octagonal and square shrines or *fana* (Varro *ling.* 6.54; Cic. *div.* 1.90; Suet. *Iul.* 54.2; Vitruvius 1.2.7 and 3.1, 4.1.3 and 5), found throughout western Europe in the early-mid Imperial period, see Horne and King 1980, 523-7 figs. 17.25-9, Rodwell 1980b, 568-70 and 582-3 fig. 18.4 (Britain), and Gros 1996a, 184 and 199-203.

IV ORGANIZATION: SOURCES, METHOD AND CATALOGUE

The materials employed in researching this thesis include archaeological remains, the texts of ancient authors and inscriptions, late Republican and Imperial coins, and other iconographic sources. While some of these sources are ancient like the Severan Marble Plan and sculpted reliefs, others date to the Renaissance when architects and topographers began to express an interest in recording ancient sites. Many of their drawings preserve verbal accounts of their discoveries, which may be confirmed by modern excavation reports.

Using this base, Chapter II will analyze the terms employed by Roman authors to denote or describe round temples, together with Vitruvius' approach to the design of temples, both round and rectangular. Chapter III will examine the concept of a *templum* as an essential component in the foundation of any temple building and will see whether this concept had an impact on the development of Roman round temples. This Chapter will also address the first attested round temples in Italy, introducing a chronological construct that will inform the layout of Chapters IV through VII. Set in their historical and architectural context, round temples will be examined from various standpoints including the divinities they honor, their locations, their patrons, their design, and the elements, both architectonic and sculptural, that comprise their decoration. After evidence for both individual round temples and the architectural type is discussed, Chapter VIII will address the issues raised in this Introduction in an attempt to answer the question of why round temples were built in the Roman world.

As an aid to this investigation, Volume II comprises a Catalogue of supplementary material for Roman round temples and their Greek comparanda. This material includes an outline of their topographical contexts, evidence for their dates,

their patrons and their architects, descriptions of their design and physical remains, literary, epigraphical and iconographic sources relevant to their analysis, and an account of their decorative programs. In addition, the dates and extent of their excavations are included together with any disproven theories about their attribution or ornament. Each entry concludes with pertinent bibliography, references to the text, Tables and Charts, which present their dimensions and proportional relationships,⁷ scaled Plans, and Plates as illustrations of their context, remains and elevations. Following the Catalogue, this Volume includes any supplemental Plates or Charts required by each Chapter and a full Bibliography applicable to both Volumes.⁸

⁷ See Vol. II 'Notes on the Tables and Charts.'

⁸ See Vol. II 'Notes on ancient source citations and the Bibliography'

CHAPTER II: ANCIENT SOURCES ON ROUND TEMPLE DESIGN

I ANCIENT TERMINOLOGY AND CONCEPTIONS OF THE ROUND FORM

Aedes, templum, tholus, and pantheum

Latin authors used a variety of terms to denote Roman round temples. Chief among them were *aedes*,¹ *templum*, and *tholus*. While *aedes* and *templum* were common ways of referring to temples, both round and rectangular,² *tholus* differed in so far as it expressed the circular form of a round temple without assigning it a religious function. This distinction in terminology is underscored by the fact that *tholus* was also used to designate round dining rooms³ and market buildings.⁴

The Latin *tholus* is derived from the Greek *θόλος*, a term which F. Robert has defined by analyzing its use in inscriptions and literature.⁵ According to Robert, *θόλος*, when employed in connection with free-standing round buildings,⁶ denotes their conical or tent-shaped roofs.⁷ After the most conspicuous element of their

¹ *Aedes* is occasionally qualified by *rotunda* (cf. Serv. *Aen.* 9.406, quoted below). This is comparable to *οικοδόμημα περιφερές* applied to the Greek shrine of Zeus and Aphrodite at Sparta (Paus. 3.12.9-11). Robert 1939, 98.

² Ov. *fast.* 6.265 and 281, and Serv. *Aen.* 7.153 (Temple of Vesta, Forum, Rome, #57), Plin. *nat.* 36.4.38 (Pantheon, Rome, #50), and *Reg. Urb.* p. 111 and 172 (Temple of Sol, Rome, #53). *Templum* as “temple building” marks a simplification of its original meaning (see Chap. III ‘Augural divination in Archaic Italy: defining the Roman *templum*’), which becomes popular in the Imperial period. Godfrey and Hemsoll 1986, 200.

³ Varro (*rust.* 3.5.12) refers to his aviary-cum-dining room at Casinum as a *tholus*, while Martial (*epigr.* 2.59.2) remarks on a *Caesareus tholus*. The latter can be identified as a dining room, whose remains may lie beneath the triclinium and nymphaea of the Domus Aurea (cf. Cassatella 1986, 535-9, and 1995, 63-4; Cecamore 1994-1995, 11-2, incorrectly links these remains to the Shrine of Vesta on the Palatine, see Chap. V #56). For alternative readings of Martial’s *tholus*, see Rodríguez Almeida 1993d, 213 (Arch of Titus) and Liverani 1996, 249 (Mausoleum of Augustus).

⁴ Varro (*Men.* 23) refers to the *tholus* of the 1st c. BC macellum at Rome. De Ruyt 1983, 158.

⁵ Robert 1939, 46-100; cf. Roux 1992, 177-82.

⁶ *θόλος* can also refer to hemispherical head bandages, cf. Galen 18.788 and 790-1, and Robert 1939, 59-60.

⁷ Strab. 4.4.3; cf. Suidas, Hesychius, and the *Etymologicum Magnum* quoted by Robert 1939, 47-52. Similarly, *σκιάς* or “parasol” may signify the roof shape of round buildings like the Skias in the Athenian Agora (Paus. 1.5.1, #6). Robert 1939, 153-4.

design, individual buildings came to be known by their roofs or *θόλοι*. Like later Roman *tholus*, their designation as *θόλοι* reflected their form, while their functions ranged from the sacred to the secular.⁸

The Latin *tholus* appears several times in connection with Roman round temples. In laying out guidelines for their design, Vitruvius uses *tholus* to refer to both the conical roofs of round temples and the buildings as a whole.⁹ His two-fold definition is echoed by Servius, who denotes both the Temple of Vesta in the Roman Forum (#57) and the Pantheon (#50) as *tholus*.¹⁰ Moreover, Ovid uses this term to describe the roof of the Temple of Vesta,¹¹ while Martial applies it to a round Shrine of Cybele (#34).¹² A final term which enjoys limited popularity in the Imperial period is *pantheum*, coined to designate round buildings whose plans reflected that of Hadrian's Pantheon in Rome.¹³

Cosmic implications of the round form?

The importance placed by ancient authors on a round building's roof, reflected in the term *tholus*, is underlined by Cassius Dio in his discussion of Agrippa's Pantheon (#50). He suggests that Agrippa chose the building's name "because of its

⁸ *θόλος* as an assembly area: *IG III*, 764 and Paus. 1.5.1 (Skias at Athens, #6), as a hero's tomb: Paus. 2.27.3 (Tholos in the Sanctuary of Asklepios at Epidauros, #13), as a temple, treasury or heroon of Phylakos: *Vitr. 7.praef.12* (Tholos in the Sanctuary of Athena Pronaia at Delphi, #12); as a shrine: Athen. 4.141E (the *νάος θολοειδής* on Ptolemy Philopater's yacht); and as a bath building: *Alciph. ep.* 3.40, Athen. 11.501c-e, *P.Magd.* 33 and 42, and *P.Zenon.* 59665 (cf. Robert 1939, 57-9 and Nielsen 1990, 7).

⁹ *Tholus* as a roof: *Vitr.* 4.8, cf. *Verg. Aen.* 9.406-8, *Varro rust.* 3.5, and Robert 1939, 67-8 and 75-6; as a round temple: *Vitr.* 7.5.5: *tholorum rotunda tecta*.

¹⁰ *Serv. Aen.* 9.406: *Tholus proprie est veluti scutum breve, quod in medio tecto est, in quo trabes coeunt: ad quod dona suspendi consueverant... Alii tholum aedium sacrarum dicunt genus fabricae, ut Vestae et Panthei est. Alii tectum sine parietibus columnis subnixum. Aedes autem rotundas tribus diis dicunt fieri debere, Vestae, Dianae, vel Herculi vel Mercurio.* Similarly, the Pantheon is referred to as *θολοειδής* by Cassius Dio (53.27, quoted in #50).

¹¹ *Ov. fast.* 6.281-2, quoted in #57.

¹² *Mart. epigr.* 1.70.9, quoted in #34.

¹³ The Mausoleum of Flavius Julius Catervius and his wife Septimia Severina is described as a *pantheum cum tricoro* (*CIL IX* 58.66). However, see Scranton 1951, 3 (Pantheon at Corinth) and Will 1951, 241-4, for Panthea, namely "temples to all the gods," which were not round.

vaulted roof, which resembles the heavens.”¹⁴ Similarly, Servius likens the roofs of all round temples to the sky,¹⁵ while Plutarch suggests that Numa intended the Temple of Vesta in the Roman Forum (#57) to imitate the world.¹⁶ For Macrobius, the oculus of the Roman Temple of Zeus Sebazio at Thrace reflects the shape of the sun that illuminates its interior.¹⁷ Even Varro’s discussion of his round aviary at Casinum equates its core with the earth and its roof with the heavens, its cupola depicting elements of the sky and the hours of the day and night.¹⁸

These sources raise questions about the extent to which architects and patrons employed the round form to convey their cosmological beliefs.¹⁹ In his controversial article entitled “The Dome of Heaven,”²⁰ K. Lehmann supports this connection, citing examples of domes that, like that of Varro’s aviary, depict the heavens. While Lehmann has been criticized both for the paucity of his examples and for their broad chronological and geographical spread,²¹ his conclusions may be examined in light of the few Roman authors who address the idea of the cosmic cupola.

Both Ennius and Varro liken the sky to the vault of the heavens,²² while Suetonius describes a ceiling in Nero’s Domus Aurea as rotating day and night like the sun and the stars.²³ Suetonius’ remark, applied to an Imperial dining room or audience chamber, recalls Martial and Statius, who compare Domitian’s audience hall

¹⁴ Cass. Dio 53.27.3.

¹⁵ Serv. *Aen.* 1.505.

¹⁶ Plut. *Numa* 11.

¹⁷ Macr. *Sat.* 1.18.11.

¹⁸ Varro *rust.* 3.5.9-12; cf. Stierlin 1984, 130-6 and Chap. IV #38. Based on Varro, Coarelli (1997, 283-4) divides the aviary into four sections: an “aquatic” section populated by fish, a middle “terrestrial” section, where meals were consumed, an upper “air” filled with birds, and a “celestial” cupola.

¹⁹ Roman conceptions of cosmology were based on astrological ideas inherited from the Greeks, in which the stars and the zodiac played a role in regulating human life. Stierlin 1984, 142-5, and see Chap. III ‘Augural divination in Archaic Italy: defining the Roman *templum*.’

²⁰ Lehmann 1945.

²¹ For: Smith 1950, 52-5, and 1956, 56-70, MacDonald 1982, 73-4 and 118-21, and Stierlin 1984, 113-213; against: Ward-Perkins 1956, 210-2 and Joyce 1990, 372-3.

²² Ennius quoted in Cic. *orat.* 3.40.162, and Varro *ling.* 5.19; cf. Vitruvius 7.3.3 and 8.2.4.

²³ Suet. *Nero* 31.2. Machines designed to reproduce the movement of the firmament appear in the works of Plato, Euxodes of Cnidus, Aratos, Ptolemy, and Vitruvius (9.7-8). For sources, see Stierlin 1984, 136-8.

to the heavens.²⁴ This may imply that Domitian's room was vaulted, like the judgment hall of Apollonius of Tyana. Philostratus compares its dome to "the heavens, covered with sapphire stars."²⁵

The use of cosmic imagery in Imperial settings goes back to the tents of Persian rulers, whose "round awnings were called heavens."²⁶ Adopting this tradition after his conquest of Persia, Alexander the Great, known as the Son of Heaven, "had a magnificent tent made ... which carried a sky of rich workmanship."²⁷ Roman emperors like Nero and Domitian, possibly inspired by Alexander, may have incorporated celestial roofs into their audience chambers to emphasize their status and that of the Imperial cult.²⁸

While these sources suggest that cosmic imagery has long-standing associations with divinity and kingship, they do not explicitly state that the structures which displayed this imagery were round.²⁹ This might imply that celestial symbolism had closer ties to the Imperial cult than to round buildings. In the case of Roman round temples, Plutarch's suggestion that the Temple of Vesta resembled the world, while surely the terrestrial counterpart of the heavens, may be intended to underline the scope of her authority.³⁰ Similarly, as Cassius Dio only knew the Pantheon as reconstructed under Hadrian, his affirmation that Agrippa placed a high value on its cosmic symbolism is open to doubt.³¹

²⁴ Mart. *epigr.* 7.56, 8.26, and 9.91, and Stat. *silv.* 3.4.47-8 and 4.2; cf. Cass. Dio 77.11.1, and Godfrey and Hemsoll 1986, 204 and 208 n. 64.

²⁵ Philostr. *Apollon.* 1.25; cf. Ward-Perkins 1956, 211. However, as Philostratus wrote in the 3rd c. AD, his description may not be reliable.

²⁶ Hesychius *s.v.* *οὐρανός*, cf. Smith 1950, 53 and 81.

²⁷ Plut. *Alex.* 3.

²⁸ Smith 1950, 82; Ward-Perkins 1956, 211.

²⁹ It is likely that Domitian's audience hall and the Persian tents were rectilinear.

³⁰ The sun visible through his Temple's oculus may indicate the source of Zeus Sebazio's authority, cf. Macr. *Sat.* 1.18.11.

³¹ Chap. V #50.

Even though celestial vaults may have formed part of the iconography of ruler cults, based on the evidence supplied by ancient sources, there is little to support Lehmann's claim that circular forms, particularly domes, were used in Roman round temples as a means to express the astrological beliefs of their founders.

II VITRUVIUS ON ROUND TEMPLE DESIGN (Plates II.1-4)

An ancient author who deals explicitly with round temples, albeit their design rather than their symbolic content, is Vitruvius. They appear in Book IV of his *De Architectura*, where he speaks about the forms and proportions of temples.³² In Book I, he lays the groundwork for this discussion by outlining the arithmetic and geometric principles behind their design and construction.³³

The principles that inform Vitruvius' text have their origins in Greek thought. Among the ideas that appealed to him were measure and the commensurability of parts, defined by Plato as "everywhere identifiable with nature, beauty and excellence."³⁴ These were expressed in terms of numbers, particularly simple or round numbers like 6 and 10, which were hailed as perfect by Greek mathematicians and philosophers.³⁵

Both measure and commensurability provide means by which proportional systems may be established. That such systems were important to Greek architects is evident from extant buildings as well as from references to lost architectural

³² Vitr. 4.8.1-3.

³³ Vitr. 1.1.4 and 3.1.1-9.

³⁴ Plat. *Phileb.* 64 E. These ideas were founded on the conviction that order, grounded in mathematical relationships, formed the basis for world events. von Naredi Rainer 1982, 11-4; Wilson Jones 1989a, 60, 1989b, 122-3, and 2000, 10.

³⁵ The Euclidians favored 6 (Eucl. *elemen.* 7.def.2) due to the proportional relationships between its factors (cf. Vitr. 3.1.6), while the Pythagoreans preferred 10 (Pythag. *Philol.* fr. B4; cf. Vitr. 3.1.5) as the number of fingers on both hands. Gros 1976b, 698-9; von Naredi Rainer 1982, 36 and 40.

treatises.³⁶ Among them, the treatise of the Hellenistic architect Hermogenes, whom Vitruvius holds up as an authority,³⁷ addressed the system of proportions he employed in the second century BC Temples of Artemis Leukophryene at Magnesia-on-the-Meander and of Dionysos at Teos.³⁸ Similarly, building plans preserved at Rome and Ostia³⁹ show that Roman architects placed a high value on observing mathematical principles in their designs.⁴⁰

Against this backdrop, Vitruvius defines symmetry and proportion as they relate to Roman architecture.⁴¹ For him, *symmetria* is “a proper agreement between the members of the work itself, and the relation of the parts and the whole general scheme, in accordance with a certain part, selected as standard.”⁴² This concept, reminiscent of the Greek ‘commensurability of parts,’ relies on the use of a “certain part” or module. By means of proportion, this module, usually defined as the lower column diameter, can be used to relate the building’s parts to the whole.⁴³

While symmetry and proportion enable a plan and elevation to be fashioned according to ideal mathematical principles,⁴⁴ Vitruvius admits that it may be necessary to adjust a temple’s design in response to questions of perception, utility, and the specifications of the site. These adjustments, made with intelligence and

³⁶ Vitr. 7.praef.12. Ionic buildings provide better evidence for Greek proportional theories in practice than Doric, as the evolution of the Doric order was both longer lasting and more pronounced. Coulton 1974, 61-86.

³⁷ Vitr. 7.praef.12, cf. 3.3.8.

³⁸ Theodoros of Phocaia also published a treatise on his design for the Tholos in the Sanctuary of Athena Pronaia at Delphi (Vitr. 7.praef.12 and #12).

³⁹ Haselberger 1997, 82; Wilson Jones 2000, 50-7. Of particular relevance here is an elevation which depicts the Pantheon’s pediment, Chap. V #50.

⁴⁰ Like Greek builders, Roman architects used straight-edges (*euthygramma*), rulers (*regulae*), and compasses (*circini*) to produce architectural plans (*ichnographia*) and elevations (*orthographia*), cf. Vitr. 1.1.4 and 1.2.2. Jacobson 1986, 69; Wilson Jones 2000, 64.

⁴¹ As some of Vitruvius’ terms lack clear definitions, caution is advisable when interpreting his design theories. Scholfield 1958, 16-9.

⁴² Vitr. 1.2.4, cf. 6.2.1.

⁴³ Vitr. 3.3; cf. Scholfield 1958, 25-6. Cicero (*Tim.* 4.13) suggests that Greek architects employed modules as part of their proportional systems. A good example is the Tholos at Epidauros (#13), which uses modules to determine its intercolumnations. Jacobson 1986, 70 n. 15; cf. Gros 1976b, 677-8.

⁴⁴ Vitr. 3.1.1, cf. 1.2.2.

common sense, should ensure that *eurythmia* is achieved.⁴⁵ Vitruvius defines *eurythmia* as the condition whereby “the members of a work are of a height suited to their breadth and a breadth suited to their length.”⁴⁶ Finally, he recommends that questions of *decor* be considered when designing a building, so that its form, size, and ornamentation reflect its function.⁴⁷ Taken together, as Vitruvius claims, these principles guarantee that the fundamentals of architecture, namely durability, convenience, and delight, are achieved.⁴⁸

Coupled with modules, Vitruvius stresses the importance of establishing simple arithmetic ratios between parts. Occasionally, in the case of complex problems, he recommends that geometry, based on the use of compasses and rulers, be employed,⁴⁹ although he is wary of incorporating irrational numbers into design.⁵⁰ Relying on arithmetic therefore, Vitruvius describes the proportions of the ideal man, wherein the principle parts are fractions of the whole and the secondary parts appear as fractions of the principle part to which they belong.⁵¹ This system results in a harmonic relationship between parts in line with his conceptions of symmetry and proportion.⁵²

⁴⁵ Vitr. 5.6.7 and 6.2.1. Wilson Jones 1989a, 64, 1989b, 135, and 2000, 43 and 59.

⁴⁶ Vitr. 1.2.3. For the Greek origins of *eurythmia*, see von Naredi Rainer 1982, 16.

⁴⁷ Vitr. 1.2.5; cf. Cic. *orat.* 3.180, and Wilson Jones 2000, 43-4. For the Greek roots of this concept, see von Naredi Rainer 1982, 17-8.

⁴⁸ Vitr. 1.3.2. See Wilson Jones 2000, xi and 40, for a discussion of *ordinatio*, *dispositio*, and *distributio*, which Vitruvius (1.2) includes among his list of principles.

⁴⁹ Vitr. 1.1.4 and 2.2. He suggested that geometry dictate the plans of theaters (5.6.1-6), the design of Ionic capitals (3.5.5), and entasis (3.3.13), cf. Wilson Jones 2000, 127. According to Wilson Jones (1989b, 133), ancient sources do not mention geometry being used in building elevations.

⁵⁰ Vitruvius advises that irrational numbers be employed in limited instances, including the design of Doric fluting (4.3.9), Ionic volutes (3.5.5-6), the abacus of Corinthian capitals (4.1.11), and the atria of houses (6.3.3, cf. Vitr. 9.praef.4-7, and Peterse 1985, 51-2). His reluctance to use them may stem from the fact that irrational numbers are generally incompatible with modules. Gros 1976b, 671-82.

⁵¹ Vitr. 3.1.2-4. In accordance with *symmetria*, the Vitruvian man relies on measure, ratio, number and shape (cf. Plat. *Nomoi* 653e, and von Naredi Rainer 1982, 15). Wilson Jones 1989b, 123-4; cf. Jacobson 1986, 123-4.

⁵² An harmonic scale is used in the design of Attic and Ionic bases (Vitr. 3.5.1-3) and Ionic entablatures (Vitr. 3.5.10-1). Scholfield 1958, 21-3; Gros 1976b, 700-3.

For Vitruvius, architecture should follow nature by ensuring proportional relationships between a building's parts.⁵³ As an illustration of this concept, he outlines the design of his basilica at Fanum, where round, commensurable numbers, namely fractions or multiples of 6 and 10, are related by arithmetic means.⁵⁴ Appropriate for secular buildings, this method of design is of paramount importance in religious architecture, wherein "the excellences and faults endure forever."⁵⁵

Vitruvius prescribes specific guidelines for the plans, elevations and orders of temples. In the case of round temples,⁵⁶ he relates their dimensions, via ratios, to the diameter of their podium stylobates.⁵⁷ In monopteroi, the stylobate diameter should equal the height of the columns and three times the width of the stairs, while in peripteroi, the ambulatory and cella represent respectively one-, three- and one-fifths of the podium. Regarding the columns of monopteroi, Vitruvius relates the lower diameter to the column height by 1:10, resulting in a pycnostyle arrangement,⁵⁸ and to the architrave height by 2:1.⁵⁹ Further, in peripteroi, he equates the height of the columns and the diameter of the cella, and sees the height of the roof as one-half of

⁵³ Vitr. 3.1.4; cf. Arist. *Phys.* 199a 15, and von Naredi Rainer 1982, 16.

⁵⁴ Vitr. 5.1.6-7; Wilson Jones 1989b, 124. It is significant that Vitruvius does not rely on modules in his own design.

⁵⁵ Vitr. 3.1.4.

⁵⁶ Vitr. 4.8.1-3.

⁵⁷ Similarly, Vitruvius' system of proportions for theater architecture (5.6.1-6) is based on the diameter of the orchestra. Jacobson 1986, 70-1.

⁵⁸ Vitruvius (3.3) lays out five possible arrangements based on the relationship of the lower column diameter to the intercolumnations and column heights. By using this measure, he is able to focus on elements of the order's design which determine its slenderness and help to establish its rhythm. Wilson Jones 1989a, 35 and 61, and 2000, 120.

⁵⁹ As J. Coulton has pointed out, for a monopteral temple whose stylobate diameter is 20 feet and lower column diameter (lcd) is 2 feet, the interaxial diameter of the colonnade equals 17½ feet (the stylobate diameter of 20 minus the lcd of 2 minus ½ as the setback from the stylobate edge necessary to accommodate the column bases, cf. Vitr. 3.5.1 at lcd/4). The interaxial circumference is 17½ times Π or approximately 55 feet, which, when divided by 5 feet as the lcd plus the intercolumnation based on a pycnostyle arrangement (i.e. 1½ lcd), results in 11 column spacings. While this works for a monopteros of any diameter (provided that the lcd/4 setback is retained), it presupposes a temple of 11 columns. Moreover, if the same method is applied to peripteroi, the results are less satisfactory unless a larger setback is employed.

the podium diameter. Finally, he stipulates that the finials of peripteroi, in their height and diameter, should reflect the column capitals.

Vitruvius makes some recommendations based on modules in the case of the Doric order, and on lower column diameters for the Ionic and Corinthian orders.⁶⁰ The lower column diameter in effect functions as a module,⁶¹ establishing the heights of the Ionic base, capital and architrave⁶² and the height and diameter of the Corinthian capital.⁶³ On Corinthian, the order most widely used during his lifetime, Vitruvius makes a few additional remarks: namely, its columns should resemble the Ionic order and its entablature should include a combination of Doric and Ionic features.⁶⁴

While even the most casual observation of Roman round temples reveals that they follow Vitruvius' principle of *decor*, attaining the level of beauty and utility appropriate for their function, only an analysis of their dimensions can determine how well they adhere to his notions of symmetry and proportion.⁶⁵ Although their state of preservation varies considerably, the remains of round temples may show what if any modules they employed, whether arithmetic or geometric ratios played a part in their design, and to what extent their plans and elevations were modified to promote *eurythmia*.

⁶⁰ Vitruvius (4.1.6-10 and 4.2.1-3) provides fanciful explanations of the origins of the orders. For more plausible derivations, see Wilson Jones 2000, 136.

⁶¹ Jacobson (1986, 71) points to the fortress of Herodium in Judea, ca. 20 BC, as an early example of a round building based on a modular plan. However, as he derived its system of proportions from the diameter of the perimeter wall, his module does not adhere to Vitruvius' definition (see above).

⁶² Vitr. 3.5.

⁶³ Vitr. 4.1. Using modules based on a division of the temple's façade, Vitruvius (4.3) addresses the shaft, capital and architrave dimensions suitable to the Doric order.

⁶⁴ Wilson Jones 1989a, 61. He makes no mention of the modillion cornice, developed in the late Republic, which becomes a feature of Augustan Classicism, see Gros 1976a, 197-207, and Chap. IV 'The entablature.'

⁶⁵ See Chaps. IV-VII 'Proportional analysis.'

PART I: THE ARCHAIC AND REPUBLICAN PERIODS
CHAPTER III: THE ARCHAIC AND EARLY-MID REPUBLICAN PERIODS

I EVIDENCE FOR ROMAN ROUND TEMPLES IN THE ARCHAIC AND EARLY-MID REPUBLICAN PERIODS

A total of six round temples can be ascribed to the period between the beginnings of Rome and the late third century BC.¹ While five of these temples were located in Rome, one was sited at Lavinium. Of the five temples, two may be dated to the seventh century, one to the sixth century, and two to the fifth century BC. Although far from certain, the Shrine at Lavinium (#17) is probably contemporary with a nearby sixth century sanctuary.²

Round temples founded in the seventh century BC:

The Temple of Vesta, Forum, Rome (#57)

Located in the Roman Forum, the Temple of Vesta (#57) forms the centerpiece of a complex of buildings closely associated with her cult.³ Evidence provided by literary and archaeological sources ascribes the Temple to the seventh century BC. In addition to accrediting Numa with its foundation,⁴ ancient authors attribute the Temple's *sacra* to Aeneas⁵ and name Romulus' mother, Rhea Silvia, an early Vestal or priestess of Vesta.⁶ Their dating is substantiated by seventh century

¹ Depictions of round monopteroi on Etruscan bronze mirrors (see Weber 1990, 105-6 n. 553 and 219 cat. M2-3) may serve as additional evidence that round temples existed in Italy as early as the Archaic period.

² See #17 below.

³ For Vesta's cult, see Brelich 1949.

⁴ See #57. Its foundation has also been attributed to Romulus. Richardson, jr. 1992, 412.

⁵ Among these *sacra* was the Palladium brought by Aeneas from Troy, see #57.

⁶ Lugli 1946, 202.

finds uncovered near the Temple, including part of a rectilinear wall⁷ and a votive deposit,⁸ as well as by remains of the Atrium Vestae,⁹ the Regia¹⁰ and the Domus Regis Sacrorum,¹¹ dating from the seventh to the fifth centuries BC.¹²

While the votive objects indicate the heart of the sacred area, the wall formed one of its limits. Running between the Temple and the Atrium Vestae, it established a boundary between the sacred area with its Temple and altar,¹³ and the domestic Atrium. Although the wall probably demarcated all four sides of the area, it did not represent the cult's *templum*, as the Temple of Vesta was not inaugurated.¹⁴

According to Ovid, in its original form, the Temple resembled a primitive hut of wattle and daub,¹⁵ similar to ninth and eighth century BC huts found on the Palatine.¹⁶ Further, he remarks that a fire burned continuously inside its cella.¹⁷ His description may reflect both legends about the first Temple and the shape it assumed in his own lifetime. The first real evidence for its form consists of a set of circular foundations dated to the late third century BC.¹⁸ They incorporated a large

⁷ Scott 1993a, 11 and 17; Coarelli 1995k, 100-2.

⁸ Bartoli 1933, 259-60; Gjerstad 1960, 310-20 (inventory of the deposit) and 372-4; Scott 1993b, 161-5.

⁹ For the plan and phases of the Atrium Vestae or house of the Vestals, see Jordan 1886, 216, Bloch 1936, 216-25, Scott 1993b, 174-5, and Coarelli 1995k, 100-5.

¹⁰ From the Regia, the Rex Sacrorum and the Pontifex Maximus, who assumed the duties of the Rex by the end of the 2nd c. BC, oversaw the worship and practices of the Vestals. Coarelli 1995k, 97-9 (plan); Papi 1995, 169.

¹¹ For its function and location, see Ser. *Aen.* 8.363, Plin. *epist.* 4.11.6 and Fest. p. 372 L, and for its remains, see Papi 1995, 169-70.

¹² Scott 1993b, 166-7; Papi 1995, 169-70.

¹³ In addition to the altar attested by Ovid (*fast.* 4.731-4), the well which contained the votive deposit and a pit for plantings (a vestige of the *lucus Vestae*?; cf. Cic. *div.* 1.45.101) were sited in this precinct. Scott 1993a, 16, and 1999c, 130.

¹⁴ See #57 and 'Conclusion' below. Servius (*Aen.* 7.153 and 9.4) suggests that the Temple did not need to be consecrated *augurio*, as the senate could not convene where women assembled. Ziolkowski 1992, 212.

¹⁵ Ovid (*fast.* 6.254-60 and 295-8) notes that the Temple was roofed with thatch and walled with willow.

¹⁶ Scott 1993b, 162-3. Though these huts were rectangular, Etruscan hut-urns (see Andren 1959-1960, 21-59) show that the round form was employed in Archaic domestic architecture.

¹⁷ Ov. *fast.* 6.297-8 and 713; cf. Varro *ling.* 6.32. The smoke may have escaped through a hole in the Temple's roof, as illustrated on Neronian coins (see #57). Roux 1984, 164.

¹⁸ Scott 1993a, 11-3.

trapezoidal pit or *penus Vestae*, which may have served as a receptacle for ashes from the sacred fire.¹⁹

The foundations probably mark a rebuilding of the Temple of Vesta after the fire of 241 BC.²⁰ With their date secured by ceramic finds and the remains of a contemporary pavement,²¹ they prove that, whatever the form of its predecessor, the late third century Temple of Vesta was round.

The Shrine of the Camenae, Rome (#33)

In addition to the Temple of Vesta (#57), Numa is attributed with setting up a Shrine beside the spring of the Camenae or Roman Muses at the Porta Capena (#33).²² This small bronze structure,²³ possibly fashioned by the famous bronze-smith Mamurius Veturius,²⁴ was struck by lightning and moved to the Temple of Honos et Virtus sometime after its dedication in 205 BC.²⁵

In the early second century, M. Fulvius Nobilior, who founded the Temple of Hercules and the Muses (#42), is said to have incorporated the Shrine into his new complex.²⁶ As illustrated on the Severan Marble Plan, this complex includes two round structures set on top of a complicated podium. While the larger of the two is linked with the Temple of Hercules and the Muses, the smaller located in front of the Temple may represent Numa's Shrine.

¹⁹ Platner and Ashby 1929, 558; Richardson, jr. 1992, 413. It is less likely that the pit stored the Temple's *sacra*.

²⁰ See #57. Livy (26.27.4) notes that the Temple of Vesta was saved from the 210 BC fire, which devastated the Forum.

²¹ Scott 1999b, 126.

²² See #33 and Stambaugh 1978, 560.

²³ The Shrine of Janus Geminus, founded by Numa, was also bronze (Procop. 1.25). Tortorici 1996b, 93.

²⁴ Prop. 4.2.59-64. Richardson, jr. 1977, 357.

²⁵ Liv. 29.11.13 (Shrine beside the Temple of Honos). Richardson, jr. (1977, 357) suggests that the move predated 205, when the temple (see Palombi 1996c, 31-3) was rededicated to both gods.

²⁶ Serv. *Aen.* 1.8.

Though it is tempting to suggest that the Shrine served as a model for Fulvius' Temple, which honored the Greek Muses, the Plan provides the only proof that the Shrine of the Camenae was round.²⁷ Besides the power of tradition, there is little to preclude the possibility that, after it was damaged, the Shrine was remodeled into a new form and design.

Round temples founded in the sixth century BC:

The Temple of Fors Fortuna, Rome (#36)

Servius Tullius is credited with founding temples to Fors Fortuna at the first and sixth milestones of the via Campana-Portuensis.²⁸ While the latter is rectangular,²⁹ F. Coarelli has identified the former (#36) with a round building shown on the Severan Marble Plan.³⁰ This building lies near the Tiber, which played a pivotal role in her cult. As the protecting deity of travel and transport,³¹ Fors Fortuna was commemorated with a yearly festival,³² which involved a procession of boats on the Tiber, accompanied by crowds on the via Campana. E. Simon has reconstructed the festival's course from the Forum Boarium to the mouth of the Tiber, following the trade route for salt, a vital commodity for Rome and her neighbors. In Simon's view,

²⁷ Frothingham (1914, 309) mentions a round temple on Monte Musino near Veii, which may be Archaic and may represent a dedication to the Muses. However, as its existence is far from certain, this temple cannot shed light on the form of the Shrine of the Camenae.

²⁸ See #36. They were two of some sixteen dedications Servius Tullius made to Fortuna at Rome, see *LTUR* Vol. 2 1995, 267-87.

²⁹ For its remains, see Scheid 1990, 150-4.

³⁰ See #36 and Coarelli 1992b, 39.

³¹ Her role is emphasized by Fortuna's attributes of a ship's rudder and prow on coins, reliefs, and in statuary. Simon 1990, 60; cf. Matheson 1994b, 23.

³² The festival, which took place on the 24 June, the *dies natalis* of both Temples (see #36), is among the earliest recorded by the Roman calendars. Simon 1990, 65; vs. Champeaux (1982, 245 fol.; cf. Sabbatucci 1988, 220), who links it to the summer solstice.

Fors Fortuna may have overseen the transport of salt,³³ while the locations of her Temples may indicate important city limits.³⁴

Finds from both milestones corroborate the Temple's early date. At the sixth milestone, third century BC terracotta votives were discovered in the Temple's foundations,³⁵ while a sixth century rectangular platform and a votive deposit with Archaic bronze statuettes were found at the first.³⁶ Similarly, among the remains of the Temples of Fortuna and Mater Matuta, also attributed to Servius Tullius, are foundations almost contemporary with their legendary founder.³⁷

While the rectangular platform goes against identifying the first Temple of Fors Fortuna with Coarelli's round building, the Marble Plan may illustrate it according to a later reconstruction.

The Shrine of the Penates, Lavinium (#17)

Late Republican coins and Imperial medallions illustrate a round Shrine intended to house the Trojan Penates³⁸ at Lavinium (#17).³⁹ This Shrine, shown together with an altar and a laurel tree sacred to their cult,⁴⁰ may have stood near the Sanctuary of Frutis, an Italic version of Venus.⁴¹ Since the Sanctuary commemorated Venus as Aeneas' mother and the Shrine may have contained the Penates he brought

³³ Simon 1990, 64-6.

³⁴ Coarelli (1992b, 44-5) compares the Temple at the first milestone to those of Fortuna and Mater Matuta in the Forum Boarium, which signaled the limits of the pomerium, and notes that the temple at the sixth milestone, together with the Temple of Dea Dia (#35), indicated the end of the *ager Romanus antiquus*.

³⁵ Scheid 1976, 642, and 1990, 153-4; Broise and Scheid 1985, 542-4.

³⁶ Visconti 1860, 415-7; Visconti and Lanciani 1884, 27-8; Scheid 1990, 150-4.

³⁷ Pisani Sartorio 1995, 281-2. In addition to Servius' foundations, Fortuna was venerated at Praeneste and Antium, two major sanctuaries in Latium that are thought to have originated in the Archaic period.

³⁸ Palombi (1997, 447-63) links the Penates to the cult of the Great Gods at Samothrace.

³⁹ See #17 and Palombi (1997, 444 n. 33) for a round shrine of the Penates depicted on the Ara Pacis. Lavinium was also the site of Aeneas' round heroon. Guarducci 1971, 82.

⁴⁰ See #17.

⁴¹ Strab. 5.3.5-6; Fest. p. 80.18 L; Mela 2.71; Plin. *nat.* 3.58. Palmer 1974, 51.

to Italy,⁴² it is possible that they were inaugurated together. The thirteen altars, which make up Venus' sanctuary range from the mid-sixth century BC to the third century AD;⁴³ perhaps the Shrine of the Penates was erected as early as the sixth century. However, since the yearly festival connected with it⁴⁴ is first attested in 137 BC,⁴⁵ this date must remain speculative.

Round temples founded in the fifth century BC:

The Temple of Mercury, Rome (#47)

In 495 BC, sources suggest that the Roman people, empowered by the Senate,⁴⁶ dedicated a Temple to Mercury (#47).⁴⁷ They elected the centurion M. Laetorius to inaugurate the Temple in the vicinity of the Circus Maximus,⁴⁸ more precisely on the slopes of the Aventine near the Circus' starting gates.⁴⁹ This site is not far from the Forum Boarium, a trading post for which Mercury, as a god with strong mercantile connections,⁵⁰ was uniquely appropriate. In addition to the Temple, the Senate decreed that a festival be celebrated on its *dies natalis*, the Ides of May,⁵¹ and that a *collegium mercatorum* or *Mercurialium* be instituted to oversee the festival and rites connected with the cult.⁵²

⁴² See #17.

⁴³ Ziegler and Sontheimer 1979d, 1175; Schilling 1982, 83-5; Simon 1990, 218-9.

⁴⁴ Together with their priesthood (cf. *CIL* X 797), magistrates officiated over yearly sacrifices to the Penates at Lavinium (see #17). Palombi 1997, 443 n. 31.

⁴⁵ See #17.

⁴⁶ The Senate's decision to erect the Temple of Mercury reaffirmed the Roman people's victory over the Etruscan kings (in the year of Tarquinius Superbus' death). Zevi 1987, 127; Andreussi 1996a, 246.

⁴⁷ Some sources (see #47) suggest that the Temple was also dedicated to Mercury's mother Maia.

⁴⁸ See #47.

⁴⁹ See #47. Combet-Farnoux 1980, 266-9, and 1981, 461; Andreussi 1996a, 246.

⁵⁰ Fest. p. 135 L; cf. Combet-Farnoux 1980, 273-7, and 1981, 462-6 (derived from the Greek Hermes).

⁵¹ See #47.

⁵² See #47; cf. Waltzing 1895-1896, Vol. 1: 35 n. 1-2, and Vol. 2: 250, and Zevi 1987, 125-6 (Roman grain merchants).

Based on a statement of Servius, the Temple, of which no archaeological traces remain, has been identified as round. Servius lists Mercury among the gods to whom round temples were dedicated: *Aedes autem rotundas tribus diis dicunt fieri debere, Vestae, Dianae, vel Herculi, vel Mercurio.*⁵³ Of these gods, Vesta received a Temple in the Forum (#57) and Hercules was honored with Temples in the Forum Boarium (#43-4), facing the Circus Flaminius (#42), and beside the Pons Aelius (#41).⁵⁴ Although Hermes was celebrated with a round Shrine on Delos (#10),⁵⁵ this marks one of the few Temples of Mercury in Rome, while no Roman round temples are known to have commemorated Diana.⁵⁶

The Temple has been linked with a sesterces minted in 172-173 AD. This coin shows a shrine set on a three-step krepis with four herms in place of columns, an entablature, and a rounded pediment that displays Mercury's attributes.⁵⁷ A statue of Mercury, wearing a chlamys and carrying a caduceus and a moneybag, appears in the shrine's central intercolumnation.⁵⁸

Although its pediment is curved, suggestive of a round shrine,⁵⁹ the image on the coin has been seen as the Temple's pronaos.⁶⁰ A fragment of the Severan Marble Plan, which shows the southeast end of the Circus, illustrates part of a construction that could be a rectangular porch.⁶¹ However, as this interpretation depends on the coin, which is not corroborated by sources that link Marcus Aurelius with a restoration of the Temple, it is difficult to justify identifying the "pronaos" and the

⁵³ Serv. *Aen.* 9.406; cf. Combet-Farnoux 1980, 269-71.

⁵⁴ For #42-4, see Chap. IV, and for #41, see Chaps. V and VI.

⁵⁵ See Chap. IV #10.

⁵⁶ One of a pair of Romano-Celtic round temples at Autun (Augustodunum), ca. 1st-2nd c. AD, may have been dedicated to Diana. Horne and King 1980, 527.

⁵⁷ These include a tortoise, a cock, a goat, a caduceus, and a moneybag. Combet-Farnoux 1980, 272.

⁵⁸ Küthmann and Overbeck 1973a, 46-7 no. 87.

⁵⁹ However, Combet-Farnoux (1980, 268-9 and 272-3) notes that this motif is commonly used in depictions of rectangular buildings like the Temple of Isis in the Campus Martius (as shown on a coin of Vespasian).

⁶⁰ Platner and Ashby 1929, 339; Kroll 1932, 976.

coin with the Temple of Mercury. It seems more likely, as B. Combet-Farnoux suggests, that the Temple was rectangular and that the coin represents some other shrine founded during Marcus Aurelius' reign.⁶²

The Shrine of Spes Vetus, Rome (#54)

In 477 BC, a Shrine of Spes, later called Vetus (#54),⁶³ was erected on the summit of the Esquiline at a site where several aqueducts entered Rome.⁶⁴ The foundation of this Shrine is mentioned in the context of Horatius' victory over the Etruscans,⁶⁵ while its location is signaled by a toponym, *ad Spem Veterem*, which continued to define the area into the Imperial period.⁶⁶

Although no archaeological remains have been identified with the Shrine, P. Hill has proposed that a series of coins issued under Antoninus Pius, ca. 158-160 AD, illustrates it.⁶⁷ These coins,⁶⁸ which Hill also identifies with the Shrine of the Genius Senatus (#39),⁶⁹ show a four-column building with a rounded pediment that shelters a standing cult figure. The cult statue is difficult to identify, but may hold torches as an attribute of Spes.⁷⁰ Although Hill describes the image as representing a domed shrine, there is no indication from the numismatic or literary sources that the Shrine of Spes Vetus was round.

⁶¹ See #47.

⁶² Combet-Farnoux (1980, 272-6; cf. Küthmann and Overbeck 1973a, 46-7 no. 87, and Hill 1989, 37), recognizing Egyptianizing influences in the shrine's depiction, has identified it as an *aedicula* built by Marcus Aurelius during his Egyptian campaigns.

⁶³ Spes gained the epithet 'Vetus' following the construction of a temple to Spes in the Forum Holitorium during the First Punic War. Coarelli 1999h, 338; cf. 1999g, 336-7.

⁶⁴ More specifically, the Shrine has been located at the intersection of via Labicana and via Praenestina. Coarelli 1999h, 338.

⁶⁵ See #54.

⁶⁶ See #54; cf. Coarelli 1999h, 338, for a detailed discussion of this and related toponyms.

⁶⁷ Hill 1989, 17.

⁶⁸ See #54.

⁶⁹ See Chap. VI #39.

⁷⁰ *BMCEmp* IV lxxiv.

Conclusion:

An analysis of the evidence in favor of seventh to fifth century BC round temples yields few conclusive results. This is not surprising considering the nature of the material: legends and myths pertaining to the foundation of Rome and her first public buildings, few archaeological remains, and late iconographic sources.

The problems posed by the evidence are best illustrated by the Shrine of the Camenae (#33) and the Temple of Fors Fortuna (#36), whose round forms are based on interpretations of the Severan Marble Plan. Similarly, depictions of the Shrines of the Penates (#17) and of Spes Vetus (#54) follow after several centuries and probably rebuildings. Closer in date are the foundations of the Temple of Vesta (#57), which assure its round form from the late third century BC. Though they may not reflect Numa's Temple, votive deposits and a wall from Vesta's precinct can confirm the cult's seventh century date.

Of the round temples ascribed to this period, it is also significant that the Temple of Vesta was not inaugurated. The sacred area on which it stood was not defined according to the procedures that predated the foundation of any other temple or *aedes*. It is therefore invaluable to examine evidence for Roman conceptions of the *templum*, or ritually delimited precinct, what form it took, and what type and shape of building it accommodated. By determining whether an *aedes* could be round in accordance with Roman concepts of the *templum*, it may be ascertained whether round temples were a viable architectural type at this date.

II AUGURAL DIVINATION IN ARCHAIC ITALY: DEFINING THE ROMAN *TEMPLUM*

The Etruscans developed an advanced understanding of cosmology at a time when Romans conceived of little more than a universe demarcated by the heavens, the earth and the underworld.⁷¹ Using a system derived from the Greek East,⁷² they defined the structure of the universe and employed this structure to interpret signs visible in the sky. By examining the course of signs or auspices, Etruscan augurs determined the viability of actions ranging from founding cities or temples to engaging in battles.⁷³

With limited knowledge of the sky, the first citizens of Rome relied heavily on the Etruscans,⁷⁴ as well as on Sabine and Oscan augurs,⁷⁵ to interpret auspices. Once exposed to the augural arts,⁷⁶ they began to acquire a practical knowledge. Romulus reportedly used augural techniques to establish Rome's pomerium,⁷⁷ while Numa is credited with founding the first college of augurs and formalizing the augural rites.⁷⁸

Both the framework and the rites instituted by Numa signify a development in Roman augural practice. As an adaptation and evolution of the Etruscan arts, the Roman system frequently reflected their ideas. Following Etruscan practice,⁷⁹ Roman

⁷¹ The Romans did not embrace more complex cosmological views until they established contact with Greece and Greek ideas in the late 3rd and 2nd centuries BC. Weinstock 1946, 101 and see Chap. IV 'Introduction.'

⁷² Sol. 1.7; Dion. Hal. 2.22.3.

⁷³ Cic. *div.* 1.72 and 2.49; Fest. p. 358 L.

⁷⁴ Gell. 4.5.1 (the statue of Horatius Cocles in the Comitium is struck by lightning). Dion. Hal. 4.59-61, Plat. 28.2.15-6, Serv. *Aen.* 8.345, Zon. 7.11.38, Varro *ling.* 5.41, Liv. 5.54.7, Plut. *Cam.* 31, Flor. *epit.* 1.7.9, Arnob. *nat.* 6.7, Val. Ant. *hist.* 13, Vir. *ill.* 8.4, Mart. Cap. 3.223, and Isid. *orig.* 15.2.31 (Olenus Callenus prophecies Rome's future *imperium*).

⁷⁵ Sabine augury: Cic. *div.* 1.42.94, 1.47.105, 1.58.132, and 2.33.70, and Varro *ling.* 5.85 (augury by birds); Oscan augury: *Tabulae Iguvinae*.

⁷⁶ While Numa is thought to have learned augural practices in Tarquinia (Strab. 5.2.2), Romulus and Remus undertook their education at Gabii (Plut. *Rom.* 6; Dion. Hal. 1.84.5).

⁷⁷ Enn. *ann.* 77 fol.; Cic. *nat. deor.* 3.2.5, *div.* 1.2.3, 17.30, 48.107, and 2.33.70, 38.80, *rep.* 2.3.5, 9.16, 29.51, *leg.* 2.13.33, *Cato* 1.13.33, and *Vatin.* 6.14; Liv. 1.6.4, 7.1, 3.61.5, 5.52.2, 6.41.4, and 28.18.11; Ov. *fast.* 4.810 fol.; Prop. 4.6.43-4; *fasti Praenestini* = *CIL* XII.1 234; Sen. *dial.* 10.13.8; Fest. p. 276 L; Gell. 13.14.5; Flor. *epit.* 1.1.6; Sol. 1.18; Paneg. 10.13; Vir. *ill.* 1.4; Serv. *Aen.* 3.46 and 6.779; Claud. 15.28-9; Nepotian. 1.4; Praef. *bibl.* 23; Schol. Bob. p. 23; Diod. Sic. 8.4.5; Dion. Hal. 1.85-7; Plut. *Rom.* 9.7; cf. Briquel 1986a, 71.

⁷⁸ Cic. *rep.* 2.14. 26; Liv. 4.4.2; Dion. Hal. 2.64.3. Attus Navius was another important Roman augur (Liv. 1.36.6). Coarelli 1999d, 170.

⁷⁹ For parallels in Oscan and Umbrian ritual, see Catalano 1978, 471, and Stambaugh 1988, 215.

augurs employed points to map out the celestial *templum* or area for taking auspices.⁸⁰ This *templum* was then set in relation to other *templa* by the process of inauguration. In his discourse on poetic uses of the term *templum*,⁸¹ Varro lends insight into the three types of *templum* employed by Roman augurs: the celestial, the earthly, and the subterranean.

According to Varro, the celestial *templum* takes its form *ab natura*, the earthly from the consultation of auspices, and the subterranean *a similitudine* or by reflection of one or both other *templa*.⁸² Of the three, the form of the celestial *templum* is most clearly defined. As Varro suggests, it is taken “from nature,” reflecting the hemispherical shape of the sky as observed from land.⁸³ With the sky as its formal counterpart, the subterranean *templum* should be understood as hemispherical or, as archaeological finds suggest, round.⁸⁴ Moreover, if its form reflects that of both the heavenly and earthly *templa*, then all three, from the evidence of the celestial *templum*, may be interpreted as round.

The celestial *templum*:

After describing its form, Varro segments the celestial *templum* into four parts suggestive of the sixteen components that constitute the Etruscan sky.⁸⁵ Varro’s quadrants conform to the compass, dividing north from south, east from west, and left

⁸⁰ For these points, see ‘The celestial *templum*’ below.

⁸¹ While Ennius (*ann.* 541; cf. *Cic. nat. deor.* 2.65) describes the celestial *templum* as the domain of Jupiter, Varro equates the earthly *templum* with a stage for divine worship (*Pacuv. trag.* 309-10; cf. Linderski 1986, 2264 and 2275) and the subterranean *templum* with a seat for the chthonic gods (*Enn. trag.* 107-8). For other meanings of *templum*, see Godfrey and Hemsoll 1986, 207 n. 35.

⁸² *Varro ling.* 7.8: *templum tribus modis dicitur: ab natura, ab auspicando, a similitudine; [ab] natura in caelo, ab auspiciis in terra, a similitudine sub terra.* Cf. Gell. 14.7.7.

⁸³ *Varro ling.* 7.7.

⁸⁴ See ‘The subterranean *templum*’ below.

⁸⁵ The Etruscans divided the sky into four quadrants corresponding to the cardinal points, each of which was subdivided into four sections (*Cic. div.* 2.42) and linked to the celestial, subterranean, and earth-bound gods. Frothingham 1914, 306; Weinstock 1946, 115. Weinstock (1946, 121-2) suggests that the bronze augural liver from Piacenza was a direct equivalent of the Etruscan sky.

from right.⁸⁶ This understanding of the sky is reflected in contemporary augural practice. In augury, the celestial *templum* was a *locus designatus in aëre*,⁸⁷ namely a place that an augur demarcated by observing a series of points, including the horizon, the pomerium, and boundaries established in relation to terrestrial markers.⁸⁸

Augurs employed formulas to delimit the celestial *templum* and divide it into quadrants. These formulas, of which Varro preserves an example,⁸⁹ established the *templum* in preparation for the taking of auspices. Based on their consultation, decisions were made on the feasibility of political, social and religious actions. The process of establishing a celestial *templum* and interpreting auspices, therefore, played an essential part in the inauguration of a new earthly *templum*.

The earthly *templum*:

Varro describes the earthly *templum* as a *locus* designated for purposes of augury and auspices.⁹⁰ This site was conceived with certain words, *certa verba*,⁹¹ which probably reflected the formulas augurs used to define the celestial *templum*. Employing similar terrestrial markers, augurs determined the orientation and demarcated the boundaries of the earthly *templum*. Archaeological evidence suggests that the first *templa* took topographical features or areas of religious or political

⁸⁶ Varro *ling.* 7.7; cf. Liv. 1.18.6-10 (Numa's *inauguratio*), Isid. *orig.* 15.4.7, Cic. *div.* 1.17.31, and Fest. p. 244 and 454 L. Like the Etruscans (Serv. *Aen.* 2.693; cf. Weinstock 1946, 122-3), Roman augurs considered signs visible to the east or left of the sky's N-S axis lucky, since they originated in the quadrant governed by the celestial gods (Dion. Hal. 2.5.2; Fest. p. 454 L). Weinstock 1946, 123; Linderski 1986, 2280-4.

⁸⁷ Serv. *Aen.* 1.92.

⁸⁸ Linderski 1986, 2287-8.

⁸⁹ The formula he records (Varro *ling.* 7.9) fixed the celestial *templum* in relation to the *auguraculum* on the Capitoline *Arx*. Linderski 1986, 2269 and 2277-9.

⁹⁰ *Auspicia*, valid for a single day (favorable or unfavorable), held for all magistrates' actions from joining in battle to founding cities, while *auguria* determined whether gods approved of proposed locations for new temples. Linderski 1986, 2295-6.

⁹¹ Varro *ling.* 7.8; cf. Liv. 1.10.5-6 (Romulus lays out the *templum* for the Temple of Jupiter Feretrius on the Capitoline).

significance as markers on which to base their orientation.⁹² As Roman cities grew, their *Cardo*, *Decumanus* and urban plans,⁹³ together with ritual demands,⁹⁴ determined the direction and shape of *templum* sites.

Each earthly *templum* took one of two forms: a site where priests interpreted auguries⁹⁵ or a site where magistrates convened and consulted auspices.⁹⁶ Among the former were the *auguratorium* on the Palatine, and at least three *auguracula*, on the Capitoline, the Quirinal and the Janiculum.⁹⁷ After establishing the *auguratorium* by augural means, Romulus consulted auspices and defined the boundaries of the city with a *pomerium*.⁹⁸

Both *auguracula*, oriented towards the Alban hills during inauguration, were used in conjunction with meeting places, enabling priests to determine whether the gods approved of specific political actions.⁹⁹ F. Coarelli has proposed that the *auguraculum* on the Capitoline *Arx* corresponded to the *Comitium* in the Forum, both

⁹² While the first *templa* faced south (suggested by the orientation of early temple buildings like that of Jupiter Optimus Maximus), by the late Republic, they opened toward whichever direction afforded the best view of their surroundings. Stambaugh 1978, 564; Godfrey and Hemsoll 1986, 200-1.

⁹³ Stambaugh 1978, 563-4; Catalano 1978, 469-70. For example, the city of Ostia developed around the intersection of its *Cardo* and *Decumanus*, while the layout of the Campus Martius at Rome was oriented according to the cardinal points.

⁹⁴ By facing the Forum Boarium and its *Ara Maxima Herculis* (see Chap. IV #43-4), the late Republican Temples of Hercules Victor *in foro Boario* (#43) and *ad Portam Trigeminam* (#44) imply that religious factors influenced their orientation.

⁹⁵ Fest. p. 34 L. These purely augural *templa* may have been equivalent to *templa minora* (cf. Fest. p. 146 L; Serv. *Aen.* 4.200), while their temporary buildings may have been known as *tabernacula*. Frothingham 1914, 304; Linderski 1986, 2274-6; vs. Catalano (1978, 470), who incorrectly equates them with *loci designati in aëre*.

⁹⁶ Varro *ling.* 7.8: *loca inaugurata "in quibus auspiciato et publice res administrarentur et senatus habere posset."* Both types could only lose their inaugurated status through the ceremony of *exauguratio*, cf. Ulp. *dig.* 1.8.9.2. Stambaugh 1978, 567-8; Linderski 1986, 2272-3.

⁹⁷ Fest. p. 38 L. It seems likely that another *auguraculum* was located on the Alban hills. Grandazzi 1986, 134-6.

⁹⁸ Plut. *Rom.* 2; cf. Coarelli 1981c, 177. The *pomerium* should not be confused with the limits of an earthly *templum*, since the whole of Rome was not inaugurated. Castagnoli 1984b, 13; cf. Godfrey and Hemsoll 1986, 200 and 207 n. 43, and below.

⁹⁹ Coarelli 1981c, 178; Grandazzi 1986, 122-38.

seventh century BC in origin, while the later *auguraculum* on the *Collis Latiaris*, a section of the Quirinal, coincided with the *Saepta*.¹⁰⁰

In addition to their associated *auguracula*, the Comitium and the *Saepta* were earthly *templa*.¹⁰¹ Here meetings were held that governed the fate of Rome and required ready knowledge of the gods' will. Similarly, most temple buildings, with the exception of the Temple of Vesta (#57), were established on inaugurated land in order to accommodate political and religious meetings.

Though temple buildings or *aedes* came to be known as *templa*, the terms were not equivalent in augural discipline.¹⁰² The earthly *templum*, known from ancient sources and archaeological remains, was a plot of land on which an altar and either temporary or permanent buildings could be constructed. While both *auguracula* preserve some traces of buildings, an augural *templum* at Bantia lacked buildings, but was bounded by stone markers that name the celestial and earthly points by which it was oriented.¹⁰³

Although the *templum* at Bantia is rectangular, as are examples at Cosa and possibly at Gubbio,¹⁰⁴ neither the sources nor the archaeological record prove the exigency of this form. A. Frothingham has proposed that earthly *templa* could be circular.¹⁰⁵ As confirmation, he points to Varro's description of the *templa*, as well as to ancient survey drawings. These drawings, preserved in medieval manuscripts, show round plans for cities divided into quadrants by an intersecting *Cardo* and

¹⁰⁰ *Arx*: Liv. 1.18.6; cf. Fest. p. 34 L; *Collis Latiaris*: Varro *ling.* 5.42. Coarelli 1981c, 180-8; cf. Linderski 1986, 2277.

¹⁰¹ Stambaugh 1978, 557; Castagnoli 1984b, 13. For the Comitium, see Coarelli 1993f, 309-14, and the *Saepta*, see Gatti 1999, 228-9.

¹⁰² Frothingham 1914, 307; Castagnoli 1984b, 3-4.

¹⁰³ Linderski 1986, 2256-7 and 2284-6.

¹⁰⁴ Cosa: Catalano 1978, 471, and Coarelli 1981c, 179-80. Gubbio: *Tav. Iguv.* 6a, 8 fol. Rectangular form: see a Celtic-Latin inscription from Vercellae cited by Linderski 1986, 2256-7 and 2275; cf. Serv. *Aen.* 2.512, which Frothingham (1914, 304) criticizes as a misrepresentation of Varro's *templa*.

¹⁰⁵ Frothingham 1914.

Decumanus.¹⁰⁶ Though with possible parallels in late Republican *cippi*,¹⁰⁷ as city plans, they cannot represent inaugurated *templum* areas. Even if they trace the pomerium, were an entire city inaugurated, it would not have been necessary for augurs to demarcate sites for temples and meeting places.¹⁰⁸

More compelling are Frothingham's arguments in favor of placing early round constructions in *templum* areas. Among these he names *bidentalìa*, sites struck by lightning that were consequently inaugurated as *templa*.¹⁰⁹ Two are known from Rome, the Archaic *puteal* in the Comitium and the second century BC *puteal Scribonianum* in the Forum,¹¹⁰ which is represented on coins as a round altar set within a circular enclosure.¹¹¹ Another early round structure is the Shrine of Venus Cloacina.¹¹² Ascribed to the Sabine king Tatius, it marks the junction of two branches of the Cloaca Maxima, appropriate for its role in purification rituals.¹¹³

Like the enclosure of the *puteal Scribonianum*, the circular platform of the Shrine may signal the limits of its *templum*. However, evidence from other sites suggests that a strict correlation in size and shape between the *templum* and the structures it accommodated was not always required. This supposition is best proven by the frequency with which two temple buildings occupied a single *templum* site. In

¹⁰⁶ For the diagrams of Frontinus, Dolabella, and Hyginus, see Frothingham 1914, 310-1 figs. 1-4. Limiting sites by means of the *Cardo* and *Decumanus* is not unique to *templa*, cf. *vigna* and cities (above). Linderski 1986, 2288.

¹⁰⁷ *CIL* I 552-6 and VI.4 30593; cf. Frothingham 1914, 312. There is no reason to believe, like Frothingham (1914, 312-3), that the Etruscan augur Olenus Calenus and subsequent Roman augurs traced the circular outlines of new *templa* on the ground. Linderski 1986, 2270-1 n. 487 and 2287 n. 561.

¹⁰⁸ Catalano 1978, 476.

¹⁰⁹ *Schol. Pers.* 2.26. Frothingham 1914, 314; cf. Coarelli 1999d, 170-1.

¹¹⁰ For the *puteal* in the Comitium and its associated *statua Atti Navii* and *ficus*, see Coarelli 1999d, 170-1, and for the *puteal Scribonianum*, see Chioffi 1998, 171-3.

¹¹¹ *RRC* I 416 nos. 1a-c and 417 nos. 1a-b (62 BC); cf. *BMCRep* I nos. 3377-85 (71 BC).

¹¹² The present Shrine, which dates to the late Republican or early Imperial periods, consists of a marble socle once topped by a balustrade and two statues of Venus (see *BMCRep* I 573-4 n. 1, and 577-8 nos. 4242-54). Hülsen 1905, 63; Coarelli 1983b, 87-9, and 1993e, 290-1.

¹¹³ *Liv.* 3.48.5; *Plin. nat.* 15.119; cf. van Essen 1956, 138-43, Gagé 1963, 60 and 256-7, and Coarelli 1983b, 84-8.

the Archaic and early Republican periods, the Temples of Fortuna and Mater Matuta serve as a good example, since they share a precinct and even a podium.

By the late Republic, the Round Temple at Tibur (#64) was added to the *templum* of the rectangular temple and the Temple of Fortuna Huiusce Diei (#38) was probably constructed within the precinct¹¹⁴ of the Temple of Feronia.¹¹⁵ Just as the shape this *templum* took did not matter in the late Republic, there is no evidence to suggest that the late third century BC coincided with changes in augural policy so significant as to effect basic conceptions of the *templum*. On the contrary, evidence that supports a continuum of ideas from the Archaic period onwards can be found in Varro's subterranean *templa*.

The subterranean *templum*:

Like the celestial *templum*, which mirrored the sky, and possibly some earthly *templa*, sites inaugurated below ground assumed a circular form. Due to their location, these *templa* commemorated chthonic divinities instead of the celestial gods honored on land.

At Rome, the Mundus (#49) in the Forum can be cited as an example of a subterranean *templum*.¹¹⁶ The Mundus, which enjoys a continuous history from the Archaic through the Imperial periods, is linked to legends of Rome's foundation.¹¹⁷ The sources define the Mundus as the center-point of Romulus' pomerium, into which Rome's earliest citizens threw earth from their homelands and the first fruits of their

¹¹⁴ Frothingham (1914, 308-9) also points to the *templum Divorum* in the Campus Martius, which contained temples of Titus (*CIL* VI 10234) and Vespasian.

¹¹⁵ For the Temple of Feronia, see Coarelli 1981a, 24 and 40-2; vs. Ziolkowski (1986, 631-9, and 1992, 25-8), who identifies it as the Temple of Juturna.

¹¹⁶ Frothingham 1914, 314-7; Coarelli 1976-1977, 369-71, and 1999k, 288; Catalano 1978, 449; cf. Smith 1950, 52-3.

crops.¹¹⁸ The Mundus consisted of two parts: the *pars superior*, which stood above ground, and the *pars inferior*. This lower part, consisting of a vaulted underground cavity or *bothros*,¹¹⁹ was consecrated to the chthonic gods Dis Pater and Proserpina.¹²⁰

Remains of the Mundus comprise a pit surmounted by a round monopteros of late second century BC and Severan date.¹²¹ While Praeneste (#30) and Pompeii (#28) provide parallels for its *pars superior*,¹²² the mid-Republican hypogea at Bolsena, Volsinii Novi, Caere, and Artena recall the Mundus' *pars inferior*.¹²³ Accessed via vaulted chambers which mirror the sky, they provided sites where men could venerate the gods of the underworld.

Conclusion:

Drawing on knowledge of augury gained through contact with their neighbors, the early Romans defined procedures by which they were able to determine the gods' will. Through interpreting signs visible in the sky, the Romans, like the Etruscans, Oscans and Umbrians, made informed decisions about actions they proposed to take. Among these actions was the founding of temples.

As inherent to temple foundation, the Romans developed the concept of the *templum*. By evolving the Etruscan understanding of the sky and adapting Oscan and

¹¹⁷ Archaeological evidence suggests that a Mundus accompanied the foundation of most if not all new cities, see inscriptions from Padula (*CIL IX 3173*) and Corfinium cited by Coarelli 1999k, 288; cf. Catalano 1978, 464-6.

¹¹⁸ The Mundus should be identified with the foundation pit cited by Plutarch (*Rom.* 11.2) and Ovid (*fast.* 4.820-4). Coarelli 1999k, 288.

¹¹⁹ See #49. For the three days per year (24 August, 5 October, and 8 November) on which the subterranean cavity was open, business transactions were forbidden in Rome. Frothingham 1914, 315; Torelli 2000, 161-2. For additional examples of *bothroi*, the term used by Plutarch to describe this cavity, see Robert 1939, 185-8.

¹²⁰ See #49. Coarelli 1999k, 289; cf. Torelli 2000, 162-3.

¹²¹ See Chaps. IV and VII #49. Also, Festus (p. 144 L, quoted in #49) describes the Mundus as round in reflection of the sky.

¹²² Architecturally similar, they may constitute the *mundi* of their own cities, see Chap. IV #28 and 30. Another possible mundus is the 5th c. BC circular cavity embedded in the acropolis at Norba. Catalano 1978, 463.

Umbrian ideas about consecrated land,¹²⁴ Roman augurs created a system for locating temples whose complexity was without precedent. This system divided the *templum* into three ritually defined components, the celestial, the earthly and the subterranean. The celestial *templum*, round in reflection of the sky, provided a backdrop against which augurs determined the movement and portent of signs. With favorable auspices, augurs used ritual means to define earthly and subterranean *templa* in relation to the celestial *templum*.

With the exception of the Temple of Vesta (#57), all other round temples from the Archaic through the Imperial periods required a *templum*. The *templum*, equivalent to the cult's sacred area, was of a shape and size sufficient to accommodate a temple and its altar. It seems unlikely that the *templum* mirrored the shape of the temple building more than was necessary or that the temple building's shape was determined by that of the *templum*.

Evidence from the late Republic suggests that round temples could be constructed on earthly *templa* of rectilinear shape. Moreover, subterranean *templa* like the Mundus (#49) were round. As the Mundus and comparable subterranean *templa* maintain a constancy of shape, it seems likely that the relationship between earthly *templa* and their temples may not have changed too dramatically over the centuries. If rectangular *templa* could accommodate round temples in the second century BC, there seems no reason inherent in augural policy why round temples could not have been constructed on comparable *templa* prior to the late third century.

¹²³ Coarelli 1976-1977, 369-71; Torelli 2000, 141 fol. and 160. For the Mundus at Artena, see Morel 1999, 483-4.

¹²⁴ Catalano 1978, 471.

CHAPTER IV: THE LATE REPUBLIC

I INTRODUCTION

While evidence for Roman round temples in the Archaic and early to mid-Republican periods is limited and often inconclusive,¹ in the late Republic, physical remains, ancient sources, and coin depictions confirm the foundation of round temples in Rome, Latium, and on the island of Delos. These temples correspond in date to Rome's first direct contact with the Greek world. Through a series of military campaigns, beginning with Claudius Marcellus' conquest of Syracuse in 211 BC,² Rome was exposed to Greek artistic, literary and architectural achievements. Awakened to their potential, Rome began to absorb and adapt Greek products in ways that enhanced her own social, intellectual, and political life.

Among the most tangible products of Greek culture enjoyed in Rome were cult images, statues and paintings.³ Where this plunder was not used to decorate existing religious and public spaces,⁴ its sale funded the construction of temples intended to both glorify their founders and proclaim the power of Rome.⁵ Some early victory temples, which may have been designed by Greek architects and craftsmen,⁶

¹ See Chap. III 'Evidence for Roman round temples in the Archaic and early-mid Republican periods.'

² Polyb. 9.10.1-13; Liv. 25.40.1-3; Plut. *Marc.* 21.1-5. For other early conquests, see Eumen. *inst. schol.* 7-8, *CIL* VI 1307 and #42 (M. Fulvius Nobilior's sack of Ambracia in 187 BC), and #44 and Gruen 1992, 85 and 123-8 (L. Mummius' conquest of Corinth in 146 BC).

³ Introduced into a conservative society, the first imports were treated with ambivalence, cf. Cic. *Verr.* 1.46, 4.1-8, and 5.185, Plin. *nat.* 34.48, and Gruen 1992, 95-6.

⁴ Gruen 1992, 86-9 and 92 (examples).

⁵ Cic. *Verr.* 2.4.120; Plut. *Marc.* 21.1; Livy 25.40.1; cf. Gruen 1992, 100-1.

⁶ Generals known to have brought back Greek artists include M. Fulvius Nobilior and L. Aemilius Paullus (Plin. *nat.* 35.135; Plut. *Aem. Paul.* 6.5; cf. Gruen 1992, 85 and 115), while Scopas Minor and Hermodorus of Salamis number among the artists and architects working in Rome.

were purely Greek in style.⁷ The majority however combined Greek design principles with Italic advances in materials and techniques.

Exemplifying both trends, Roman round temples demonstrate an understanding of Greek architectural models coupled with a readiness to experiment and manipulate their forms. Their clearest models were Greek tholoi. In an exhaustive study,⁸ F. Seiler divides the evolution of this building type into three phases: its creation in the Archaic period, its refinement through the introduction of the Doric peristasis in the Classical period, and its culmination in the Hellenistic period, marked by considerable variation in the type's use and composition.

Like the earliest tholoi, including the Geometric building at Lathuresa and Archaic and Classical tholoi at Thebes and Eretria,⁹ the fifth century Skias in the Athenian Agora (#6), the best example of phase one, was a simple, non-peripteral drum. Consisting of a poros socle supporting mud brick walls and a tiled roof, the Skias contained two arcs of three columns and was accessed via two opposing doors. Ancient sources reveal its function as the meeting and dining place of the *prytaneis* or council presidents and a storehouse for weights and measures.¹⁰ Closely framed by public offices, the Skias' round form may reflect a need for sizable floor space¹¹ and easy access despite limited angles of approach.¹²

⁷ It is likely that the Pentelic marble Temples of Jupiter Stator, built by Q. Caecilius Metellus Macedonicus in 146 BC and designed by Hermodorus of Salamis (Vell. 1.11.5; Vitruvius 3.2.5), and of Mars *in circo*, founded by Brutus Callaicus in 132 BC (Nep. *Prisc.* 17), assumed a Greek form. Ziolkowski 1988, 327. It is also possible that the Temple of Ceres, Liber and Libera, which pre-dates the influx of Greek craftsmen, was designed by a Greek architect. Coarelli 1993d, 260-1.

⁸ Seiler 1986.

⁹ See Seiler 1986, 7-24 (Lathuresa), 25-8 (Sanctuary of the Kabires, Thebes), and 36-9 (Eretria). The earliest reference to a tholos appears in Homer's *Odyssey* (22.442-466). Robert 1939, 138-52.

¹⁰ In the Imperial period, the Skias also functioned as a temple to the Phosphoroi, see #6.

¹¹ Roux 1988, 292.

¹² Thompson 1940, 44.

The late fifth and fourth century Tholos at Delphi (#12),¹³ located in the Sanctuary of Athena Pronaia, was a peripteral structure built with greater harmony and sophistication than the Skias at Athens; as such, it serves as a good example of Seiler's second phase. From tufa foundations, the Tholos rose in Pentelic marble with a three-step krepis, twenty Doric columns, a frieze of forty metopes, and a marble-tiled roof. Inside the Tholos were ten Corinthian columns resting on a limestone socle, forty metopes, and nine statues. In addition to its costly materials and elaborate plan, it differed from its predecessors for the elongated, inclined columns that gave rhythm to its peristasis¹⁴ and the tiles, sima and acroterial sculpture that divided its roof into zones.¹⁵ Moreover, unlike the Skias, a modular system of proportions determined the relationship between its parts.¹⁶ This contributed to the overall unity of the Tholos, whose round form and significant sculptural program¹⁷ differentiated it, as the Athenian treasury,¹⁸ from other temples and treasuries on the sanctuary plain.

The contemporary Tholos at Epidauros (#13) was sited at the heart of Asklepios' sanctuary. While its foundations, used for sacrificial or oracular purposes,¹⁹ lack parallels among other tholoi, its Pentelic marble elevation is not unlike that of the Tholos at Delphi. One-third larger, the Tholos at Epidauros was only slightly taller, with comparable Doric columns, intercolumnations and triglyphs. The metopes of its Doric frieze embossed with phiales are much simpler than those at

¹³ This is the second of two tholoi at Delphi; the first (#11) sited in the Sanctuary of Apollo, ca. 560 BC, is significant both for its early stone peripteros and for its experimental use of the Doric order.

¹⁴ A diminution in the intercolumnation widths compensated for the columns' extra height. Bommelaer 1991, 65.

¹⁵ Roux 1952, 454 and 466-73.

¹⁶ This modular system, based on multiples of seven, recalls the numerical relationships praised by Greek philosophers. Bousquet 1980, xi; Laroche 1990, 52; cf. Chap. II 'Vitruvius on round temple design.'

¹⁷ Roux (1988, 294, and 1992, 186-91) suggests that the metopes, if representations of the Persian wars and Greek civil struggles, may have been intended to underline Athens' military supremacy.

¹⁸ Roux 1984, 154, 161-2, and 168-9; Seiler 1986, 65-71.

¹⁹ Robert 1939, 296-358; Roux 1992, 205-10. See Seiler 1986, 86, for the comparable Manteion of Apollo at Klaros.

Delphi as are its simas and antefixes. In its interior, the Tholos included a socle and fourteen Corinthian columns, but introduced an Ionic architrave and frieze course as well as a series of wall paintings.²⁰ As at Delphi, the Tholos' round form helped to set it apart from rectilinear buildings in the sanctuary,²¹ and may have facilitated the cult rituals enacted in its foundations.²²

The Philippeion at Olympia (#22) was begun by Philip II following his success at Chaironea in 338 BC, and completed by his son, Alexander, to serve as both a victory monument and a statue gallery for the Macedonian royal family.²³ While its round form provided an excellent means of displaying statuary,²⁴ its location next to the Temple of Pelops, an ancestor of his patron Herakles, was determined by Philip's social ambitions.²⁵ Influenced by its predecessors,²⁶ the Philippeion, with its varied architectural elaboration²⁷ and external use of the Ionic order, effects a smooth transition to Seiler's third phase.

Pertaining to this phase are a wide range of buildings from tholoi incorporated into courts, either rectilinear, like the Tholos at Kepos in Pontus Euxeinos, or round, like the three tholoi annexes of the court at Pella (#25), tholoi combined with rectilinear elements, like the Temple of Artemis at Stymphalos (#61), which unites a round naos with a rectangular pronaos, to diminutive tholoi which appear as votives,

²⁰ See #13.

²¹ The Tholos retained the eastern orientation of its neighbor, the Temple of Asklepios. Seiler 1986, 72-3 and 82-3.

²² Robert 1939, 296-358; Roux 1992, 205-10.

²³ Seiler (1986, 100-3) sees the use of gold and ivory statues, previously confined to cult images, as a way to politically legitimize the dynasty created by Philip.

²⁴ The Tholos contains a curved base, which enabled the statues to be viewed from all angles. Seiler 1986, 96-8.

²⁵ Paus. 5.7.9 and 13.1-2; Arr. 3.3.2 and 6.3.2; Plut. *Alex.* 2.1. Miller 1973, 192.

²⁶ While its materials recall the Tholos at Epidauros, the Philippeion's roof and foundations are similar to the Tholos at Delphi's. See #22, and Seiler 1986, 91 and 96.

²⁷ In addition to Greek motifs, Miller (1973, 194-217) notes that the Philippeion incorporates Macedonian features to reflect Philip's origins.

like the Monument of Lysicrates at Athens (#3), or as components of funerary architecture.²⁸

The finest large-scale example is the Arsinoeion (#58), constructed by Arsinoe II, the wife of the Macedonian king Lysimachos, ca. 285 BC,²⁹ in the Sanctuary of the Great Gods at Samothrace. Composed of a smooth drum, the building rises from a three-step krepis to culminate in a gallery of Doric and Corinthian pilasters, Doric and Ionic architraves, and a lantern roof.³⁰ While its diameter is comparable to that of the Tholos at Epidauros and its floor space to the Skias at Athens, as the Arsinoeion lacks colonnades, its unsupported span is the largest in Greek architecture.³¹ Due to its size, scholars have proposed that it served as an assembly hall for public or religious functions, like the Skias at Athens, which it recalls in form and location.³²

This summary of the development of Greek tholoi reveals how a basic form with several variables had been created by the Hellenistic period, which Roman architects could adopt and adapt for their own purposes. As the Greeks used round buildings to fulfill political and religious functions, so the Romans of the late Republic tied their new temple foundations to ideas current in their society.

II DISCUSSION

Archaic foundations rebuilt in the late Republic:

In addition to the Temple of Vesta (#57) and the Mundus (#49), the Monopteros at Pompeii (#28), whose foundation may date to the Archaic period, was rebuilt in the late Republic.

²⁸ Seiler 1986, 115-19 (Pontus Euxeinos).

²⁹ For an alternative Arsinoe, see #58.

³⁰ The Arsinoeion's back-to-back pilasters almost function as a peristasis.

³¹ Roux 1992, 92.

³² Accessed via a processional road, the Arsinoeion could be viewed from the south, west and north. Roux 1992, 29 and 216-21.

The Temple of Vesta, Forum, Rome (#57)

The Temple of Vesta (#57) experienced two distinct phases of development in the late Republic: the first, of early second century date, corresponded to an extension of the Temple's precinct as far as the Atrium Vestae and the Regia, while the second, dating to the mid-first century, saw the walls of the precinct repaired and its paving replaced.³³ Also in the second phase, an arch was added to buttress the Temple's foundations, whose *favissa* was refaced with roof tiles.³⁴ Third century fire damage³⁵ may have necessitated improvements to the Temple's precinct, while the arch and work on the *favissa* may point to a rebuilding of the Temple in the first century BC, attributed by R. Scott to Julius Caesar, *pontifex maximus* from 63.³⁶

The late Republican Temple may be illustrated on a denarius of Q. Cassius, struck ca. 57 BC,³⁷ and on cistophoric tetradrachms minted by C. Fannius in 49-48.³⁸ Both depict the Temple as a round monopteros rising from a low podium with Ionic columns, grillwork,³⁹ and a rounded roof. A statue of the goddess appears on its roof⁴⁰ and, on Cassius' coin, a *sella curulis* or judge's seat is depicted in its interior. While the statue, like the legend, identifies the building as the Temple of Vesta,⁴¹ the seat may allude to a trial involving Vestals that took place under Cassius' ancestor, L. Cassius Longinus Ravilla in 113.⁴² However, even if Cassius' coins refer to this

³³ Scott 1999b, 126. The Archaic *lucus Vestae* located near or possibly within the precinct of the Temple may have survived through the late Republic. Cic. *div.* 1.45.101; Scott 1999c, 129-30.

³⁴ Scott 1993a, 11-3, and 1999b, 126.

³⁵ See Chap. III #57.

³⁶ Scott 1993a, 17. Van Deman (1912, 393) links this rebuilding to Augustus.

³⁷ See Cat. #57 and Cody 1973, 43-4.

³⁸ See Cat. #57 and Cody 1973, 44-7 and 49.

³⁹ The grillwork only appears on Fannius' coins.

⁴⁰ The *palladium* she may carry (see Cat. #57) underlines Vesta's links to Aeneas and consequently, to legends of Rome's foundation.

⁴¹ Fuchs 1969, 51-7; Hill 1989, 24. Due to the presence of a continuous fire (Varro *ling.* 6.32; *Ov. fast.* 6.297-8 and 713), it is highly unlikely that the Temple ever contained a cult statue.

⁴² Cody 1973, 43-4.

event, they probably reflect the first century Temple, which may have carried the bronze roof mentioned by Pliny.⁴³

Though possibly funded by Greek conquests, the late Republican Temple of Vesta has little in common with contemporary victory temples. Rather, as the city's hearth, the Temple was reconstructed in deference to Rome's cultural heritage.⁴⁴

The Mundus, Rome (#49)

The Mundus (#49), a round pit in the Archaic period, was covered with a permanent structure in the late second century BC. Attested by its foundations and fragments of its Ionic entablature, this monopteros⁴⁵ was sited within a contemporary or first century precinct.⁴⁶ F. Coarelli has suggested that, by capping its pit or *penus inferior*, the Mundus' rebuilding marked a change in the way its function was conceived and understood.⁴⁷ No longer emphasized for its role in Rome's colonization, he suggests that it was celebrated for its location at the center of the city, much like a Greek *omphalos*. Coarelli's comparison of the Mundus to a Greek 'navel' or geographic center is supported by its Imperial appellation of *Umbilicus Urbis*,⁴⁸ as well as by likely parallels for its form and function in Greece and Greek-influenced Etruria.⁴⁹

⁴³ Plin. *nat.* 34.14. Alternatively, this roof may pertain to the Temple's rebuilding just before Pliny's death, see Chap. V #57.

⁴⁴ Although her cult is related to the Greek goddess Hestia's, Vesta's Temple does not find a parallel in Greece, where Hestia was worshipped at open-air altars. Robert 1939, 12 and 365-8; Hautecoeur 1954, 6.

⁴⁵ The Mundus' reconstruction as a monopteros is based on a drawing of P. Ligorio (*Cod. Neap.* 35 p. 145). Lanciani 1967, 281; von Sydow 1973, 573-4.

⁴⁶ See #49.

⁴⁷ Coarelli 1996k, 289, and 1999i, 95.

⁴⁸ *Not. Reg.* 8; *An. Eins.* 1.5, 7.7, 8.8; cf. Fest. p. 144L and Coarelli 1976-1977, 361-4, and 1996k, 289; vs. 1999i, 95 (*Umbilicus Urbis* from the late Republic).

⁴⁹ See below for Greek *omphaloi*, and Verzar 1976-1977, 393-7, for Etruscan urns representing tholoi atop *omphaloi*. Although not an *omphalos*, the fourth century BC tholos in the Sanctuary of the Chthonic Divinities at Agrigento provides a good parallel. Coarelli and Torelli 1984, 146-9; Holloway 1991, 63.

The Monopteros, Pompeii (#28)

Built in the style of its sixth century BC neighbor,⁵⁰ Numerius Trebius' Doric Monopteros (#28) may have replaced an earlier structure that stood above a pit in the Foro Triangolare, one of Pompeii's most ideologically important areas. As its plan and location support comparison with the Mundus at Rome (#49), it is possible that the Monopteros also recalled it in function.⁵¹ It seems reasonable that a political leader like Trebius might build or rebuild a shelter for the Mundus of his city, especially as his family's trading activities throughout the Mediterranean⁵² could have exposed him to Greek *omphaloi*.⁵³

Round temples founded in the second century BC:

Like the Mundus (#49) and the Monopteros at Pompeii (#28), round temples built in the late Republic demonstrate an awareness of the power and extent of Greek influence on Roman social, political and intellectual life. Although some prefer Roman traditions to Greek ideals, like the Temple of Vesta (#57), most round temples effect a balance between Greek and Roman elements in their design and construction.

The Temple of Hercules and the Muses and the Shrine of the Camenae, Rome (#42 and 33)

The Temple of Hercules and the Muses (#42), founded by M. Fulvius Nobilior,⁵⁴ active in Aetolia, and rebuilt by the consul L. Marcius Philippus,⁵⁵ was

⁵⁰ See #28.

⁵¹ Coarelli 1976-1977, 371-2; Verzar 1976-1977, 393-7.

⁵² La Rocca, de Vos, and de Vos 1994, 151.

⁵³ Coarelli (1983b, 219; cf. Catalano 1978, 463) cites the *omphalos* at Norba as comparable in both form and location. *Omphaloi* have also been identified at Greek Delphi, Eleusis, Bolsena (Coarelli 1983b, 215 and 219-20; cf. Hautecoeur 1954, 8), and Artana (Morel 1999, 483-4).

⁵⁴ *RE* VII Fulvius 91.

both a victory monument⁵⁶ and a testament to M. Fulvius' commitment to culture and the arts.⁵⁷ The Temple, whose dedication may have coincided with Fulvius' triumph in 187,⁵⁸ was enclosed within the Porticus Philippi in 33 BC.⁵⁹ Both the Temple and the Porticus, which aligned the Temple precinct with the Circus Flaminius⁶⁰ and the Porticus Octaviae,⁶¹ can be reconstructed on the basis of the Severan Marble Plan and of literary and iconographic sources that relate details of their decoration.

On the Plan, the Temple is shown as a drum with a rectangular pronaos and a flight of four steps.⁶² Resting on a platform, it is preceded by the Shrine of the Camenae (#33),⁶³ which appears on a lower level,⁶⁴ and is backed by a semicircular exedra. The Porticus bounds the Temple platform with a double colonnade⁶⁵ and a wall on four sides. While its entrance façade is obscured by breaks in the Marble Plan, the Porticus' back wall is punctuated by an opening leading to a flight of steps, a square court, and a triangular enclosure.⁶⁶

⁵⁵ Most scholars would agree that L. Marcus Philippus, Augustus' stepbrother and *consul* in 38 BC (*RE* XIV Marcus 77), built the Porticus Philippi (see Martina 1981, 54, and Viscogliosi 1996c, 17), though Richardson, jr. (1977, 359, and 1992, 187) believes Philippus, Augustus' stepfather and *consul* in 56 BC (*RE* XIV Marcus 76), responsible for the Porticus and the reconstruction of the Temple.

⁵⁶ This is one of several victory temples dedicated to Hercules in the Campus Martius, possibly as payment of the *decuma Herculis*. Others include the Temple of Hercules Magnus Custos near the Circus Flaminius, built prior to 218 BC (see Viscogliosi 1996b, 13-4), and Sulla's shrine to Hercules Sullanus (see Palombi 1996a, 21-2).

⁵⁷ See Cic. *Tusc.* 1.3, below and Boyancé 1955, 180-1, Pötscher 1979, 1477-9, and Pietilä-Castrén 1987, 100.

⁵⁸ Eumen. *Paneg.* 9.7.3 (quoted in #42); Viscogliosi 1996c, 17. Eumenius is incorrect in suggesting that its construction was paid *ex pecunia censoria*.

⁵⁹ Roman calendars record two *dies natalis* for this Temple; the first, 13 June (*CIL* I 344-5), has been associated with Fulvius' construction, while the second, 30 June (*Ov. fast.* 6.797; cf. *Mart.* 4.49.13), may refer to Philippus' restoration. Viscogliosi 1996c, 17.

⁶⁰ Its location fits with Vitruvius' suggestion (1.7.1) that temples of Hercules should be sited near circuses; cf. *Plin. nat.* 34.33 and Frazer 1964, 55-7 (statue of Hercules Triumphator beside the starting gates of the Circus Maximus).

⁶¹ Gros 1976a, 82-3.

⁶² This depiction is supported by some building remains, see #42.

⁶³ See Chap. III #33.

⁶⁴ Viscogliosi (1996c, 18; cf. Castagnoli 1983a, 96) proposes that this area was landscaped or functioned as a podium or platform.

⁶⁵ Though it seems more likely that Philippus was responsible for the entire Portico, Marabini Moevs (1981, 46) views the first row of columns as the *porticus ad fanum Herculis* erected by M. Fulvius Nobilior (*Liv.* 40.51.6) and the second as that built by Philippus.

⁶⁶ Richardson, jr. (1977, 361) identifies the enclosure as the wig market mentioned by Ovid (*am.* 3.167-8) and Martial (5.49.12-3).

According to ancient authors, the Temple's decorative scheme included nine statues of the Greek Muses taken as booty from Ambracia,⁶⁷ a statue of Hercules Musagetes,⁶⁸ and the Shrine of the Camenae.⁶⁹ In addition, an annotated copy of the *Fasti*,⁷⁰ paintings by Zeuxis and Theorus, and three statues by Antiphilus can be linked with the Temple complex.⁷¹ Of these features, the *Fasti* may have been incorporated into the Temple platform,⁷² and the paintings would have been sheltered by the Portico.⁷³

A Campana plaque, which may illustrate part of the complex, places a statue of Heracles Musagetes directly beneath the marine frieze of the Temple's pronaos⁷⁴ and athletic statues in the intercolumnations of the Portico.⁷⁵ Depicting the rear third of the Temple complex, the plaque implies that the cult image of Hercules stood in the Temple's cella, while the statues, possibly by Antiphilus, decorated the rear wall of the Porticus.

Absent from the plaque, the Ambracian Muses may appear together with Hercules on denarii minted by Q. Pomponius Musa in 64 BC.⁷⁶ These show the nine Muses with accompanying attributes and Hercules, identified as *Hercules Musarum*, with a club and a lyre. While it is generally assumed that the prototypes for these images were Fulvius' statues, M. T. Marabini Moevs rejects this comparison on the

⁶⁷ See #42. However, ancient authors (M. Porcius Cato Censorius in Prisc. *gramm.* 2.367.14 K; Cic. *Tusc.* 1.3, and *Arch.* 27; Liv. 39.4.3-7) disputed his right to appropriate the Muses following Ambracia's surrender. Martina 1981, 58 fol.; Viscogliosi 1996c, 17.

⁶⁸ See #42. No ancient author writes of a statue of Hercules brought from Ambracia. Marabini Moevs 1981, 5.

⁶⁹ Serv. *Aen.* 1.8.

⁷⁰ See #42. This may be the first of its kind. Viscogliosi 1996c, 17.

⁷¹ See #42.

⁷² Lundström (1929, 106 fol.) prefers to site the *Fasti* along the base of the exedra.

⁷³ If correctly located, the paintings and statues by Antiphilus (see below) may have been introduced to the complex by Philippus.

⁷⁴ The relief does not support Viscogliosi's (1996c, 18) tetrastyle pronaos.

⁷⁵ Marabini Moevs 1981, 5 and 47. Olinder (1974, 64) dates the marine frieze to Philip's restoration.

⁷⁶ *RE XXI* Pomponius 23. Richardson, jr. (1977, 358-9) suggested that Musa revived the cult of Hercules and the Muses to explain his unusual cognomen.

basis of stylistic anomalies.⁷⁷ Instead, she prefers to see images of the Muses on a late Republican crater from Cerdo⁷⁸ and of Hercules on first century BC Arretine ware⁷⁹ as imitations of Fulvius' hoard.

The sources relate that Fulvius introduced the combined cult of Hercules and the Muses to Rome⁸⁰ after he and the poet Ennius, who joined and recorded his campaigns,⁸¹ discovered a cult of Herakles Musagetes in Greece.⁸² This cult, if imbued with current philosophical ideas, would have honored Hercules for his wisdom and insight and the Muses for their poetic inspiration.⁸³ In a Roman context, a temple dedicated to these deities may have served as a place where poets could meet, compose and recite their poetry. If a *Collegium Poetarum*,⁸⁴ Fulvius' Temple would have recalled the Mouseion at Alexandria and possibly, the Temple of the Muses at Thespieae.⁸⁵

In light of the Greek roots, function, and content of the Temple of Hercules and the Muses, it is appropriate that its form and decoration had clear Greek precedents. Herakles was honored with tholoi at Aigai, Thasos, and Pella (#25).⁸⁶ He may also have been venerated together with the Dioskouroi in a tholos at

⁷⁷ Marabini Moevs (1981, 10-48) considers the images' baroque style incompatible with Classical Greek works.

⁷⁸ Marabini Moevs (1981, 10-48) also discredits Eumenius' testimony of nine Muses, proposing five for which she finds clearly defined types on the Cerdo and related vessels.

⁷⁹ A number of Arretine pots show a Hercules figure wearing a chiton and chlamys and carrying a cithara. Marabini Moevs 1981, 21-2.

⁸⁰ Cic. *Arch.* 27 and Martina 1981, 57 fol.

⁸¹ Cic. *de iur. ill.* 52.2.

⁸² Eumen. *inst. schol.* 7-8 and Marabini Moevs 1981, 5 and 48; vs. Martina 1981, 51-2.

⁸³ Boyancé 1955, 182-3; Martina 1981, 64. See Pietilä-Castrén 1987, 102, for possible links between Pythagoras, Numa, and the annotated *Fasti*.

⁸⁴ Silher (1905) and Crowther (1973, 576-9) trace the history of the *Collegium Poetarum* at Rome and suggest other locations for it, including the Temple of Minerva on the Aventine.

⁸⁵ Silher 1905; Tamm 1961; Cancik 1969; Crowther 1973. Horsfall (1976) provides the fullest examination of the evidence supporting a *Collegium Poetarum* at Rome.

⁸⁶ Aigai: Price 1973, 70, and Seiler 1986, 160 nos. 1-2; Thasos: Seiler 1986, 162. The complex at Pella, which consisted of three tholoi flanking a round court, may have commemorated Herakles Phylakos, a guardian god and protector of the Macedonian state. Price (1973, 68 and n. 19) suggests that the Classical tholos at Delphi (#12) also served as a heroon of Phylakos.

Samothrace.⁸⁷ While Fulvius may have chosen to emulate the round form of these temples, it is also possible that the Shrine of the Camenae, to which he gave a prominent position on the platform, served as a model for his Temple. Fulvius also combined Roman and Greek elements in the layout and content of his decorative program. Balanced against Numa's Shrine and the Fasti were Greek statues and paintings, some of which, like the Muses if placed on top of the semicircular exedra,⁸⁸ would have recalled the statue displays of Classical and Hellenistic Greece.⁸⁹

The Temples of Hercules Victor in the Forum Boarium area (#43 and 44)

Ancient authors record the existence of two round Temples dedicated to Hercules Victor in Rome: *una ad portam Trigeminam, alia in foro Boario*.⁹⁰ Modern scholars have identified these with the round Temples built in and beside the Forum Boarium. The forum served as both the cattle market and the primary cult center of Hercules in Rome. Its association with the Hercules cult dates back to the prehistoric period,⁹¹ when the hero received an altar in the forum to commemorate his victory over the local tyrant Cacus.⁹² The Ara Maxima Herculis⁹³ may represent a replacement of this altar in the Republican period,⁹⁴ while statue dedications,

⁸⁷ Price 1973, 68-70.

⁸⁸ However, Marabini Moevs (1981, 46) would like to set the Ambracian Muses in the Portico's NE intercolumniations.

⁸⁹ For the Hellenistic period, the hemicycle of the poets and philosophers in the Serapeion at Saqqarah, constructed by Ptolemy I Soter, and the *schola* at Phyrus' court in Alexandria provide good comparative examples. Marabini Moevs 1981, 43 and 46.

⁹⁰ Serv. *Aen.* 8.363; cf. Macr. *Sat.* 3.6.10.

⁹¹ It seems likely that Greek merchants introduced Herakles to the Etruscans in the Archaic period. Sichtermann 1960b, 388; vs. Van Berchem 1959-1960, 61-8, who derives Hercules from the Phoenician god Melkart. The first epigraphic evidence to link him to the forum dates to 399 BC. Liv. 5.13.5-6, 7.2.2 and 27.1, and 8.25.1; Dion. Hal. 12.9 fol.; Aug. *civ.* 3.17; cf. Bayet 1926a, 260.

⁹² For the myth, see Coarelli 1992a, 130-9.

⁹³ Tac. *ann.* 12.24; Schol. Iuv. 8.13.4; Dion. Hal. 1.40-4; Schol. Veron. *Aen.* 8.104; Serv. *Aen.* 8.271; cf. Liv. 9.29.9, Val. Max. 1.1.17, and Dion. Hal. 1.40 (*Ara Maxima* incorporated into State religion).

⁹⁴ Its 2nd c. BC remains, consisting of an Anian tufa podium found beneath and behind S. Maria in Cosmedin, can be attributed to Scipio Aemilianus. He may have restored the Altar as a means of paying the *decuma Herculis*. Bayet 1926b, 127, 141, 239-42 and 248-56; Jaczynowska 1981, 633-4;

inscriptions and votive offerings found nearby, like the round Temples, attest to a continued interest in his cult at the forum Boarium through the Imperial period.⁹⁵

The first of these Temples (#44) has been associated with the surviving round Temple by the Tiber based on the location of the Servian walls and the Porta Trigemina,⁹⁶ the *dies natalis* of the Temple,⁹⁷ and the Portunus relief, which may illustrate its urban context.⁹⁸ The second Temple (#43) may be identified with the round Temple destroyed by Sixtus IV. Modern scholars, aided by Livy and Festus, have placed this Temple to the north of S. Maria in Cosmedin on a site now occupied by the ex-Palazzo dei Musei di Roma.⁹⁹

Many of the same passages in which ancient authors provide evidence for the existence and the location of round Temples to Hercules Victor give insight into the founders of these Temples and the motivations behind their founding.

The Temple of Hercules Victor in foro Boario, Rome (#43)

The Temple of Hercules Victor *in foro Boario* (#43) has been identified with the Temple destroyed in the fifteenth century through references in the ancient sources. In addition to locating the Temple, a passage of Festus may reveal its

Coarelli 1992a, 130-9 and 165, and 1995k, 351. For a discussion of its original founders, see Bayet 1926, while its form is reminiscent of the monumental altar at Pergamon.

⁹⁵ For praetorian inscriptions and inscribed votives from the Imperial period, see Bayet 1926, 241, and Cressedi 1984, 264. The last recorded mention of the altar dates to 321 AD. Cressedi 1984, 285.

⁹⁶ For the debate surrounding the location of the Servian walls and the Porta Trigemina, see Säflund 1998, Andreussi 1996b, 319-24, Coarelli 1992a, *passim* and 1996l, 332-3.

⁹⁷ See #44 and below. For the differences in epithet, see Ziolkowski 1988, 311 n. 6, and Coarelli 1992a, 180-1 and 188-92.

⁹⁸ According to Coarelli (1992a, 95-6, and 1996c, 15), this relief, which appears on the Arch of Trajan at Benevento, depicts a procession of gods as topographical indicators in the forum Boarium. He sees Portunus as a personification of the Temple of Portunus, Hercules as the round Temple of Hercules Victor, and Apollo as the statue of Apollo Caelispex.

⁹⁹ Livy (10.23.3) and Festus (p. 282 L) locate a round temple of Hercules near a *signum* or *sacellum* of Pudicitia.

founder. Based on his text,¹⁰⁰ Scaliger has proposed L. Aemilius Paulus, who is known to have pledged a hecatomb and games to Hercules before the Battle of Pydna.¹⁰¹ Better however is Coarelli's suggestion of his son, P. Cornelius Scipio Aemilianus, consul in 146 and 134 BC.¹⁰² Scipio Aemilianus, who oversaw work on the nearby Pons Aemilius,¹⁰³ and knew Pacuvius, credited with decorating a temple of Hercules,¹⁰⁴ may have founded it during his censorship in 142.¹⁰⁵ Alternatively, though less likely, the Temple may have been vowed by the *familia* or servile clergy of Hercules at the Ara Maxima¹⁰⁶ or by the military victor, T. Quinctius Flamininus.¹⁰⁷

Numerous Renaissance authors attest to the excavation, restoration and destruction work carried out by Sixtus IV (1471-1484) in the forum Boarium. During this work, a seated bronze Hercules, shown holding the apples of the Hesperides,¹⁰⁸ was discovered near S. Maria in Cosmedin and the Temple was razed to the ground.¹⁰⁹ However, a drawing by B. Peruzzi preserves something of its appearance. From this drawing, G. B. Giovenale has reconstructed the Temple as a pycnostyle peripteros¹¹⁰ with eighteen Tuscan columns rising from a stepped krepis. Its cella is punctuated by a tall door and a small window, while a low stepped dome serves as its

¹⁰⁰ Festus p. 282 L quoted in #43. Scaliger's emendation (see #43) implies that a member of the *gens Aemilia* was responsible for the Temple's construction.

¹⁰¹ Plut. *Aem. Paul.* 17.19.

¹⁰² Liv. 40.51.4; Plut. *praec. ger.* 20.4.

¹⁰³ Its construction coincided with his censorship. Coarelli 1995k, 351.

¹⁰⁴ Plin. *nat.* 35.17, 19 and 22; cf. Toynbee 1951, 37. Lyngby (1954, 20-3) connects Pacuvius' paintings with an unknown temple to Hercules.

¹⁰⁵ Pais (1920, 520; cf. Ziolkowski 1992, 46, vs. Palmer 1990, 236-40) suggested Scipio Aemilianus based on a passage of Plutarch (*praec. ger.* 20.4), which reveals that he dedicated a temple to Hercules during his censorship, probably following his conquest of Carthage.

¹⁰⁶ For Mommsen's alternative reading of Festus, see #43.

¹⁰⁷ Based on a third reading of Festus (see #43), Palmer (1990, 237-8) dates the Temple to the 190s-180s BC with a *dies natalis* of 29 June or 21 December. Like Scipio Aemilianus, Quinctius Flamininus was a known philhellene. Gruen 1992, 101.

¹⁰⁸ This statue may represent a Hercules Triumphalis, see Plin. *nat.* 34.33 (Evander's Hercules), above and Cressedi 1984, 268.

¹⁰⁹ The site as identified by Renaissance topographers corresponds to the zone of the ex-Pastificio Pantanella, occupied in the eighteenth century by the warehouses and granaries of Ottavio Gracchi.

¹¹⁰ See Chap. II 'Vitruvius on round temple design' and Gros 1976a, 214.

roof.¹¹¹ His reconstruction, especially the cupola, is hypothetical and may reflect renovations of the Imperial period.¹¹²

In addition to the bronze Hercules,¹¹³ Servius and Macrobius attest to a second statue connected with the Temple.¹¹⁴ Depicted wearing the Nemean lion skin,¹¹⁵ this Hercules, like the bronze statue, recalls one of the hero's labors. Hercules, whose success depended on his resourcefulness and might,¹¹⁶ was an ideal role model for late Republican generals and political leaders and by extension, the preferred god for victory dedications.

The Temple of Hercules Victor *ad portam Trigemnam*, Rome (#44)

The second round Temple of Hercules Victor (#44) stands together with a rectangular temple on a fill layer between the forum Boarium and the banks of the Tiber. This layer, which may be limited by the Servian walls, contains ceramic remains from the early second century BC.¹¹⁷ The contents of the layer constitute a *terminus post quem* for both Temples, while its date and location suggest a link with M. Fulvius Nobilior's expansion of the port in 179 BC.¹¹⁸ Despite their physical proximity and late Republican date,¹¹⁹ the two Temples are radically different in form and decoration. While the rectangular temple shows strong Italic influences in its

¹¹¹ Giovenale 1927, 378-9. As it is difficult to conceive that the weight of a dome could be supported by columns, it seems more reasonable to reconstruct a wooden truss roof.

¹¹² Coarelli 1992a, 91-2. Much of the Temple's elevation may have been invented by Peruzzi.

¹¹³ Giovenale (1927, 380) places this statue in an interior niche.

¹¹⁴ Serv. *Aen.* 3.407 and 8.288, and Macr. *Sat.* 3.6.17. Lyngby (1954, 32-6 and 59-60) finds parallels to this Hercules on the Portunus relief and on a series of medallions labeled *Herculi Victori*.

¹¹⁵ Varro in *Schol. Dan. Aen.* 8.363 quoted in #43; cf. Lyngby 1954, 16.

¹¹⁶ Sichtermann 1960a, 378-87 (in Cynic and Stoic philosophy).

¹¹⁷ Coarelli 1995k, 360. For the course of the Servian walls, see above.

¹¹⁸ Palmer 1976-1977, 141. By extension, the Temple's placement may imply some involvement in the life and trading activity of Fulvius' port. See below for its potential commercial links, while the rectangular temple is generally attributed to the god Portunus, the patron god of harbors and ports. Adam 1994b, 5-30, 56-78 and 101.

¹¹⁹ For the Temple's date, see below. The late 2nd c. BC date of the Temple of Portunus is secured by the fill layer and by the materials and techniques employed in its construction. Adam 1994b, 46-9.

style and stucco-covered decoration,¹²⁰ the Temple of Hercules Victor resembles temples of the Greek East in its materials and design.

The Temple rises from tufa foundations¹²¹ with a cella of marble-revetted travertine and a marble peristasis. Its twenty columns, resting on a marble-covered krepis and travertine euthynteria, comprise Ionic bases, fluted shafts and Corinthian capitals. Unusually slim and densely packed, its columns differ among themselves in height, material and number of drums.

The Pentelic columns known as Group A pertain to the original Temple. In view of their closest comparanda, the late Hellenistic capitals of the Hekateion at Lagina in Caria, ca. 128-81 BC, W.-D. Heilmeyer has proposed that the Group A capitals were transported partially carved from Greece¹²² and put in place by local workmen.¹²³ The Luna marble columns of Group B and Luna capitals of Group C, supported on original shafts, by contrast, are of Italian manufacture. Precise copies of the Group A capitals,¹²⁴ the Groups B and C capitals were produced in Rome, probably following the Tiber flood of 15 AD, which may have destroyed parts of the Temple's sub- and superstructure.¹²⁵

The Temple's peristasis supported a Corinthian-Ionic entablature,¹²⁶ while ceiling coffers, decorated with acanthus plants and flowers, spanned its ambulatory. Its cella wall, heavily repaired in the Imperial period, consists of a tall socle of finely dressed header and stretcher courses and, above its cornice, marble blocks clamped to

¹²⁰ While the frontal, symmetrical plan and materials used in the Temple of Portunus are purely Italic, its peripteros of pilasters betrays some Greek influence.

¹²¹ The presence of a *bothros* or pit in the Temple's foundations, like at the Tholos at Epidauros (#13), may strengthen the Temple's links with Hercules' early chthonic ideology. Robert 1939, 372-3.

¹²² Finds from the Mahdia shipwreck attest to the shipping of architectural elements from the Greek world to Rome.

¹²³ As the acanthus leaves of the Temple's coffering are similar in style to the capitals of Group A, Rakob and Heilmeyer (1973, 19, 23, and 30) suggest that they are products of a Greek workshop.

¹²⁴ Rakob and Heilmeyer 1973, 22.

¹²⁵ Rakob and Heilmeyer 1973, 6-8, 19 and 21-3.

¹²⁶ This reconstruction is supported by the Ionic slope of the cornice fragments, suggesting the use of modillions and a continuous frieze course. von Hesberg 1980, 119 and 169.

a travertine backing.¹²⁷ Though characteristic of late Classical and Hellenistic building practices, the drafting and masonry techniques used in its construction appear rarely in Roman architecture prior to the late Republican or Augustan periods.¹²⁸ As a result, they, like the fill layer, help to narrow the Temple's date to the second or first centuries BC.¹²⁹ Moreover, like the Temple's marble-tiled, wooden truss roof,¹³⁰ they underline the strength and breadth of Greek influence on its form, materials and design.

Based on dating limitations¹³¹ and evidence provided by the ancient sources, modern scholars have sought to assign a founder to the Temple. Servius and Macrobius¹³² credit M. Octavius Hersennus¹³³ with the introduction of the cult and the construction of a temple to Hercules Victor in Rome. Based on Hersennus' connections to the olive trade,¹³⁴ F. Coarelli identifies the Temple by the Tiber as this foundation. The Temple, sited in a marketplace and port, may represent a tribute to Hercules Victor Olivarius, the patron god of olive merchants.¹³⁵ Supported by an

¹²⁷ Strong and Ward-Perkins 1960, 9; Rakob and Heilmeyer 1973, 10 and 12.

¹²⁸ Strong and Ward-Perkins 1960, 11-8 and 31-2. Comparable examples of drafting include the Hieron at Samothrace (late 4th c. BC), the Mausoleum of Caecilia Metella (60 BC) and the Temple of Mars Ultor in the Forum of Augustus (dedicated in 2 BC). According to Ward-Perkins, the pattern of tall-and-short courses used above the socle, though commonplace in the late Hellenistic architecture of Asia Minor, is without parallel in Rome.

¹²⁹ Strong and Ward-Perkins (1960, 18-20) argue for a late Republican date as comparable Augustan examples employed a much thinner marble veneer and as few if any Roman buildings were constructed of imported marbles after the opening of the Luna marble quarries.

¹³⁰ Rakob and Heilmeyer 1973, 32-3.

¹³¹ In addition to the fill layer and the Temple's Greek style and construction, its dating is restricted by the limits of Grotta Oscura tufa use, ca. 396-early 1st c. BC, chronological listings in the *Fasti*, 173-67 BC (see Coarelli 1992a, 101-2), and the date of the first marble temple in Rome (for the Temple of Jupiter Stator, ca. 146 BC, see 'Introduction' above).

¹³² Serv. *Aen.* 8.363; Macr. *Sat.* 3.6.10. For difficulties regarding the sources from which these authors drew and hence the reliability of their material, see Ziolkowski 1988, 318-24.

¹³³ M. Octavius is alternately known as Hersennus and Herennus.

¹³⁴ Coarelli (1992a, 193-6 and 199; vs. Ziolkowski 1988, 320-1) also identifies Hersennus as an author with Tiburtine connections suitable for the transfer of a Tibur-based cult (Macr. *Sat.* 3.12.7), and a *tribunus plebis* who may have abolished the *lex Frumentaria* of C. Gracchus.

¹³⁵ Inscriptions from Delos suggest that Hercules was the patron of Italian *olearii*. Ziolkowski 1988, 317; Coarelli 1992a, 203-4.

inscribed statue base,¹³⁶ Coarelli's attribution of Hercules Victor Olivarius is additionally significant as his cult statue was crafted by the Greek artist, Scopas Minor. Linked with such a famous name, it is not impossible that the renowned Greek architect, Hermodorus of Salamis, was responsible for the Temple's design.¹³⁷

It is also possible however that Hermodorus designed a temple for L. Mummius Achaicus, the prominent military figure whom A. Ziolkowski proposes as founder.¹³⁸ Mummius is cited on an inscription as constructing an *aedem et signu(m)* to Hercules Victor.¹³⁹ As a general, consul and censor together with Scipio Aemilianus,¹⁴⁰ who may have built the nearby Temple of Hercules Victor *in foro Boario*, it seems likely that Mummius founded a temple worthy of his status. Like Metellus Macedonicus and Brutus Callaicus, who constructed temples in Pentelic marble,¹⁴¹ Mummius may have dedicated the Greek-inspired, marble-revetted round temple to the god who ensured his victory.¹⁴²

The Temple of Fortuna Huiusce Diei, Rome (#38)

Architectural and decorative remains of Temple B found in the gardens of S. Nicola ai Cesarini as well as the Severan Marble Plan illustrating it, its northern

¹³⁶ Hercules Olivarius is named on the statue base (*CIL* VI 33936 quoted in #44), while Hercules Victor and Invictus appear in the Regionary Catalogues (see #44 and Degrassi 1963, 16, 180-1, and 494-6). Coarelli 1992a, 93 and 96-7. Palmer (1976-1977, 150) interprets the Catalogue reference as a street name.

¹³⁷ Coarelli 1970-1971b, 263; cf. Cic. *de orat.* 1.62, Plin. *nat.* 36.35, Vitruv. 3.2.5, and Wilson Jones 2000, 20 (Hermodorus' projects in Rome).

¹³⁸ Ziolkowski (1988, 317-27) doubts whether Hersennus had the funds or the political clout necessary to build this Temple. Moreover, he considers it likely that the *lex Papiria* would have limited Hersennus' ability, as a private individual, to found a temple on public land.

¹³⁹ It should be noted that the inscription (*CIL* P 626 = *CIL* VI 331 = *ILLRP* 122), discovered on the Caelian, was cut into a low quality, travertine slab. Hardly a dedicatory plaque, Coarelli (1992a, 186) would link it to a shrine built near its find spot.

¹⁴⁰ For L. Mummius' career, see Ziolkowski 1988, 328-9, and for a modern review of his aesthetic sentiment, see Gruen 1992, 123-7.

¹⁴¹ See 'Introduction' above. Like them, Mummius adopted a surname reflective of his conquest.

¹⁴² As Mummius was the only general to be labeled *victor* by Vergil (*Aen.* 6.836-7), it seems appropriate that Hercules' cult should bear his epithet. Ziolkowski 1988, 330; cf. Wilson Jones 2000, 138 (re. the appropriateness of the Corinthian order for a victory monument).

neighbor Temple A, and a portion of Temple C, have aided archaeologists in identifying the location of Temple B at a site known as the Area Sacra di Largo Argentina. The Temples of the Area Sacra, A, B, C, and D at its southern limits, are bounded by a rectangular portico that backs onto the *porticus Pompei* with its theater to the west and fronts onto the porticus of the Via delle Botteghe Oscure, which F. Coarelli considers the Imperial *porticus Minucia Frumentaria*.¹⁴³ Coarelli identifies the enclosure of the Area Sacra as the *porticus Minucia Vetus*, constructed by M. Minucius Rufus, consul in 110 BC, following his victory over the Scordisci in 107.¹⁴⁴

Of the Temples located within the Area Sacra, Temple B is the most recent. It follows the first period of building work in the Area, from the late fourth to the mid-third century BC, which saw the construction of Temples A, C and D. In the second period, from the mid-second to the mid-first century BC,¹⁴⁵ the ground level of the Area Sacra was raised with a tufa paving, the *porticus Minucia Vetus* was erected, and Temple B experienced the first and second phases of its development in unison with the second phase of Temples C and D and the second and third phases of Temple A.

The construction of Temple B is contemporaneous with a general unification of the Area Sacra. The addition of tufa paving brought the four Temples, conceived and built separately, together on a common ground level, while the erection of Minucius' Portico gave shape to the Area and defined its outer limits. In its first phase, ca. late second century BC,¹⁴⁶ Temple B rose from two stone and concrete foundation rings¹⁴⁷ with a cella wall and peripteros of tufa and travertine. A base, embedded in its inner ring, supported a colossal cult image, of which fragments have

¹⁴³ Coarelli et al. 1981, 32; vs. Manacorda 1999, 132-7.

¹⁴⁴ See *CIL* VI 10223 and Coarelli et al. 1981, 35, and 1995k, 318; vs. Wall 1932, passim, and Rickman 1983, 106-7.

¹⁴⁵ Coarelli et al. 1981, 13-4.

¹⁴⁶ For this date, see #38 and below.

¹⁴⁷ Coarelli et al. 1981, 19. A sewer was discovered underneath the Temple's foundations. Marchetti-Longhi 1956-1958, 45-8.

been found beside the Temple.¹⁴⁸ On stylistic grounds, Coarelli has attributed this statue to Scopas Minor.¹⁴⁹

The Temple's podium was preceded by a set of travertine-revetted steps and supported eighteen Corinthian columns.¹⁵⁰ The columns, resting on Attic-Asiatic bases, carried a richly detailed, Pentelic marble entablature¹⁵¹ and a marble-plated, wooden truss roof.¹⁵² The original cella wall, destroyed in the mid-first century BC,¹⁵³ was replaced by a new wall rising from the outer foundation ring. This new wall, formed by interposing tufa blocks between the columns, greatly increased the dimensions of the cella¹⁵⁴ and occasioned the restructuring of its podium. Now faced with peperino, the podium was enlarged and received new base and cornice moldings. Simultaneous with this reconstruction was the introduction of two oblong bases placed on either side of the Temple's stairs.¹⁵⁵ These were presumably intended for the sculptural groups mentioned by Cicero and Pliny.¹⁵⁶

Though common decorative elements and the introduction of tufa paving and Minucius' portico went far to unify the Temples of the Area Sacra, raised platforms with altars built in front of Temples A, C and D in the first period and B in the second¹⁵⁷ resulted in much of their independent flavor being retained until the massive renovations of Domitian's era.¹⁵⁸

¹⁴⁸ Marchetti-Longhi 1956-1958, 51-2 and 64-6; Coarelli et al. 1981, 19-20.

¹⁴⁹ Gros 1996, 269-70.

¹⁵⁰ Marchetti-Longhi 1956-1958, 53-9; Coarelli et al. 1981, 19.

¹⁵¹ Coarelli et al. 1981, 20 pl. 5.2; vs. Schorner 1995, 9. If correctly identified, this plaque would be the earliest example of an ornamental stone frieze found in Rome.

¹⁵² Marchetti-Longhi 1956-1958, 63-5.

¹⁵³ See #38 and Gros 1996a, 270.

¹⁵⁴ See Chart #38.1.

¹⁵⁵ Marchetti-Longhi 1956-1958, 60-2, and 1970-1971, 21 and 52-3; Coarelli et al. 1981, 20-1; Gros 1996a, 270.

¹⁵⁶ Cic. *Verr.* 2.4.4.126, Plin. *nat.* 34.54 and 60, and see #38.

¹⁵⁷ Marchetti-Longhi 1970-1971, 20-1.

¹⁵⁸ Marchetti-Longhi 1970-1971, 9-13; cf. Chap. VI #38.

Set apart from its neighbors, Temple B has been identified based on Varro's description of his aviary at Cassinum.¹⁵⁹ Likening it to a *tabula literaria ... cum capitulo*, Varro notes that his birdhouse ... *est ultra rutundus columnatus, ut est in aede Catuli, si pro parietibus feceris columnas*.¹⁶⁰ Prior to incorporating its peripteros within a new cella wall, Temple B, referred to as the *aedes Catuli*,¹⁶¹ corresponded perfectly to Varro's aviary.¹⁶²

One of two known temple dedications by a Catulus may coincide with this *aedes*. The first, a temple to Iuturna *in campo Martio*, has been associated with C. Lutatius Catulus, who defeated the Carthaginians in 241 BC. Coarelli has linked this construction with Temple A, while Ziolkowski sees it as Temple C.¹⁶³ The second dedication by a Catulus takes two forms: statues to Fortuna Huiusce Diei on the Palatine and a temple in the Campus Martius. Q. Lutatius Catulus,¹⁶⁴ consul in 102 BC and a possible descendant of C. Lutatius Catulus,¹⁶⁵ may have had a hand in both, following his victory at the Battle of Vercellae in 101.¹⁶⁶ Pliny records a dedication by this Catulus of statues at a shrine to Fortuna in the *vicus Fortunae Huiusce Diei* on

¹⁵⁹ Varro *rust.* 3.5.9-12; cf. Van Buren and Kennedy 1919, 61-2, and Coarelli 1980, 211.

¹⁶⁰ Varro *rust.* 3.5.12. Though possibly modeled after the Temple, Varro's aviary is not unique. Comparable aviaries may be found in wall paintings in the Villa of Julia Felix and Houses I.iv.25, VI.i.7, VI.ix.6, and VII.vii.16 at Pompeii, and in the gardens of the Villa at Diomed. Van Buren 1925, 111, and 1932, 10-2.

¹⁶¹ Boyancé 1940, 69; Coarelli 1981a, 37-9.

¹⁶² Moreover, a tufa wall separating Temples A and B, together with its statue bases, would have delimited an area in front of Temple B reminiscent of a *tabula literaria*. Marchetti-Longhi 1956-1958, 45, 48 and 70, and 1970-1971, 10 and 20.

¹⁶³ Coarelli 1981a, 42-6; Ziolkowski 1986, 624-39, and 1992, 94-6.

¹⁶⁴ For Catulus' philhellenism, see Cic. *nat. deor.* 1.28.79, Gell. 19.19.10, and Beard and Crawford 1985, 19.

¹⁶⁵ Regardless of their true relationship, Q. Lutatius Catulus would have claimed a blood connection, which presumably influenced the location of his temple (see below).

¹⁶⁶ Q. Lutatius Catulus is known to have dedicated a temple to Fortuna Huiusce Diei on the anniversary of his Battle vow. Plut. *Mar.* 26.2; cf. Boyancé 1940, 67, Coarelli 1981a, 38, and Richardson, jr. 1992, 156.

the Palatine,¹⁶⁷ which coincided with the founding of a new temple to Fortuna Huiusce Diei, most likely in the Campus Martius.¹⁶⁸

This temple foundation commemorated not only the fortune that favored Catulus' win,¹⁶⁹ but also, as Cicero explains, Fortuna *nam valet in omnes dies*.¹⁷⁰ Fortuna Huiusce Diei, acknowledged as a force intervening in the daily lives of all Roman citizens, shows clear elements of Tyche, the Greek goddess of Fortune and Fate. In the wake of Rome's first exposure to Greece, Fortuna's oracular abilities, once equal to her roles in fertility and transport,¹⁷¹ came to prominence. Like Tyche, with whom she was assimilated, Fortuna was acknowledged in victory dedications as the divinity whose favor might ensure Rome's success and continued prosperity.¹⁷²

The Round Temple, Tibur (#64)

Two late Republican temples crown the acropolis at Tibur, one of the most ancient and important cities of Latium.¹⁷³ A rectangular temple, dating to the first half of the second century BC,¹⁷⁴ stands to the north of the Round Temple (#64) added to its precinct when the acropolis was extended to the east with an artificial terrace.¹⁷⁵

¹⁶⁷ This shrine was probably set up by L. Aemilius Paulus. *Aust. de sacris aedibus* 26; Platner and Ashby 1929, 216.

¹⁶⁸ Plin. *nat.* 34.54 and 60; Boyancé 1940, 65-7.

¹⁶⁹ Based on its comparison to Varro's aviary, Coarelli (1997, 283-4; cf. Plut. *Mar.* 26.3) suggests that the Temple of Fortuna Huiusce Diei's ornament included astrological motifs connected with Catulus' victory and the Temple's dedication day.

¹⁷⁰ Cic. *leg.* 2.28. This can be contrasted with Q. Fulvius Flaccus' foundation to Fortuna Equestris in 180-174 BC, which commemorated Fortuna's role in his victory over the Celtiberi as an isolated event (Liv. 40.40.10, and 42.10.5; Vit. 3.3.2). Coarelli 1995d, 268-9.

¹⁷¹ See Chap. III #36.

¹⁷² Hamdorf 1964, 37-9; Kajanto 1981, 516-8 and 521-32. Trajan's Temple of Fortuna Omnium serves as a prime example. Aronen 1995f, 273.

¹⁷³ For a summary of Tibur's involvement with Rome, see Coarelli 1993a, 36-9.

¹⁷⁴ The rectangular temple is a prostyle, tetrastyle, pseudo-peripteral building of tufa and travertine with five engaged quarter-columns along its side walls, four along its back, and engaged half-columns at its corners. Its podium moldings and column bases are similar to those of the Round Temple. Delbrueck 1907-1912, 14-6; Giuliani 1970, 122-35; Coarelli 1993a, 90-2. For its date, see Giuliani 1970, 131-2.

¹⁷⁵ Prior to this addition, there was not enough space to accommodate a second temple between the first and the slopes of the acropolis. Clearly, the Round Temple was planned only after the rectangular temple was begun or built. Giuliani 1970, 122.

The terrace, supported on vaulted arcades excavated and built up from the slopes of the acropolis, together with the Round Temple, can be linked to a large-scale restructuring of the city in the late second century.¹⁷⁶

The Round Temple's podium, consisting of a tufa and concrete core revetted in travertine, is approached by a set of eleven steps on axis with its door.¹⁷⁷ The podium, ornamented with base and cornice moldings, supports a tufa and concrete wall, punctuated by a door and two windows, and a peristasis of ten of an original eighteen columns. The columns, with Attic bases and Corinthian capitals, are surmounted by an inscribed Ionic architrave and a frieze depicting garlands and bucrania. A simple cornice protrudes above the frieze, while ceiling coffers, engraved with flowers and acanthus leaves, span the ambulatory.¹⁷⁸ Though nothing remains of its roof, R. Delbrueck has reconstructed a two-tiered, wooden truss¹⁷⁹ in preference to the cupola shown in Renaissance drawings.¹⁸⁰

Inside the cella is a small treasury aligned with the Temple's door. Like the inscribed architrave, it may help in determining the divinity to whom the Round Temple was dedicated as well as its patron. Identifying the treasury as a repository for the Sibylline Books,¹⁸¹ F. Coarelli links the Round Temple with the tenth sibyl Albunea, whose cult site was located near the acropolis.¹⁸² He reconstructs its

¹⁷⁶ See Cat. #64 and Coarelli 1987, 104, and 1993a, 93. For contemporary buildings in Tibur, see Coarelli 1993a, 92.

¹⁷⁷ Coarelli 1993a, 92-3; cf. Giuliani (1970, 137-8), who incorporates a landing.

¹⁷⁸ Delbrueck 1907-1912, 18.

¹⁷⁹ Delbrueck 1907-1912, 22; cf. De Angelis d'Ossat 1930, 244.

¹⁸⁰ The drawings of G. da Sangallo and an anonymous artist whose work is in the Wiener Hofbibliothek portray a cupola, either egg-shaped with an oculus and surrounded by a balustrade or tiered like the Pantheon (#50). Delbrueck 1907-1912, 21-2; Giuliani 1970, 132.

¹⁸¹ Dion. Hal. 4.62.5; cf. Coarelli 1987, 105-6, and 1993a, 94. Albunea's cult statue was depicted holding the Sibylline Books (Lact. *inst.* 1.6.12).

¹⁸² Hor. *carmin.* 1.7.11; Stat. *silv.* 1.3.70 fol. For difficulties arising from the confusion between Albunea and Albulia, see Tilly 1934, 29, Lyngby 1965, 95-8, and Coarelli 1987, 105. Coarelli (1987, 105-7) ascribes the rectangular temple to Tibur's founder, Tiburnus.

inscription to refer to L. Gellius Poplicola, praetor in 94 and consul in 72 BC.¹⁸³ As part of his political and religious duties, Poplicola may have transferred the Sibylline books from Tibur to the Temple of Jupiter Capitolinus at Rome in 83.¹⁸⁴ If Coarelli is right in suggesting that Gellius' name replaces an earlier inscription and signifies a consular date,¹⁸⁵ its present inscription may indicate a re-dedication of the Temple following the *damnatio memoriae* of its founder.¹⁸⁶ Although Coarelli's interpretation is appealing, it is more prudent, like C. F. Giuliani,¹⁸⁷ to leave the question of the Round Temple's attribution open.

The Shrine and Temple of Fortuna Primigenia, Praeneste (#30-1)

The Sanctuary of Fortuna Primigenia at Praeneste is a vast, terraced complex that rises from the forum of the city into the hill behind it.¹⁸⁸ The religious buildings of the forum constitute the "lower Sanctuary," while the "upper Sanctuary" comprises the terraced area, the hemicycles, and the Shrine (#30) and Temple (#31) of Fortuna.¹⁸⁹ The upper Sanctuary was probably constructed between 110 and 100 BC,¹⁹⁰ decades before Sulla conquered the city and transformed it into a colony of

¹⁸³ For Gellius' career, see Coarelli 1987, 107.

¹⁸⁴ Tagliamonte 1996, 144-8.

¹⁸⁵ Coarelli 1987, 106-7. The ablative case would suggest such a solution, though as it reads now, the inscription is almost impossible to reconstruct.

¹⁸⁶ Coarelli 1987, 110. This would be unlikely if the original founder was a priestly college acting under a Sibylline mandate.

¹⁸⁷ Giuliani 1970, 133.

¹⁸⁸ The layout of the complex is comparable to the Hellenistic sanctuary at Kos and the city of Pergamon at its height under Eumenes II (197-159 BC). Taken by itself however, the upper Sanctuary, with its three-sided portico, theatral cavea and terminal Temple, resembles Italic sanctuaries at Tibur (Hercules Victor) and Gabii (Juno). Coarelli 1987, 52-3.

¹⁸⁹ These function as separate and self-sufficient units. For the lower Sanctuary, see Coarelli 1993a, 131-7, while among its more significant features are the 4th c. BC "Antro delle Sorti" (see Mingazzini 1978, 211-7), a site linked with Fortuna's oracular abilities (see Brendel 1960, *passim*, and Coarelli 1987, 67-79), and the late 2nd c. Temple of Isis, a goddess ideologically related to Fortuna (Vitr. 1.7.1; cf. Coarelli 1976, 339, 1987, 79-82, and 1993a, 135-6, and below).

¹⁹⁰ Degrassi 1978, 149-63; Coarelli 1976, 337-9 (last quarter of the 2nd c. BC); vs. Gullini 1973, 760-4 and 778-9 (mid-2nd c.).

Rome.¹⁹¹ This date is supported by architectural and sculptural remains from both Sanctuaries¹⁹² as well as inscriptions, which record the involvement of local merchants¹⁹³ and magistrates¹⁹⁴ in founding Praeneste's upper Sanctuary and elaborating her forum.

The Shrine was located on the Terrace of the Hemicycles, while the Temple stood behind the large hemicycle that crowns the complex. The Shrine, sited in front of the Terrace's eastern exedra,¹⁹⁵ rose from a well revetted in tufa *opus incertum*.¹⁹⁶ Its podium supported seven Corinthian columns,¹⁹⁷ a Doric entablature and a conical roof,¹⁹⁸ while a stone transenna topped by metal grillwork filled out its intercolumnations. A large circular altar and a base, which may have supported a marble cult image,¹⁹⁹ stood next to the Shrine and were accompanied by a set of fountains or lustral basins placed beside the Terrace's stairs.²⁰⁰

From an architectural standpoint, the Shrine most closely resembles the late Hellenistic Rotunda at Ilion (#14). Consisting of a drum with Doric pilasters, windows and a cone-shaped roof, the Rotunda is recalled by the Shrine in size, composition, and very possibly, function. Sited on the city's acropolis, it served as

¹⁹¹ Several scholars date the building work at Praeneste to Sulla's occupation: Magoffin 1978, 85-6 (the upper Sanctuary only); Lugli 1954a, 305-8, Kähler 1978, 241, and Romanelli 1967, 51-5 (both Sanctuaries). For a summary of their arguments, see Lugli 1954a, 308, and for a refutation, see Gullini 1954 and 1973, 779-95.

¹⁹² See #30-1.

¹⁹³ A number of *negotiatores*, whose names are preserved on Delos, are of Praenestine origin. Coarelli 1976, 338; Degrassi 1978, 163.

¹⁹⁴ Using these inscriptions, the municipal *Fasti*, dedications of freedmen, and epigraphs from tombs, Degrassi (1978, 149-63) compiled a list of the ancient Praenestine *gentes*, among whom he discovered a close correspondence with the Sanctuary's benefactors.

¹⁹⁵ Bronze coins taken from the well, which date between the reigns of Vespasian and Constantine II, attest to the longevity of the Sanctuary. Fasolo and Gullini 1953, 148.

¹⁹⁶ Lacking evidence for drainage, it seems unlikely that the well held water. Fasolo and Gullini 1953, 147-8.

¹⁹⁷ Coarelli (1987, 52) attaches ritual importance to the number seven, since the exedrae also employ seven columns.

¹⁹⁸ Fasolo and Gullini 1953, 149-52 (entablature); Coarelli 1987, 50 (roof).

¹⁹⁹ Coarelli 1987, 50.

²⁰⁰ Based on these and the high number of votive objects discovered on the Terrace, Coarelli (1987, 52) concludes that this area was of particular importance to Fortuna's cult.

Ilion's *omphalos*, while F. Coarelli suggests that, like the Mundus at Rome (#49) and the Monopteros at Pompeii (#28), the Shrine constituted the *mundus* of Praeneste.²⁰¹

Accessed via stairs from the Terrace of the Hemicycles, a second terrace and a hemicycle, formed from a curved portico and theatral cavea, fronted the Temple of Fortuna Primigenia. Traces of this Temple, visible inside the Palazzo Barberini, include foundations and two concentric walls of *opus incertum*. Drawing from a record of its destruction in 1298²⁰² and Renaissance sketches by P. Ligorio and fra' Giocondo, Coarelli reconstructs the Temple as a large circular structure roofed with a cupola.²⁰³ This drum, he suggests, was approached via an opening at the back of the hemicycle, which provided access to a set of ramps running perpendicular to the Temple²⁰⁴ and possibly, to ramps or stairs sited in-between the Temple's outer and inner cella walls.²⁰⁵ Recognizing that the narrow width and flat gradient of this area is antithetical to Coarelli's reconstruction, F. Rakob puts forward a simpler solution.²⁰⁶ To account for its elevated cella, he places a stairway between the entrance to the Temple precinct via the portico and the Temple's perimeter wall.²⁰⁷

Remains and ancient sources suggest that the Temple contained a bronze cult statue, a black marble statue, and an olive tree that produced honey.²⁰⁸ Fortuna's role as an Italic mother goddess is emphasized by the bronze statue, which shows her

²⁰¹ Coarelli (1993a, 200) cites a pre-Republican phase in the well's construction, which he links with Praeneste's foundation (see below).

²⁰² This text (quoted in #31) compares the Temple to the Pantheon (#50).

²⁰³ Coarelli 1987, 43 and 56; vs. Rakob and Kleibrink 1990, 69-71 and 76. All three rightly reject Kähler's (1978) proposal of a monopteros.

²⁰⁴ These ramps, possibly intended as service entrances, would have provided a way of approaching the Temple from outside the upper Sanctuary. Coarelli 1987, 58 and 61.

²⁰⁵ This reconstruction is based primarily on fra' Giocondo. Coarelli 1987, 58-60 fig. 20.

²⁰⁶ Rakob 1992, 87 figs. 19-25.

²⁰⁷ Lauter (1979, 410) is unclear about the existence of a perimeter wall, while Rakob (1992, fig. 13) rejects it entirely.

²⁰⁸ See #31 (marble statue), Plin. *nat.* 33.61 (bronze cult statue), and Cic. *div.* 2.41.85-7 (olive tree). For dating reasons, Sulla's *lithostroton* (Plin. *nat.* 36.189; vs. Champeaux 1987, 216-35) cannot be located inside the Temple.

seated and suckling the infants Jupiter and Juno.²⁰⁹ The marble statue, incorporating elements of Tyche and Isis,²¹⁰ accentuates Fortuna's oracular abilities, brought to prominence through her assimilation with Tyche. This duality²¹¹ is supported by the existence of two buildings commemorating Fortuna: the Shrine, if correctly identified as the Mundus, associated with the Praeneste's origins,²¹² and the Temple linked with the Sanctuary's construction during a period of intense Greek influence.²¹³ To this period can be dated the first mention of Praeneste's Fortuna as an oracular goddess, and of the yearly festival which recognized both roles by commemorating Fortuna's relationship to Jupiter, her oracular abilities, and her maternal gifts.²¹⁴

The Shrine of Hermes and Maia, Delos (#10)

In the late second century BC, religious fraternities representative of the Italian merchant classes dedicated a series of monuments in the so-called 'Agora of the Compétaliastes' or 'the Italians' on Delos.²¹⁵ Foremost among them were the Hermaists, founded in honor of Hermes-Mercury some thirty or forty years before, when the Italian community first became prominent on the island.²¹⁶ Their

²⁰⁹ Fortuna is represented as Jupiter's nurse in Servius Tullius' Temple of Fortuna Primigenia on the Capitoline (Plut. *quaest. Rom.* 74.106, and *fort. Rom.* 10; Aug. *civ.* 6.7.1; cf. Sabbatucci 1988, 172-4, and Aronen 1995g, 273-5) and conversely, as Jupiter's daughter on inscriptions (*CIL* XIV 2852-3, 2856-8, 2860, and 2863-72; cf. Pease 1923, 491, and Champeaux 1982, 24). The dualities inherent in her cult are reflected in the cult images of the two Fortunaes of Antium and on coins minted by Quintus Rustius, magistrate in 19 BC. Brendel 1960; Simon 1990, 63-4.

²¹⁰ Isis is particularly appropriate as the deity of maritime commerce, the means by which the Sanctuary's construction was probably financed (see above). Fasolo and Gullini 1953, 259-60; Gullini 1973, 766-7; Coarelli 1993a, 135. For other cult images of Fortuna with oracular connections, see Brendel 1960, *passim*, and Coarelli 1987, 74-9.

²¹¹ Similar are the two Venuses honored at the Shrine of Venus Cloacina. Coarelli 1993e, 290-1.

²¹² The Shrine may also have fulfilled an oracular role, if it held *sortes* or lots (cf. Cic. *div.* 2.41.85-6).

²¹³ It is possible, as Hanson (1959, 34) suggests, that Temple began as a cave shrine, like the "Antro delle Sorti" in Praeneste's forum (see above), and was rebuilt as an oracular site in the late Republic.

²¹⁴ The maternal component of her festival rivaled the *Matralia* celebrated at the Temples of Fortuna and Mater Matuta in the Forum Boarium. Champeaux 1982, 60.

²¹⁵ See #10.

²¹⁶ For the Hermaists, see Hatzfeld 1975, 349. Other fraternities include the Apollonaists and the Poseidonaistes, honoring Apollo and Poseidon-Neptune respectively.

dedications in the Agora, identified on a large commemorative plaque,²¹⁷ include a round Shrine to Hermes, the god of commerce, and his adoptive mother Maia (#10).

According to the Shrine's bilingual inscription,²¹⁸ it formed the focal point of a small sanctuary to Hermes, surrounded by a peribolos²¹⁹ and embellished with a Doric and an Ionic monument, altars and cult statues.²²⁰ The Shrine rose from gneiss foundations and a two-step podium of Naxian marble with four Doric columns, an inscribed Ionic entablature, and a conical roof.²²¹ Though little more than a treasury,²²² the Shrine serves as an elaboration of a more modest monument erected to Hermes and Maia in the Sanctuary of Apollo in the mid-second century.²²³

This divine pair were frequently worshipped together both in Rome, where Maia originated, and in the Greek world, the home of Hermes who became assimilated with the Roman god Mercury.²²⁴ As a dedication to Hermes, the Shrine recalls a Hellenistic tholos linked with Hermes and the Muses at Knidos²²⁵ and the fifth century BC Temple of Mercury at Rome (#47).²²⁶ More generally, as a dedication intended to promote commercial interests, it may be compared to tholoi in market buildings or *macella* found throughout the Roman world, which, by the Imperial period, may have had religious as well as mercantile associations.²²⁷ On Delos, the construction of this sanctuary points to the increased importance of the

²¹⁷ Hatzfeld 1912, 103. By extension, the Shrine, as a round commemorative monument, is comparable to the Hellenistic Monument of Lysicrates (#3).

²¹⁸ This inscription (*ID* 1738 = *CIL* III² 14203) is remarkable in so far as the Greek and Latin texts are not equivalent; one mentions the divinities honored by the dedication and the other establishes the nature of the offering.

²¹⁹ Hatzfeld 1912, 165.

²²⁰ See #10, Ardaillon 1896, 436, Hatzfeld 1912, 103, and Bruneau-Ducat 1983, 117.

²²¹ Salviat 1963, 260; Binder 1969, 94-7. Its roof, carved to represent radiating bands of tiles, finds parallels in the Monument of Lysicrates at Athens (#3) and the Arsinoeion at Samothrace (#58). Salviat 1963, 260.

²²² Seiler 1986, 146.

²²³ Hatzfeld 1912, 163-4.

²²⁴ Hatzfeld 1912, 349-50; Roussel 1987, 272. For an examination of their possible chthonic and agrarian symbolism, see Robert 1939, 89.

²²⁵ See Passuello-Disegna 1976, 21, for the Heroon of Antigonas Gonatas.

²²⁶ See Chap. III #47.

²²⁷ De Ruyt 1983, 300.

Hermaist fraternity by the end of the century, further enhanced in the mid-first century BC, when they dedicated the Shrine to Hermes-Mercury.²²⁸

Round temples founded in the first century BC:

While examining the evidence for late Republican round temples, it is possible to lose sight of other, equally significant, ways in which the round form was used in contemporary architecture. With varying amounts of Greek input, the form appeared in funerary, commercial and bath buildings both in and outside of Rome, as well as in second style wall painting. Cylindrical tombs like the Mausoleum of Caecilia Metella, domed drums that number among the bath buildings at Baiae, and the first peripteral market buildings at Pompeii and Morgantina,²²⁹ like round temples, reveal the form's amazing range and versatility. Wall paintings, which depict round buildings in urban or rural settings,²³⁰ demonstrate the array of contexts suitable for the form.

The wall paintings are additionally significant for recording a class of round buildings, including temporary shrines and pavilions, too ephemeral to be preserved by the archaeological record.²³¹ Though intended as permanent temples, little more evidence can support the existence of three late Republican temples cited by W. Altmann: the Heroon of Eumelos, Vesta or Ceres near Naples (#20), the Temple of Feronia at Nazzano (#21), and the Temple of the Genius near Stabiae (#60). More substantial evidence points to the foundation of round shrines to Cybele (#34), Bacchus (#32) and Venus (#55) at Rome.

²²⁸ Hatzfeld 1975, 349.

²²⁹ De Ruyt 1983, 137-49 (Pompeii, late 2nd c. BC), 102-14 (Morgantina, late 3rd c.-180 BC).

²³⁰ For round shrines shown in urban and rural contexts, see Robert 1939, 82-8, and for depictions of round shrines to Venus-Aphrodite, see #55 below.

²³¹ It should be noted that most buildings illustrated in wall paintings were partly, if not wholly imaginary.

The Tholus of Cybele and the Shrine of Bacchus, Rome (#34 and 32)

In one of his epigrams,²³² Martial traces a route from the Roman Forum to the house of Proculus.²³³ As he advises the way, he points out notable landmarks along it, including the Temple (#57) and Atrium of Vesta in the Forum and the colossus of Sol, formerly of Nero, which stood on the site of the later Temple of Venus and Roma. Instead of delaying in front of the colossus, he suggests that the traveler make a turn *hac qua madidi sunt tecta Lyaei / et Cybeles picto stat Corybante tholus*.²³⁴ These words of Martial imply that a Shrine of Bacchus (#32), a “dwelling of Lyaeus,” existed near the top of the via Sacra and was accompanied by a Tholus of Cybele (#34).²³⁵ Cassius Dio may make another passing reference to the Tholus, when he relates a decision to reorientate its cult statue after the death of Julius Caesar.²³⁶ If taken together, these passages define a span during which the Tholus existed, namely from the middle of the first century BC through the late first century AD, while some archaeological evidence connected with it and the neighboring Shrine of Bacchus extends this span through the mid-second century.²³⁷

Based on the topographical information supplied by Martial, the Tholus has been linked with a set of circular foundations discovered near the later Basilica of Constantine.²³⁸ With a modest diameter, these foundations recall the dimensions of

²³² Mart. *epigr.* 1.70.9-10.

²³³ His house may have stood on the Palatine or the slopes of the Velia (Mart. *epigr.* 1.70.6). For analyses of the route, see Graillet 1912, 333, Lugli 1947, 175-6, and Bruhl 1953, 197-8.

²³⁴ Mart. *epigr.* 1.70.9-10. For Martial’s use of *tholus*, see Chap. II ‘Ancient terminology and conceptions of the round form.’

²³⁵ The topographical context of Martial’s poem, as well as the archaeological evidence, makes it difficult to believe that he is referring to the Temple of Magna Mater on the Palatine (as suggested by Rodríguez Almeida 1993e, 338).

²³⁶ Cass. Dio 46.33.3; cf. Lugli 1947, 174. This decision would be illogical in the context of the south-facing Temple of Magna Mater on the Palatine. Coarelli 1982, 36. For the cult statue of the Palatine temple, which incorporated the black stone from Pessinous, see Esdaille 1908, 368-74, Pensabene 1996a, 206-8, and below.

²³⁷ While Cassius Dio wrote in the mid-1st c. BC, Martial’s epigram has been dated to 85-86 AD. For Imperial evidence pertaining to both buildings, see Chap. VI #32 and 34.

²³⁸ These may date to the Domitianic period. See Chap. VI #34.

other roadside shrines, most notably that of Venus Cloacina on the lower via Sacra.²³⁹ For the Shrine of Bacchus, F. Coarelli proposes a semicircular exedra opposite the Medieval porch. He relates the two buildings based on an Antonine medallion, which may illustrate a temple of Liber set within a curved portico.²⁴⁰ Coarelli's hypothesis is flawed in that, although Antoninus Pius restored the Shrine, the exedra does not enclose a building of comparable size to his entablature,²⁴¹ nor does its location to the south of the via Sacra make it a likely pair for the Tholus of Cybele.²⁴²

Beyond the Tholus' possible diameter, little is known about the appearance of either building in the late Republic. Martial describes the Tholus as painted with images of the Corybantes, possibly on its ceiling,²⁴³ while Cassius Dio implies that its cult statue was visible from the road.²⁴⁴ The exact date of and motivations behind the foundations of both buildings are equally ill-documented. Coarelli has speculated that P. Cornelius Scipio Corculum built the Tholus in recognition of the role his father, P. Cornelius Scipio Nasica, played in introducing Cybele's cult to Rome in 204 BC.²⁴⁵ Although Nasica's popularity surged in the late Republic and early Imperial period, Coarelli's proposed relationship between Corculum's house and the exedra he mistakenly attributes to Bacchus' Shrine can lend no support to his hypothesis.²⁴⁶ Similarly, Palmer's identification of the Shrine with the 36 BC rebuilding of a shrine

²³⁹ Like the Tholus, the Shrine faced west. Coarelli 1993e, 290-1.

²⁴⁰ Coarelli 1982, 35; cf. Chap. VI #32, Nash 1961-1962, Vol. 1: 165, and Roller 1999, 314.

²⁴¹ See #32.

²⁴² It was probably located farther up the Palatine or the Velia. Paus. 8.46.5; Bruhl 1953, 199.

²⁴³ With an ornamented ceiling, the Tholus may have resembled the Rotunda at Termessos (#62) or the Hadrianic Temple of Tyche at Side (see Chap. VI #59).

²⁴⁴ The cult statue was presumably visible enough from the exterior for Cassius Dio to remark on a change in its orientation. Whether this suggests that the Tholus lacked cella walls is debatable.

²⁴⁵ Coarelli 1982, 37-9. For P. Cornelius Scipio Nasica, see Val. Max. 8.15.3, *Vir. ill.* 46.3, Schol. *Iuv.* 3.137.2, Simon 1990, 147, and Roller 1999, 288, 311 and 313-4.

²⁴⁶ For alternative dating theories, see Jordan and Hülsen 1907, 103, and Graillot 1912, 332.

to Mutinus Titinus, an Etruscan god whom he associates with Liber, is purely speculative.²⁴⁷

The Tholus' location on the via Sacra, between the Temples of Vesta and the Penates,²⁴⁸ seems appropriate in light of Cybele's Anatolian origins.²⁴⁹ More generally however, the prime position of both the Tholus and the Shrine reveals the esteem in which Cybele and Bacchus were held in the late Republic.²⁵⁰ As a protector of the State and the mother of the gods,²⁵¹ Cybele and her neighbor Bacchus, who oversaw young men's transition into adulthood,²⁵² played prominent roles in first century and early Imperial Rome. Although both gods are ultimately derived from the Greek world, their round shrines have no direct Greek precedents. In view of their size and location however, they recall the Monument of Lysicrates in Athens (#3) and the Rotunda at Termessos (#62),²⁵³ while as shrines to Cybele and Bacchus, they look forward to Imperial dedications both in and outside of Rome.²⁵⁴

The Shrine of Venus, Rome (#55)

The Shrine of Venus (#55) formed part of the vast *horti Sallustiani*, gardens created in the late Republic, which numbered among the most favored Imperial residences from the first century AD.²⁵⁵ Excavated in the sixteenth century, the

²⁴⁷ For Mutinus Titinus, see Fest. p. 142 L, Bruhl 1953, 26, and Palombi 1997, 439-41. Palmer's (1974, 199) attribution of the Shrine to Cn. Domitius Calvinus is hampered by the *terminus ante quem* (43 BC) supplied by Cassius Dio (46.33.1-3).

²⁴⁸ For the Temple of the Penates, see Chap. VII #52.

²⁴⁹ Coarelli 1982, 37.

²⁵⁰ For the cults of Cybele, see Roller 1999, and of Liber, see Bruhl 1953. That her cult was strong is attested by Magna Mater's temple on the Palatine, built to accommodate her cult image in 191 BC (Liv. 29.14.13-4, 36.36 and 37.2; *Vir. ill.* 46.3; Prud. *mart. Rom.* 206; Serv. *Aen.* 7.188; Iuv. 3.138 fol.), rebuilt in 111 (Val. Max. 1.8.11; Obseq. 39; Ov. *fast.* 4.348) and enlarged in 3 AD (*R. Gest. div. Aug.* 19; Cass. Dio 4; Suet. *Aug.* 57; *Mon. Ancyr.* 4.19). Roller 1999, 288, 311 and 313-4.

²⁵¹ Roller 1999, 1-2 and 108-14.

²⁵² Bruhl 1953, 16; Sabbatucci 1988, 105.

²⁵³ However, the Tholus of Cybele lacked the high socle that characterizes both Greek shrines.

²⁵⁴ In particular, Commodus dedicated a round shrine to Liber Pater Commodianus at Portus (#29).

²⁵⁵ For the Horti Sallustiani, see Santangelo 1941, 177-91 and Castelli 1988, 60.

Shrine was described by Flaminio Vacca,²⁵⁶ drawn by Pirro Ligorio or Onofrio Panvinio, based on a sketch of Ligorio,²⁵⁷ and illustrated on contemporary maps.²⁵⁸ Taken together, these sources, possibly supplemented by Pietro Sante Bartoli's remarks of 1620, enable the building to be reconstructed with reasonable certainty.

Vacca discusses the remains of a shrine “di forma ovata,”²⁵⁹ which he discovered near the Porta Salaria.²⁶⁰ He describes it as surrounded by a peripteros of yellow Corinthian columns, while, inside the shrine, he remarks on pairs of alabaster columns flanking its four entrances and a set of steps descending to its elaborate, marble pavement.

Although neither Vacca nor Bartoli, who may comment on the Shrine's use of materials,²⁶¹ ascribes it to Venus, R. Lanciani has connected the plan by Ligorio or Panvinio, cited as depicting the Shrine of Venus *hortorum Sallustianorum*, with their reports.²⁶² It shows half of a round building ornamented with interior and exterior niches and colonnades. Using measurements provided by Panvinio,²⁶³ C. Hülsen has filled out the plan to include a peristasis of sixteen columns, twelve exterior niches,²⁶⁴ four entrances flanked by pairs of interior columns, and a set of interior steps.²⁶⁵ Though substantially in keeping with the Renaissance plan, Hülsen follows Vacca's

²⁵⁶ Vacca, Nardini and Flaconiere 1704, 58, quoted in #55.

²⁵⁷ *Cod. Vat. Lat.* 3439 f. 28r; cf. Hülsen 1889, 271-2.

²⁵⁸ See #55.

²⁵⁹ In the absence of evidence to suggest that Romans built “oval” temples, Vacca's shrine should be understood as round.

²⁶⁰ Vacca uncovered the Shrine in the vigna of his father Gabriele Vacca, see #55.

²⁶¹ It has been questioned whether Bartoli is referring to this or another temple, see Hülsen 1889, 271, and Castelli 1988, 54-5; vs. Lanciani 1888, 3-4.

²⁶² Lanciani 1888, 3-4. For the description appended to the plan, see *Cod. Vat. Lat.* 3439 f. 28r, *Cod. Par. fonds St. Germain* 86 = *Cod. Ital.* 1129, and Hülsen 1889, 271-2.

²⁶³ Hülsen 1889, 271-2.

²⁶⁴ The round Temple of Tyche at Alexandria also had 12 exterior niches. *Lib. descr.* Foerster VIII, p. 529-31; *Cod. Theod.* 14.27; cf. Will 1951, 239 and La Rocca 1999b, 283.

²⁶⁵ The existence of interior steps has led Hülsen (1889, 271-3) to compare this building to the ‘Temple of Minerva Chalcidica’ (#48), concluding that it was a nymphaeum.

description in reconstructing the Shrine's doors and interior, and moreover, does not include the platform, which Panvinio claims raised it above the surrounding area.²⁶⁶

In addition to the Shrine's dedication cited by Ligorio,²⁶⁷ other inscriptions have come to light which relate to this building. They record dedications made by Imperial freedmen or slaves at the Shrine.²⁶⁸ Moreover, Renaissance maps may depict the Shrine as a domed round building²⁶⁹ set within a rectangular portico, apsidal at one end.²⁷⁰

In view of its location, F. Coarelli has proposed that Julius Caesar, whose gardens were incorporated into the Horti Sallustiani following his death,²⁷¹ either built the Shrine or was gifted it by Julius Theopompus.²⁷² Moreover, he suggests that the Shrine, if designed after the Temple of Aphrodite at Theopompus' native Knidos (#16),²⁷³ may have celebrated a Greek-style Venus-Aphrodite. While the Roman Venus was recognized as the mother of Aeneas and the patron of the *gens Iulia*, most notably in Caesar's Temple of Venus Genetrix,²⁷⁴ in the late Republic, a new Venus emerged through association with the Greek goddess of love and fertility.

²⁶⁶ See above.

²⁶⁷ See above and Lanciani 1888, 6. Though occasionally doubted, as Ligorio saw the Shrine shortly after its excavation (demonstrated by its inclusion in his 1561 plan of Rome) and as A. Fulvio (1527, 14) reported the discovery of a similar inscription, it is unlikely that the dedicatory inscription was fabricated. Castelli 1988, 57.

²⁶⁸ For these inscriptions, found in the Horti's necropolis on the via Salaria, see *CIL* VI 122 and 4327 = 30699 = *ILS* 3184 and 32451, and *CIL* VI 32468 quoted in #55, Lanciani 1888, 10-1, and Coarelli 1999k, 116.

²⁶⁹ A comparable roof appears in Peruzzi's drawing of the Temple of Hercules Victor *in foro Boario* (#43).

²⁷⁰ Although the Shrine is often confused with the Temple of Venus Erycina (see #55), Renaissance maps (see Castelli 1988, 57 fig. 4) demonstrate that the two are not equivalent. Using these maps, Coarelli (1999k, 115-6) links a rectangular temple found at the intersection of Via Gaeta and Via Curatone to the Temple.

²⁷¹ Obseq. 71; Cass. Dio 42.26.3; Ps. Cic. *in Sall.* 7.19; cf. Coarelli 1983b, 215 n. 52, and Castelli 1988, 59.

²⁷² Coarelli 1983b, 215, 1995k, 10-1, and 1999k, 117.

²⁷³ Comparable in this respect is the Temple of Venus Erycina (see above), to which Strabo (6.2.6) refers as a "copy" of the Temple of Aphrodite at Eryx. See *RRC* I 448 (denarius, minted by Considius Nonianus in 63-57 BC, which depicts the Temple as rectangular) and Castelli 1988, 53-4, 59 and fig. 1.

²⁷⁴ For Venus' cult, see Schilling 1954.

Coarelli's identification may be supported by the Shrine's use of Greek images of Aphrodite, including an Archaic head,²⁷⁵ and lavish materials, evocative of Hellenistic palaces, in its decorative program. More generally, the abundant precedents for tholoi to Aphrodite as well as evidence for her and Venus' worship in garden settings make viable the dedication of a round shrine to Venus-Aphrodite.²⁷⁶

In addition to her Temple at Knidos, Aphrodite was honored with a round shrine in her sanctuaries at Aegina and Paestum.²⁷⁷ In literature, she is documented as the recipient of an Aphrodision beside gardens on Hieron II's ship,²⁷⁸ a tholos next to sleeping compartments on Ptolemy Philopater's yacht,²⁷⁹ and a shrine, together with Zeus, in the Agora at Sparta.²⁸⁰ Tholoi were set up in gardens throughout the Greek world to honor Aphrodite Ourania,²⁸¹ while Venus Fisica is depicted in Pompeian wall paintings as the recipient of round shrines.²⁸² Moreover, inscriptions note that Venus received a temple in the Horti Serviliani²⁸³ and remains point to a round temple

²⁷⁵ Santangelo 1941, 139-40; Simon 1990, 214-5. Additionally, pieces of two Classical "thrones" or altars have been uncovered which, if genuine, are significant for their depiction of scenes integral to Venus' cult. de Franciscis 1958, 119-20. Coarelli (1999k, 116) links them and the Archaic head to the Temple of Venus Erycina.

²⁷⁶ Also unlike the Temple of Venus Genetrix, the Shrine may have honored a private cult, which would explain its omission from the Regionary Catalogues.

²⁷⁷ Aegina: Robert 1939, 6 and 423; Paestum: Sestieri 1953, 131-3 fig. 39.

²⁷⁸ Athen. 5.207d-e; Vit. 6.3.10. La Rocca (1986, 20-1) suggests that this room, dated ca. 275-215 BC, functioned as a *cenatio*.

²⁷⁹ This shrine (Athen. 5.205d-e) may be dated to 222-204 BC. Moreover, K. Fittschen (1978, 544-7) suggests that Athenaeus' descriptions of the decoration and layout of both shrines inspired paintings in Room 2 of Casa dei Grifi at Pompeii, the atrium of the Villa dei Misteri, and the villa at Torre Annunziata.

²⁸⁰ This *oikodomema peripheres* (Paus. 3.12.11) contained statues of both gods.

²⁸¹ There were garden sanctuaries of Aphrodite at Athens, Tamasos, Myrikai, Idalion on Cyprus, Samos, Knossos, and Kephistos. Ver. *Aen.* 1.92; *Ov. met.* 10.644 fol.; Athen. 13.572 fol.; *Eur. Med.* 835 fol.; cf. Ziegler and Sontheimer 1979a, 430.

²⁸² *Plin. nat.* 19.50; cf. Charbonneaux 1966, 1125. For examples, see Lehmann 1953, 199 fol., Moorman 1988, 68, 73, 106 (in tholoi), and 152-3, 183, 198, 219, 240 (in garden scenes), Weber 1990, 108-9 Cat. M7-11, and Roux 1992, 198-9 n. 221 (in tholoi); cf. Weber 1990, 109-10 Cat. M12-3 (on terracotta lamps).

²⁸³ *Plin. nat.* 36.23, 25, and 36; *NA* 28 = *AE* 1959, 145 and 300; vs. Degrassi cited in Chioffi 1996b, 84.

or nymphaeum on the Viminal,²⁸⁴ ornamented with a copy of Praxiteles' Aphrodite from Knidos.²⁸⁵

Even without evidence to affirm the link between Theopompus and Caesar, and hence the Temple at Knidos and the Shrine in the Horti Sallustiani, the Roman building was undoubtedly influenced by the Knidian Temple and Greek shrines to Aphrodite in its form and decoration. Its garden setting moreover fits within the Greek tradition of celebrating Aphrodite for her role in ensuring both human and agricultural fecundity. Although not foreign to the Italic goddess, this aspect of Venus' character was reinforced through her assimilation with Aphrodite.²⁸⁶

III ANALYSIS

TEMPLE FOUNDATION AND LOCATION

In addition to the availability of funds and space, a variety of factors influenced the foundation and siting of late Republican round temples. The founding of a temple required a *votum*, a *locatio* and a *dedicatio*.²⁸⁷ A *votum* or vow signified a contract made between the vow maker and a divinity, whereby the vow maker obliged himself to build a temple in the divinity's honor.²⁸⁸ Through the process of *locatio*, he joined forces with augurs and magistrates to locate the temple as well as to arrange

²⁸⁴ Its remains have been uncovered near the intersection of via Palermo and via Venezia. Mancini 1913, 170; Neuberger 1960, Cat. 159.

²⁸⁵ For the original, see #16. The statue and Temple at Knidos may be depicted in some Pompeian wall paintings, see Moorman 1988, 204 and 225-6.

²⁸⁶ Simon 1990, 213-28.

²⁸⁷ These were commonly followed by an *inauguratio* for a *templum* and a *consecratio* for an *aedes*. Ziolkowski 1992, 203-9.

²⁸⁸ See Liv. 5.21.2-3, 8.9.6-8 and 10.19.17, Macr. *Sat.* 3.9.7-11, and Ziolkowski 1992, 193-7, for the formula employed by vow makers.

for its design and construction. On its completion, a magistrate²⁸⁹ oversaw its *dedicatio*, a ceremony that marked the temple's *dies natalis* or dedication day.²⁹⁰

Temples were usually vowed and constructed by local magistrates and occasionally by priestly colleges,²⁹¹ though in the late Republic, a number of victorious generals vowed and built temples in commemoration of their campaigns.²⁹² Booty won in the Hellenistic East financed and ornamented many of these new “victory monuments.” The Mundus (#49) attributed to Romulus, Numa's Temple of Vesta (#57) and Shrine of the Camenae (#33), and the Temple of Hercules Victor *in foro Boario* (#43), if built by the consul and censor, P. Cornelius Scipio Aemilianus,²⁹³ represent more traditional foundations, as may the Temple of Hercules Victor *ad portam Trigeminam* (#44), the work of the consul and censor L. Mummius Achaicus or the prosperous olive merchant M. Octavius Hersennus.²⁹⁴

M. Fulvius Nobilior's dedication to Hercules and the Muses (#42) is a prime example of a Temple constructed *ex manubiis*²⁹⁵ to house a sculptural collection acquired as plunder from foreign campaigns.²⁹⁶ Similarly, the Temple of Fortuna Huiusce Diei (#38), if built by Q. Lutatius Catulus, the champion at Vercellae and consul in 102 BC, would provide evidence for the phenomenon of temples vowed on campaign and constructed when the vow maker had obtained a position of political importance at home.

²⁸⁹ This magistrate could be the vow maker elevated to the status of censor or *duumvir*.

²⁹⁰ The *dies natalis* marks the date of future festivals celebrated in connection with the temple. Ziolkowski 1992, 203-9.

²⁹¹ Ziolkowski 1992, 198-9.

²⁹² For a list of mid-to-late Republican temples vowed and constructed by victorious generals, see Ziolkowski 1992, 200.

²⁹³ See #43 above.

²⁹⁴ Servius (*Aen.* 8.363) and Macrobius (*Sat.* 3.6.11) relate that Hersennus, as a private individual, asked for public land on which to build a private shrine (*impetrato a magistratibus loco*). Ziolkowski 1992, 218, and see #44 above.

²⁹⁵ Though funded by booty, temples built *ex manubiis* required the approval of the Senate to commemorate public cults. Ziolkowski 1992, 235-6 and 241-50.

²⁹⁶ Though vowed on campaign, the Temple can be linked to his consulship.

Like the Temple of Hercules Victor by the Tiber, if vowed by M. Octavius Hersennus, the Shrine of Venus (#55) may mark a dedication made by a private individual. F. Coarelli has proposed that Julius Theopompus, a prominent citizen of Knidos, gifted the Shrine to Julius Caesar.²⁹⁷ For its location in Caesar's Horti, the Shrine may be a private foundation²⁹⁸ in contrast to other late Republican round temples, which honored public cults.²⁹⁹

Outside of Rome, epigraphical evidence suggests that the Shrine and the Temple of Fortuna Primigenia at Praeneste (#30-1) were built by magistrates and *negotiatores* drawn from noble Praenestine *gentes*. Similarly, a local magistrate constructed the Monopteros at Pompeii (#28), while on Delos, the Hermaists, a fraternity drawn from the Italian merchant classes, dedicated the Shrine of Hermes and Maia (#10).³⁰⁰ By contrast, the Round Temple at Tibur (#64), if an *aedes* of the sibyl Albunea, may have been mandated by the Sibylline books and constructed by a priestly college.

Once a temple was vowed, the vow maker attended to its *locatio*. This procedure consisted of choosing a site, determining the boundaries of its inaugurated area,³⁰¹ locating the temple within this area, and arranging for its construction.³⁰² Frequently, the temple would be sited within an existing religious district like the Porticus Minucia, the whole of which was probably inaugurated prior to the addition of the Temple of Fortuna Huiusce Diei.³⁰³ Similarly, a temple might be founded in a

²⁹⁷ See #55 above. It is possible that Theopompus, as a foreigner, was not in a position to dedicate a shrine which he was legally entitled to vow.

²⁹⁸ The Temple of Bona Dea, built by a Vestal virgin, was also a private foundation. Chioffi 1993, 197-9.

²⁹⁹ Even if P. Cornelius Scipio Corculum founded the Tholus of Cybele as a private individual, as it is sited on the via Sacra, it almost certainly commemorated a public cult.

³⁰⁰ As at Praeneste and possibly Pompeii, it is likely that the Hermaists used income from trade to finance their Shrine.

³⁰¹ See Chap. III part II.

³⁰² Ziolkowski 1992, 203-9.

³⁰³ Ziolkowski 1992, 212-4; cf. Chap. III part II.

region with long-standing ties to the divinity to whom it was dedicated. Examples include the Temples of Hercules Victor in and around the forum Boarium and the Mundus and Temple of Vesta in the Roman Forum, since the forum Boarium's connections to Hercules can be traced back to the Archaic period as can the Mundus' and Vesta's links to the Forum.³⁰⁴

Further, a temple's location could be determined by law³⁰⁵ or by political ambition. Locations along the "via triumphalis," the route followed by the triumphal *pompa*, were especially valuable for victorious generals who wished to boast of their power and prestige.³⁰⁶ Finally, the nature of the cult played a role in site selection. Only the temples of native or long assimilated cults could be located within the city pomerium.³⁰⁷ As a result, most of the late Republican temples in Rome, both round and rectangular, stood outside the city walls.

In the late Republic, building work in Rome focused on temples and private victory monuments³⁰⁸ in the zone of the Campus Martius.³⁰⁹ In addition to accommodating foreign cults, the Campus Martius provided more space than was available within the pomerium³¹⁰ for the temples of established cults and deities. Among its added attractions was the Circus Flaminius, a grand monument built by the democratic leader C. Flaminius Nepos in 220 BC, and its access to the triumphal route. The Temple of Hercules and the Muses occupied a prime location along the

³⁰⁴ Moreover, both show the strict adherence to the cardinal points that was characteristic of 7th c. building. Scott 1993b, 162-4; cf. Coarelli 1983b, 219 (the Mundus' W orientation). For the principles behind temple orientation, see Chap. III and Gros 1976a, 147-53.

³⁰⁵ Ziolkowski 1992, 219-33 (the *lex Papiria*).

³⁰⁶ This would explain why the foundations of the bitter enemies M. Fulvius Nobilior and M. Aemilius Lepidus, who built the Temple of Juno Regina *in circo Flamino*, stood beside each other. Ziolkowski 1992, 218.

³⁰⁷ Cass. Dio 40.47.3-4 and 53.2.4; cf. Ziolkowski 1992, 266-7 and 276-7. Ziolkowski (1992, 275) considers this due to a shortage of space, rather than hostility towards foreign cults.

³⁰⁸ The Theater of Pompey, ca. 61-55 BC, is a prime example as is the rebuilding of the Temple of Jupiter Optimus Maximus employing marble columns from the Olympeion at Athens (Plin. *nat.* 36.45 and Gell. 2.10). Zanker 1988, 21-4.

³⁰⁹ Ziolkowski (1992, 292 and 300) details other reasons why the Campus Martius may have appealed to late Republican temple builders.

³¹⁰ For disputes surrounding the limits of the pomerium, see Andreussi 1999, 96-105.

triumphal route and opposite the Circus Flaminius.³¹¹ Likewise, the Temple of Fortuna Huiusce Diei benefited from its proximity to the Circus Flaminius, as did the Temples in and around the forum Boarium, which were near the Circus Maximus. The Temple of Vesta and the Mundus, by contrast, filled highly prominent positions within the pomerium in the midst of buildings essential for the political and religious guidance of Republican Rome.

Adjacent to the Roman Forum, the Shrine of Bacchus and the Tholus of Cybele were sited on the via Sacra. Though not as ancient as Vesta's cult, Bacchus received his first temple at Rome in 493,³¹² and Cybele was introduced into the Roman pantheon in 204 BC.³¹³ Moreover, the prominent positions of their Shrines may be explained as a factor of their size, whereas its function as a tribute to the patron of the *gens Iulia* probably determined the setting of the Shrine of Venus.

Like Rome's Campus Martius, the cities of Latium underwent a vast reorganization in the late Republican period. The Round Temple at Tibur and the Shrine and Temple of Fortuna Primigenia at Praeneste reveal the extensive planning involved in the layout of cities throughout Latium. An elaborate substructure was built to accommodate the Round Temple on the acropolis at Tibur, the most prominent area of the city. Its location may have been inspired by cult factors, as the goddess Albunea had both a *domus* and a *nemus* near the Anian falls that flow beneath the acropolis.³¹⁴

³¹¹ In addition, both temples are near the Circus Flaminius as Vitruvius (1.7.1) suggests, (*templa Herculi, in quibus civitatibus non sunt gymnasia neque amphitheatra, ad circum*. Ziolkowski 1992, 299.

³¹² The Temple of Ceres, Liber, and Libera was ordered by the Sibylline books in 499 or 496 BC (Dion. Hal. 6.17.2-3; Tac. *ann.* 2.49.1), constructed, and dedicated in 493 (Dion. Hal. 6.94.3). Moreover, the festivals associated with it, the *Ceralia* and the *Liberalia*, formed part of an Archaic or "Numan" cycle of ca. 6th c. date. Coarelli 1993d, 260.

³¹³ Ov. *fast.* 4.343 fol. Roller 1999, 263-71 and 275-8. For the Palatine temple built in 191 BC, see #34 above.

³¹⁴ If the nearby rectangular temple is dedicated to Tiberus, a god frequently connected with Albunea, then religious arguments for the Round Temple's location gain greater support.

Similarly, the terraced Sanctuary of Fortuna Primigenia at Praeneste showcases its Shrine and Temple on the slope of a hill near a *nemus* of the goddess.³¹⁵ The Shrine acts as a prelude to the Temple, which crowns the complex. The whole of the terraced sanctuary, built to link both buildings, relies on the symmetric, axial and theatrical qualities of Greek sanctuaries³¹⁶ to manipulate the ascent of its visitors and impress them with its grandeur.

The Monopteros at Pompeii and the Shrine on Delos, comparable in size to the Shrine at Praeneste, occupied less prominent positions. Both stood in fora, the former in the Foro Triangolare, a crowded precinct next to Pompeii's theater and athletic district, and the latter, together with other shrines, altars, and statues, in the Agora of the Hermaists near Delos' port.³¹⁷

Whereas these Shrines balance their proximity to significant monuments against available building sites, the patrons at Tibur and Praeneste placed such a high value on dramatic locations and established cult sites that they manipulated natural areas to provide settings for their round temples.³¹⁸ In-between these two extremes are the round temples of Rome. As at Pompeii and Delos, some were sited in areas considered politically and socially desirable based on their relationship to specific monuments³¹⁹ and, as at Latium, religious sites. While, thanks to Rome's expansion into underdeveloped areas like the Campus Martius, others were allowed considerable freedom in their site selection as well as scope for sophisticated layouts.³²⁰

³¹⁵ The Temple of Feronia at Nazzano (#21) is comparable to both sites since a *lucus* (Cato frg. 30; cf. Verg. *Aen.* 7.697) provided the principal impetus for its foundation.

³¹⁶ See #30-1 above.

³¹⁷ This area would have held strong appeal for a merchant fraternity.

³¹⁸ Prior to the 2nd c. BC, there is no evidence for any significant development on the hillside at Praeneste. With a "blank slate," the Sanctuary's architects and patrons enjoyed almost unlimited choice in designing and laying out the site.

³¹⁹ For example, Q. Lutatius Catulus' desire to link the Temple of Fortuna Huiusce Diei with that of his illustrious "ancestor", C. Lutatius Catulus, motivated its awkward placement in-between two rectangular temples in the Porticus Minucia Vetus.

³²⁰ The Temple and Porticus complex of Hercules and the Muses provides a good example.

Whatever their environment, the shape of late Republican round temples sets them apart from their surroundings. This is most notable in the forum Boarium, where the two Temples of Hercules Victor, lacking boundary walls, showcase their circularity from every angle. Moreover, like its round form, the style and orientation of the Temple of Hercules Victor *ad portam Trigemnam* distinguishes it from the nearby Temple of Portunus, as the Round Temple at Tibur forms a marked contrast to the rectangular temple. Whether chosen for religious or aesthetic reasons, the round form is well suited to temples of the late Republic built in settings determined by cult, political and personal considerations as well as finances and available space.

BUILDING MATERIALS AND TECHNIQUES

Masonry techniques

The materials and techniques used in the construction of late Republican round temples accord well with building trends current in Roman Italy in the second and first centuries BC. Among these trends, the use of *opus quadratum* masonry, consisting of stone blocks laid as headers and stretchers, is most notable in the walls of the Temple of Hercules Victor *ad portam Trigemnam* (#44),³²¹ while *opus incertum* and *opus reticulatum*, types of stone-faced cement work, can be found in the foundations and walls of round temples in Rome, Tibur, and Praeneste. The former technique, Vitruvius claims³²² and the archaeological record suggests, is typical of Classical and Hellenistic Greek practice,³²³ while the latter two are native to Italy.³²⁴

³²¹ As in the Temple by the Tiber, one may assume that *opus quadratum* was used in the marble Temples of Jupiter Stator and of Mars *in Circo*, see 'Introduction' above.

³²² Vitr. *arch.* 2.8.5-7. For Vitruvius' opinions on building materials, see below and Gros 1982, 673 and 675-9.

³²³ For examples in Greece and the Greek East, see Lugli 1957, 179.

³²⁴ Vitr. 2.8.1: *Structurarum genera sunt haec: reticulatum quo nunc omnes utuntur, et antiquum quod incertum dicitur.*

Prevalent in the second century BC, *opus incertum* was gradually replaced by *opus reticulatum* in the first century.³²⁵ It is not surprising therefore that, while most round temples employ *incertum* work, only one, the Temple of Fortuna Huiusce Diei (#38), makes extensive use of an early *reticulatum*.³²⁶

These two methods, coursed stone and cement work, were employed by Roman architects to simulate Greek temples, whose marble construction they admired, though found costly and impractical to recreate. Stone blocks with a marble facing were used in the Temples of Hercules Victor by the Tiber, and possibly of Vesta (#57), Hercules and the Muses (#42), Hercules Victor *in foro Boario* (#43), and Venus (#55).³²⁷ The walls of the Tiber Temple consist of a socle, formed from header and stretcher blocks of marble and travertine, and courses of travertine revetted with marble plates.³²⁸ The marble plates, in turn, are drafted to resemble a pattern of taller and shorter courses.³²⁹ With a tall socle and coursed masonry, the Temple's elevation closely recalls that of Hellenistic buildings like the Tholos at Epidauros (#13) and the Hieron and Arsinoeion (#58) at Samothrace.

In their composition and ornament, late Republican or early Augustan travertine-faced mausolea, like the round tomb of Caecilia Metella, draw from the same sources. Buildings like these may have influenced the development of First style wall painting, which depicts varied masonry courses resting on a plinth or

³²⁵ Coarelli (1977, 16-8) postulates that population pressures of the late 2nd c. BC necessitated the development of building materials that could be quickly, easily and cheaply produced by a large slave-powered work-force and used for projects for which they were not specifically tailored.

³²⁶ Coarelli 1977, 13. Other examples of early or *quasi-reticulatum* work include the Lacus Iuturnae as rebuilt in 116 BC, the Horrea Galbana, ca. 108, and the House of the Griffins, ca. 100 BC, while the first fully developed example of *opus reticulatum* is the Theater of Pompey, ca. 61-55 BC. Coarelli 1977, 10-5; Sear 1982, 75-6; Adam 1994a, 129-30.

³²⁷ B. Peruzzi's drawing (see #43) suggests that the Temple of Hercules Victor *in foro Boario* was either constructed of ashlar masonry or stuccoed to mimic marble.

³²⁸ The revetment was adhered to its backing with U-shaped clamps following Hellenistic practice. Rakob and Heilmeyer 1973, 12.

³²⁹ In its original form, the cella wall had seventeen courses of tall and short masonry above the socle. Strong and Ward Perkins 1960, 11.

socle.³³⁰ As a complement to this influence, the drafted margins of the Temple by the Tiber may imitate a style that originated in stucco work.³³¹

Stuccoed wall paintings provide a perfect analogy with late Republican round temples that used the new Italic techniques of *opus incertum* and *opus reticulatum*. While most temples employed *opus incertum* in their foundations,³³² the Round Temple at Tibur (#64) and the Temple of Fortuna Primigenia at Praeneste (#31) had cella walls constructed of this material and stuccoed to approximate the forms and styles of Greek masonry.³³³ Creating these walls required both the skills of a master craftsman and the talents of an architect. Accounting for personal styles, it seems probable that, like First style wall paintings preserved in building interiors, their work was varied enough in its components and colors to produce wall surfaces that were more representational than realistic.³³⁴

Roofing techniques

With few exceptions, the roofs of late Republican round temples are not sufficiently preserved to reveal their form and the materials and techniques used in their construction. Those that are extant, namely the roofs of the Shrine of Fortuna Primigenia at Praeneste (#30) and the Shrine of Hermes and Maia on Delos (#10), follow Greek precedents in their design. Comparable to the Monument of Lysicrates at Athens (#3) and the Rotunda at Termessos (#62), their roofs consist of marble plates, sculpted to resemble an overlapping network of tiles.³³⁵ For both structural

³³⁰ Ling 1973, 15 and 22-3, and 1991, 13.

³³¹ Ling (1973, 23) points to other examples of cross-influences between real and painted architecture.

³³² See 'Building components' below.

³³³ While stucco both protected and regularized wall surfaces (see Adam 1994a, 121-2 and 245), Vitruvius (7.17) considered it a second rate alternative to marble for well-designed buildings.

³³⁴ See 'Stucco and mosaic work' below.

³³⁵ These were meant to mimic the roofs of larger Greek tholoi, see below.

and aesthetic reasons, it seems likely that most late Republican round temples followed suit in preferencing Greek to Roman methods of roof construction.

A Greek roof consisted of a wooden ridge beam or truss³³⁶ and a system of wooden rafters,³³⁷ anchored to the top masonry course and cornice of a temple's walls. The rafters determined the roof's slope, while terracotta or marble tiles comprised its ornament.³³⁸ By contrast, some Roman roofs took the shape of domes, formed from closely-fitted stone blocks³³⁹ or a matrix of concrete.³⁴⁰ While both Greek and Roman roofs relied on a temple's foundations and cella walls to carry their weight, domes, made of much heavier materials, required additional support. Of the round temples, only the Temple at Praeneste (#31) had thick enough foundations, walls and, as reconstructed by F. Rakob, buttresses to sustain a domed roof.³⁴¹

Also in favor of timber roofs are slots for roofing supports found on the coffer blocks of the Round Temple at Tibur (#64) and remains of marble protomes and antefixes discovered near the Temples of Fortuna Huiusce Diei (#38) and of Hercules Victor *ad portam Trigeminam* (#44). Employed in Greek tholoi like the Philippeion at Olympia (#22), these features would not be out of place in late Republican round temples, which favored Greek models in other aspects of their form and design.

BUILDING COMPONENTS

³³⁶ In the prop-and-lintel system, the ridge beam was supplemented by perpendicular props that supported the apex of the roof. Hodge 1960, 35 and 39.

³³⁷ The top of the rafters were secured with tie beams to maintain the shape of the roof. Hodge 1960, 45.

³³⁸ Hodge 1960, 61-8.

³³⁹ For details concerning the construction of stone arches, vaults and domes, see Adam 1994a, 158-73.

³⁴⁰ *Opus caementicium* was modeled on wooden scaffolding, mirroring the shape of the dome. Adam 1994a, 174-81.

³⁴¹ While the domes shown in Renaissance drawings on the Temple of Hercules Victor *in foro Boario* and the Shrine of Venus may mark Imperial reconstructions, the foundations and *opus reticulatum* walls of the Temple of Fortuna Huiusce Diei would have been strong enough to support the lighter domes of the mid-Imperial period, see Chap. VI 'Roofing techniques.'

The building components of late Republican round temples are derived from a variety of sources. Their foundations, where known, are Greek in form, yet employ Roman materials.³⁴² The foundations of the Temples of Hercules Victor *ad portam Triginam* (#44) and of Fortuna Huiusce Diei (#38), like those of the Tholos at Epidauros (#13) and Philippeion at Olympia (#22), consist of two stone rings, placed below the Temples' cella and colonnade. In the Temple of Hercules by the Tiber, this second ring extends beneath its stairs, like the radial bands that support the Shrine of Hermes and Maia on Delos (#10). Also of stone are the foundations of the Temple of Hercules and the Muses (#42), while *opus incertum* is used in the rings of the Temple of Fortuna Primigenia at Praeneste (#31) and the core of both the Temple of Vesta (#57) and the Mundus (#49).³⁴³ Though of Italic fabric, the latter temples, like the Tiber Temple, incorporate a pit for ashes and offerings, comparable to that at Epidauros. By extension, the Monopteros at Pompeii (#28) includes a substantial well in its foundations, while the Shrine of Fortuna Primigenia at Praeneste (#30) rests on the opening to a well, much like the Rotunda at Ilium (#14).

While the krepidides of the two Temples of Hercules Victor and the Shrine on Delos are highly Greek in flavor,³⁴⁴ the high podia and frontal stairs that characterize the majority of round temples recall Italic practice.³⁴⁵ Though influenced by Etruscan styles, high podia, when elaborated with base and cornice moldings drawn from the Greek repertory, form pedestals that depart from the Etruscan conception of a podium as an integral part of a temple.³⁴⁶ This Roman innovation, most evident in the Temple of Fortuna Huiusce Diei and the Round Temple at Tibur (#64), extends to the podia of

³⁴² While arcaded terraces are common features of Greek and late Republican sanctuaries, Tibur preserves the only example used in connection with a round temple.

³⁴³ To facilitate the laying of the foundations, their trenches were probably lined with a wooden frame. Adam 1994a, 81-6.

³⁴⁴ The Tholoi at Delphi (#11-2) and Olympia (#22) provide good examples.

³⁴⁵ Both the Monopteros at Pompeii and the Shrine at Praeneste lacked podia.

³⁴⁶ Shoe 1965, 23.

contemporary rectangular temples such as the Round Temple's pair at Tibur and the Temple of Portunus.³⁴⁷

Like the moldings which decorate Roman podia, the round temples' columns adapt ornaments derived from Greek sources to Italic tastes. While this is most notable in their bases and capitals, the columns' shafts demonstrate both an acceptance of Greek practice and a willingness to vary and experiment with Greek forms. Following Greek models, the shafts of the Temple of Fortuna Huiusce Diei and the Round Temple at Tibur are independent of their column bases. In the Temple of Hercules by the Tiber and the Shrine at Praeneste however, the column bases are carved of one piece with the tip of the shafts' flutings. This method of extending the base is characteristic of late Republican practice.³⁴⁸

Ornamental grillwork set into the intercolumnations of a peristasis, as in the Temple of Vesta and the Shrine of Fortuna Primigenia, is drawn from Greek sources, but finds wider use in the buildings of Republican Italy. In the Greek world, this means of obstructing interior views is confined to temple architecture like the Parthenon and, on a smaller scale, the Rotunda at Ilion. In Roman Italy however, modest secular constructions like Varro's aviary at Casinum³⁴⁹ as well as temples employed this treatment.

Though the cella walls of late Republican round temples could follow either Greek or Roman practice in their construction and decoration, their form was without doubt based on Greek models. The peripteral Tholoi at Delphi (#12), Epidauros, and Olympia are reflected in the Temples of Vesta and Hercules Victor, in the first phase of the Temple of Fortuna Huiusce Diei, in the Round Temple at Tibur, and in the

³⁴⁷ Adam 1994b, *passim*.

³⁴⁸ For additional examples, see Rakob and Heilmeyer 1973, 6. While the Monopteros at Pompeii lacked bases, it is impossible to determine which method the remaining round temples followed.

³⁴⁹ Varro *rust.* 3.5.9.

Shrine of Venus in the Horti Sallustiani (#55), while the Temple of Hercules and the Muses,³⁵⁰ the second phase of the Temple of Fortuna Huiusce Diei, and the Temple of Fortuna Primigenia recall the closed drums of the Skias at Athens (#6) and the Arsinoeion at Samothrace (#58). Smaller tholoi like the Monument of Lysicrates (#3) and the Rotunda at Ilion may have provided precedents for the Shrine at Praeneste, the Mundus and the Shrine of Hermes and Maia.³⁵¹

Moreover, the large doors³⁵² flanked by windows and framed with travertine of the two Temples of Hercules Victor and of the Round Temple at Tibur may be based on a similar arrangement in the Philippeion. Although there is much that is specifically Greek or Roman about these temples, their final design results from a skillful amalgamation of Greek models and Roman technical innovation that heralds the development of a new indigenous architecture.

DECORATIVE DETAILS

The podium molding

Although the high podia of the late Republican round temples are a legacy of the Etruscans, the moldings used to ornament the bases and crowns of these podia are drawn from a Greek repertory of styles and motifs. The most common decorative element in Roman podium molding is the cyma reversa, an inverted S-curve, that is visible in its pure form in the crown moldings of Temple C of the Area Sacra di Largo Argentina and of the Temple of Portunus by the Tiber.³⁵³ It is also used as both the

³⁵⁰ Of the Greek tholoi, only the Tholos at Epidauros with its rectangular ramp and the Temple of Artemis at Stymphalos (#61) with its two-roomed pronaos employ both round and rectangular forms.

³⁵¹ In view of their size, these tholoi may also have inspired the design of the Shrine of Bacchus (#32) and the Tholos of Cybele (#34).

³⁵² See Vitr. 4.6, for a discussion of the orders and proportions of doors and their architraves.

³⁵³ Shoe 1965, 144.

crown and base moldings of the rectangular temple at Tibur and as the base molding of the Round Temple (#64).

The crown molding of the Round Temple at Tibur, by contrast, combines a cyma recta, an S-curve, with a cyma reversa and a fascia or vertical rise.³⁵⁴ The cyma recta, a favorite motif of the Romans from the late second century BC,³⁵⁵ is frequently used with other standard forms to produce highly ornate moldings.³⁵⁶ The crown molding of the Shrine of Fortuna Primigenia at Praeneste (#30), like the crown molding of the Round Temple at Tibur, employs a combination of a cyma recta, a cyma reversa and a fascia.³⁵⁷ Similarly, a cyma recta is the dominant element of the crown molding of the Temple of Fortuna Huiusce Diei (#38) in its first phase,³⁵⁸ while, in the simplified moldings of its second phase, the cyma recta is retained together with a cyma reversa.³⁵⁹

The base moldings of the podia of Roman round temples receive a variety of treatments involving the same decorative elements that shape their crown moldings. While the base moldings of the Round Temple at Tibur and the Shrine at Praeneste are simple cyma reversas,³⁶⁰ those of the third phase of Temple A and of the first phase of the Temple of Fortuna Huiusce Diei are complex combinations of cyma reversas, tori and scotias. Even the cyma recta topped by a fillet and concave cavetto of the Temple of Fortuna Huiusce Diei's second phase, much like the base molding of

³⁵⁴ Projecting significantly, it closely resembles the cornice moldings of the Forum Holitorium's Temples of Janus and of Juno Sospita, as rebuilt in the 1st c. BC, see Shoe 1965, 157, 162-4 and 173, and Giuliani 1970, 136-7.

³⁵⁵ Shoe 1965, 33.

³⁵⁶ The Temple of Portunus by the Tiber explores the potential of this form to its fullest with a complex crown molding uniting several cyma rectas, cyma reversas and fascias with fillets.

³⁵⁷ Shoe 1965, 174.

³⁵⁸ The cyma recta is combined with two fascias and a cyma reversa. In composition, it is similar to, though more elaborate than, the equivalent moldings on Temple A's podium in its third phase (see #38 above), and the moldings of the Temple of Veiovis in Rome, ca. 78 BC, and of the Temple of Hercules in Ostia, ca. 100-80 BC. Shoe 1965, 175, 177-8 and 182-3.

³⁵⁹ Shoe 1965, 175, 181 and 184

³⁶⁰ They are comparable to the base moldings of the rectangular temple at Tibur and the Temple of Iuno at Gabii. Shoe 1965, 157.

the Temple of Portunus, shows a skillful manipulation of available forms. The cyma reversa and the cyma recta, though based on common Greek motifs, shape moldings in Italy that are unparalleled in the Greek world.³⁶¹

The column base

The column bases of late Republican round temples³⁶² show variations on the Greek Ionic base.³⁶³ The Greek base, characterized by two tori flanking a fully defined scotia, is approximated in the first Italic examples of the late third century BC with two half rounds separated by a curved or vertical section.³⁶⁴ By the end of the second century, nearly all Italian column bases show some evidence of a scotia. This scotia or inverted half round is usually defined by fillets along the interior of the two tori.³⁶⁵ The bases of the Round Temple (#64) and the rectangular temple at Tibur include scotias shaped by a full lower fillet but lacking an upper fillet,³⁶⁶ while the bases of the Shrine of Fortuna Primigenia at Praeneste (#30), the Temple of Hercules Victor *ad portam Trigemina* (#44), and the Temple of Portunus have scotias flanked by two full fillets.³⁶⁷

By contrast, the bases of the Temple of Fortuna Huiusce Diei (#38) and of Temple A in the Area Sacra di Largo Argentina include two well-defined scotias between tori. The double scotia has clear markings of Asiatic influence.³⁶⁸ A later

³⁶¹ The cyma recta employed as a base molding in Italy, where it is rarely if ever used in Greece, gives an idea of the inventiveness of Italian craftsmen. Shoe 1965, 182.

³⁶² For Vitruvius' opinions on contemporary column bases, see Gros 1982, 684-5.

³⁶³ The Temple of Nike and the Erechtheion at Athens preserve good examples of the Greek Ionic base. Strong and Ward-Perkins 1962, 5. As a Doric temple, the Monopteros at Pompeii (#28) lacks column bases.

³⁶⁴ Shoe 1965, 191-3; Gros 2001, 495.

³⁶⁵ Examples of scotia both with and without defining fillets can be found in the lower Sanctuary at Praeneste. Shoe 1965, 193.

³⁶⁶ Strong and Ward-Perkins 1962, 8; Shoe 1965, 191-8

³⁶⁷ Shoe 1965, 196.

³⁶⁸ Shoe 1965, 198. The columns of the Temple of the Nymphs in the Via delle Botteghe Oscure provide comparable examples of Attic-Asiatic bases. Strong and Ward-Perkins 1962, 11.

reworking in stucco of the Temple of Fortuna Huiusce Diei's bases to the Attic model betrays the trend towards more conventional forms that will characterize Imperial column bases.³⁶⁹ The standard Attic bases of the Shrine at Praeneste and of the Temples of Hercules Victor and Portunus in Rome are precursors of this trend.

The Corinthian capital in the late Republic

With the exception of the Tuscan Temple of Hercules Victor *in foro Boario* (#43), the Doric Monopteros at Pompeii (#28), and the Doric Shrine of Hermes and Maia on Delos (#10),³⁷⁰ late Republican round temples favored the Corinthian order for their column capitals. In their form and design, they owed much to the Corinthian capitals of late Hellenistic Greece and Asia Minor. In the fifth century BC, the order was developed in Greece for use in the interior of religious buildings like the Temple of Apollo at Bassae. The victory Monument of Lysicrates in Athens (#3) is the oldest surviving structure to employ an external Corinthian colonnade, a fashion that became popular in the third century. The order continued to evolve with great variation until the second century, when a canonical form developed.³⁷¹ This form, used in buildings of the late Hellenistic period like the Arsinoeion at Samothrace (#58),³⁷² the Olympeion at Athens and the Hekateion at Lagina, finds close parallels in the Corinthian capitals of late Republican Italy.

The "normal" or canonical Corinthian capital of the Hellenistic world was exported to Rome and Latium in the late second century BC. Where a capital carved by Greek workmen from Greek materials was not transported directly, imitations

³⁶⁹ Strong and Ward-Perkins 1962, 11-2.

³⁷⁰ The capitals of the Shrine of Venus in the horti Sallustiani (#55) are recorded as both Corinthian and Composite.

³⁷¹ Gros 2001, 471-2.

³⁷² These are the first "normal" Corinthian capitals known from Greek architecture. Roux 1992, 93.

worked by Italian craftsmen were employed in its place. The early history of the Corinthian order in Rome can be reconstructed from examining a few preserved examples. Among them are the Group A capitals of the Temple of Hercules Victor *ad portam Trigemnam* (#44), a capital in the Antiquario Communale,³⁷³ and fragments of capitals from the Temple of Fortuna Huiusce Diei (#38). These employ forms like highly ribbed leaves accentuated with points and hollows, vertical calyces, and curving helices.³⁷⁴ The naturalistic shapes of the Corinthian capitals from the Round Temple at Tibur (#64) and the Shrine at Praeneste (#30) are close in form and ornament to these Roman examples.

After this early blossoming of the order in Rome and Latium, few capitals may be found in the area until the late first century BC.³⁷⁵ Provincial buildings fill this gap with a range of Corinthian capitals, both richly ornamented with organic forms like the late second century BC examples and flatter and more stylized in line with capitals of the early Imperial period.³⁷⁶ Major efforts of the early Empire, like the Temple of Apollo on the Palatine, as well as the capitals of Groups B and C of the Temple of Hercules Victor by the Tiber, point to a trend in the design of Corinthian capitals towards less rounded and more ornamental shapes. The richness and adaptability of the Corinthian order held a lasting appeal for Italian craftsmen, who modified the Greek form with Italic motifs in a near endless array of examples from the late Republic through the end of the Empire.

The Corinthian capitals of the round temples

³⁷³ Rakob and Heilmeyer 1973, pl. 34.2; Gros 2001, 473.

³⁷⁴ von Hesberg 1981a, 21.

³⁷⁵ It is likely that the political chaos of the 1st c. had some influence on the number of public buildings built with the Corinthian order in Rome. von Hesberg 1981a, 22; Gros 1987, 57.

³⁷⁶ Gros 2001, 473.

The Corinthian capitals of the round temples of Rome and Latium provide a fairly coherent picture of the origins of the order in Rome. The Group A capitals of the Temple of Hercules Victor *ad Portam Trigeminam* (#44) rely heavily on late Hellenistic models. Like the capitals of the Hekateion at Lagina and the Church of the Apostles in the Athenian Agora, the Group A capitals are strikingly high and narrow with a 1:0.63 ratio of height to diameter.³⁷⁷ Similarly, they share an interest in the development of naturalistic forms and in the exploration of effects achieved with light and shade.³⁷⁸ All three capitals mark a clear division between the two lower tiers of overlapping acanthus leaves and the well articulated volutes and helices that scroll beneath the abacus.

The striking similarities between the Group A capitals and capitals produced in Greece and Asia Minor, as well as their material, has inclined F. Rakob and W.-D. Heilmeyer to propose a Greek origin. They believe that, like the capitals discovered in the Mahdia shipwreck, the Group A capitals were produced in Greece by Attic craftsmen and then transported with bosses to Rome, where finishing details were worked *in situ*.³⁷⁹ The preserved lower half of a capital from the Temple of Fortuna Huiusce Diei (#38),³⁸⁰ although produced of local Italic stone, shows the same definition, arrangement of acanthus leaves and use of space that characterizes the capitals of Group A.³⁸¹

³⁷⁷ Both the Hekateion and the Church of the Apostles have ratios of 1:0.66. Rakob and Heilmeyer 1973, 24.

³⁷⁸ Heilmeyer 1970, 35-6 and 123; Leon 1971, 155-7 pls. 55.2-3; Rakob and Heilmeyer 1973, 24; Gros 2001, 472.

³⁷⁹ The Gymnasium at Miletus boasts a late Hellenistic capital, similar in style to the Group A capitals, which preserves evidence of bosses. Rakob and Heilmeyer 1973, 23.

³⁸⁰ Like most capitals employed in large, late Republican buildings, those of the Temple of Fortuna Huiusce Diei were carved from two separate blocks. Strong and Ward-Perkins 1962, 12.

³⁸¹ Though stylistically similar, the capitals of the Temple of Fortuna Huiusce Diei show more rounded and less precise carving. This may be due to the relative softness of their material (Anian tufa) and to their intended coating of stucco, which would dull more carefully articulated designs. Comparable capitals may be found in the Agora at Messene and the Tetrastilum at Ostia. Heilmeyer 1970, 36 and 53; von Hesberg 1981a, 21; cf. Leon 1971, 156-7.

Corinthian capitals from the forum, the upper Sanctuary, and the Shrine of Fortuna Primigenia at Praeneste (#30) include tiers of naturalistic leaves that begin to invade the zone of the thick, yet plastically modeled volutes and helices.³⁸² The capitals of the Round Temple at Tibur (#64), though less organic in form, mirror the decorative qualities and spatial effects of the Praeneste capitals.³⁸³ The Tibur capitals have proportions and a decorative scheme that are comparable to the capitals of the Olympeion in Athens.³⁸⁴ At Praeneste and Tibur, the architectonic elements of the capital, the volutes and helices, become secondary to natural forms.

Like the capitals of Group A of the Tiber temple and the Temple of Fortuna Huiusce Diei, the Groups B and C capitals, which date to the Tiberian period, lay a greater emphasis on structural elements, while simplifying and ornamentalizing the organic qualities of the late Republican examples.³⁸⁵ Moreover, like Groups B and C, the Imperial capitals of the Tabularium and the Basilica Aemilia in Rome, which draw clear inspiration from Group A,³⁸⁶ give evidence of the far reaching influence had by the capitals of late Republican round temples on the development of the Corinthian order.

The entablature

In their design and ornament, the entablatures of late Republican round temples rely as much on Greek precedent as on Italic innovation. As Vitruvius

³⁸² Lauter-Bufe 1987, 51 and 82.

³⁸³ Moreover, comparable capitals are preserved from the Temple of Castor and Pollux at Cori and the "Temple of Jupiter" at Terracina. Fasolo and Gullini 1953, 436; Giuliani 1970, 139.

³⁸⁴ Fagerlind 1932, 125; Rakob and Heilmeyer 1973, 27; Gros 2001, 474-5.

³⁸⁵ The flatness of their leaves finds parallels in Augustus' reconstruction of the Temple of Magna Mater in Rome, while their abacuses, volutes and helices recall the capitals of the Forum of Augustus and its Temple of Mars Ultor. Rakob and Heilmeyer 1973, 21-2; cf. Gros 2001, 473.

³⁸⁶ Rakob and Heilmeyer 1973, 28.

testifies,³⁸⁷ Roman architects inherited the Doric entablature, with its plain architrave, triglyph-and-metope frieze, mutules, and cornice, and the Ionic entablature, with its divided architrave, continuous frieze, dentil course, and cornice, from the Greeks. While both forms proved suitable complements to a Corinthian colonnade,³⁸⁸ the Romans made improvements to the Ionic entablature, substituting modillions or brackets for Attic dentils.³⁸⁹ The modillion, inspired by traditional Hellenistic versions of the Doric mutule,³⁹⁰ may have found its first expression in the stucco work of First and Second style wall paintings.³⁹¹ Coupled with Greek Ionic, it defined the Corinthian entablature that would inform the shape of the order in the Imperial period.³⁹²

Of the round temples, the Shrine of Fortuna Primigenia at Praeneste (#30) preserves the only Doric entablature³⁹³ and the Mundus (#49) retains the only Ionic,³⁹⁴ while the Round Temple at Tibur (#64), the Shrine of Hermes and Maia (#10), and possibly the Temples of Fortuna Huiusce Diei (#38) and of Hercules Victor *ad portam Trigemina* (#44) provide early examples of Corinthian. The Doric friezes of the podium and entablature of the Shrine at Praeneste³⁹⁵ show an alternating pattern of triglyphs and metopes with paterae and rosettes as well as bucrania in the podium

³⁸⁷ Vitr. 4.1.2-3 and 4.3.

³⁸⁸ Strong 1963, 171-2.

³⁸⁹ Strong 1963, 171.

³⁹⁰ Strong 1963, 177; Gros 1976a, 148 and 2001, 492-3; Wilson Jones 2000, 141. It is unlikely that the modillions of the Corinthian cornice represent an elongation of Doric triglyphs. Gros 1976a, 204; Adam 1994a, 206.

³⁹¹ The S-curved modillions in the tepidarium of the Casa del Criptoportico at Pompeii are examples of the form used in wall paintings. Strong 1993, 174-7; Ling 1973, 49-50. For other examples, see von Hesberg 1981a, 27-32, and Adam 1994a, 201-7. However, Gros (1976a, 203-7 and 2001, 492-3; cf. Hesberg 1981a, 27 fol.) suggests that modillions developed in an architectural context, which was merely reflected in wall paintings.

³⁹² Modillions were in general use by 50-40 BC. Strong 1963, 176.

³⁹³ As a Doric building, the Monopteros at Pompeii (#28) should be reconstructed with a Doric entablature.

³⁹⁴ The only ornament preserved from the Mundus' entablature is a band of Ionic cymatia or egg-and-dart, which runs below its fragmentary cornice.

³⁹⁵ The cornice which protrudes above the Shrine's entablature, worked on both sides, is identical to the crown molding of its podium. Fasolo and Gullini 1953, 149-52.

frieze.³⁹⁶ Though the rosettes and bucrania are drawn from the Greek repertory of styles and motifs,³⁹⁷ the paterae are a Roman creation of the late second century, only loosely based on Greek precedent.³⁹⁸ Further, Italic variation is notable in the way elements of the frieze are modeled. Among them, the rosettes with rays of pointed petals emanating from a central blossom assume a characteristically Italic form.³⁹⁹

The garland frieze of the Round Temple at Tibur's Corinthian entablature⁴⁰⁰ also introduces Italic innovations into a Greek decorative framework. The garlands of the frieze, which hang from the horns of bucrania and frame paterae and rosettes, are formed of acanthus-like leaves, blossoms and fruits.⁴⁰¹ Both the "acanthusizing" of the leaves and the shape of the garlands, which ride thinly over the bulls' horns yet fall in thick swags, are characteristic of the garland motif as it develops in Italy.⁴⁰²

A marble plaque which may form part of the Temple of Fortuna Huiusce Diei's frieze course is a delicate, highly stylized version of Tibur's frieze. Instead of compact, thickly set swags alternating with sacred objects, thin tendrils of an acanthus plant blossom into rosettes. Though it is difficult to surmise how the frieze of the Temple of Hercules Victor by the Tiber looked, fragments of its geison with an Ionic slope suggest that it, unlike the Round Temple at Tibur, employed modillions beneath

³⁹⁶ The base found nearby has a comparable Doric frieze, but a more complicated cornice. Fasolo and Gullini 1953, 49-50.

³⁹⁷ The Doric entablature of the Tholos at Epidauros (#13) preserves the earliest examples of rosettes in monumental stone architecture, while the northern Propylaion includes some of the earliest bucrania. Phiales, similar to paterae in shape, are first used in a frieze from the so-called Ptolemaion and the Arsinoeion at Samothrace (#58). Drawing from these examples, Kraus (1978, 456-7) proposes a Ptolemaic origin for some of the decorative motifs used in the Doric order.

³⁹⁸ Paterae may derive from Greek skyphoi. Steffanelli et al. 1991, 30-3.

³⁹⁹ Italic rosettes are more clearly visible on the Apsidal Hall at Praeneste. Kraus 1978, 458, 460 and 467 fig. 2.

⁴⁰⁰ A simple cyma reversa and fillet cornice protrudes above the frieze. Delbrueck 1907-1912, 18; Gros 1976a, 217.

⁴⁰¹ Delbrueck 1907-1912, 20.

⁴⁰² Kraus 1978, 460 and 464. Other early examples include friezes from the Temple of Portunus, the Tomb of Bibulus at Rome, and the round altar of Mercury in the Vatican. Honroth 1971, 12; Kleiner 1980, 42-3; von Hesberg 1981b, 204-5 and 209.

its cornice.⁴⁰³ Modillions, like the garlands, paterae and rosettes of the entablature's frieze course, are indicative of the inventiveness of late Republican craftsmen, who felt free to adapt the orders of the Greeks to suit native tastes.

Ceiling coffers

The Round Temple at Tibur (#64) and the Temple of Hercules Victor *ad portam Trigemnam* (#44) are the only late Republican round temples to preserve ceiling coffers. Each coffer block at Tibur contains two recessed panels with a central motif of a four-petaled flower beneath a four-leafed acanthus plant. While the use of superimposed acanthus leaves is peculiarly Italic, a rosette framed within a coffer has strong Greek associations.⁴⁰⁴

The ceiling coffers of the Temple of Hercules Victor are very similar in style to those of the Round Temple, yet include bands of Ionic cymatia or egg-and-dart ornament around their recessed panels where the Tibur coffers have a plain strip. This carved enrichment of the coffer bands, though frequently used in Greek marble and wooden coffers,⁴⁰⁵ is exceedingly rare in Roman architecture before the end of the Republic.⁴⁰⁶ It demonstrates how the ceiling coffer developed gradually, transforming a Greek form with Greek and Italic elements as the coffer saw wider use.

Stucco and mosaic work

⁴⁰³ The late Republican Temple of the Dioscuri at Cori and the Tabularium in Rome also use modillions. von Hesberg 1980, 119 and 169.

⁴⁰⁴ The Tholos at Epidauros (#13) provides good examples of ceilings coffers decorated with rosettes. Strong and Ward-Perkins 1962, 25.

⁴⁰⁵ There are comparable examples in marble in the Tholos at Epidauros (#13) and the Temple of Athena Polias at Priene, and in wood, in the Hieron at Samothrace. Ling 1973, 50.

⁴⁰⁶ From the late Republic, stucco (see below) was commonly used to shape details of coffers, as in the vaulted hemicycles at Praeneste. Ward-Perkins 1989, 119-20.

Like carved and molded ornaments applied to architectural members, stucco and mosaic work enlivened the surface of late Republican round temples. R. Ling believes that the stucco work of the late Republic was born of Egyptian and Greek traditions of decorative plaster work. While the Egyptian tradition contributed molded relief ornaments, the Greek inspired a division of the stuccoed surface into forms drawn from monumental architecture.⁴⁰⁷ This combination resulted in the formation of a “Masonry style” in the fourth century BC,⁴⁰⁸ which developed into the First Pompeian style by the second century.⁴⁰⁹ Through depicting architectural elements like socles, masonry courses and cornices supported by modillions,⁴¹⁰ First style wall painting was used to simulate marble temples, like that of Hercules Victor *ad portam Trigemnam* (#44), which set the standard of luxury in the late Republic.

The Round Temple at Tibur (#64) preserves some traces of First style stucco work on its exterior. Similarly, the column bases of the Temple of Fortuna Huiusce Diei (#38) show a later reworking in stucco.⁴¹¹ In addition to facing external walls and architectural members, stucco work was used to shape frieze details. The garland frieze of the Round Temple at Tibur, for example, employed a layer of stucco to elaborate stone forms, while the contemporary Temple of Portunus used stucco, without the benefit of stone, to mold elements of its frieze course.

Fragments of painted stucco discovered inside the cella of the Temple of Fortuna Huiusce Diei indicate that wall paintings formed part of the round temples’ interior decoration. This decoration took the form of either architectural ornament in

⁴⁰⁷ Egyptian plaster casting dates back to the Eighteenth Dynasty (ca. 1570-1320 BC), while Greek stucco work has its origins in the Mycenaean period. Ling (1973, 12-4) has suggested that the two strains merged when Egypt became part of the Hellenistic world.

⁴⁰⁸ Fourth century examples can be found in the Athenian Agora, at Samothrace and at Olynthos, though by the third century, the style had spread throughout the Hellenistic world and remained the most widely used form of interior decoration until the 1st c. BC. Ling 1973, 15.

⁴⁰⁹ Ling 1973, 21.

⁴¹⁰ For the Eastern and Western variations on this pattern, as well as additional types of molded decoration, see Ling 1973, 15-9 and 23.

⁴¹¹ The bases were reworked prior to their incorporation into the cella wall, ca. the mid-1st c. BC.

the First style or pictorial depictions in the Second.⁴¹² A reference to historical paintings by Pacuvius,⁴¹³ which F. Coarelli links with the Temple of Hercules Victor *in foro Boario* (#43),⁴¹⁴ and to images of the Corybantes that adorned the Tholus of Cybele (#34),⁴¹⁵ provide support for the use of Second style painting in cella interiors.

While paintings on stucco covered the temples' walls and architectural ornament, mosaic pavements adorned the floors of their cellas and ambulatories. Fragments of black and white *tesserae* discovered on the cella floor of the Temple of Fortuna Huiusce Diei and possibly the mixed marble pavement of the Shrine of Venus (#55)⁴¹⁶ signal the use of mosaics in late Republican round temples. Mosaic flooring, with origins in the Hellenistic East, continued to be employed in a wide variety of patterns and colors throughout the Imperial period. Similarly, the First and early Second style wall paintings of this period prefigure the development of painted stucco work under the Empire.

Statuary

In addition to exposing Rome to a rich and varied architectural tradition, conquests enabled her to benefit from Greece's highly developed sculptural repertory. Roman generals, now able to experience Greek sculptural displays first hand, by their right as victors, seized statues of religious importance or aesthetic appeal to fund and decorate their own temple foundations. Round temples, like other victory temples of

⁴¹² In the Second style, figural scenes or illusionistic vistas are played out within an architectural framework similar to that of the First style.

⁴¹³ Plin. *nat.* 35.4.19. The Greek paintings displayed in the Porticus Philippi (Plin. *nat.* 35.66, 114 and 144; cf. #42) should not be understood as examples of Second Style stucco work.

⁴¹⁴ Coarelli (1992a, 86 and 164-80; cf. Gruen 1992, 118) speculates that these paintings, like the *tabulae* of Hostilius Mancinus (Plin. *nat.* 35.23), depicted episodes from the Third Punic War and the siege of Carthage.

⁴¹⁵ Mart. *epigr.* 1.70.9-10 quoted in #34.

⁴¹⁶ Vacca, Nardini and Flaconiere 1704, 58, quoted in #55. However, this pavement cannot be dated with certainty.

the late Republic, exhibited Greek statues to underline the prestige and military might of their founders. Among those used in Roman round temples were the statue groups plundered from Greece and Ambracia to decorate the Temple of Fortuna Huiusce Diei (#38) and the Temple and precinct of Hercules and the Muses (#42). The Greek artist Scopas Minor, working in Rome,⁴¹⁷ may have been responsible for the cult images of the Temples of Hercules Victor *ad portam Trigemina* (#44) and of Fortuna Huiusce Diei. Due to their material, the bronze statues of Hercules discovered near his Temple *in foro Boario* (#43) and of Fortuna from her Temple at Praeneste (#31) are likely to have been Greek, as may have been, for their links to Greek religion, the second statue of Hercules in the forum Boarium and the statues of Isis-Tyche from Praeneste and Albunea from Tibur.⁴¹⁸

As in Greece, these statues were displayed both inside temples and in their immediate precincts. With few exceptions, most notably the Temple of Vesta (#57), the Shrine at Praeneste (#30), and the Shrine of Hermes and Maia on Delos (#10),⁴¹⁹ each temple's cult image was exhibited in its cella, while statues related in theme or artistic significance were displayed on adjoining statue bases. The forum Boarium, for example, as the principal cult site of Hercules in Rome, was arrayed with a variety of statues, altars and offerings, in addition to the Ara Maxima and the two Temples of Hercules Victor.⁴²⁰ Emphasizing different aspects of his cult, the statues associated with the Temples helped to fill out an area devoted to his worship.⁴²¹ Similarly, the

⁴¹⁷ According to Pliny (*nat.* 36.25-7), Scopas is particularly known for a large group of Neptune, Thetis, Achilles and a sea *thiasus* displayed in a sanctuary dedicated by Cn. Domitius near the Circus Flaminius, as well as for statues of Apollo on the Palatine and Vesta in the horti Serviliani. Isager 1991, 154-5.

⁴¹⁸ See Serv. *Aen.* 3.407 and 8.288, and Macr. *Sat.* 3.6.17 (forum Boarium), #31 (Praeneste), and Lact. *inst.* 1.6.12 (Tibur).

⁴¹⁹ Its continuous fire prohibited the display of statues inside the Temple of Vesta, while the well beneath the Shrine at Praeneste and the limited floor space of the Shrine on Delos restricted their use of statuary. Instead, nearby bases may have supported the Shrines' cult images.

⁴²⁰ See 'The Temples of Hercules Victor in the forum Boarium area' above.

⁴²¹ See #43-4 above.

statues of Fortuna, linked with the Temple at Praeneste, focus on contrasting facets of her cult.⁴²²

In its second phase, several Greek statues were added to the sculptural program of the Temple of Fortuna Huiusce Diei. While her main cult image remained inside the Temple's cella, two bases were added to flank its stairs. These bases, which may have supported up to twelve statues, could have precipitated the rebuilding of its podium and cella wall. Brought forward to replace its peripteros, this cella wall doubled the Temple's floor space,⁴²³ creating a more imposing structure to visually balance its new sculptural displays.

While these statues were not thematically related to Fortuna Huiusce Diei,⁴²⁴ the statues incorporated into the Temple and precinct of Hercules and the Muses were directly linked to its cult and function. Introduced by M. Fulvius Nobilior, the Italic Hercules and Ambracian Muses served as the cult images of his Temple, the former placed inside its cella and the latter on an adjacent Greek-style *schola*. Numa's Shrine of the Camenae (#33) positioned in front of the Temple counterbalanced the Greek Muses, while the Greek athletic statues introduced by L. Marcius Philippus set Hercules' physical strengths in harmony with his mental acuity.⁴²⁵

More so than the sculptural displays of other round temples, the array of statuary exhibited in the Temple of Hercules and the Muses and the Porticus Philippi conveyed the clout and convictions of their founders. Through his use of plunder,⁴²⁶ Fulvius sought to legitimize his victory, while demonstrating to a wide audience the extent of his Greek tastes and literary ideals. Through building and adorning his

⁴²² See #31 above.

⁴²³ See Chart #38.1.

⁴²⁴ See Cic. *Verr.* 2.4.4.126 and Plin. *nat.* 34.54 and 60; cf. Procop. *bell.* 1.15.11 outlined in #38.

⁴²⁵ See #42 above.

⁴²⁶ Though the extent of Fulvius Nobilior's plunder was enormous (Liv. 39.5.15; cf. Liv. 38.9.13, Polyb. 21.30.9, *Vir. ill.* 52.2, and Gruen 1992, 108), he showed refined sensibilities in the Temple he dedicated and the objects he chose to display.

Porticus to complement Fulvius' Temple, Philippus endorsed his claims and followed suit by using Greek statues to fuel his own political propaganda. While not uncommon in the late Republic,⁴²⁷ the desire to showcase booty with purpose-built spaces did not dominate the selection and display of statuary in round temples.

PROPORTIONAL ANALYSIS (Charts IV.1-16)

Vitruvius' recommendations regarding the design of round temples and the columnar orders⁴²⁸ may be taken as a starting point for an analysis of the proportions employed in late Republican round temples. Greek tholoi provide another starting point as their influence on Roman round temples was widely felt. However, when Vitruvius' prescriptions for monopteroi are applied to both Greek and Roman examples, only the Shrine of Fortuna Primigenia at Praeneste (#30) echoes his 1:10 correlation between lower column diameter and column height.⁴²⁹ Greek and Roman peripteroi are closer to his guide, with most showing a 3:5 relationship between their cella exterior and stylobate diameter, while, as reconstructed on the basis of B. Peruzzi's drawing, the cella exterior and column height of the Temple of Hercules Victor *in foro Boario* (#43),⁴³⁰ and the finial and capital diameter of the late fifth and fourth century Tholos at Delphi (#12), have a 1:1 correspondence.

Similarly, when applied to Greek drums,⁴³¹ the lower column diameter to column height ratio is usually ca. 1:10,⁴³² while the drum exterior is equal to the

⁴²⁷ Similarly, the *porticus Metelli* was built by Q. Caecilius Metellus Macedonicus in 146 BC to house Lysippos' Granikos Monument. Isager 1991, 160-1.

⁴²⁸ See Chap. II 'Vitruvius on round temple design' for all references to Vitruvius' text used below.

⁴²⁹ Cf. Wilson Jones 1989a, 42-3. Although they do not reflect Vitruvius' 1:1 relationship between column height and stylobate diameter, both the Monopteros at Pompeii (#28) and the Shrine at Praeneste have a 3:4 correspondence regarding their total exterior measurements (both lack stylobates).

⁴³⁰ At 19:20 and 9:10, the Temple of Hercules Victor *ad portam Trigemnam* (#44) and the Temple of Fortuna Huiusce Diei (#38) come close.

⁴³¹ The drum exterior has been substituted for the stylobate diameter, and the stylobate diameter to cella diameter relationship excluded.

column height of the Rotunda at Ilion (#14). Moreover, though not Vitruvius' 1:2, most of the roof height to drum exterior measurements average at 1:5.⁴³³ On columnar proportions, namely column height and intercolumnation to lower column diameter, neither the tholoi nor the round temples follow Vitruvius' design. Within the columnar orders however, both the Doric tholoi and the Monopteros at Pompeii (#28) show a high correlation.⁴³⁴ This does not apply to the Ionic order, where only the Philippeion's (#22) base height to lower column diameter fits Vitruvius' specifications, while for the Corinthian order, most employ capitals of a height equivalent to their lower column diameter.⁴³⁵

When elements of the columnar orders not discussed by Vitruvius are compared to the lower column diameter, new patterns emerge.⁴³⁶ For example, Greek tholoi show a considerable range in shaft height ratios, while for round temples, the range is less broad with the Temple of Fortuna Huiusce Diei (#38), the Round Temple at Tibur (#64), and the Shrine of Fortuna Primigenia approximating an 8:1 relationship.⁴³⁷ With respect to interaxial dimensions between neighboring columns, most Greek and Roman examples range from three to four times the lower column diameter.⁴³⁸ The interaxial diameter between opposing columns shows no such correspondence.

⁴³² The columns of the Arsinoeion at Samothrace (#58) are closer to 1:6.

⁴³³ The one exception, the Rotunda at Termessos (#62), recalls Vitruvius.

⁴³⁴ Since Vitruvius (4.3.1-4) relates the Doric module to the façade of a rectangular temple, all ratios are defined for round temples based on the relationship of one lower column diameter to two modules.

⁴³⁵ The proportional relationships supported by their abacuses have not been tested, but see Wilson Jones 1989a, 47-9, and 2000, 145-6

⁴³⁶ While some of the smaller measures may appear comparable, it should be noted that, due to their size, any variation is more significant. Even so, the Greek capital diameters to lower column diameters are consistently close to 1 1/4:1.

⁴³⁷ Cf. Wilson Jones 1989a, 43, and 2000, 148-9. Of the tholoi, only the Philippeion at Olympia's (#22) interior columns have this ratio of shaft height to lower column diameter.

⁴³⁸ Exceptions include the Rotundas at Termessos and Ilion (#14), the external order of the Tholos at Epidauros (#13), and the Skias at Athens (#6).

M. Wilson Jones, who has made an extensive study of columnar proportions, notes that for the Ionic order, the column height to shaft height ratio is frequently 10:9 or 11:10.⁴³⁹ This holds true for the exterior order of the Philippeion and the interior order of the Arsinoeion, though also for the Doric sixth century Tholos at Delphi (#11), the Temple of Aphrodite at Knidos (#16), and the Rotunda at Ilion, and the Tuscan Temple of Hercules Victor *in foro Boario*. His recommendation of 6:5 for the Corinthian order is employed by most tholoi,⁴⁴⁰ while of the round temples, only the Shrine at Praeneste and the Temple of Hercules Victor *ad portam Trigemina* (#44) show this relationship.

Moreover, instead of a Vitruvian module like the lower column diameter, Wilson Jones proposes that the “critical dimension” influenced the design of centralized buildings like tholoi and round temples.⁴⁴¹ He defines the critical dimension as an important element of the building’s plan, commonly the stylobate diameter, into which other significant dimensions can be divided.⁴⁴² Beyond the 3:5 relationship between cella exterior and stylobate diameter noted by Vitruvius,⁴⁴³ Roman round temples, with the exception of the Temple of Fortuna Huiusce Diei in its second phase,⁴⁴⁴ show a 1:2 correlation between their cella interiors and critical

⁴³⁹ Wilson Jones 1989a, 57 n. 56 (examples). Wilson Jones (1989a, 61) notes that this relationship is not compatible with Vitruvius’ recommendations, which fix the heights of the base and capital with regard to the lower column diameter.

⁴⁴⁰ Wilson Jones 1989a, 38, 1989b, 136, and 2000, 147. This ratio does not apply to the interior order of the Philippeion.

⁴⁴¹ Wilson Jones 1989b, 117 and 129. The critical dimension, based on foot measurements, cannot be determined for tholoi as Greek feet measurements are fairly unreliable.

⁴⁴² This concept is based on the idea that the use of simple, consistent foot measurements was integral to temple design. Coulton 1975, 58-66; Wilson Jones 2000, 83.

⁴⁴³ With stylobate as their critical dimensions, it is not surprising that many round buildings show a 1:1 correlation with their roof diameters.

⁴⁴⁴ As a drum, the Temple of Fortuna Huiusce Diei in its second phase has a 5:6 correspondence.

dimensions.⁴⁴⁵ Additionally, most are almost as tall as their critical dimensions are wide.⁴⁴⁶

In addition to significant variations in the proportional relationships among their parts, the tholoi and round temples differ among themselves with respect to their overall size, floor space and volume. Ranging from less than two meters to over twenty meters in diameter, the interior floor space of the Arsinoeion (#58), for example, is over three hundred times that of the Rotunda at Ilion,⁴⁴⁷ while its volume is over five hundred times greater. Though less dramatic, the Temple of Fortuna Huiusce Diei as a drum is one hundred times more spacious than the Shrine at Praeneste. The smaller cella of the Temple of Hercules Victor *in foro Boario*, at sixty-eight times the floor space of the Shrine at Praeneste, has thirty-nine times its volume.

While Vitruvius' module and Wilson Jones' "critical dimension" demonstrate that arithmetic relationships can exist between the major components of tholoi and round temples, Vitruvius raises the possibility that geometric relationships may also govern a building's design.⁴⁴⁸ To assess what role geometry played, Wilson Jones employs both methods in his analysis of the Round Temple at Tibur. He notes that, with a critical dimension of forty-eight feet based on its stylobate diameter, most major dimensions from the height of the podium, columns, and entablature to the total height, the stair width, and the cella diameter, result in simple fractions.⁴⁴⁹ By contrast, Wilson Jones reveals that a geometric analysis based on the cella exterior⁴⁵⁰

⁴⁴⁵ The wide range of ratios employed by Greek tholoi may be explained by the fact that several are drums.

⁴⁴⁶ While the round temples, with the exception of the Shrine at Praeneste, approach a 1:1 relationship, the Greek tholoi show a wider range.

⁴⁴⁷ Though not roofed, it is striking that the round court at Pella (#25) has one thousand times more floor space than the Rotunda at Ilion.

⁴⁴⁸ See Chap. II 'Vitruvius on round temple design.'

⁴⁴⁹ Wilson Jones 1989a, 63, 1989b, 114 and 131-2, and 2000, 103-6 figs. 5.28-9.

⁴⁵⁰ This analysis was first carried out by H. Geertman (1989).

is not only awkward for its incorporation of the square root of two, but also fails to predict the exact dimensions of the cella.

Both the critical dimension and Vitruvius' concept of the module show that establishing clear proportional relationships between the whole and its parts was a consideration for Greek and Roman architects. However, the dimensions of tholoi and round temples also reveal that, at least until the Imperial period, proportions were determined on a case-by-case basis as often as rules defined by Vitruvius or Wilson Jones are apparent in their design.

IV CONCLUSION

The round temple as it develops in Rome, Latium and on the island of Delos in the late Republic tempers a reliance on the traditional forms and styles of Greek architecture with the use of new Italic techniques and ornament. The round form is derived from Greek tholoi of the Classical and Hellenistic periods and may have been introduced to Italy by Greek architects. Following Roman conquests of the Hellenistic East in the second century BC, a number of Greek craftsmen immigrated to Rome in the train of victorious generals. Like Hermodorus of Salamis, who designed the Temples of Jupiter Stator and of Mars *in Circo*, and Scopas Minor, who may have crafted the cult images of the Temples of Hercules Victor *ad portam Trigemnam* (#44) and of Fortuna Huiusce Diei (#38), Greek craftsmen played a significant role in the ornamentation of late Republican Italy. They brought and employed Greek materials, techniques, designs, and decorative styles to appeal to their philhellenic patrons. These Greek elements were in part transmuted by available resources and local tastes. The use of stuccoed cement work to approximate Greek

ashlar masonry or marble revetment, where marble was not available, is an example of the Roman readiness to adapt local products and techniques to Greek styles.

Though used as a base, Greek traditions of design and ornament did not determine the appearance of late Republican round temples. Like the methods used to simulate ashlar masonry, the decorative ornaments of the round temples recall Greek styles with Greek-inspired, yet native born motifs. New uses for the Greek cyma reversa and an experimental cyma recta characterize Roman podium moldings, while elements of the Corinthian order and its entablature bespeak Italic variations on Greek themes. The rounded tips of the acanthus leaves, in contrast to the spiky points of the Greek *acanthus spinosus*, point to the translation of Greek marble detailing into native Italic stones. Further, the introduction of modillions beneath an Ionic cornice signifies an indigenous development, which may have roots in stuccoed wall paintings.

Round temples also reflect Greek tholoi in their proportions and design. Even though they rarely employ the same proportional relationships, round temples follow the Greek principles of symmetry and proportion discussed by Vitruvius.⁴⁵¹ Like their building materials and techniques therefore, the decoration and design principles of late Republican round temples signal the careful amalgamation of Greek traditions and Italic innovations that defines much of late Republican architecture.

This inventive approach to the design and ornament of round temples extends to the use of the round form in other media. Unlike Greece, where the form is reserved for temple architecture, in Italy, round buildings run the gamut of functions from aviaries to mausolea. Moreover, the form is frequently picked up in the illusionistic architectural vistas of Second style wall paintings. Here, round temples are framed by walls, columns and pediments to create a feeling of depth. This three-

⁴⁵¹ More than using Vitruvius as a guide, Roman architects simply responded to ideas prevalent in their society.

dimensional space and the close conjunction of round and rectilinear forms reflect built architecture, where round temples and rectangular buildings stand side by side. Within the existing infrastructure of Republican Italy, populated with rectangular temples, porticoes, and civic, industrial and domestic structures, round buildings, be they aviaries, mausolea or temples, stood out as unique and eye-catching features of a Roman cityscape. As Greek-inspired forms, they acted as tributes to the glory of the Hellenistic world and to the refined tastes and skills of their patrons and architects, while as round buildings in an urban setting, they provided visual relief from a succession of rectangular forms and spaces.

In the late Republican period, round temples came to symbolize the power of Rome fresh from victories in the Hellenistic East. The design and decorative traditions of the Greeks provided a base on which Roman architects might build their own traditions of form and ornament. Consequently, the round temples of this period show the beginnings of a new architecture. Whether designed and built by Greek architects, possibly like the Temple of Hercules Victor *ad portam Trigemnam*, or crafted by Italic builders with native materials and techniques, round temples emphasize the extent of Greek influence on Roman architecture, while exploring new methods and styles of building that will find wide use in the Imperial period.