# NOTE TO USERS

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UMI

# VITRUVIUS

## WRITING THE BODY OF ARCHITECTURE

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## Abstract

Vitruvius dedicated his, the only work on architecture to have survived from classical antiquity, to Augustus Caesar, the first Roman emperor, and claimed repeatedly that he was "writing the body of architecture (*corpus architecturae*)." A detailed examination of meaning of this claim, read in the specific imperial context that brought *De architectura* to light in ca. 25 B.C., is the principal focus of this study, which has been undertaken less as an effort to come to positive terms with the relevance (or irrelevance) of Vitruvius' normative prescriptions for Roman building practice than in the attempt to try to understand what he was trying to say about architecture and why.

The exegesis is developed in four parts. The first deals with the corporeal identity of the book itself: a ten-scroll "angelic" messenger, whose written form proves to be as significant an index of its meaning as its content. The second part assesses Vitruvius' presentation of his treatise to Augustus in the preface to Book 2 of his treatise as the emperor's Herculean body: at once the agent and proof of Roman conquest and, like Hercules, the philanthropic purveyor of the benefits of civilisation to conquered peoples. The third unravels what Vitruvius meant when he said that buildings, temples especially, were to be put together in the same way that nature puts together the bodies of beautiful men. The fourth part concludes that the beautiful body in question is the body of the king: that of the emperor himself, whose body – *corpus imperii* – was, at that historical juncture, imagined as congruent with the body of the Roman world. For Vitruvius, through architecture – *as* architecture – this kingly body was to be the chief agent of the empire's enduring coherence.

That the project of Roman world dominion so consistently shaped this first self-conscious attempt to give a comprehensive account of architecture raises troubling questions about the discipline itself. It is in raising such questions that Vitruvius' *De architectura* acquires more than antiquarian interest.

## Resumé

Vitruve dédia son traité – la seule oeuvre traitant de l'architecture qui nous soit parvenue de l'antiquité – à César Auguste, le premier empereur romain. De plus, Vitruve se revendique à plusieurs reprises d'avoir "écrit le corps de l'architecture (*corpus architecturae*)." Cette dissertation se penche sur l'exégèse rigoureusement contextuelle de cette revendication, faite au début du règne d'Auguste vers 25 av. J.-C. quand parut le *De architectura*. Son but est moins la quête de réponses positives aux questions de rapports (ou leur absence) entre les ordonnances normatives de Vitruve et la pratique architecturale de son temps qu'une tentative de compréhension du sens global voué à l'architecture par ce traité qui se veut, avant tout, une oeuvre de synthèse. La toute première.

L'exégèse se développe en quatre parties. La première concerne l'identité corporelle du livre lui-même: un messager "angélique" dont la forme originelle, déployée en dix rouleaux, se dévoile comme étant toute aussi significative pour le sens du traité que l'est son contenu. La deuxième partie concerne la présentation du traité à Auguste dans la deuxième préface du *De architectura* en tant que corps "herculéen": à la fois moyen et témoin de la conquête romaine et, tout comme Hercule, le *philanthropos* qui apporte les bienfaits de la civilisation aux peuples soumis. La troisième se penche sur le sens, encore contextuel, du propos vitruvien à savoir que les édifices, les temples surtout, doivent être composés comme la nature elle-même compose le corps d'un bel homme. La quatrième partie conclut que le beau corps en question est nul autre que le corps du roi – le corps de l'empereur qu'on imaginait (en tant que *corpus imperii*), à cette conjoncture historique précise comme étant le corps entier du monde romain. La revendication de Vitruve est celle-ci: c'est à travers l'architecture – en *tant* qu'architecture – que ce corps royal peut devenir l'agent principal de la cohérence durable de l'empire.

Que le projet romain de la domination mondiale ait à ce point formé cette première tentative de synthèse de la connaissance architecturale soulève des questions troublantes. C'est en les soulevant que le *De architectura* de Vitruve acquiert son sens actuel.

*À la mémoire de Jean*

# CONTENTS

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# INTRODUCTION

*. . autrefois les sçavans n'avoient pour but dans leurs études que les recherches des opinions des Anciens, se faisant beaucoup plus d'honneur d'avoir trouvé le vray sens du texte d'Aristote que d'avoir découvert la verité de la chose dont il s'agit dans le texte.*

Claude Perrault, *Ordonnance des cinq espèces de colonnes*[1]

In the mid-20's B.C.[2] Vitruvius, an ageing military architect about whom little is known,[3] presented Augustus Caesar, new ruler of the Roman world, with ten books on architecture. The only major work on architecture to survive from classical antiquity,[4] and the first self-consciously comprehensive account of the subject,[5] the treatise known

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[1] Perrault 1683, p.xviii.

[2] The work may have been begun in the 30's, but not completed until the 20's. For recent views on the dating of Vitruvius and reviews of previous literature on the subject, see Baldwin 1990 who, although somewhat equivocal, tends to support a publication date between 29 and 25 B.C. Fleury, Vitruvius I (1990), pp. xvi-xxiv brackets the writing of the work between 35 and 25 B.C.; Romano 1987, pp. 17-20, argues that it was written between 27 and 23, with the prefaces to each of the ten books written later.

[3] Vitruvius 2.pref.4: "old age has spoiled my appearance, bad health has sapped my strength" (*faciem deformavit aetas, valetudo detraxit vires*). Since Romans considered old age to begin at forty-six (Cicero *De senectute* 60), Vitruvius was probably in his fifties. Gros 1994a argues that Vitruvius' official position was that of *scriba armentarius*, and that as such he belonged to the *ordo apparitorum*, the class of Roman public servants situated between the equestrian order and the *plebs*. Cf. Cohen 1984, Dumougin 1988, p. 706, Purcell 1983, p. 154. For surveys of the literature on Vitruvius' identity see also Baldwin 1990 and Fleury, Vitruvius I (1990), pp. ix-xvi. Ruffel and Soubiran 1962, p. 142 give a succinct and plausible outline of his career, based on the internal evidence of *De architectura*. Knell 1985, p. 2 fixes his birth date at 84 B.C.

The Latin text followed here for Books 1, 3, 4, 7, 8, 9 and 10 is that of the seven volumes of the Budé edition so far available. For the other three books (2, 5 and 6), that of Fensterbusch, Vitruvius 1964. On the Budé and other recent editions, see below nn. 19, 20 and 28. All translations of Vitruvius are my own, with the Latin text cited in the notes for reference. Other translations of classical authors mainly follow those of the Loeb Classical Library, in which cases the original is *not* cited. When translations are not from Loeb, the original is cited along with the translator. If the original is cited but no translator given, the translation is my own.

[4] The only other known work, a thirty-page Byzantine *opusculum* of the first half the sixth century A.D. written by one Julian of Ascalon, deals with domestic construction in urban Palestine. See Saliou 1994.

[5] Vitruvius 4.pref. and below pp. 9-10.

to posterity as *De architectura* in time became *the* text of architectural theory to which, at least until the 18th century, all other texts referred.[6]

The best-known of such texts appeared in the Renaissance, after the legendary discovery of the Harley manuscript of Vitruvius by the humanist Poggio Bracciolini at St. Gall in 1414 and, more importantly perhaps, after the invention of printing.[7] Not only did these writings appear as editions of *De architectura* itself, in Latin or in translation, many with commentaries and sumptuous illustrations.[8] Inaugurated by Alberti's *De re aedificatoria libri decem* of the mid-fifteenth century, texts for which Vitruvius was the principal referent also took shape as architectural treatises which either explicitly or implicitly took *De architectura* as their point of departure.[9] For Renaissance theorists, Vitruvius' authoritative voice from the past had both raised for the first time and defined for all time what the important issues in architecture were: not only how architects and their patrons, but how all educated people were to understand the discipline.

The authority of *De architectura* would not escape the wholesale demotion of authoritative ancient texts that accompanied the scientific revolution in the 17th century.

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[6] Germann 1991, pp. 214-236 dates the end of what he calls "Vitruvianism" to the 18th century, specifically to the writings of Jean-Nicolas-Louis Durand. On Durand's functionalism as a historical watershed, Pérez-Gomez 1983, pp. 298-326.

[7] In fact, reception of Vitruvius was continuous throughout the middle ages: Ciapponi 1960, p. 98; Koch 1951, p. 15, n. 18. Cf. Fleury, Vitruvius I (1990), pp. xlvi-liii; Kruft 1994, pp. 30-40. The oldest Vitruvius manuscript is the Carolingian, 9th-century *Harleianus* 2767 now in the British Museum. The most definitive survey of the seventy-eight surviving Vitruvius manuscripts is by Krinsky (1967), who describes each in detail, giving its date, location, origin, and physical appearance.

[8] On the Harley manuscript (*Harleianus* 2767) see n. 7, above. For a complete listing of all Vitruvius editions, translations and major commentaries from the *editio princeps* of 1486 to 1915, see Ebhardt 1918. For an update to 1982, see Callebat, et. al. 1984, pp. vii-xiii.

[9] The *editio princeps* of *De re aedificatoria* dates from 1485, but had already been circulating in manuscript for some time. On Alberti's as an "inaugural text" see Choay 1988. The current authoritative English translation of *De re aedificatoria* is by Rykwert, Leach and Tavernor (Alberti

however. By the end of the 18th Vitruvius became less a source of architectural truth than a source to be investigated for information about the architecture of antiquity and, often, to be censured for misinformation about it.[10] The historiographical assumptions underlying the recent resurgence of Vitruvian studies among classicists and classical archaeologists in continental Europe continue to fall within such essentially positive guidelines, initially laid out before a hostile audience by Claude Perrault at the end of the 17th century.[11] Legitimate study of ancients texts (*De architectura* among them), Perrault claimed, was to entail less an attempt to discover the "true sense" of the text than to verify "the truth of that with which the text deals."[12]

Bracketed by this fundamental modern premise, the scholarly investigations of classicists in the course of the past three decades, launched by Curt Fensterbusch's German translation of 1964,[13] have indeed resulted in a much more detailed assessment than ever before of the truth of that with which *De architectura* deals. Although it is still little, we now know more about the author himself, for instance.[14] The nature,

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1988). For recent surveys of Vitruvius' influence in the Renaissance, see Germann 1991; Guillaume, ed. 1988; Hart, ed. 1998; Kruft 1994, pp. 66-72.

[10] The watershed text on the matter is Perrault 1683.

[11] In the notes to his translation of *De architectura* (Perrault, Vitruvius 1673) and especially his *Ordonnance des cinq espèces de colonnes* (Perrault 1683). Cf. McEwen 1998 with references.

[12] Perrault 1683, p. xviii: *. . . autrefois les sçavans n'avoient pour but dans leurs études que les recherches des opinions des Anciens, se faisant beaucoup plus d'honneur d'avoir trouvé le vray sens du texte d'Aristote que d'avoir découvert la verité de la chose dont il s'agit dans le texte.* Similarly, Quatremère de Quincy on the tyranny of ancient texts: *Je n'entends pas ce savoir oisif et stérile . . . chez lequel les mots prennent la place des choses; je parle de cette science qui doit rattacher nos connaissances à celle du passé. . . . Cette science ne fait que naître. Comment pouvait-elle exister avant les découvertes de ce siècle? . . . Nous avons de gros livres sur l'Antiquité expliquée; le malheur est qu'on a voulu l'expliquer avant qu'elle fût explicable . . .* (*Lettres sur le déplacements des Monuments de l'Art de l'Italie*, Paris 1796, pp. 22-25, as cited Greenhalgh 1974, p. 304). Michael Greenhalgh, who cites the passage, remarks that "It is statements like this which spell the end of the influential books of Pliny and Vitruvius" (p. 304).

[13] Recent scholarship has twice been reviewed by Pierre Gros: in his *ANRW* article of 1982, and in his more recent introduction to *Le projet de Vitruve* (1994).

[14] See notes 2 and 3, above.

operability and Hellenistic origins of his proportional schemata are better understood, thanks mainly to the work of German scholars, Burkhardt Wesenberg above all.[15] His literary influences and cultural milieu have been studied by Antoinette Novara and especially by Elisa Romano in her *La Capanna e il Tempio*.[16] His language has been examined by Louis Callebat;[17] his mechanics, the subject of Book 10, by Philippe Fleury in a recent monograph.[18] Each of the volumes of the new French translation being published in the Budé edition has appeared with a newly-established Latin text, full critical apparatus, lengthy introduction, extensive commentary and up-to-date bibliography, all of which considerably augment the amount of available information.[19] Also recent amont modern translations is the handsome new two-volume Italian one by Antonio Corso and Elisa Romano, extensively commented and annotated like the Budé volumes, and conducted under the direction of Pierre Gros, the acknowledged leader in current Vitruvius studies.[20]

Gros' work has been wide-ranging, with articles on topics as diverse as the philosophical foundations of Vitruvius' understanding of architectural harmony, his

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[15] Wesenberg 1983, 1984a, 1989 and 1994. Lothar Haselberger's discovery of 200 square metres of drawings etched onto the walls of the *adyton* of the Hellenistic Temple of Apollo at Didyma was another landmark (Haselberger 1983 and 1984). See also the work of Heiner Knell, especially his monograph of 1985; Coulton 1989 and Wilson Jones 2000.

[16] Novara 1983 and 1994; Romano 1987. On Vitruvius' intellectual milieu, see also Rawson 1985, *passim*.

[17] Callebat 1982, 1992, and 1994. On Vitruvius' language, see also Corso and Romano, Vitruvius 1997, pp. lxxix-xcv.

[18] Fleury 1993.

[19] The first volume published was Jean Soubiran's translation of and commentary on Book 9, which appeared in 1969. Books 1 (Fleury, 1990), 3 and 4 (Gros, 1990 and 1992), 7 (Liou et al., 1995), 8 (Callebat, 1973) and 10 (Callebat and Fleury, 1986) are also now available. Books 2, 5 and 6 are still in preparation.

[20] This illustrated Italian edition has been published with along with Rose's Latin text of 1867, which the translators have emended somewhat (Corso and Romano, Vitruvius 1997; Rose and Müller-Strübing, Vitruvius 1867). The translation now replaces Silvio Ferri's incomplete one (Ferri, Vitruvius 1960) which contains Books 1 to 7 only.

illustrations, and the rhetoric of architectural authority.[21] As a classical archaeologist, however, Gros has concentrated primarily on reading *De architectura* in terms of the specifics of Roman building practice in the late Republic and early Empire. Contrasting the variety and inventiveness of the built work of the period with the by-and-large unitary prescriptions set out in the treatise, he concluded early on that Vitruvius' project was essentially a normative one, motivated by the desire for rational systematisation.[22] Certainly not with a view to establishing a systematic handbook for practitioners, he has insisted,[23] nor entirely with a view to dignifying the architectural profession by making architecture a proper liberal art like rhetoric, as Frank E. Brown argued over thirty-five years ago.[24] Neither a *Fachbuch* for practitioners nor a *Sachbuch* for educated laymen[25] – anachronistic either/or categories that Gros claims are inappropriate to the Vitruvian context[26] – *De architectura* and its evidently normative *parti* must be understood in terms of values specific to the time and place of its writing. And what Romans valued above all were *honores*, the honours that were the reward for service to the state. This unassailable premise has led Gros to draw certain conclusions to which I shall return.

Less methodically circumscribed, and less obviously marked by the regularly held colloquia and attendant publications that have punctuated the progress of Vitruvius studies among continental European classicists,[27] there has, nevertheless, been a

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[21] Gros 1989a (philosophy), 1996b (illustrations), 1989b and 1991a (authority).
[22] Gros 1971, 1973, 1975. See also 1994b.
[23] Gros 1994a and 1996b.
[24] Brown 1963.
[25] For the terms, see Sallmann (1984, p. 12) who argues that *De architectura* is a *Sachbuch*.
[26] Gros 1994a, pp. 75-76.
[27] *Architecture et société*, Rome, 1980 (published 1983); *Bauplanung und Bautheorie der Antike*, Berlin, 1983 (1984); *Vitruv-Kolloquium Darmstadt*, Darmstadt, 1982 (1984); *Munus non ingratum*, Leiden 1987 (Geertman and de Jong, eds., 1989); *Le projet de Vitruve*, Rome 1993 (1994). English-language participation in these these colloquia has been extremely rare.

corresponding renewal of interest in Vitruvius in the English-speaking world. It is noteworthy that Ingrid Rowland, the author of the just-published new English translation of Vitruvius is not primarily a classicist, but a Renaissance scholar, whose collaborator, Thomas Noble Howe, is an architect.[28] English-speaking classicists, with few exceptions, tend to ignore Vitruvius, or at best to denigrate his importance.[29] The only monograph on Vitruvius in English is a very brief study, first published twenty years ago, which claims the treatise was "meant to be primarily a handbook for architects and engineers."[30]

It is mainly among architects and architectural historians working under the rubric of what is studied in professional schools as "history and theory," that the new English-speaking Vitruvians are to be found. Whereas continental European classicists have concentrated primarily on reconstructing "the truth of that with which the text deals," in terms which aim to be rigorously *scientifiques*, architectural Vitruvians, among whom Joseph Rykwert has figured as a chief and very influential exponent, are less concerned with *De architectura* as a repository of facts which are either true or false than in the work as the entry point into the (pressing, for architects) question of architectural meaning.[31] If these scholars read the text historically, which they very often

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[28] Rowland and Howe, Vitruvius 1999, consists of Rowland's English translation and Howe's illustrated commentary.

[29] He barely rates a mention in volumes IX and X, the relevant volumes of the new edition of the Cambridge Ancient History, for example. Rawson 1985 allows him a fair amount of attention in her study intellectual life in the late Republic, but tends to find him garrulous, pretentious and inaccurate.

[30] McKay 1985, p. 16. The book is only 88 pages long.

[31] From Rykwert's early *On Adam's House in Paradise*, (1981, but originally published in 1972) to his recent *The Dancing Column* (1996), not to mention countless articles (for a selection, Rykwert 1982) Other explorations of meaning in Vitruvius include Hersey 1966 and 1988 and Onians 1988. Pollitt 1974 draws heavily on Vitruvius in his work on ancient critical terms. For all of these scholars, including Wilson Jones 2000, Vitruvius is only a part, not the focus, of study.

do not,[32] they tend to treat it either as the beginning of the tradition that ended with the scientific revolution or as the end of the one that began with the Greeks, to whose understanding of architecture Vitruvius, who worked almost entirely from Greek sources, serves primarily as a kind of window. Either way, the historically specific Vitruvius of ca. 25 B.C. tends to evaporate in favour of the author of a work which is part of a continuum and to be valued, in spite of (or because of) multiple possible interpretations, as essentially transhistorical: the source of metaphors and insights that are, or should be – for architects – perennially informative. Of these, the metaphor of architecture as a reflection of the human body is fundamental.[33]

But what is "body" and what is "architecture?" And why, leaving aside for the moment important distinctions between architecture and building, as well as those between human and non-human bodies, is architecture a metaphorical body? The questions, formulated in this way, are indeed transcendent. My aim, however, is not to match in kind the transcendence of the questions with a speculative transcendence of approach, but rather to approach them, if at all, indirectly by targeting as closely as possible the historically specific Vitruvius of ca. 25 B.C., about whom as already noted, the stock of available information has increased dramatically in recent years.

Even so, literary evidence for the reception of Vitruvius in antiquity is rare. He is not mentioned at all in the surviving work of any Augustan author. Pliny, writing in the

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[32] See, most recently, Dripps 1997 for example.

[33] The metaphor is the dominant theme of Rykwert 1996. For a succinct account of his position see especially Rykwert 1992. A Rykwert *Festschrift* which dealt precisely with this topic was held at the University of Pennsylvania in March of 1996. The proceedings (George Dodds and Robert Tavernor, eds., *Body and Building*, M.I.T. Press) are forthcoming.

mid first century A.D., mentions him as a source three times in his lists of *auctores*.[34] He is mentioned in Frontinus' late first-century A.D. work on aqueducts.[35] The abridgement of *De architectura* written by Cetius Faventius in the early third century was the first of many works to reduce the work to a *Fachbuch*.[36] Servius mentions him as a writer "*de architectonica*" in his commentary on the *Aeneid* written in the fourth century A.D.[37] Sidonius Apollinaris writing in Gaul in the mid fifth century A.D. elevates him to something like mythical stature, anticipating in this his virtual apotheosis in the Renaissance: for Sidonius, Vitruvius is to the plumb line as Orpheus is to the plectrum.[38] Although there are a number of inscriptions naming a Vitruvius who may or may not be the author of *De architectura*, they are not especially informative.[39] Archaeological evidence is, to say the least, equivocal, with the thrust of much scholarship since the time of Claude Perrault being proof that Vitruvius' rules were rarely, if ever, followed.

Insofar as the "real," historically specific Vitruvius is the focus of my study, I might be said to be allying myself with the continental European classicists. My interest, however, is primarily architectural, and unlike theirs my aim is less to establish the "truth of that with which the text deals" than, so to speak, to take a great leap backward and adopt the very methodological principle Claude Perrault dismissed over 300 years ago: to try to discover *le vray sens du texte*, the "true sense of the text." What, to put it simply, was Vitruvius trying to *say*? And why?

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[34] On trees in *Natural History*, Book 16, on painting in Book 35 and on stones in Book 36.
[35] *De aquis* 1.25.
[36] See Plommer 1973.
[37] Servius *Ad Aeneidem* 6.43.
[38] Sidonius Apollinaris *Epistulae* 4.3.5. On the ancient reception of Vitruvius, see Fleury, Vitruvius I (1990), pp. ix-x; Pellati 1921.
[39] On the epigraphic evidence, see Thielscher 1961 and Ruffel and Soubiran 1962.

As a tactic, this means respecting the text's opacity – allowing what in contemporary critical discourse would be termed its "otherness" – and avoiding anachronistic reductions that favour clarity above all. An opaque text is, obviously, *not* a window: neither to the transhistorical truth of architecture (whatever that may be) nor to (in principle verifiable) objects, facts or events. Such a text has its own identity, is itself an object, fact or event. Vitruvius thought of his text as a body. This central metaphor is the primary focus of my study.

Vitruvius claims – repeatedly – that he was "writing the body of architecture," the *perfect* body of architecture (*emendatum*, without a flaw), he insists at one point.[40] This is how he begins the preface to Book 4.

*When I noticed, Imperator, that many who have provided rules and scrolls of commentaries on architecture have not left orderly works but only incomplete drafts, scattered like fragments, I decided it would be a worthy and most useful thing to bring the whole body of this great discipline to complete order and, in separate scrolls, to develop a register of conditions for each of its different subjects.*.[41]

Pierre Gros has singled out this preface as crucial for understanding Vitruvius' intentions,[42] stressing that the project of bringing together a written *corpus* of architectural knowledge from scattered sources is the very hallmark of Vitruvius'

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[40] "*Corpus emendatum architecturae:*" Vitruvius 9.8.15. See also 2.1.8; 4.pref.1; 5.pref.5; 6.pref.7; 7.pref.10; 7.pref.14; 10.pref.4; 10.16.12. On the "perfection" of his work and its relation to the Pythagorean *teleon*, see the section "A Perfect Ten" in Chapter 1, below pp. 48-68.

[41] Vitruvius 4.pref.1: *Cum animadvertissem, Imperator, plures de architectura praecepta voluminaque comentariorum non ordinata sed incepta uti particulas errabundas reliquisse, dignam et utilissimam rem putavi tantae disciplinae corpus ad perfectam ordinationem perducere et praescriptas in singulis voluminibus singulorum generum qualitates explicare.*

[42] Gros, Vitruvius 4 (1992), p. xiii: *il est indéniable que ce rapide* prooemium *contient une affirmation décisive pour la compréhension du projet vitruvien.*

originality.[43] That Vitruvius should have done so, or thought he had, is also what underwrites his hope for renown.

"Little celebrity has come my way," laments Vitruvius, who does not appear to have enjoyed much success as an architect.[44] Moreover, avenues to fame were open chiefly to aristocrats who participated in Roman public life – to generals who led victorious armies in battle above all. The inscriptions that petrified the short-lived apotheosis of the triumph awarded to such *imperatores* recorded *their* names on the *monumenta* they paid for from the spoils of war, not those of the architects charged with their construction.[45]

Not particularly successful professionally, nor as a *scriba armentarius* in the service of important men, himself a prominent figure, nor even, by his own diffident avowal, a writer of great talent,[46] Vitruvius nevertheless hopes, in the preface to book 6, "that once these scrolls have been published (he) will be known even to posterity,"[47] adding a little later that he "decided to write the whole body of architecture and its principles with the greatest of care, thinking it would be a not unwelcome service to all peoples."[48]

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[43] Vitruvius' sources were mainly Greek and are listed, for the most part, in the preface to Book 7. Gros first made the point about Vitruvius' originality over 20 years ago (Gros 1975, p. 986), and continues to defend it, most recently 1996b, p. 44. Other scholars have also supported the view, notably Callebat 1989; Kessissoglu 1993; Novara 1983, p. 288 and 1994 p. 57; Romano 1987, pp. 186-187.

[44] Vitruvius 6.pref.5: *Ideo notities parum est adsecuta*

[45] On fame, Braudy 1986, McEwen 1995; on triumphs, Scheid 1986, pp. 223-225; Versnel 1970, Woolf 1993, pp. 172-174; on the epigraphic anonymity of architects Gros 1983, pp. 427-428.

[46] *Scriba armentarius*: above, n. 3; lack of writing ability: Vitruvius 1.1.18. Nevertheless, recent reassessments of Vitruvius' writing ability invite some mitigation of the poor view popular since the time of Alberti's unequivocal censure in the fifteenth century (Alberti 1988, p. 154). See especially Callebat 1982 and 1994.

[47] Vitruvius 6.pref.5. *Sed tamen his voluminibus editis, ut spero, etiam posteris ero notus*

[48] Vitruvius 6.pref.7: . . . *corpus architecturae rationesque eius putavi diligentissime conscribendas, opinans munus omnibus gentibus non ingratum futurum.* That *omnibus gentibus* here is "all peoples" is confirmed by, for example, Cicero's use of *imperium omnium gentium* (*De oratore* 1.14) to describe

Written compilations as such did not constitute a claim to fame, however. Nor did originality, for that matter, at a time when, in Rome, truly original undertakings – revolutionary ones, such as Augustus's seizure of command, for instance – tended to be presented (and accepted) as a return to the *mos maiorum*, the customs of the ancestors which, as Cicero claimed, were the foundation of the Roman commonwealth.[49] Glory was the reward for service to the state,[50] supremely, the triumph awarded to a victorious general.[51]

Pierre Gros sees the notion of service as central to Vitruvius' undertaking and in this, he claims, *De architectura* as *corpus* plays a key role. Service to the state meant providing Augustus, who would famously leave Rome a city of marble, with a kind of brief or "complete catalogue" on what was to be done.[52] The theme of utility or service has also been the focus of Antoinette Novara's work on Vitruvius.[53] Novara's argument is that Vitruvius understands his project as a service not only to builders like Augustus who, thanks to *De architectura*, will be able to judge and appreciate what they have

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what, in the context, can only be taken as Rome's "command of all peoples." Cf. Cicero *Pro Balbo* 16. On the phrase *omnes gentes* and its significance, below Chapter 2, pp. 157-160.

[49] Cicero *De re publica* 5.1, citing Ennius who, he alleges, received the words from an oracle: *moribus antiquis res stat Romana virisque*. Augustus himself was a master of the tactic, presenting his de-facto monarchy as a "restoration" of the republic is perhaps paradigmatic. On Augustus's preoccupation with continuity and his habit of presenting innovation as tradition, see for example, Augustus *Res gestae* 8.5; Suetonius *Divus Augustus* 31.5 and 89.2. On the concern in the Augustan period with relating the present to the past, particularly in the religious sphere, see Price 1996, especially p. 813. Sablayrolles 1981 has read the chapters (19-21) of the *Res gestae* which deal with building as making precisely the same point. See also Zanker 1988, especially pp. 167-238. This concern was continuous with the preoccupation among intellectuals of the late Republic (Moatti 1988 and 1991). "Originality," an anachronistic term, would have no value in such a context. The Latin adjective *originalis* is post-classical and meant "primitive" (Lewis and Short, sv), which is something no civilized Roman would have aspired to.

[50] Earl 1961, ch. 2; Knoche 1967. Cf. Brunt 1978, p. 162.

[51] Brunt 1978, p. 183 cites Cicero (*De provinciis consularibus* 19-36) as arguing in 56 B.C. that Julius Caesar was performing the highest service to the state by conquering Gaul.

[52] Suetonius *Divus Augustus* 28.3. Gros 1994a, p. 89: *Vitruve, s'adressant à Auguste, lui propose en somme un catalogue complet destiné à lui permettre une rapide appréciation de ce doit être accompli.*

undertaken to build, but beyond as a humanistic service to *omnibus gentibus*, to all peoples, and even to posterity.[54] And she points out, concurring with Pierre Gros about the central importance of the preface to Book 4 for understanding Vitruvius' purpose, the most beneficial thing of all in this regard (*utilissimam rem*), is his having assembled all architectural knowledge into a single well-ordered *corpus*.[55] To come to grips with the question of why this *corpus* is to be of such great benefit is another of my principal aims.[56]

Does *corpus* simply mean a compilation? Neither Pierre Gros nor Antoinette Novara nor any of the modern translators who render Vitruvius' written *corpus* variously as *Gesamtwerk* in German, *sytème accompli* or *ouvrage d'ensemble* in French and "comprehensive treatise" in English seem to have recognised what I have called the opacity of the metaphor.[57] Nor, for that matter, its novelty.

It is common enough to speak of a "body" of written work today, but *corpus*-as-written-work in Latin does not predate Cicero, who uses it only twice in family letters, and then with no suggestion of encyclopaedic totality.[58] The term *architectura* does not predate Cicero either. He uses it only once in his very last work, where he names it

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[53] Novara 1983, 1994 and a forthcoming work mentioned in 1994, p. 48, n. 5.
[54] Vitruvius 6.pref.7.
[55] Vitruvius 4.pref.1. Novara 1994, p. 57.
[56] See especially Chapter 2, pp. 155-184.
[57] Fensterbusch, Vitruvius 1964 translating 5.pref.5; Gros, Vitruvius 4 (1992) translating 4.pref.1; Soubiran, Vitruvius 9 (1969) for 9.8.15; Granger, Vitruvius 1931 for 2.1.8. Exceptionally, Ingrid Rowland (Rowland and Howe,Vitruvius 1999) renders 2.1.8 (*cum corpus architecturae scriberem*) "when I set to out write about the whole body of architecture," preserving the "*corpus*" of the text in her translation. She reverts to "the whole of the discipline" and to its "comprehensive account" at other points where Vitruvius uses *corpus* (4.pref.1; 9.1.15) however.
[58] *TLL* IV, 1020-1021. Cicero *Ad Quintum fratrem* 2.11.4 and *Ad familiares* 5.12.4.

along with medicine and teaching, as an "honest" profession "from which no small benefit is derived."[59]

Moreover, although the age of Cicero, which was the age of Vitruvius' cultural formation,[60] was full of compilers, none of Vitruvius' older contemporaries such as Varro or indeed Cicero himself, both named by Vitruvius as mentors,[61] appear to have used the term *corpus* to refer to their "*Gesamtwerke*." This is very curious. For if, as Claude Moatti has argued, *rassembler la matière dispersée* – exactly what Vitruvius claims he is doing for architecture in the preface to Book 4 just cited – was indeed the *mot d'ordre* among writers of the late Roman Republic,[62] one would expect the literature of the period to be rife with references to written *corpora*, and this is simply not the case. The first writer to use the term "*corpus*" in the "*Gesamtwerk*" sense commentators tacitly assume to be conventional and transparent is Vitruvius himself, who indeed uses it more often and more insistently, even, than any later writer.[63]

This suggests, first of all, that the usage was in fact *not* conventional among Latin writers; second that *corpus* for Vitruvius, to whom the locution *corpus architecturae* ("the body of architecture") is unique, bears a special relation to his topic – to the matter, taking him at his word, he is *writing*, not to what he is writing *about* – and last that *corpus* also bears a special relation to the time of *De architectura*'s appearance,

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[59] Cicero *De officiis* 1.151. *De officiis* was written between Julius Caesar's assassination and Cicero's own execution in the proscriptions of 43 B.C. The only other surviving Latin author, apart from Vitruvius, to use *architectura* is the elder Pliny: *Natural History* 7.38; 11.82. Cf. *TLL* II. 464–465. Varro, whose late, now lost work on the nine disciplines, written 34-33 BC (Griffin 1994, p. 703), included a book on architecture known to Vitruvius (7.pref.14), probably used the term, but this is not certain. On Varro's *Disciplinarum libri*, see especially Hadot 1984, pp. 156-190.
[60] Schrijvers 1989a; Rawson 1985, p. vii.
[61] Vitruvius 9.pref.17. On Vitruvius as part of the "encyclopaedic" movement, see Callebat 1989.
[62] Moatti 1988, pp. 405–406 and 1991.

which was not in the late Republic, when the encyclopaedists just mentioned were writing, but at the beginning of the reign Octavian-Augustus, Julius Caesar's adoptive son and heir.[64]

In the service first of Julius Caesar, and later of Augustus himself,[65] Vitruvius was active during the tumultuous years of almost uninterrupted civil strife that marked the transition from republic to empire – the transition from an oligarchy in which power passed, on a yearly basis, from one set of magistrates to another, to the de-facto monarchy of a single all-powerful man.[66] *De architectura* appeared in the triumphal period that followed the return of peace, zealously (and not without justification) credited in both the art and literature of the period,[67] not least by Vitruvius himself, to the new ruler.

"When your divine mind and power, Imperator Caesar, were seizing command of the world and all your enemies had been crushed by your invincible strength," is how Vitruvius begins the preface to Book 1, addressing Augustus in terms one Roman

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[64] TLL IV 120-121. Surprisingly, it does not appear at all in the work of Pliny the elder, a compiler to end all compilers.
[65] See Romano 1987, ch. 1: "*Vitruvio augusteo.*"
[66] Vitruvius 1.pref. 2.
[67] Given the Roman revulsion against the title of king, Augustus was not called a king at Rome, but that he was understood as a king in virtually every other part of the Roman world, and this almost immediately after his defeat of Mark Antony in 31 B.C., has been demonstrated by Millar 1984. Cf. Dio Cassius 52.1.1: "Such were the achievements of the Romans and such their sufferings under the republic, and under the dominion of a few, during a period of seven hundred and twenty-five years. After this (i.e. with the rise of Augustus) they reverted to what was, strictly speaking, a monarchy . . . ." That Vitruvius understands Augustus as a king is implicit in the substitution of Augustus for Alexander (overtly referred to as *rex*, "king" at 2.pref.1) discussed below in Chapter 2, pp. 139-155. Modern literature on the period, beginning with Syme 1939, is abundant. Besides the new editions of volumes IX and X of the *Cambridge Ancient History*, with their exhaustive bibliographies, two useful collections of essays are Millar and Segal, eds., 1984, and Raaflaub and Toher, eds., 1990. The exhibition catalogue, *Kaiser Augustus und die verlorene Republik* (Hofter et al., eds. 1988), surveys this time of transition through the art and architecture of the period, as do Simon 1986 and especially Zanker 1988.
[67] On the art, see Simon 1986; Walker 1981; Zanker 1988. Horace's odes and Virgil's *Aeneid* contain some of the best-known examples of encomiastic literature, but Virgil and Horace were far from alone.

historian has called "the most complete statement of the concept of empire outside the *Res gestae* (Augustus's autobiography)."[68] The Roman senate rewarded Octavian in January of 27 B.C. with unprecedented *honores* which included the bestowal of the name Augustus, a name never before given to any human, and whose multiple evocations covered a range of meanings all pointing to a special relation with the gods and the god-given power to set the world to rights.[69]

*De architectura* appeared at or just after the beginning of the Augustan building boom that would not only transform Rome from brick to marble, but would also leave its indelible mark on Roman territories stretching from Cappadocia in the East to the farthest reaches of western Spain,[70] fashioning the scattered lands ruled by Rome into what Ovid, writing near the end of Augustus' long reign of over forty years, would call *corpus imperii*, the body of the empire, thus being the first to articulate what soon became a fundamental metaphor of imperial ideology.[71] But when Vitruvius wrote his *corpus* at the beginning of Augustus's reign, "*corpus imperii*" had not yet attained currency, and another thing I hope to show by considering the opacity of Vitruvius' body metaphor is how the specifically architectural *corpus* he wrote provides a framework for understanding the *corpus* the Roman world would become during the reign of the

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[68] Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum invictaque virtute cunctis hostibus stratis. . . .* Ramage 1987, p. 63. See also Grenade 1961, pp. 106-107, 149-151, and Millar 1973, who comments that the preface's "unabashed acceptance of the personal dominance of Augustus is unmistakable" (p. 66).

[69] Augustus, *Res gestae* 34.2; Ovid *Fasti* 1.607-616; Suetonius *Divus Augustus* 7.2, drawing on the Augustan writer Verrius Flaccus; Florus 2.34.66; Dio Cassius 53.16.4. Cf. Dumézil 1957; Erkell 1952; Gagé 1930; Galinsky 1996, pp. 12-21; Pollini 1993, pp. 262-263; Price 1996, p. 822; Speyer 1986, p. 1797; Wagenvoort 1947, pp. 12-13.

[70] Kienast 1982a, pp. 336-365.

[71] Ovid *Tristia* 2.226, cf. Béranger 1953, pp. 218-252; Kienast 1982b, who cites Ovid's as the first use of the phrase (p. 5); Richardson 1991 and below, Chapter 4, pp. 305-326.

autocrat for whom it was written.[72] My hypothesis is that grasping the "true sense" of his written *corpus* depends on grasping what the *corpus* of *imperium* entailed, and vice versa.

Arguing the plausibility of this, to say the least, intricate web of connections defies a linear approach. My intention is to unravel it piecemeal, in four separate chapters, each concentrating on a single aspect of the Vitruvian *corpus*: on each of four different "bodies," all interrelated, that together make one. In the first chapter, *The Angelic Body*, I will discuss how Vitruvius appears to have understood the task he describes so strangely as "writing the body of architecture." Chapter 1 deals with the book as book – with the corporeal identity of Vitruvius' "angelic" or written messenger,[73] a unified *corpus* of ten *volumina* or scrolls, whose signification I will explore in terms of contemporary events and currents of thought, Stoicism and Stoic theories of language in particular.

In the second chapter, *The Herculean Body*, I will address the issue of the book's and its author's relation to Augustus, Vitruvius' dedicatee, taking into specific account the notion of service that Gros and Novara have viewed as the key to understanding the work's intent. The benefits to be conferred by Vitruvius' Herculean body are nothing less than those of civilization itself whose dissemination, now, was Rome's self-appointed "Herculean" task – one that Vitruvius presents as unrealizable without his

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[72] Vitruvius 1.pref.2: *haec tibi scribere coepi*, "I began to write this work *for you*," i.e. Augustus.

[73] *Angelos* (whence "angel") is the Greek word for messenger. It should be noted that Professor Hans Böker and Dr. Jane Francis, two of the six official readers of this thesis, objected the usage of "angelic" as too medieval in its evocations. While fully appreciative of this criticism, I have failed, with apologies, to alter it for the following reasons. "Angelic" continues to appear to me as a particularly apt way of naming both Vitruvius' "messenger" which is his book and also his "message" which, like an angel or the Stoic *lekton* discussed below in Chapter 1, pp. 100-102, is incorporeal. The term also plays a key role in structuring the entire thesis.

own *corpus*. The discussion is developed from detailed, contextual examination of the preface to Book 2 and its anecdote about the architect Dinocrates who impersonates Hercules in order to attract the attention of Alexander the Great.

A close reading of Book 3, chapter 1, where Vitruvius articulates the celebrated links between architecture – temples specifically – and the human body, will be the point of departure for chapter three, *The Body Beautiful*. Chapter 3 discusses the role of proportion, the role of the circle-and-square geometry bodied forth in Vitruvian Man, so called, and the connection of both to the architectural beauty Vitruvius invariably, and I believe with pointedly deliberate intent, calls *venustas*.[74] Beauty, especially architectural beauty, had a very precise part to play in forging the new world order.

Chapter four, *TheBody of the King*,[75] will bring to bear on the discussion the nature and unprecedented world-wide extent of Augustan building programs through which Roman rule – its *imperium* – acquired palpable spatial extent in the world-body they made congruent with the king's. Included in Chapter 4 is a close examination of the latter's representation in the famous statue of Augustus from Prima Porta, sculpted not long after the appearance of Vitrvuius' treatise. The argument of this final chapter is

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[74] Vitruvius never uses *puchritudo*, for instance, another very common Latin word for beauty. See below, chapter 3, pp. 234-235. Professor George Hersey of Yale University who was the outside reader of this thesis has drawn attention to my failure to refer to Frank Zöllner's *Vitruvs Proportionsfigur* of 1987 in my account of Vitruvian Man. The omission is no doubt due to the book's not having been mentioned in recent Vitruvius bibliographies such as, for example, that in Pierre Gros' commentary on Book 3 (Gros, Vitrvuius 3 (1990)). I freely acknowledge my oversight, while noting, on the other hand, that Zöllner only devotes one of his thirteen chapters (Chapter 2, pp. 23–43) to the ancient Vitruvius with the remaining twelve dealing with Wittkower (Chapter 1), the middle ages and the Renaissance. I have added the work to my bibliography and included it in my references (Chapter 3, below), while postponing a fuller account to future work on the topic.

[75] The same two readers who questioned the use of "angelic" (see n. 73, above) also questioned my use of "king" as being un-Roman and medieval. Once again, I very much appreciate the criticism but have retained the usage for the reasons given in n. 66, above. Like "The Anglic Body," the "Body of the King," is crucial as a structural operative in an interpretive strategy which, it might be noted, is not entirely without precedent: see Dupont 1986.

that in *De architectura* the world-body the Prima Porta Augustus presents as an image is a real possibility.

Overlaid, as it were, one over the other, angelic, Herculean, beautiful and kingly bodies together constitute a palimsest: Vitruvius' complete body of *architectura*. That there *was* no single "body" of architecture before Virtuvius wrote it, and that its appearance in the early Augustan principate is rooted in the imperial circumstances that brought it to light leads to the unsettling conclusion that the body of architecture is also the body of empire. The birth of *architectura* as a discipline (rather than a practice), in other words, appears to be co-dependent with the Roman project of world-dominion. *Architectura*'s role in that project is, principally, what underwrites Vitruvius' vindication of his undertaking.[76] Is architecture, now, a discipline unrelated to the imperial body in which Vitruvius rooted it? Has it ever been? The answers to such questions lie far beyond the scope of this study, but it is in raising them that the historically specific Vitruvius of ca. 25 B.C. acquires more than antiquarian interest.

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[76] See for example below, Chapter 1, pp. 44–48.

## Chapter One

# THE ANGELIC BODY[1]

**Commentaries. *Auctoritas*. A Perfect Ten. Unified Bodies. Signification.**

Writing alone can assemble scattered fragments of written knowledge into what Vitruvius calls a "perfectly-ordered *corpus*."[2] There is no imaginable alternative. And writing with its own field of operations, its own manifest physical and spatial presence, inevitably shapes the "what" it is ostensibly about. If this borders on uninspired truism, its bearing on the quiddity of *De architectura* nevertheless merits consideration. In hierarchy of the known – at least for Vitruvius and his contemporaries – what was written took precedence over what was not. A person was not known until his name was recorded on a census roll, or better still (and better known), chiseled on a public inscription, preferably in large letters at the top.[3]

In 45 BC, after the appearance of Varro's 41-volume compendium of Roman custom, *Antiquitates rerum humanarum et divinarum*, Cicero paid tribute to its author: "in our own city we were like foreigners wandering and drifting, but your books brought us home so that we might know who and where we were."[4] For intellectuals like Cicero true

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[1] On the use of the term "angelic," see above, Introduction, n. 73.
[2] Vitruvius 4.pref.1: *dignam et utilissimam rem putavi tantae disciplinae corpus ad perfectam ordinationem perducere*.
[3] On the omnipresence of writing in the Roman city, see Corbier 1987.
[4] Cicero *Academica* 1.9. Cf. Moatti 1988 and 1991; Beard 1991.

knowledge of who and where one was lay in a written record of *mores*, many far from current, not in changeable collective memory and customary behavior.

The information (market days, feast days, anniversaries, foundation dates of temples, etc.) compiled and publicly posted on calendars in the late Republic and early Empire, similarly supplanted the lived and mutable with the written and ostensibly fixed.[5] Indeed if, as Jack Goody has shown in his *The Domestication of the Savage Mind*,[6] it is through writing that hierarchies of knowledge become established in the first place, it should not be surprising to find writing itself heading a list which does not (cannot, *as a list*) exist prior to its writing.[7] For so, at any rate, does Vitruvius place it on his list of what an architect should know.[8] An architect, he writes, should be educated in nine *disciplinae*, a number no doubt deliberately chosen in order to correspond to that of the nine muses.[9] Writing comes first:

. . . *he* (the architect) *should be* literatus, *be skilled in drawing and trained in geometry; he should be able to recall many histories, listen carefully to the philosophers, not be ignorant of medicine, know music, remember the responses of jurisconsults, and be well acquainted with astrology and the order of the heavens.*[10]

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[5] Gordon 1990b pp. 184-191; cf. Beard 1991 pp. 54-55. See also Frézouls 1989 p. 234.
[6] Goody 1977.
[7] Goody 1977 pp. 52-111, cf. Moatti 1988 p. 422, Beard 1991 p. 55. .
[8] Vitruvius 1.1.3.
[9] Varro's *Disciplinae*, written in 34-33 B.C., consisted of nine books for the same reason. Varro added two disciplines, medicine and architecture, to the traditional seven. Vitruvius knew the work: he mentions Varro's book on architecture at 7.pref.14. On Varro, see Griffin 1994, pp. 703-708; Rawson 1985, *passim*; Skydsgaard 1968, Tarver 1997.
[10] Vitruvius 1.1.3: . . . *litteratus sit, peritus graphidos, eruditus geometria, historias complures noverit, philosophos diligenter audierit, musicam scierit, medicinae non sit ingnarus, responsa iurisconsultorum noverit, astrologiam caelique rationes cognitas habeat.* According to Cornelius Nepos, a minor historian of the first century B.C. contemporary with Vitruvius, "the term *literatus* is commonly applied to those who can speak or write about anything judiciously, knowledgeably and with insight (*diligenter et acute scienterque*)" (Suetonius *De grammaticis* 4). That Vitruvius has writing specifically in mind is born out by his ensuing elaboration of what, for an architect, being *literatus* entails.

"An architect should know writing (*litteras*)," he continues, "so as to be able to bring about a stronger (*firmior*) memory in commentaries (*commentariis*)."[11] Vitrvuius does not specify who or what is to achieve a "stronger memory" through such writings (the architect or his work?) or whose memory is at issue (the architect's own? public memory or the memory of posterity?), but the essential point is clear.[12] Writing nails memory down, as it were – makes it *firmior*, more steadfast, longer lasting, more powerful.[13]

Echoing precisely this view and confirming that, in this context, *litterae* does indeed refer to writing, Vitruvius' contemporary Livy called *litterae* "the only faithful guardian of the memory of achievements."[14] The events before the fourth century BC, set forth in his first five books, writes Livy at the beginning of the sixth, are dim because they are far off, and also because "in those days there was very little use of writing, the only faithful guardian of the memory of achievements, and even what existed in the commentaries (*commentariis*) of pontiffs and other private and public documents, nearly all perished in the conflagration of the city." Although, unlike Vitruvius, Livy does specify what the memory guarded by writing is *of* – memory of achievements (*rerum gestarum*, things done) – Livy does not seem to feel the need to specify in *whose* memory they are guarded, any more than Vitruvius does. The assumption of both writers seems to be an understanding of memory as something "out there," a shared *topos* or common ground which for Livy was the topography of Rome itself.

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[11] Vitruvius 1.1.4: *Litteras architectum scire oportet uti commentariis memoriam firmiorem efficere possit.*
[12] See Fleury, Vitruvius I (1990), pp. 71-72, where the various options are reviewed. Fleury's translation favors the commentary's being a way for the architect to perpetuate his own renown: *Il faut que l'architecte ait des lettres pour pouvoir donner de lui un souvenir plus durable en rédigeant des commentaires.*
[13] Lewis and Short, s.v. *firmus.*
[14] Livy 6.1.2: *una custodia fidelis memoriae rerum gestarum.* Cf. Jaeger 1993, whose translation (p. 363) is the one cited here.

The opening of Livy's second pentad where the citation appears is immediately followed by the story of Marcus Manlius Capitolinus who, in the early fourth century BC, won fame by saving the Capitol from invading Gauls but later was cast from the Tarpeian rock of that same Capitol for aspiring to kingship.[15] Mary Jaeger's reading of the account shows how, for Livy, writing acts as "the only faithful guardian of memory" not by affirming what everyone already knew – that the Capitol was the head of Rome – but by making memory indeed more faithful by augmenting it through historical narrative. After Manlius' death, Livy concludes, "the same spot (the Capitol) served to commemorate extraordinary fame and the extremity of punishment." The Capitol – memory as *topos* – is made *firmior* because its meaning has been *increased*, not reduced. Familiar with that *topos* which, with its great Temple of Jupiter the Greatest and Best, rose high above all other *topoi* in the city, Livy's Roman readers might also have recalled that an adjacent shrine dedicated to Fides, good faith or faithfulness personified, had indeed "guarded" the Capitol since the time of Numa Pompilius, second king of Rome after Romulus, its legendary founder.[16] Around the shrine of Fides, bronze tablets inscribed with laws and treaties were displayed.[17]

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[15] Livy 6.11-20.

[16] Livy 1.21.3-4; Dionysius of Halicarnassus *Antiquitates* 2.75.3; Plutarch *Numa* 16.1. Cf. Cicero *De off.* 3.103: "our forefathers chose that she (Fides) should dwell on the Capitol, neighbour to Jupiter Optimus Maximus."

[17] Dio Cassius 45.17.3, who says they were dislodged by a storm in 44 or 43 B.C.

**Commentaries**

Both Livy and Vitruvius name commentaries in connection with the role of writing in bringing about stronger memory. Livy says their disappearance, along with the disappearance of other documents, contributed to the obscurity of what he relates in his first pentad. What was a *commentarius*?

Vitruvius appears to understand *commentarii* as the kind of writing architects normally engage in: in the passage already noted, where he says that architects need writing "so as to be able to bring about a stronger memory in commentaries," and elsewhere too where he refers both to his own writings and to his architectural sources as *commentarii*.[18] Commentaries also include other writings, besides architectural ones. Through commentaries, Vitruvius writes in the preface to Book 7, the wisdom of the ancestors (*maiores*) is handed down from generation to generation, building up step by step to reach the highest degree of subtlety.[19] Without such writings nothing would be known of the exploits at Troy, for instance, or of the thoughts of philosophers (Socrates, Plato, Aristotle, and Zeno, among others) or of the deeds of kings like as Croesus, Alexander, and Darius. Writings on architecture, philosophical works and annals of great achievements – all, apparently for Vitruvius, *commentarii* like his own – guard the memory of all men.[20]

One fairly common view among modern scholars is that *commentarii* – literally "reminders" or "*aides-mémoire*" and (more or less) the Latin equivalent of what were

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[18] Vitruvius 1.1.4; 2.8.8 (own writings); 1.1.12, 4.1.1, 7.pref.14, 7.pref.17 (writings of other architects). Cf. Fleury, Vitruvius I (1990), pp. 94-95.

[19] Gloss on 7.pref.1: *Maiores cum sapienter tum etiam utiliter instituerunt per commentarium relationes cogitata tradere posteris, ut ea non interirent, sed singulis aetatibus crescentia voluminibus edita gradatim perventirent vetustatibus ad summam doctrinarum subtilitatem.*

[20] Gloss on 7.pref.2: *Namque si non ita fecissent, non potuissemus scire quae res in Troia fuissent gestae. . . nisi maiores praeceptorum comparationibus omnium memoriae ad posteritatem commentariis extulissent.*

called *hypomnêmata* in Greek – were succinct records in which public officials set down their experiences in order to provide guides for people engaged in practical occupations.[21] Whatever their more exalted role, and certainly not excluding it, the missing *commentarii* of pontiffs regretted by Livy in the opening lines of his sixth book may have fallen into such a category, although they could have just been lists, without any advice-giving component. A bronze tablet from Banasia in Morocco discovered some thirty years ago attests to what the inscription calls a *commentarius* which Augustus began as a record of the names and details of every person to whom he granted Roman citizenship.[22]

When Pompey was elected consul for the first time in 70 B.C., he asked his friend Varro to write him a *commentarius* on the *officium*, or office, of Senate performance (*de officio senatus habendi*), because "due to his extended time in the military he was not privy to matters of Senate conduct nor to city affairs in general."[23] Varro obliged with a work he called an *eisagôgikon* or "introductory guide" from which Pompey "might learn what he ought to do and say when he consulted the Senate."[24] The little book recorded not especially Varro's own experiences but what practices had been established by the *mos maiorum*, the custom of the ancestors.[25] Architecture too had an *officium*, according to Vitruvius, which suggests a possible parallel between Varro's "introductory guide" and the

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[21] Rüpke 1992, p. 210: *Der* commentarius *ist diejenige Gattung, in der ein (Ex-)Magistrat seine Erfahrungen mit Blick auf Kollegen und Amtsnachfolger (Juristen, Offiziere) niederlegt.* Bömer 1953 renders *commmentarii* as *Amtsbücher* in German "official books." See also Nicolet 1991 p. 101; De Laine 1996, p. 118; Skydsgaard 1968, pp. 110-121.

[22] The inscription dating from the time of Marcus Aurelius (late second century A.D.) was first published in Seston and Euzennat 1971. For full documentation, see Sherwin-White 1973; cf. Millar 1984, p. 50.

[23] Aulus Gellius *Noctes Atticae* 14.7.2: *Pompieus cum inituru foret, quoniam per militiae tempora senatus habendi consulendi . . .*

[24] Aulus Gellius *Noctes Atticae* 14.7.3: *ex quo disceret quid facere dicereque deberet, cum senatum consuleret.* Cf. Moatti 1988, p. 424; 1991, p. 34.

[25] Aulus Gellius *Noctes Atticae* 14.7.4.

kind of commentary *De architectura* was meant to be.[26]

Frontinus, the late first century AD author of a work on aqueducts and one of the few ancient authors to mention Vitruvius,[27] calls his work a *commentarius* in which, like Vitruvius, he claims to have gathered hitherto scattered facts "into a body so to speak" – a work meant, he says, to serve as a *formula administrationis* to guide him as newly appointed curator of Rome's water supply.[28] It would not be unreasonable to infer that the ostensibly practical subject matter of Vitruvius' treatise, which might even have provided a model for Frontinus' *De aquis*, made *De architectura* a similar kind of work.[29]

Janet De Laine has shown in a recent article that although providing a practical guide might have been Frontinus' avowed purpose, a great deal of his *De aquis* reads not like a technical manual at all but more like a speech he might have delivered to the senate, with the lists and statistics given part of project meant, she concludes, to generate wonder and confirm power.[30]

The general Marcus Agrippa, Augustus's principal minister and son in law, was closer in time to Vitruvius and almost certainly known to him.[31] Agrippa also wrote a commentary on aqueducts.[32] Another commentary he wrote was meant to accompany, or provide statistics for drawing, the world map completed by Augustus after Agrippa's death in 11 B.C. and displayed in the Porticus Vipsania in the Campus Martius, in order, as Pliny

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[26] The *officium* of architecture: Vitruvius 2.pref.5; 2.1.8.
[27] *De aquis* 1.25. See above, Introduction, p. 7.
[28] Frontinus *De aquis* pref.2.
[29] See Gros 1994a and 1996b; Sallmann 1984.
[30] De Laine 1996, p. 139. On the "rhetoric of number" see also Purcell 1990, p. 180 and 1992 p. 425; Edwards 1996, p. 98.
[31] Book 8 of *De architectura*, on water, if read in connection with the reference in Frontinus (*De aquis* 1.25), appears to reflect a period of service to Agrippa who, as aedile, was in charge of Rome's water supply from 33 B.C. Callebat, Vitruvius 8 (1973), p. x; Fleury, Vitruvius 1 (1990) p. xiv.
[32] Frontinus *De aquis* 2.99.

writes "to set the world (*orbis*) before the eyes of the City (*urbis*)."[33]

Like many Augustan projects, the map project originated with Julius Caesar who appears to have initiated it shortly before his assassination in 44 B.C. Two late antique sources tell of four Greek geometers Caesar sent out east, west, north and south to measure the world in an undertaking which was very much part of the tradition that had linked geography to conquest since the time of Alexander the Great,[34] tabulating its extent in lengths of rivers traversed and lists of mountain ranges overrun.[35] Augustus, who extended the limits of the Roman world beyond those established by his adoptive father, continued Caesar's cartographic enterprise under the direction of Agrippa who compiled the four geometers' statistics in his *commentarius* – a work of geography, certainly, but also a record of the achievements of Caesar, of Augustus, and of Rome.[36]

T.P. Wiseman has suggested that one of the later sources on the map project may bear traces of Agrippa's original preface to that commentary. "I have discovered by careful and vigilant reading," wrote the anonymous author known as "Aethicus" in the late fourth or early fifth century,

*that the Senate and People of Rome, masters of the whole world, conquerors and rulers of the globe, at the time when their triumphs reached everything that lies under*

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[33] Pliny *NH* 3.17. On Agrippa's map and its commentary, see especially Nicolet 1991, ch. 5 and notes; also Roddaz 1984, pp. 291-293 and 572-587; Rüpke 1992, p. 213; Wiseman 1992. Fragments of the commentary survive, mainly in Pliny's *Natural History* (Books 3-6, and Book 35), as well as in two later geographical works known as the *Divisio orbis terrarum* and the *Dimensuratio provinciarum*. The fragments are collected in Klotz 1931, pp. 386-486. On the *urbis-orbis* trope, which first became current in the late republic, see Bréguet 1969, and further below, Chapter 2, pp. 116-117.

[34] The two sources are Julius Honorius and a so-called "Aethicus," both dating from the late fourth or early fifth century A.D. For Julius Honorius, see Riese 1878, pp. 21-55 and Nicolet and Dalché 1986, pp. 184-92; for "Aethicus," Riese, 71-103, Nicolet and Dalché pp. 192-194; Cf. Wiseman 1992, p. 26 and Nicolet 1991, p. 96. In the third century B.C., the great Greek geographer Eratosthenes pointed out that the conquests of Alexander had greatly increased geographical knowledge. See Strabo 1.14; Diogenes Laertius 5.51; cf. Wiseman 1992, pp. 32-37.

*heaven . . . having subjugated the world by their prowess, marked everything with their own boundary, wherever the earth extends. And lest anything should escape their divine mind* (divina mens), *which is master of all things, they traced out what they had conquered according to the four cardinal points of the sky, and by their celestial wisdom announced that everything that is surrounded by ocean consists of three parts, meaning Asia, Europe and Africa.*[37]

Whether or not the words are in fact Agrippa's, their resonance with the opening words of *De architectura* is uncanny, with the telling difference that the subjections, triumphs and "divine mind" Aethicus's text credits Roman people with are credited by Vitruvius to Augustus alone.[38] Evidence in Book 8, the most geographical of the ten, suggests that Vitruvius may have known Agrippa's work. Not the map itself, only installed in the Porticus Vipsania about forty years after *De architectura*'s appearance,[39] but Agrippa's commentaries which could be the *orbis terrarum . . . scripta*, the "written world," Vitruvius refers to in connection with the sources of various rivers.[40] More

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[35] Nicolet and Dalché 1986, pp. 157-158; Purcell 1990.

[36] Nicolet 1991, pp. 111-113.

[37] "Aethicus" in Riese 1878, pp. 71-72: *Lectionum perviligi cura comperimus, senatum populumque Romanum totius mundi dominos, domitores orbis et praesules, cum quidquid subiacet caelo penetrarent triumphis . . . subiugato virtute sua orbe totum qua terra protenditur proprio limite signavisse. Et ne divinam eorum mentem omnium rerum magistram aliquid praeteriret, quam vicerant, quadripertito caeli cardine investigarunt et intellectu aetherio totum quod ab oceano cingitur tres partes esse dixerunt, Asiam Europam et African reputantes.* Cf. Nicolet and Dalché pp. 192-194; Wiseman 1992, pp. 26 and 41-42. The translation, for the most part, follows Wiseman.

[38] Vitruvius 1.pref.1: When your divine mind and power, Imperator Caesar, were seizing command of the world, and all your enemies had been crushed by your invincible strength and citizens were glorying in your triumph and victory; when all subjected peoples awaited your nod and the senate and the Roman people, now free of fear, were being guided by your most noble thoughts and counsels . . . *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum invictaque virtute cunctis hostibus stratis triumpho victoriaque tua cives gloriarentur et gentes omnes subactae tum spectarent nutum populus romanus et senatus liberatus timore amplissimis tuis cogitationibus consiliisque gubernaretur. . .*

[39] In 13 A.D., twenty-five years after Agrippa's death, according to R. Hanslik (s.v. Agrippa, *RE* 9A.1, 1270).

[40] Vitruvius 8.2.6. See also Callebat, Vitruvius 8 (1973), pp. 73-74, n. 2 and Fensterbusch, Vitruvius 1964,

evidence would be needed for positive identification, but to identify Agrippa as one of Vitruvius' sources is not the aim here. The point rather is to survey the ground covered by *commentarii* which, in this geographical context at least, was the world-wide arena of Roman achievement. *Commentarii*, in other words, had a spatial dimension.

Although, in keeping with the four parts of the sky, Caesar sent out four geometers in four different directions to measure the earth, the earth they measured was, as it had been at least since the time of Herodotus, tripartite.[41] Agrippa himself appears to have said so: "The world is divided by three names," one source cites him as having written, using what sounds to the modern ear like a strange turn of phrase, "Europe, Asia, and Libya or Africa."[42] "The three parts of the world are called Europe, Asia and Libya or Africa" would sound better, but in the odd phrasing actually used the three parts of the world do not preexist their naming. Rather, in the words of the source, three names divide the world and bring, by implication, its three parts into existence – or at least into the realm of the known. Unnamed, they would remain unknown; and known because written, not drawn. Map commentaries, with their lists of names and numbers, carried greater epistemological weight than did their graphic renderings. The size, scale and overall configuration of graphic representations could vary considerably.[43] The names and numbers, "faithful guardians of

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p. 565, n. 492.

[41] Herodotus 2.16.1; 4.42.1. Wiseman (1992) has difficulty reconciling the quadripartite surveying operation with the tripartite earth consisting of three continents (Europe, Asia, and Africa or Libya) traditionally represented in maps. The difficulty disappears if one reads, as indeed Aethicus did, the one as reflecting heavenly order, the other the tipartite totality of the inhabited world itself. Manilius, who wrote his *Astronomica* near the end of Augustus's reign, saw no incompatibility. See 4.587 ("the circle of the sky is divided in four parts," *quattuor in partes caeli discribitur orbis*) and 4.658-695, where, on the other hand, the inhabited world (the *orbis terrarum*, rather than the *caeli orbis*) has the usual three continents.

[42] Agrippa, fr. 1, Klotz 1931, p. 386: *orbis terrarum dividitur tribus nominibus, Europa, Asia, Libya vel Africa.* The fragment, attributed by Klotz to Agrippa, appears at the beginning of the *Divisio orbis terrarum*, a late source. See n. 33 above and Rüpke 1992.

[43] See Nicolet 1991, pp. 101-108; Wiseman 1992, p. 40.

the memory of achievements," in principle at least, did not.

As every beginning student of Latin knows, "Gaul as a whole is divided into three parts."[44] For so wrote Julius Caesar at the beginning of his commentary on his conquest of Gaul, undertaken with the ambition to rival Pompey's conquests in the East.[45] Caesar's Gallic campaign lasted seven years, from 58 to 51 B.C.. The commentaries describing it, unusually, were written in the third person and the seven books that comprise them appeared at the end of the period in question.[46] An ostensibly objective third-person record of achievements, Caesar's *Bellum Gallicum* is also geographical, as indeed its opening words attest.[47] Strabo, who wrote his geography in the latter part of Augustus's reign, saw a parallel between the geographer's methods and the general's. Ideas of things – the example he gives is of an apple – are put together from fragmentary sense-impressions, he writes.

*So too in the case of large figures, while the senses perceive only the parts, the mind puts together a concept of the whole from what the senses have perceived. And men . . . trust as organs of sense those who have seen or wandered over any region, some in this some in that part of the earth and put together in one diagram their image of the whole inhabited world. Why generals, too, . . . are not present everywhere, but carry out successfully most of their measures through others, trusting the reports of messengers, and sending their orders around in conformity with the reports they hear.*[48]

As a general Caesar worked through messengers; as a writer, from military

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[44] Caesar *BellumGallicum* 1.1: *Gallia est omnis divisa in partes tres.*
[45] For an incisive account, see Brunt 1978, pp. 178-183.
[46] An eighth book was added later by Aulus Hirtius, one of Caesar's officers.
[47] See Götte 1964, Rüpke 1992, p. 217.
[48] Strabo 2.5.11.

dispatches,[49] assembling in his commentaries the *litterae* (as they were called) sent to him by legates in the field with those he in turn sent to the Senate in Rome,[50] where bulletins of success in battle were greeted as *litterae laureatae*, laureate letters – messengers of victory.[51] The award of a triumph could depend on such reports.[52]

Latin students begin with Caesar's commentaries because his writing is so clear and concise: "naked, upright and beautiful," wrote Cicero admiringly.[53] What could be clearer than "Gaul as a whole is divided into three parts, one inhabited by the Belgae, another by the Aquitani, and a third by . . . the Celtae or Galli"? But why, if Gaul is a "whole," does it not include (for example) *Gallia Narbonensis*, a Roman province since the mid-second century B.C.? Because, as a province, it was no longer foreign and conquerable, one suspects. "The whole of Gaul was now subdued," writes Hirtius at the beginning of the eighth book he wrote as an appendix to Caesar's own seven.[54] The assertion certainly has a finer and more final ring than "the parts of Gaul not previously subdued now were." For Hirtius to be able to make the claim on Caesar's behalf, the "whole of Gaul" had to preexist its conquest – which Caesar made sure of in the very first line of his commentary.

And why do the Galli give their name to the whole of *Gallia* even though their own

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[49] Posidonius has sometimes been cited as a geographical source, particularly for the geography of Gaul: see Rawson 1985, pp. 260-261, Götte 1964, pp. 242, 252, 276.

[50] See for example, Livy 41.12.2-10; 45.41.1-7; Caesar *Bellum Gallicum* 2.35.4; 5.47.4; 5.49.3. Cf. Rüpke 1992, p. 217. Never one to waste time, Caesar probably planned their publication from the outset. Unlike the scrawled dispatches of his predecessors, his letters to the Senate arrived already converted into book form (*formam memorialis libelli*), neatly written out in columns. Some of these memorandum books were still extant when Suetonius wrote his biography in the second century A.D. (Suetonius *Divus Julius* 56.6). On Caesar's *Bellum Gallicum* and its probable resemblance to the dispatches he sent from the field, Vasaly 1993, p. 151.

[51] Caesar *Bellum Gallicum* 2.35: "And for those achievements, upon receipt of Caesar's dispatches (*ex litteris Caesaris*), a fifteen days' thanksgiving (*supplicatio*) was decreed, an honour that had previously fallen on no man." See also 4.38 and 7.90, where in each case twenty days of thanksgiving are awarded upon receipt of Caesar's *litterae* at Rome.

[52] Weinstock 1971, pp. 60-79.

[53] Cicero *Brutus* 262: *Commentarii (Caesaris) nudi sunt, recti et venusti*. Cf. Rüpke 1992, p. 206.

territory is only one of its three parts? Above all, why three parts? The Helvetii, whose alleged ambition to take over the rest of Gaul was Caesar's initial target, were "closely confined by the nature of their territory,"[55] bounded by the Rhine, the Jura mountains and lake Geneva. Then why is Helvetic territory part of the whole from which it is so emphatically cut off, yet not itself a "part," like the territories inhabited by the Belgae, Aquitani and Galli?

A whole, wrote Aristotle, is that which has a beginning, a middle and an end.[56] Three, for Pythagoreans, was the number of completion and fulfilment.[57] Commenting on the perfect numbers of Pythagorean arithmetic, Theon of Smyrna wrote, "the number three is also perfect, since it is the first number which has a beginning and middle and end . . . and it is the first bond and power of the solid, for in three dimensions is the solid conceived."[58] Mathematically, three originated the possibility of palpable extent and projected it onto the world.

In Rome the Temple of Jupiter Capitolinus, shrine of *the* supreme Roman deity and named for him alone, had a triple cella which housed a triad of divinities: Jupiter himself of course, but also Juno and Minerva. In Varro's allegorizing account, Jupiter was to be understood as the sky, Juno as the earth and Minerva as "ideas," a tripartite – Roman – scheme which for him "embraced the totality of existence."[59] The world itself was tripartite.

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[54] *Bellum Gallicum* 8.1: *Omnia Gallia devicta . . . .*
[55] Caesar *Bellum Gallicum* 1.2.
[56] Aristotle *Poetics* 1450b29.
[57] Burkert 1972, pp. 474-475.
[58] Theon of Smyrna, ed. Hiller 46, as cited in Ivor Thomas, ed., *Selections Illustrating the History of Greek Mathematics* 1 (1939) p. 87. Theon was a Greek mathematician of the early second century A.D.
[59] Varro *Antiquitates rerum divinarum* in Augustine *City of God* 7.28. Cf. Boyancé 1975, p. 102. Georges Dumézil argued the existence of an earlier triad than that of Jupiter-Juno-Minerva: one made up of Jupiter, Mars, and Quirinius that reflected the "tri-functional ideology" (Law, War, Production) he understood as

So, for Plato was the soul, a notion reinfused into the unitary soul (*hègemonikon*, ruling principle) of the stoics by Posidonius who, more than anyone else, helped shape Roman stoicism in the first century B.C.[60]

A whole by definition had three parts. So too, *as a whole*, had Caesar's Gaul. The map the modern reader longs for would only confuse an assertion whose clarity and force lie beyond the possiblity of any cartographic elucidation.[61]

While retaining the authority of official records like the ones kept by pontiffs, Caesar's commentaries altered what Jörg Rüpke calls the *commentarius* "genre" (*Gattung*) of which the tripartite division, he claims, was to become a constitutive signal.[62] Whether or not this was invariably so,[63] the commentaries discussed here – Caesar's and the those of Agrippa and Frontinus which came later – did profess totality in a way that earlier *commentarii* do not appear to have done. Frontinus' *De aquis* was *all* about aqueducts, beginning "*ab urbe condita*," from the foundation of Rome.[64] Agrippa's commentary covered the whole world. Caesar's seven books of commentaries made a unit, both territorial and temporal, of the seven years he says it took him to conquer the whole of Gaul. Vitruvius, who recalls his previous "attachment" to Caesar's might in his first preface, would have been a young man in his twenties at the time, and was almost certainly

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underlying all of Indo-European culture and religion (Dumézil 1987, pp. 160-290). For a succinct summary of Dumézil's position, Beard, North and Price 1998, pp. 14-16.

[60] Tripartite soul (reason, spirit, appetite) in Plato: *Republic* IV 443d6-7 and *passim*. Posidonius and tripartite soul: Edelstein and Kidd 1972, fragments 140, 131a; cf. Rawson 1985, p. 293. Unitary *hègemonikon*: Long 1996, p. 242-243. Influence of Posidonius in Rome, Long 1986 pp. 216-222; on Posidonian Stoicism in Vitruvius as mediated by Cicero, Gros 1989a. Triadic systematization of doctrines were a common feature of Stoic thought: see Fuhrmann 1960, pp. 147-148, especially the references at p. 148, n. 1.

[61] Rawson (1985, p. 260) wishes she had a map, but says there is no sign that one was ever included.

[62] Rüpke 1992, p. 214.

[63] Rüpke (1992, p. 213) cites four examples besides Caesar, all of which are later in date: Quintus Cicero (*Commentariolum petitionis* 2), Agrippa (fr. 1, Klotz 1931, p. 386), Frontinus (*Stratagemata*, Pref.2), Gaius

with him during the period in question.[65]

Architecture too is a whole. "Architecture itself has three parts, building, the construction of clocks (*gnomonice*) and mechanics," writes Vitruvius.[66] Books 1 to 7 of *De architectura* deal with building, Book 9 deals with *gnomnice*, and Book 10 with machines, which include the machinery of war.[67] A little like the Helvetic territory of Caesar's *Bellum Gallicum*, Book 8, on water, is ambiguously situated: a separate part of *De architectura* but not a "part" of architecture, even though aqueducts were a major feature of Roman building practice, and even though Vitruvius probably participated in their construction.[68]

The encyclopaedic ambitions Vitruvius shared with Varro, Cicero and other writers of the late Roman republic he also, as a writer of commentaries, shared with Caesar, his first patron, with whom he shared camp life and a professional interest artillery as well.[69] This

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(*Institutiones* 1.8). Interestingly, he does not mention Vitruvius.

[64] Frontinus *De aquis* 1.4.

[65] Vitruvius in his twenties during the Gallic wars: this is assuming he was in his fifties when *De architectura* appeared in the mid twenties B.C. See above, Introduction, n. 3. Vitruvius 1.pref.2: . . . for it was concerning this that I was known to your father (Caesar) and this is what first attached me to his might. *Ideo quod primum parenti tuo de eo fueram notus et eius virtutis studiosus.* Vitruvius' detailed description (2.9.15) of Caesar's construction of a larch wood seige tower while campaigning in the Alps at the beginning of the Gallic wars (probably in 59-58 B.C.) bears all the marks of a first-hand account (cf. Corso and Romano, Vitruvius 1997, pp. 215-216), as does his description (10.16.11-12) of the siege of Marseilles in 49 B.C., at the beginning of the civil war that immediately followed the Gallic wars. The description of these two events, ten years apart, stongly suggest that the "attachment" covered the intervening period. Caesar also writes of this siege of Marseilles in his *Bellum Civile* (1.34-36; 1.56-58; 2.1-16; 2.22. Cf. Callebat and Fleury, Vitruvius 10 (1986), pp. 289-293.

[66] Vitruvius 1.3.1: *Partes ipsius architecturae sunt tres: aedificatio, gnomonice, machinatio.* Written not long before *De architectura* in 34-33 B.C., Varro's now lost work on the nine disciplines of 34-33 B.C., included a book on architecture, which Vitruvius mentions in the preface to Book 7 (7.pref.14). It could conceivably have made a similar division. Of the 74 works Varro wrote, only two survive, one on agriculture (*Libri tres rerum rusticarum*, whose three books also establish a tripartite division), and one on the Latin language (*De lingua latina*). See Griffin 1994, p. 703; Liou et al., Vitruvius 7 (1995); pp. 74-75; Rawson, 1985, *passim*; Skydsgaard 1968.

[67] Discussed in Book 10, chapters 10 to 12.

[68] See Callebat, Vitruvius 8 (1973), pp. ix-x, p. 156, and pp. 165-167.

[69] In both his *Bellum Gallicum* and his *Bellum Civile*, Caesar discusses many of the same machines as Vitruvius does in the final chapters of Book 10. See Fleury 1993, pp. 230-231.

last area of common experience was absent from his relations, if any, with other writers, and linked his discipline to the very centre and agent of Roman conquest.

Writers equip men with so many benefits, declares Vitruvius in the preface to Book 9, that "not only should they be awarded palms and crowns, but they should even be voted triumphs and judged to have consecrated seats among the gods."[70] The contrast between athletes (who exercise only their own bodies and win *honores*) and authors (who exercise both their own minds *and* those of others, but are not rewarded) evoked in this preface was, others have observed, a *topos* among Greek authors.[71] The mention of triumphs, however, projects it into the Roman context. The paragraph immediately preceding Vitruvius' declaration praised the benefits conferred on all peoples by the writings of wise men like Pythagoras, Democritus, Plato and Aristotle. In the context of Roman experience, however – that of Vitruvius in particular – triumphs were the prerogative of victorious generals, not athletes. One thinks of Augustus, of course, and of other *imperatores*, but especially of Caesar, whose achievements, unforgettably conveyed in lapidary *litterae*, had won him the vote of a triumph which culminated, as did all such processions, in his solemn ascent to the Temple of Jupiter on the Capitol.[72] Caesar, moreover, had recently joined the council of the immortal gods, as indeed Vitruvius recalls elsewhere.[73] The transfer of the *topos* to late

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[70] Vitruvius 9.pref.3: *Cum ergo tanta munera ab scriptorum prudentia privatim publiceque fuerint hominibus praeparata, non solum arbitror palmas et coronas his tribui oportere, sed etiam decerni triumphos et inter deorum sedes eos dedicandos iudicari*

[71] On the opposition of athletes and authors, see Soubiran, Vitruvius 9 (1969), p. xx, who cites Xenophanes and Euripides. The view was also articulated in Vitruvius' own time by Athenodorus of Tarsus, one of Augustus's Greek philosophical advisors (as cited by Seneca, *De tranquillitate animi* 3.1). Cf. Grimal 1946, p. 72.

[72] Due to the intervening outbreak of civil war, Caesar did not celebrate his Gallic triumph until 46 B.C., when it was followed by three more, which celebrated his victories in Alexandria, the Pontus and Africa. On the four triumphs of 46: Dio Cassius 43.19.1; Suetonius *Divus Julius* 37. Cf. Weinstock 1971, pp. 76-79; Westall 1996, p. 88.

[73] He was "judged" a god by the Senate on or about the 1st of January 42 B.C. (Weinstock 1971, p. 386).

first-century Rome gives writing the spatial dimension of conquest and transforms the mental athlete into a Roman triumphator.[74]

While crossing the Alps to join his troops in Gaul in 54 BC,[75] Caesar wrote a short work on grammar called *De analogia*, which he dedicated to Cicero: "You have won greater laurels than the triumphal wreath, for it is a greater achievement to have extended the frontiers of Roman genius than those of Rome's empire."[76] In a similar vein, Vitruvius' contemporary the philosopher Quintus Sextius developed a specifically Roman branch of Stoicism later admired by Seneca. For Sextius, the stoic sage was to exercise the *imperium* (sic) of reason in imitation of a good general. Always ready for combat, he is to march his virtues through enemy territory *agmine quadrato*, in square formation, armed against attack from any side.[77]

At the opening of Book 1, Vitruvius' well-educated architect is to master knowledge consisting of both *fabrica* and *ratiocinatio* if, "fully armed," he is to reach his goal "speedily and with authority."[78] Swift attack seems to be the watchword here, reminding one very much of the speed and authority for which Caesar made himself known.[79] Further along, the disciplines which "arm" the architect are the steps (*gradus*) by

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Vitruvius 1.pref.2: *Cum autem concilium caelestium in sedibus immortalitatis eum* (Caesar) *dedicavisset.*

[74] The third century B.C. Greek geographer and polymath Eratosthenes (also mentioned by Vitruvius in the preface to Book 9) was known as *pentathlos*, the pentathlete, because of the breadth of his learning (Jacob 1992b).

[75] Suetonius *Divus Julius* 56.5.

[76] Cited Pliny *Natural History* 7.117. Cf. Griffen 1994, p. 715; Hendrickson 1906, p. 118. *De analogia*, which survives only in fragments, was written to defend purity of Latin diction against rhetorical abundance and embellishment, and may have been conceived as a reply to the third book of Cicero's *De oratore* (Hendrickson 1906).

[77] Seneca *Epistulae* 59.7. Cf. Grimal 1978, pp. 254-258. Grimal estimates Sextius was born ca. 70/69 B.C. On Quintus Sextius, see also Lana 1953.

[78] Vitruvius 1.1.2: *At qui utrumque perdidicerunt* (sc. *fabrica et ratiocinatio*), *uti omnibus armis ornati, citius cum auctoritate quod fuit propositum sunt adsecuti.*

[79] See, for example, *Bellum Gallicum* 2.3; 5.51; 6.3, and most famously the *Veni, vidi vici* of his Pontic victory of 47 B.C. in Asia Minor (Appian *Bella civilia* 2.81.384; Dio cassius 42.48.1; Suetonius, *Divus*

which he ascends to the *summum templum architecturae*, the highest temple of architecture: the summation, for Vitruvius, of all learning.[80] As no Roman could help knowing, and as unavoidably conspicuous no doubt as the Victor Emmanuel monument is today, the highest temple in Rome was the huge, golden-roofed one on the Capitol whose steps the laurel-wreathed victor ascended on the day of his triumph; Caesar, so Dio Cassius relates, on his knees (Figs. 1 and 2).[81] For Tacitus it was *pignus imperii*, the guarantee of empire.[82]

It is not usual to connect "*summum templum architecturae*" with the Capitol.[83] Vitruvius' implication is normally taken to be that architecture occupies a high and holy ground, with *templum* understood not as a building, but in the augural sense evoked by the late second century A.D. scholar Festus: the place from which one "contemplates" or views

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*Julius* 35.2; cf. Westall 1996, p. 115, n. 238.)

[80] Vitruvius 1.1.17: *Itaque facilter contra eas disciplinas disputare possunt quod pluribus telis disciplinarum sunt armati*. 1.1.11. . . *his gradibus disciplinarum scandendo scientia plerarumque litterarum et artium nutriti pervenerint ad summum templum architecturae*. See also 1.1.1 and n. 80, below. Similarly, in the first chapter of Book 2 (2.1.6), primitive humans, advancing *gradatim*, "step by step," from the construction of buildings to the other arts and disciplines, are led from their brutish existence in the wilderness to gentle *humanitas*. The step-climbing metaphor reappears, without overt mention of the "temple of architecture," at 7. pref.1 where the knowledge transmitted by writings builds up *gradatim*, step by step, *ad summam doctrinarum subtilitatem*. It also occurs in the preface to Book 9 (9.pref.14) as the steps of men's memories (*gradibus memoriarum*) whereby great minds are raised up to heaven.

[81] The archaic temple of Jupiter burned down in 83 B.C. Rebuilding on the same, nearly square foundations (62.25 x 53.50 metres), was begun by Sulla and completed by the consul Q. Lutatius Catulus, who dedicated it in 76 (*LTUR*, s.v. Iuppiter Optimus Maximus, Aedes). On its roof of gilded bronze tiles, Seneca the Elder (*Controversiae* 1.6.4; 2.1.1; Pliny *Natural History* 33.57. Caesar's triumph: Dio Cassius 43.21.2. Vitruvius stipulates elsewhere (1.7.1) that the tutelary deities of a city – Jupiter, Juno and Minerva – are to be housed in a temple located *in excelsissimo loco*, in the very highest place: clearly an evocation of the Capitoline temple with its triple cella, which served as a model for Roman colonial foundations from the time of Caesar on (cf. Gros 1987b p. 356 and 1990, Price 1996, p. 844). The expression *in summo templo* also occurs at 3.4.3 with reference to the odd number of steps that are to front a temple so that the right foot with which one begins one's ascent is also the one placed *in summo templo*, on the temple platform at the top. Fleury (Vitruvius I[1990], p. 93) notes that climbing the steps of a temple was solemn and sacred matter. It certainly would have been for a triumphator at the moment of his apotheosis. See further below Chapter 2, pp. 175-177.

[82] Tacitus *Historiae* 3.72. Cf. Edwards 1996, p. 80. Tacitus, writing at the end of the first century A.D., was voicing an opinion that had been commonplace for some some.

[83] No one has done so before, to the best of my present knowledge.

Fig. 1

Monumuent to Victor Emmanuel II. Rome. inaugurated in 1911. (Photo author).

on all sides, and which in turn (being prominent) is visible from all sides.[84] This "temple," architecture, is the *tempio* of Elisa Romano's monograph on Vitruvius, *La Capanna e il Tempio*.[85]

One might recall, that correct interpretation of divine will through augury was understood as what, above all, underwrote Roman might.[86] The metonymic "guarantee" of this might was the Temple of Jupiter on the Capitol, where the *augurium* (place from which auguries were taken) also stood.[87] "*Summum templum architecturae*," standing at the top of the "steps" of all the other learned disciplines, writes architecture into the equation.[88]

When explaining that knowledge of history should be included in an architect's arsenal of disciplines in order to enable him to justify the use of certain ornaments, Vitruvius chooses to illustrate his point with the story of the capture and destruction of a city, the slaughter of its male citizens and the enslavement and public humiliation of its female ones. As Vitruvius tells it, Carya, the Peloponnesian city in question, was sacked by the Greeks for collaborating against them with the Persian invaders – in the early fifth century B.C. one naturally assumes, when Xerxes overran much of Greece. Permanent admonitory chastisement of the Caryans' treachery is why caryatids, statues of widowed Caryan women wearing their finest clothes, are put in the place of columns to support entablatures, says

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[84] Lindsay edition 34, as cited Fensterbusch, Vitruvius (1964), p. 535, n. 22 and Fleury, Vitruvius I (1990), p. 93: *contemplari dictum est a templo, id est loco qui ab omni parte aspici vel ex quo omnis pars videri potest, quem antiqui templum nominabant.* The relation between architecture and augury – excluding the term of Roman might – is to a large degree the theme of Rykwert 1988.

[85] Romano 1987, especially p. 193.

[86] Among many recent discussions of Roman religion, see Beard, North and Price 1998. Succinctly, Rawson 1985, p. 288: "It was an article of faith with the Romans that they were the most religious of all peoples, and that this was the reason for their success." On Roman religion (recently) Beard, North and Price 1998 and below, Chapter 3, pp. 213-231.

[87] Further, the three divinities housed in the triple cella of the Capitoline temple were sometimes known as the *summi imperatores*, supreme commanders (*ILLRP* 192, with commentary; cf. Crawford 1974, p. 363).

Vitruvius. "So that they might be led in triumph not just once, but enslaved forever as a lesson."[89]

But the Persian advance was arrested at Salamis in 480 B.C., and Xerxes' armies never reached the Peloponnese. Although the genesis of the fifth-century monuments of the Athenian Acropolis can indeed be traced to the Athenian victory at Salamis,[90] the Erechtheion caryatids which used, traditionally, to be taken as the ones referred to in Vitruvius' story were in fact called *korai* by the classical Greeks – "maidens" – not "caryatids." The term itself originates with Vitruvius who, it would appear, was wrong or at least seriously confused about caryatids.[91]

Far more interesting for present purposes than the issue of Vitruvius' doubtful historical accuracy is his choice of this particular story as exemplary.[92] It operates in the same triumphalist arena as the *litterae* Caesar no doubt tailored to his specific purpose, and which, compiled in his commentaries, were subsequently read as history.[93] The historical context in which the caryatid story was written is the same as that in which the plan for the Forum of Augustus was formulated, a project initially vowed in 42 B.C. to celebrate the

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Where would such *summi imperatores* – who, according to Varro, encompassed everything there is (above, p. 31 and n. 58) – live but in a *summum templum*?

[88] See further below, Chapter 2, pp. 175-177.

[89] Vitruvius 1.1.5: . . . *oppido capto, viris interfectis, civitate deleta, matronas eorum in servitutem abduxerunt nec sunt passi stolas neque ornatus matronales deponere uti non una triumpho ducerentur, sed aeterno servitutis exemplo.*

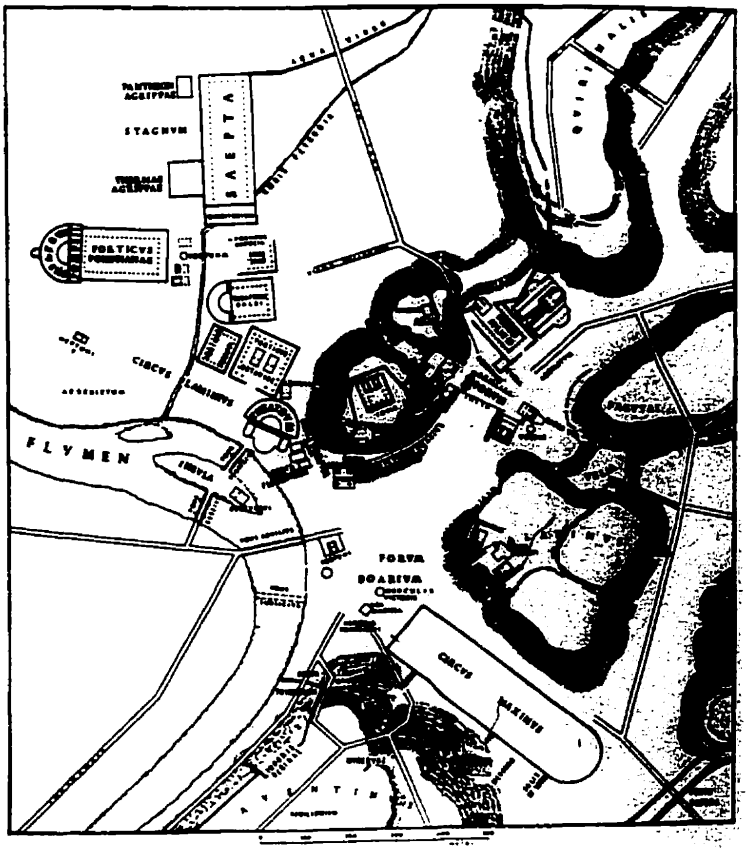
[90] The Persians burned down all the buildings on the Acropolis just before the battle of Salamis. The monuments of the Periclean Acropolis eventually replaced them. On the Athenian victory over the Persians at Salamis as the chief and perennial informant of the architecture of the Acropolis, most recently Hurwit 1999.

[91] The whole caryatid controversy, with citations and bibliography, is reviewed in Fleury's commentary on the passage (Vitruvius I [1990], pp. 74-80). See especially Vickers 1985 and more recently, Rykwert 1996, pp. 129-138, King 1998.

[92] Illuminating in this context is Feeney 1998, p. 128, writing on the aetiologies Romans (notably Ovid) gave for ritual practice: "Modern readers . . . tend to think of aetiology as bad history, a botched recovery of the past, although it is of course not that at all but rather the ancients' way of doing theory."

[93] Rambaud 1953; Rüpke 1992.

Fig 2




The monumental centre of republican Rome, after L. Cozza.

avenging of Caesar's murder and the defeat of the treacherous citizens who murdered him.[94] In the Corinthian porticos which flanked the Temple of Mars Ultor (the Avenger), which was the monumental focus of the Forum and which, for the first time, brought the god of war inside the sacred boundary of the city, were deployed images of the great men through whom Augustus traced his and Rome's divine ancestry – on one side, Aeneas son of Venus, and Aeneas' descendants, the Julii; on the other, Romulus son of Mars and the great military men who descended from him.[95] In the second storey of these porticos caryatids, copies of the Erechtheion *korai*, whose story for Vitruvius illustrates the use of history, took the place of columns. The whole complex justified the Augustan present through a reconstruction of Rome's past.[96] The "stronger memory" brought about by Vitruvius' commentary, whatever its factual shortcomings, secured the caryatids in the golden age of Pericles and made them part of the legitimating narrative.[97]

### *Auctoritas*

Writing tops Vitruvius' list of the nine disciplines meant to constitute an architect's education. It comes before drawing which, for the author of *De architectura*, was indeed secondary. Only ten drawings, none of which have survived, appear to have been originally

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[94] Suetonius *Divus Augustus* 29.2; Ovid *Fasti* 5.569-78. The octastyle Corinthian temple, built entirely of Luna marble, the largest Roman temple to date and considered most beautiful, was not dedicated until 2 B.C.

[95] Zanker 1968; 1988, pp. 201-204; Anderson 1984, pp. 65-100; Galinsky 1996; Kellum 1996; La Rocca 1995.

[96] See Introduction, above p. 10 and n. 49 on the prevailing concern to relate the present to the past.

[97] Zanker 1968, pp. 12-13, takes Vitruvius' story as pointing to the caryatids in the Forum of Augustus as a symbolic representation of the peoples humiliated by Augustus. Wesenberg 1984b disagrees, but admits that Vitruvius was probably aware of their inclusion in the project. On fifth-century B.C. Athens as the

included in the work.[98] Pierre Gros has shown recently that, although much scholarship since the Renaissance has focused on devising graphic renderings of Vitruvius' text as the surest means to understanding what he was trying to say. Vitruvius himself deliberately shunned drawing and resorted to graphic methods with much reluctance only when words completely failed him.[99] For him, writing explains better than drawing – whatever the frustrated modern architectural reader may think.[100] Writing (not drawing) is the basis for all reasonable discussion and constitutes the field in which *De architectura* is to operate.

*The knowledge of the architect is furnished with many disciplines and various kinds of learning. Judiciously exercised, it demonstrates everything the other arts achieve. It is brought into being by* fabrica *and* ratiocinatio. Fabrica *is the continuous and routine practice of the activity the hands accomplish out of matter; its offspring is a work whose form is in keeping with its intended purpose.* Ratiocinatio *is what can show how, and explain to what degree, things have been made with skill and calculation.*[101]

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classical ideal emulated in Augustan art see Zanker 1988, pp. 269-283. On the Forum of Augustus caryatids as part of that project of emulation, La Rocca 1995, p. 77.

[98] See Fleury, Vitruvius I (1990), pp. lxii-lxvii. See also Carpo 1998, pp. 163-164.

[99] Gros 1995, 1996b.

[100] Carpo 1998, p. 164 attributes the scarcity of drawings to Vitruvius' awareness of their futility at a time (before the age of printing) when their accurate reproduction in manuscript copies would have been impossible.

[101] Vitruvius 1.1.1: *Architecti est scientia pluribus disciplinis et variis eruditionibus ornata cuius iudicio probantur omnia quae ab ceteris artibus perificiuntur opera. Ea nascitur ex fabrica et ratiocinatione. Fabrica est continuata ac trita usus meditatio quae manibus perficitur e materia cuiuscumque generis opus est ad propositum deformationis. Ratiocinatio autem est quae res fabricatas sollertiae ac rationis pro portione demonstrare atque explicare potest.* Since my translation of the first sentence is rather at odds with most modern interpretations, grammatical justification is in order. I have taken *cuius* as referring to the knowledge of the architect, not to the architect himself, since *scientia* is the subject of the sentence. *Judicio*, in my view, means "with or by discernment, discretion, good judgement" in this context (Lewis and Short, s.v. *judicium*, II C). I have taken *probantur* in the sense of "make (a thing) credible, show, prove, demonstrate" (Lewis and Short, s.v. *probo*, III B). Thus, literally, "the architect's knowledge . . . by the good judgement of which all the works that are brought to completion by the other arts are proven." In other words, the knowledge of the architect, judiciously excercised, demonstrates or proves (makes palpably credible, *shows*) the achievements of the other arts. This is entirely in keeping with Vitruvius' view of *architectura* as the summation of learning (*summum templum architecturae*, 1.1.11) and bypasses the usual, somehwat problematic, reading that the architect somehow judges all the achievements of the other arts

*Ratiocinatio* explains, and the word for "explain" here is *explicare*, literally to unfold, or unroll, as in unroll a book roll. *Ratiocinatio* is not equivalent to writing, but without writing, *ratiocinatio* – the "discussion" which Vitruvius says is to complement and complete the knowledge of hands-on practice – is all but inconceivable to him.[102] Moreover, like the victory without the dispatch to record it or the map without its accompanying commentary, *fabrica* without writing has no *auctoritas*, no authority.

*Architects who aim at employing themselves with their hands without the aid of writing will never be able to achieve authority equal to their labours. But those who rely only on discussion and writing will look as if they have chased a shadow and not the thing itself. Those who have overcome both, however, like men fully armed, will attain their goal speedily and with authority* (auctoritas).[103]

*Auctoritas* was a specifically Roman notion.[104] Originally a legal term related to vouchsafing and guaranteeing, authority was the security offered by an *auctor* who underwrote an action undertaken by someone else.[105] A contractual matter in the legal sphere and, analogously, in the politico-religious one, *auctoritas* entailed trust, mutual

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(see Fleury, Vitruvius 1 (1990), pp. 65-66 and further below, Chapter 2, pp. 175-184). Granger's text and translation of this passage (Vitruvius 1931) are no longer accepted.

[102] It is usual to translate *ratiocinatio* as "theory," but Schrijvers (1989b), in a detailed examination of the passage, has recently demonstrated that "discussion," or *discours* in French, comes much closer to Vitruvius' intentions. At 5.12.7, writing and "ratiocination" are used as equivalent terms: *Quae necessaria ad utilitatem in civitatibus publicorum locorum securrere . . . in hoc volumine scripsi . . . privatorum autem aedificiorum utilitates . . . in sequenti volumine ratiocinabor.*

[103] Vitruvius 1.1.2: *Itaque architecti qui sine litteris contenderant ut manibus essent exercitati non potuerunt efficere ut haberent pro laboribus auctoritatem; qui autem ratiocinationibus et litteris solis confisi fuerunt umbram non rem persecuti videntur. At qui utrumque perdidicerunt, uti omnibus armis ornati, citius cum auctoritate quod fuit propsitum sunt adsecuti.*

[104] On the term in general see Galinsky 1996, pp. 10–41; Heinze 1925; on *auctoritas* as a critical term, Pollitt 1974, pp. 311-318; on Vitruvius and *auctoritas*, Gros 1989b.

[105] See Heinze 1925, p. 351: . . . auctor *ist, wer die von einem anderen auszuführende Handlung (oder, was auf dasselbe hinauskommt, den Entschluss dazu) massgeblich und wirkungsvoll gutheisst; das 'massgeblich' enthält zugleich in sich, dass dabei eine gewisse Veranwortung vom Gutheissenden übernommen wird. . . . es ist . . . ein spezifisch römischer Begriff.*

obligation and good faith: what the Romans called *fides*.[106] As mentioned earlier, the shrine of Fides stood next to the Temple of Jupiter on the Capitol and was surrounded by bronze tablets inscribed with laws and treaties.[107]

*Auctoritas* was held by an *auctor*. The term is derived from the verb *augeo* – increase, magnify, augment. *Auctores* included artists and builders and, J.J. Pollitt has suggested, were people who "had the power to bring something into existence and/or insure that its existence continued."[108] "Augustus," a profoundly religious epithet connected with augury, belongs to the same semantic field as *augeo auctor auctoritas*.[109] Augustus had more authority than anyone.[110] "After this time (after 27 B.C., when the Senate conferred new *cognomen* on him), I excelled all in *auctoritas*, although I possessed no more power (*potestas*) than others who were my colleagues," he wrote near the end of his autobiography.[111] This might seem like outrageous sophistry, but it is just possible that Augustus was simply describing the facts.[112] His official powers, legally founded in the *mos maiorum*, were indeed no greater than anyone else's, yet his word was effectively law because of the implicit contract between himself and the *res publica*, a *consensus* which made him exclusive guarantor of its security. Augustus's greatest challenge was to maintain that consensus.[113]

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[106] Cicero *Topica* 73. Cf. Galinsky 1996, p. 15.
[107] On the shrine of Fides, above p. 22 and n. 16.
[108] Pollitt 1974, p. 315.
[109] Religious dimension of "Augustus:" above, Introduction, p. 14 and n. 70. Relation to *augeo*: Suetonius *Divus Augustus* 7.2.
[110] See Galinsky 1996, pp. 10–41; Crook 1996, pp. 117-123.
[111] Augustus *Res Gestae* 34.3: *Post id tempus auctoritate omnibus praestiti, potestatis autem nihilo amplius habui quam ceteri qui mihi quoque in magistratu conlegae fuerunt.* The translation is by P.A. Brunt and J.M. Moore.
[112] See Crook 1996.
[113] See Grenade 1961, pp. 151-152.

Writing seems to have had a good deal to do with it.[114] The phenonmenon known as the Roman "epigraphic habit" first took serious hold in the early Empire, under Augustus.[115] Augustus himself was obsessed with writing, never speaking extempore, according to Suetonius, and even reading prepared texts to his wife Livia when he had something particularly important to say to her.[116] In order to discourage absenteeism in the Senate "he had the names of all the senators entered on a tablet and posted."[117] Laws to be considered were, for the first time and at his initiative, similarly inscribed and posted ahead of time.[118] The bronze tablet from Banasia mentioned earlier which Augustus began as a *commentarius* to record the names and details of everyone to whom he granted Roman citizenship is further evidence of what Fergus Millar has called his "obsession with documentation," and suggests the possibility that other such *commentarii* were also begun elsewhere.[119] Much (all?) of Augustus's correspondence with Aphrodisias, the Carian "city of Venus" in Asia Minor in which he took particularly keen interest because Venus was supposed to be his ancestress, survives because it was chiselled onto the walls of the theatre there.[120] This last was probably not at his initiative, of course, but the Aphrodisians obviously considered it the appropriate thing to do.[121]

This is how Vitruvius addresses Augustus in the second paragraph of the preface to Book 1.

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[114] Corbeil 1987 (p.44: "*l'écrit légitime*"); Hopkins 1991.
[115] Galsterer 1990, p. 10; Woolf 1996, p. 22. See also, MacMullen 1982; Meyer 1990.
[116] Suetonius *Divus Augustus* 84.1-2.
[117] Dio Cassius 55.3.3.
[118] Dio Cassius 55.4.1.
[119] Seston and Euzennat 1971; Sherwin-White 1973; cf. Millar 1984, p. 50.
[120] Millar 1973. On Aphrodisias, especially Erim 1986 and an ongoing series of conference papers, most recent of which is Roueché and Smith eds., 1996.

*When I realized that you had care not only for the common life of all men and for the security of the commonwealth but also for the fitness of public buildings that even as, through you, the city was increased* (aucta) *with provinces, so public buildings were to provide eminent guarantees* (auctoritates) *for the majesty of empire I decided not to hesitate and took the first opportunity to set out for you my writings on these matters* (his rebus), *for it was concerning this* (de eo) *that I was known to your father (Caesar) and this is what first attached me to his might.* [122]

Commentators tend to assume that the "matters" with which Vitruvius says his writings deal and the infuriatingly vague "this" concerning which he was first attached to Caesar refer, respectively, to architecture and to his activities as an architect.[123] Vitruvius' meaning is at once more subtle and more pointed.

The preface to Book 1 began, "When your divine mind and power, Imperator Caesar, had seized command of the world." Vitruvius invariably addresses Augustus as *Imperator* or *Caesar*, or both, in all ten prefaces except one.[124] Although other writers use

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[121] Price 1984 gives a subtle reading of the imperial cult in Asia Minor as an appropriate (not necessarily obsequious) thing to do. Inscriptions of imperial correspondence at Aphrodisias and elsewhere could be understood in similar terms.

[122] Vitruvius 1.pref.2: *Cum vero adtenderem te non solum de vita communi omnium curam publicaeque rei constitutione habere, sed etiam de opportunitate publicorum aedificiorum ut civitas per te non solum provinciis esset aucta verum etiam ut maiestas imperii publicorum aedificiorum egregias haberet auctoritates, non putavi praetemittendum quin primo quoque tempore de his rebus ea tibi ederem, ideo quod primum parenti tuo de eo fueram notus et eius virtutis studiosus.* On the relation of this passage to the ideology of the principate, see Grenade 1961, pp. 106-107 and p. 149. My reading both of this passage and of Vitruvian *auctoritas* owes a great deal to Gros 1989b.

[123] Gros 1976a, p. 55; Ruffel and Soubiran 1962, p. 145; cf. Fleury, Vitruvius 1 (1990), pp. 56-57.

[124] *Imperator Caesar*: 1.pref.1; *Imperator*: 2.pref.4, 3.pref.4, 10.pref.4; *Caesar*: 1.1.18, 6.pref.5, 7.pref.10, 9.pref.18. The prefaces to Books 4 and 5 have both, opening with *Imperator* (4.pref.1, 5.pref.1) and invoking *Caesar* a little further on (4.pref.1; 5.pref.5). Cf. Fleury, Vitruvius 1 (1990), pp. 51-52. Only the preface to Book 8 has neither, which may, as Louis Callebat has suggested, be an accident of transcription rather than an omission, deliberate or otherwise (Callebat, Vitruvius 8 [1973], p. viii). See further below, pp. 116-117. Until Octavian, by adopting "Imperator" as an official name in 29 B.C., made it permanent part of his identity, *Imperator*, a strictly temporary title, was the acclamation of a general (*imperator*, lower case) by his troops after a victory. The acclamation was one of the conditions for the award of a triumph

"Caesar" to address him, no other writer ever uses "Imperator" or "Imperator Caesar."[125] Epigraphic and numismatic parallels are frequent, however. "Imperator Caesar," the official name that appeared, usually in abbreviated form, on public buildings and on coins belongs to the language of inscriptions, not of literature.[126] Vitruvius could not confer authority on his work by amplifying his themes the way poets and historians do, he stresses in the preface to Book 5.[127] As a writer on architecture who must, he says, be brief,[128] Vitruvius inscribes "Imperator Caesar" on *De architectura* the way a stone-cutter might chisel IMP. CAESAR onto the entablature of public monument, or a moneyer stamp it on a coin to guarantee its value (Fig. 3). Vitruvius never addresses Augustus as such – neither does any other prose writer – but the "*aucta*" and the "*auctoritates*" of the passage from the preface to Book 1 just cited implicitly invoke the authority of the new *cognomen*.[129]

Initially, the passage sets up a parallel between, on the one hand, Augustus's concern for the security of life in common in a restored *res publica* and, on the other, the fitness of public buildings.[130] Next, just as Augustus had "increased" the city (*civitas*) with provinces, so public buildings, as eminent *auctoritates*, would secure the majesty of empire.[131] *Auctoritates* in the plural were, specifically, duly witnessed *written* records or

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(Dio Cassious 52.41.3, Suetonius *Divus Julius* 76, cf. Syme 1958, p. 176, who says he was already using the name in 38 B.C.). It was never, until Augustus, a permanent name or title (Syme 1958). See also Combès 1966 and further below, Chapter 4, pp. 308-309. *Caesar* was adopted when Octavian became Julius Caesar's heir in 44.

[125] Fleury, Vitruvius 1 (1990), p. 52..

[126] "Augustus" was added to it after 27 B.C. For epigraphic evidence, see *TLL*, s.v. *imperator*, 558; for numistmatic evidence, see, for example, the reverse types of two *denarii* in the British Museum, dating from between 29 and 27 B.C.: 096494 and 195155 (cf. Pollini 1990, figs. 15 and 17).

[127] Vitruvius 5.pref.1.

[128] Vitruvius 5.pref.2: *ut memoriae tradantur, breviter exponam.*

[129] Gros 1989b, p. 126.

[130] On *cura*, "care" for the public good, as an aspect of imperial ideology see Béranger 1953, pp. 169-217.

[131] Cf. Suetonius *Divus Augustus* 28 (the brick-to-marble passage): *Urbem neque pro maiestate imperii ornatum . . . ut iure sit gloriatus marmoream se relinquere quam latericiam accepisset.* On the relation between *maiestas* and *monumenta* as the agents of *consensus*, see Gros 1990, pp. 56-58. Gonzales 1984

"guarantees" which transcribed official resolutions.[132] Public buildings, strictly speaking, did not "represent" power, any more than a dispatch "represented" a victory. Equivalent or at the very least analogous to writing, public buildings (as Vitruvius tells it here) were the authoritative records that legitimated power.

How, besides the inscriptions that invariably appeared on them, did buildings "record" power? Essentially, according to Vitruvius, by increase. *Auctoritas* in buildings is a concomitant, variously, of increased spending, of greater richness of materials, of heightened contrast in the light and shadow of a peristyle, of bigger columns and more of them.[133] The *magnificentia*, magnificence, taken as the cause or result (or both) of

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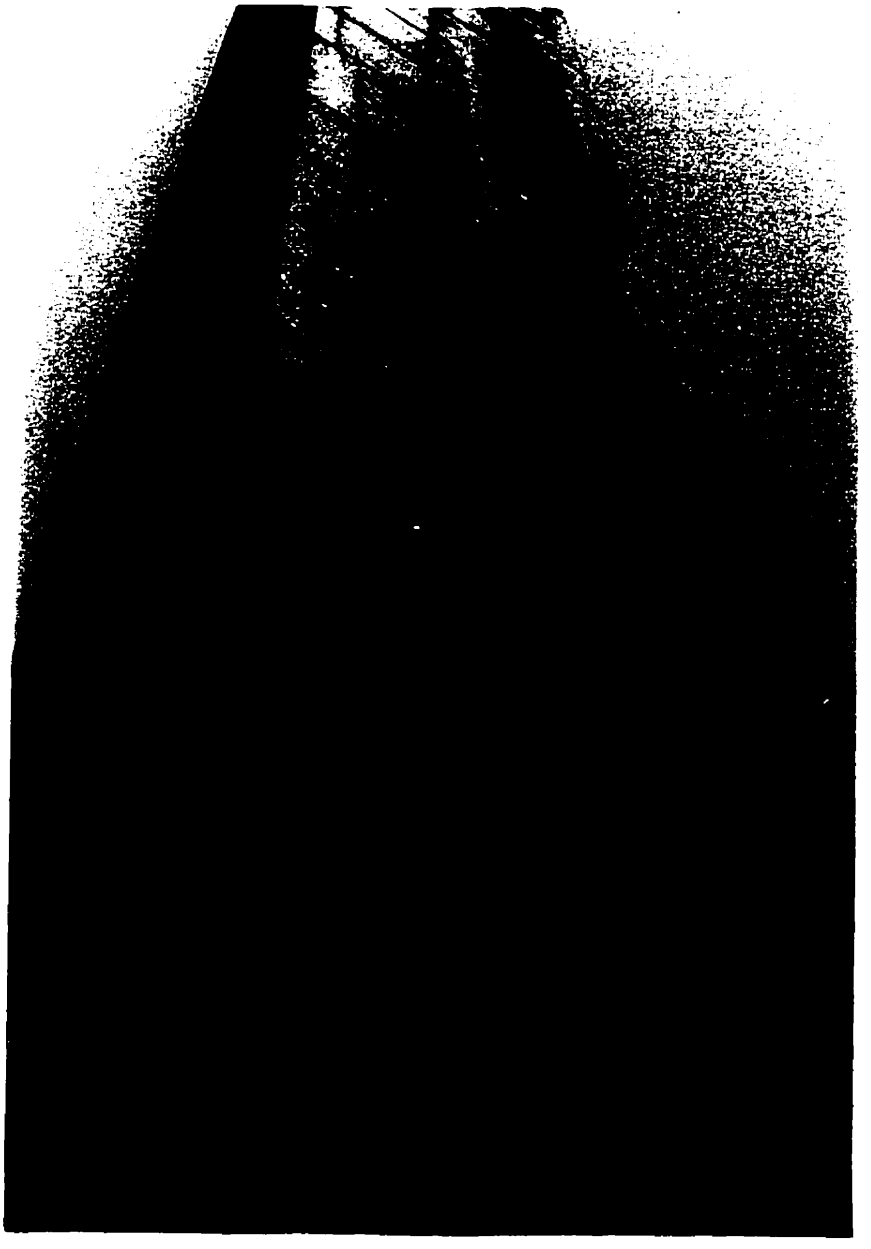
gives an illuminating account of the *tabula Siarensis*, a lengthy inscription found near Seville in 1982, which minutely details three triumphal arches set up in Rome, Syria and Germania to honour Germanicus after his death in 19 A.D. The *tabula Siarensis* was a bronze tablet to be fixed – according to the instructions inscribed on it – in a prominent place (*celeberrimus locus*). What is particularly interesting is that the purpose and meaning of this written record of *monumenta* erected elsewhere is identical to that of the absent built works themselves. Moreover, the wording of the inscription clearly suggests that the *tabula Siarensis* was one of many such *tabulae* posted in *celeberrimi loci* all over the Roman world.

[132] See especially Cicero *De oratore* 3.5. In the last speech he delivered to the Senate before his death, L. Licinius Crassus, a prominent statesman of the early first century B.C., concluded with the resolution "That the nation should be assured that neither the advice nor the loyalty (*fides*) of the senate had ever failed to support the state." The resolution, whose transcription Crassus personally witnessed, was duly recorded *in auctoritatibus*. Vitruvius refers to *De oratore* at 9.pref.17. Cf. Gros 1989b, p. 127. Dio Cassius (55.3.4-5), writing in Greek about Augustus's Senate activities in 9 B.C., has difficulty with *auctoritas*, which he does not translate but simply transliterates. A law could not be passed in the absence of a quorum in the Senate. In such a case, "the senators would proceed with their deliberations and their decision would be recorded, though it could not go into effect as if regularly passed, but instead, their action was what was termed *auctoritas*, the purpose of which was to make known their will. For such is the general force of this word, to translate it into Greek by a term that will always be applicable is impossible." Here again *auctoritas*, clearly an un-Greek notion, is a matter of written record.

[133] Vitruvius 7.pref.17: if the Temple of Honos and Virtus, built by Marius around 100 B.C. had been of marble, it would, in addition to its fine proportions and execution, have had *auctoritas* "from magnificence and expenditure" (*ab magnificentia et impensis*). 3.3.6 and 3.3.8: in eustyle and pseudo-dipteral temples, the larger ambulatory between the cella wall and the peristyle will confer *auctoritas*. 3.3.9: the *asperitas* or "fierceness" of heightened contrast between light and shade in temple peristyles has *auctoritas*. 5.1.10: In the Basilica at Fano, with its *aedes Augusti* (shrine of Augustus), the one building Vitruvius claims as his own design , he specifies the use of a single order of columns to span two storeys. These "colossal" or "giant" columns, rising without interruption to the beams of the ceiling, actually save money by dispensing with an intervening entablature, but "appear to add the magnificence of expenditure to the work and increase its authority" (*magnificentiam inpensae et auctoritatem operi adaugere videntur*). 7.pref.17: the huge dodecastyle porch added to the front of the Telesterion at Eleusis in the late fourth century B.C. at

Fig. 3



Restored inscription (CIL 6.702) on the base of the obelisk used as the gnomon of the Horologium Augusti. Augustus's giant sun clock in the Campus Martius at Rome. inaugurated in 9 B.C. (Photo author).

*auctoritas* has to do, literally, with magnification. *Magnus facio*, "I make big."

The late republican *imperatores* were, of course, no strangers to displays of architectural magnificence.[134] But what these fiercely competitive men had not thought about and Vitruvius had (for some time, apparently, and with great deliberation – *magnis cogitationibus*[135]) was *why* architecture "increased" the commonwealth and *how* it was to record Roman greatness. And this, as the ensuing chapters of this study will attempt to demonstrate, not locally or piecemeal, but comprehensively, world-wide. *Fabrica* alone, to recall Vitruvius' own term, is necessarily local and specific; it has, he asserts, no authority. *Ratiocinatio*, on the other hand, systematises: its scope is universal. Indissociable from writing, *ratiocinatio* secures *fabrica* the way IMP. CAESAR secured the value of a coin or the authority of a monument. But *ratiocinatio* without *fabrica*, like IMP. CAESAR without a coin, a monument or a man to bear the name is just a shadow, not the real thing.

Close reading of the second paragraph of the preface to Book 1, suggests it was not architecture itself but a common concern with the fundamental question of architecture as legitimator of *imperium* that initially "attached" Vitruvius to Caesar's might; that the connections between architecture and empire are the "matters" which his writings duly record. Thus, concluding the first chapter of Book 1,

*I promise as I hope that, in these scrolls, I shall in truth have vouched for the power of the art and its inherent principles beyond question and with the greatest authority*

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once increased the size of the vestibule for initiates "and added the greatest authority to the work" (*operique summam adiecit auctoritatem*).

[134] Gros and Sauron 1988, pp. 51-56; Zanker 1988, pp. 5-78.

[135] Vitruvius 1.pref.1.

(auctoritas) *not only to builders but to all learned men.*[136]

**A Perfect Ten**

*De architectura* consisted of ten *volumina*, or scrolls. Although for Vitruvius the work is, insistently, a *corpus*,[137] the first and only mention of its consisting of ten books occurs at the very end of Book 10, on mechanics. Vitruvius may not have intended ten books initially,[138] but ten unquestionably constituted the finished *corpus* he presented to Augustus.

*In this scroll I have given as complete an account as I could of the principles of the machines I consider most useful in times of peace and war. Now in the previous nine I brought together the ones for the other different subjects and parts, so that the whole body of architecture might have all its members developed* (explicata) *in ten scrolls.*[139]

The ten separate *volumina* that divided up *De architectura* at its completion were not like the contiguous, sequential "books" of medieval codices and modern editions (Fig. 4).[140] Book 2 of the Fensterbusch translation, for instance, ends on page 131 and Book 3 begins on its verso, page 132.[141] The "books" of modern editions are not discrete tactile

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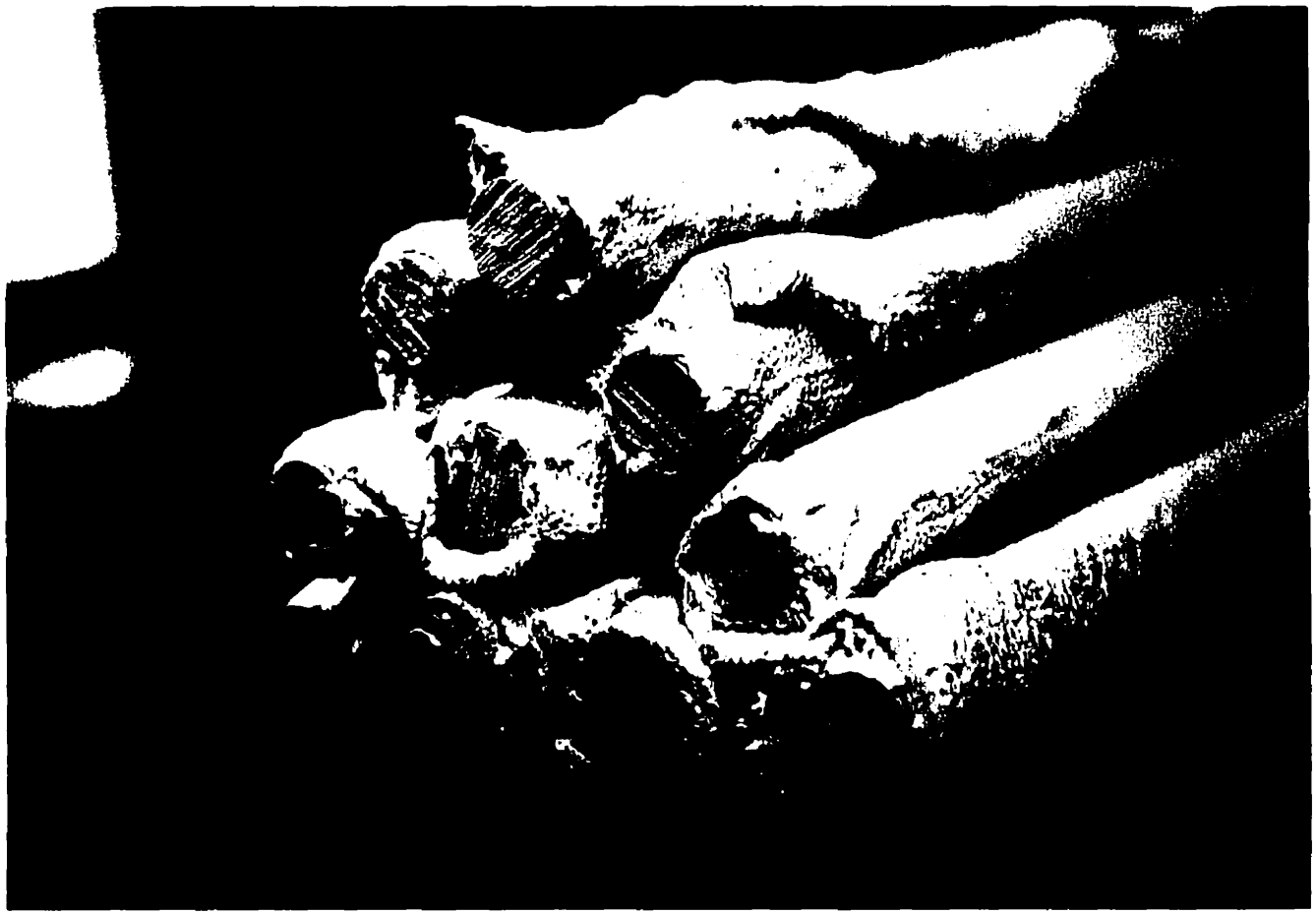
[136] Vitruvius 1.1.18: *De artis vero potestate quaeque insunt in ea ratiocinationes, polliceor, uti spero, his voluminibus non modo aedificantibus, sed etiam omnibus sapientibus cum maxima auctoritate me sine dubio praestaturum.*
[137] Above, Introduction, p. 9 and n. 40.
[138] Callebat 1989, p.37.
[139] Vitruvius 10.16.12: *Quas potui de machinis expedire rationes pacis bellique temporibus et utilissimas putavi in hoc volumine perfeci. In prioribus vero novem de singulis generibus et partibus conparavi, uti totum corpus omnia architecturae membra in decem voluminibus haberet explicata.*
[140] On ancient books, and the relevance of their physical constitution, Small 1997, pp. 11-25.
[141] Fensterbusch, Vitruvius 1964.

Fig. 4



Plaster, wood and surgical gauze model of *De architectura*, by author.

units.[142] The *singula volumina*, separate scrolls, to which Vitruvius consigned his individual subjects, were.[143] Separate scrolls with a different subject in each, are his means for bringing the body of architecture to *perfectam ordinationem*, complete order, Vitruvius says in the preface to Book 4.[144] The *ordinatio* of his compilation is again vindicated in virtually identical terms in the preface to Book 5.[145] *Ordinatio*, order, heads the list of the six things on which architecture depends, enumerated in the second chapter of Book 1, right after the first chapter with its list of nine disciplines. "Architecture depends on *ordinatio*. . . ," he begins.[146] "*Ordinatio* is the proper relation of parts of a work taken separately and the provision of proportions for overall symmetry. It is constituted from quantity – *posotês* in Greek."[147] As for architecture so, might one infer, for *De architectura*?

Quantities certainly played an important role in constituting the works of Varro, whom as already noted Vitruvius admired,[148] and who especially favored four, the number of cosmic order.[149] The quadripartite structure of people, place, time and thing was his preferred framework for systematizing the vast amounts information contained in his

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[142] Exceptionally, each of the 10 books of the Budé edition is being published as a separate volume, although the Budé volumes are codices, of course, not scrolls. On the Budé volumes above Introduction, p. 4 and n. 19.

[143] Vitruvius 7.pref.18: . . . *sed deposite singulis voluminibus de singulis exponeremus.*

[144] Vitruvius 4.pref.1: . . . *dignam et utilissimam rem putavi tantae disciplinae corpus ad perfectam ordinationem perducere et praescriptis in singulis voluminibus singulorum generum qualitates explicare.*

[145] Vitruvius 5.pref.5: I set up their order (of the scrolls) so that inquirers need not gather explanations piecemeal, but can obtain them from a single body with different subjects treated in separate scrolls. *Eorum ordinationes institui, uti non sint quaerentibus separatim colligenda, sed e corpore uno et in singulis voluminibus generum haberent explicationes.* Similarly, 1.7.2: . . . *commensus aedificiorum et ordines et genera singula symmetriarum peragere et in singulis voluiminibus explicare.*

[146] Vitruvius 1.2.1: Architecture depends on *ordinatio*, which is called *taxis* in Greek, and on arrangement which the Greeks call *diathesis*, and eurythmy, and symmetry and decor and distribution, called *oikonomia* in Greek. *Architectura autem constat ex ordinatione, quae graece* taxis *dicitur, et ex dispositione – hanc autem Graeci* diathesis *vocitant – et eurythmia, et symmetria et decore et distributione, quae graece* oikonomia *dicitur.*

[147] Vitruvius 1.2.2: *Ordinatio est modica membrorum operis commoditas separatim universeque proportionis ad symmetriarum comparatio. Haec componitur ex quantitate, quae graece* posotês *dicitur.*

[148] Vitruvius 9.pref.17.

enormous literary output.[149] St. Augustine explains how four governed the division of the 25 books of Varro's *Antiquitates rerum humanarum* as well as that of the 16 books of the accompanying *Antiquitates rerum divinarum* on Roman religion, which was dedicated to Caesar as *pontifex maximus*.[151] Varro's *Hebdomades*, a collection of portraits of 700 eminent men, was governed by seven, just like (so Varro) the organization of the heavenly bodies and the birth and growth of humans, and indeed Varro himself who had, he said in his preface, entered the 12th *hebdomad* of his age and had written 70 *hebdomads* of books.[152]

Insistence on a connection between number and nature was Pythagorean, a doctrine with many adherents among Roman intellectuals of the late Republic.[153] Because the sect had initially flourished in southern Italy, where Pythagoras lived for much of his life, there was a tendency to consider him a something of a native son, and his philosophy as being at least as Roman as it was Greek.[154] In the preface to Book 5, Vitruvius invokes Pythagorean principles as a means of ordering literary composition "by cubical principles

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[149] Varro *De re rustica* 5.3, *De lingua latina* 5.11-12. Cf. Skydsgaard 1968, pp. 12-13.

[150] Tarver 1997, p. 137. On four as constitutive principle even of dinner parties, Aulus Gellius reports Varro as having written, "The banquet itself has four features, and then only is it complete in all its parts: if a nice little group has been got together, if the place is well chosen, the time fit and due preparation not neglected" (*Noctes Atticae* 13.11.3).

[151] Augustine *City of God* 6.3.

[152] Aulus Gellius *Noctes atticae* 3.10.1. According to Pliny (*Natural History* 35.160), Varro was buried in the "Pythagorean way" in leaves of myrtle, olive and black poplar. Cicero, in the Pythagorean *somnium Scipionis*, calls seven "a number which is the key of almost everything" (*De republica* 6.18).

[153] On Pythagoreanism in the late Republic, Griffin 1994, pp 707-710; Rawson 1985 pp. 291-295. There was a particular fascination with Plato's *Timaeus*, the most Pythagorean of his dialogues, parts of which Cicero translated into Latin, and which contains, among other things, a full account of the cosmic role of four. Coleman (1964) has argued that Pythagoreanism constitutes the unifying theme of the whole of Cicero's *De republica* – not just (as has often been recognized) the *somnium Scipionis* of the concluding book.

[154] Cicero *De Oratore* 2.154; *Republic* 2.28; cf. Griffin 1994, p. 707. A statue of Pythagoras which had stood next to the *comitium* in the Forum Romanum since the fourth century B.C. was removed by Sulla when he modified the area in the 80's B.C.: Cicero *Tusculan Disputations* 4.2-5; Pliny *Natural History* 34.26. Plutarch (*Roman Questions* 2.25, 72, 95, 102, 112) draws many parallels between Roman and

(*cybicis rationibus*)," which arose, he notes later in the same preface, from things originally "observed by our ancestors in the order of nature."[155] The point of "numbering" books the way Varro did would have been to affirm their participation in that order.

Because, like dice, a cube when it is thrown remains immobile on whatever side it rests, works written according to such principles stay put in the memory.[156] Vitruvius, as far as one can tell, did not follow Pythagoras' alleged "cubical principles," which prescribed that no more than three 216-line "cubes" constitute one *conscriptio*. But then it is far from certain what exactly Vitruvius understood by *conscriptio* (treatise? piece of writing?). One thing is certain though: *De architecura* was constituted by ten scrolls.

Book rolls, nine to eleven inches long, consisted of sticks (*umbilici*) to which one end of the papyrus roll was attached and around which it was rolled.[157] The lines of text, written in columns, ran parallel to the long edge of the roll. Unrolled, a papyrus scroll averaged between 20 and 30 feet in length. An open codex is limited to the display, usually, of only two columns of text at time. A continuous, virtually endless, colonnade unfurled before the eyes of an ancient reader who unrolled a scroll. Rolled up, tied with strings or straps called *lora*, and, if particularly precious, wrapped in a parchment jackets rubbed with cedar oil to preserve them from decay, *volumina* were neat short rods – physical units

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Pythagorean customs, reflecting a tradition going back several centuries that Pythagoreanism had had an important formative influence on early Roman institutions (Coleman 1964, p.12).

[155] Vitruvius 5.pref.3: Pythagoras too, and those who followed his school of thought, thought to write their precepts in scrolls according to cubical principles. 216 lines make up a cube . . . . *Etiamque Pythagorae quoque eius haeresim fuerunt secuti, placuit cybicus rationibus praecepta in voluminibus scribere, constitueruntque cybum CCXVI versus* . . . 5.pref.5 *Cum ergo haec naturali modo sint a maioribus observata* . . . For a recent, detailed philological study of the fifth preface, see Kessissoglu 1993. On cubical principles in Vitruvius, see Hersey 1966, who takes them as the point of departure for a study of numerology in Italian Renaissance architecture.

[156] Vitruvius 5.pref.4.

[157] My account of scrolls follows Clark 1901, pp. 27-30, who supplies textual evidence for the book terminology.

which could be counted the way beads on an abacus are counted, with the fingers. The units of *De architectura*, while remaining single and separate – something Vitruvius seems to have set some store by – added up to ten.

The ten-book division is far from inherent in the thematic organization of *De architectura*, however, and indeed bears a rather strained relation to it. Book 8, on water, fits uncomfortably into the schema and, as already discussed, cannot be classified under any of the three so-called "parts" of architecture – building, clock-construction and machinery.[158] Books 3 and 4, both very short and both on temples, could easily have constituted a single book: together their length is about the same that of Book 10 alone.[159] The division between them is awkward. Book 3 breaks off abruptly after dealing with the proportions of the Ionic order, whose origins are not accounted for until the opening chapter of Book 4, along with the origins of the Doric and the Corinthian, whose proportions Book 4 subsequently deals with. Seven books – as noted, another heavily loaded number – are devoted to building, and only one each to the other two "parts" of architecture, making (diagramatically, at least) for a rather lopsided structure in which Book 8, on water, does not figure at all.[160] Ten books were clearly not the spontaneous or accidental concomitant of the compilation. Ten was an artifice, deliberately assigned to it. This is not to say that the ten-part division was artificial or arbitrary.

Ten, Vitruvius knew, was *perfectus* – complete, finished.

*Moreover they* (the ancients) *deduced the standards of measure that all works obviously require from the parts of the human body: finger, palm, foot, cubit. And they*

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[158] P. 33, above.

[159] On the lengths of the different books, Fleury, Vitruvius 1 (1990), pp. xxiv-xxv. On the structure of Books 3 and 4, Gros 1975 and Vitruvius 3 (1990), pp. x-xvi.

*arranged these into the perfect number which the Greeks call* teleon. *The ancients determined ten to be the perfect number; for it was, in fact, discovered from the hands and the number of fingers. Indeed if nature completes both palms with ten fingers, it was also Plato's opinion that the number ten is perfect because individual units, called* monades *in Greek, complete the decade* (decusis). *But as soon these go over to make eleven or twelve, they cannot be perfect until they reach another decade. For units are fragments of ten.* [161]

The passage appears in Book 3, chapter 1, in the context of a whole matrix of crucial passages. These will be examined below, in Chapter 3. For the moment ten is the issue.

Ten is *perfectus*, complete, because nature revealed its perfection through the fingers of two hands. Fingers not only supply the basic unit of measurement for building (the other units, also body parts, are multiples of it);[162] hands – "completed" here by ten fingers – are, Vitruvius affirms elsewhere, the *means* of building as well. *Fabrica* is the "routine practice of the activity *the hands* accomplish out of matter."[163] Primitive humans began to build, says Vitruvius in the first chapter of Book 2, because, besides upright posture, "they, unlike other animals, had this prize from nature . . . that they easily handled

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[161] For lopsidedness, see the diagram in Fleury, Vitruvius 1 (1990), p. 121.

[162] Vitruvius 3.1.5: *Nec minus mensurarum rationes, quae in omnibus operibus videntur necessariae esse, ex corporis membris collegerunt, uti digitum, palmum, pedem, cubitum, et eas distribuerunt in perfectum numerum quem Graeci* teleon *dicunt. Perfectum autem antiqui instituerunt numerum qui decem dicitur; namque ex manibus digitorum numero [ab palmo pes] est inventus. Si autem in utrisque palmis ex articulis ab natura decem sunt perfecti, etiam Platoni placuit esse eum numerum ea re perfectum quod ex singularibus rebus, quae* monades *apud Graecos, perficitur decusis. Quae simul autem undecim aut duodecim sunt factae, quod superaverint, non possunt esse perfectae, donec ad alterum decusim perveniant; singulares enim res particulae sunt eius numeri.* As elsewhere, I follow the text of the Budé edition (Gros, Vitruvius 3 [1990]) – Gros, here, supresses *ab palmo pes*; cf. his commentary *ad loc.*, p. 71.

[163] On ancient metrology in general see Fernie 1978, Hecht 1979 and the relevant chapters in Fernie 1996. Cf. Wilson Jones 1989, p. 36. On ancient metrological reliefs which illustrate the bodily basis for ancient measurement Vitruvius discusses here and also at 1.2.4, see Fernie 1981; Dekolakou-Sideris 1990; Ben-Menahem and Hecht 1985; Wesenberg 1975-76. Cf. Rykwert 1996, pp. 99-100 and *passim*. See also Wilson Jones, *JJA* forthcoming.

any thing they liked *with their hands and fingers*."[164] Ten originates in nature (fingers reveal this) and is mediated from nature to building through fingers to palms, feet and forearms; to the whole body, in fact, whose "number," Vitruvius claims, the ancients said was ten – *teleon* in Greek, "that which has been brought to fulfillment" (*perfectus* is its Latin equivalent). The argument may tend to redundant circularity, but its purpose is clear: to bind building to nature through the body, with ten fingers playing the key role of making that body both specifically human and revealing it as "perfect." This (to Vitruvius) obvious truth about ten is revealed not only via fingers in *fabrica*, but also affirmed in the *ratiocinatio* of men like Plato. It takes both to bring architecture into being.[165]

Only one surviving source on the mathematical perfection of ten has anything explicit to say about fingers, although others do point out that all peoples, even barbarians, count to ten, and then begin again from one, which suggests an implicit connection.[166] It has been suggested that the notion of the body's "number" being ten may originate in the pebble diagrams of one Eurytus, a fifth-century B.C. Greek mathematician known only through secondary sources, who assigned numbers to natural phenomena such as "man" and "horse" by picking out their salient points with pebbles.[167] On this hypothesis, the pebbles for "man" would, presumably, have added up to ten in some way.[168]

Pebble diagrams, not usually of men or horses, played a key role in ancient mathematics. Ancient mathematicians, particularly those of Pythagorean stripe, understood

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[163] Vitruvius 1.1.1: *Fabrica est continuata ac trita usus mediatio quae manibus perficitur e materia*
[164] Vitruvius 2.1.2: *habentes ab natura praemium praeter reliqua animalia . . .manibus et articulis quam vellent rem faciliter tractarent.*
[165] Vitruvius 1.1.1; 1.1.15.
[166] John Lydus (*De mensibus* 3.4; see further, below) makes a direct connection between the perfection of ten and the ten fingers. For counting, even among barbarians, beginning with ten, see Aëtius *Placita* 1.3.8 and Iamblichus (cited below).
[167] Aristotle *Metaphysics* 1092b; Theophrastus *Metaphysics* 3.

numbers geometrically, in spatial terms. Indeed, in Vitruvius' opening account of the nine disciplines, arithmetic is not listed as a separate discipline, but falls under the rubric of geometry, which is third on the list, after writing and drawing.[169] One was a point; two (a line), two points; and three (a plane), three points. Inasmuch as a minimum of four points are needed to construct a solid, four *contained* the first three numbers and was the geometrical number for "body," if one understands "body" as the Stoics did, which is to say, as anything material – encompassing, for them, all that could, strictly speaking, be said to exist. Everything there is in other words.

Pebblewise, four expanded into its constituents is . (one pebble), and . . (two pebbles), and . . . (three pebbles), and . . . . (four pebbles). Plato understood that ten was perfect, says Vitruvius, because these *singulara res*, individual units (*monades* in Greek), add up to or "complete" ten. Indeed, according to Vitruvius, units as units only exist as parts or fragments (*particulae*) of ten. He is, once again, probably thinking of fingers – useless except as attached to, and "completing," hands which in turn, with one or more fingers missing, are no longer perfect. The figure which demonstrates the point about ten is the *tetractys*, ten pebbles arrayed in triangular formation, like this:

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    *   *
  *   *   *
*   *   *   *
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Thus, says Pythagoras in an essay by Lucian: "what you think is four is ten, a perfect triangle and our oath."[170] The "oath" in question was the *tetractys* itself, by which the

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[168] Gros 1989a, p. 17; Pollitt 1974, pp. 18-20 and 413–414; Raven 1951.
[169] Vitruvius 1.1.4.
[170] Lucian *Vitarum auctio* 4. Lucian was a literary figure of the mid second century A.D. See also Martianus Capella *De nuptiis Philologiae et Mercurii* 2.96: now because it is complete and squared . . . the

Pythagoreans swore as the "fount and root of everflowing nature."[171] Spatially deployed in a "perfect triangle," ten was a tripartite whole, like Gaul, the world, the soul – and architecture. The sum or "fulfilment" of four, ten – like four, only more so – was also the number of cosmic order.[172] It was, again according to Lucian, "the principle of health," insofar as health depended in ancient medicine on the proper balance of the four elements (earth, air, fire and water) in the body.[173] As the tetrad, it was the ultimate source of all possible musical harmonies in ancient musical theory.[174] The Pythagoreans also called ten *mnémé*, memory.[175]

One of the best-known texts on the magnitude and power of ten survives in Iamblichus' third century A.D. report on a short work *On the Pythagorean Numbers* by Speusippus, Plato's nephew and successor at the Academy in fourth-century B.C. Athens. Iamblichus writes,

. . . *he* (Speusippus) *devotes the other half of the book to the decad, showing it to be the most natural and most initiative of realities, inasmuch as it is in itself (and not because we have made it so or by chance) an organizing idea of cosmic events, being the foundation stone and lying before God the Creator of the universe as a pattern complete in all respects. He speaks about it in this way.*

"*Ten is a perfect number* (teleios) *and it is both right and according to nature that*

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parts of the quarternary fill up the power of the decad. *Nam quaternarius suis suis partibus complet decadis ipsius potestatem idoque perfectus est et habetur quadratus.* Cf. Lücke 1991, p. 81.

[171] Sextus Empiricus *Adversus mathematicos* 7.95. Sextus Empiricus, to whom we owe much of our understanding of ancient Stoicism, was a skeptic philosopher of end of the second century A.D.

[172] The Pythagoreans understood both 4 and 10 to be the keys of the order of nature (Iamblichus *Theologoumena arithmetica* 22.60).

[173] Lucian *De lapsu in salutando* 5.

[174] See West 1992, pp. 233-236.

[175] Philolaus, as cited Kessissoglu 1993, p. 101, n. 218.

*we Greeks and all men arrive at this number in all kinds of ways when we count.*"[176]

*De mensibus*, a work on the Roman calendar by John Lydus, a Byzantine antiquarian who wrote under Justinian in the sixth century A.D., contains two lesser-known passages on the perfection of ten, both based on earlier sources.[177] Ten, the agent both of individuation and of unity, encompasses all the "forms, calaculations, proportions, and harmonies of the other numbers;" the key, he writes citing both Parmenides and Philolaus, to the whole order of nature.[178] Later in the same work he begins his account of the Roman months (originally ten of them) with a similar encomium in which the decad, the "circle and limit of all the numbers," bounds the unlimited, holds all the numbers together, and is nature's special stamp on humans to whom, uniquely, it has given ten fingers.[179] And because the decad, as he puts it, "fills up" the yearly cycle of nature by causing the universe to revolve, ten is both the container and the content of time itself.

Throughout *De architectura*, Vitruvius is at all points concerned to demonstrate the necessary connection of his topic to *natura* – the cosmic totality Pythagoreans saw as ruled by ten. In chapter 4 of Book 1, for example, the choice of a healthy site for a city and its proper orientation entails understanding that all bodies are composed of four elements: the "principles the Greeks call *stoicheia*: heat, moisture, earth and air."[180] The same physics is

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[176] Iamblichus, *Theologumena arithmeticae* 82.12. (*Greek Mathematical Works* I, p. 77). Cf. Aristotle *Metaphysics* 986a8: "ten is thought to be perfect and to comprise the whole nature of number." See also the commentary of Alexander of Aphrodisias on this passage, as cited by Kessissoglu 1993, p. 102. Kessissoglu also links the perfection of ten to the ten books of *De architectura*.

[177] John Lydus *De mensibus* 1.15 and 3.4. The source for John Lydus' Pythagoreanism, evident throughout his work, is thought to have been a compendium of the first century A.D. See Maas 1992, pp. 58-61; Robbins 1921, pp. 97-112.

[178] John Lydus *De mensibus* 1.15: *Hê dekas . . . pasas tas ideas tôn allôn arithmôn kai logôn kai analogiôn kai symphôniôn periechousa.*

[179] John Lydus *De mensibus* 3.4: *Kyklos pantos arithmou estin hê dekas kai peras.*

[180] Vitruvius 1.4.5: *Namque e principiis, quae Graeci* stoicheia *appellant, ut omnia corpora sunt composita, id est calore et umore, terreno et aere . . .* The Byzantine *opusculum* (early fifth century A.D.)

repeatedly invoked in Book 2 to account for the proper choice of building materials.[181] The overriding point of the opening chapter of Book 3, which is the context of the paragraph on ten just cited, is to show that temples, especially, must be built following the same *ratio* nature follows in "building" a man's body.[182] Laying out the plan of a Roman theatre in Book 5 entails inscribing four equilateral triangles in a circle, "just as astrologers calculate the twelve celestial signs from the musical harmony of the stars."[183]

In Book 8, Vitruvius is not at all surprised by all the different kinds of water the earth contains: if the human body – composed mainly of earth – can contain juices as varied as blood, milk, urine, sweat and tears how much more variety is to be expected in the far greater body of the earth, of which the human body is but a small fragment.[184] Fully two thirds of Book 9, on the construction of clocks, is an account of ancient astronomy – the

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by Julian of Ascalon which deals with private construction in Palestine, and which is the only work on architecture, besides *De architectura* that has survived from antiquity, also draws heavily on the doctrine of the four elements. The first part of this two-part work, on workshops and dwelling houses, is structured by them: under fire, Julian deals with bath buildings and bakeries; under air, with balconies, windows, and the spaces between houses; under water, with canals, cisterns, latrines, sewers and gutters; under earth, with digging and planting. See Saliou 1994.

[181] Vitruvius 2.1.9: No kinds of material, nor bodies, nor things can come to be or be understood without the union of elements. . . *Namque nulla materiarum genera neque corpora neque res sine principiorum coetu nasci neque subici intellectui possunt. . .*

[182] Vitruvius 3.1.1: No temple can be coherently constructed unless it has symmetry and proportion: unless the way it is put together conforms exactly to the principle relating the parts of well shaped man. *Namque non potest aedis ulla sine symmetria atque proportione rationem habere compositionis, nisi ut ad hominis bene figurati membrorum habuerit exactam rationem.*

[183] Vitruvius 5.6.1: *quibus etiam in duodecim signorum caelestium astrologi ex musica convenientia astrorum ratiocinantur.* Fensterbusch (Vitruvius 1964) takes this qualification as an interpolation, and suppresses it in his Latin text. I have thus, exceptionally, followed the text of Harley manuscript here (Granger, Vitruvius 1931), being in full agreement with Gros 1994b, p. 59 who also retains the clause (see Introduction, n. 2, for an account of the Latin texts usually followed). The remark Vitruvius makes here is perfectly in keeping with the one he voices in Book 1, when writing of the coherence between all the different *disciplinae*: "Similarly there is common discourse between astrologers and musicians about the sympathy between the stars and musical harmonies – between fourths and fifths and quadrants and triangles. . ." *Similiter cum astrologis et musicis est disputatio communis de sympathia stellarum et symphoniarium, in quadratis et trigonis, diatessaron et diapente. . .* (1.1.16; cf. Gros 1994b, p. 64). The appeal in both cases is to Pythagorean principles.

[184] Vitruvius 8.3.26: *Cum haec tanta varietas sit disparibus rebus natura distributa, quod humanum corpus est ex aliqua parte terrenum, in eo autem multa genera sunt umorum, uti sanguinis, lactis, sudoris, urinae,*

order of the heavens which supplies the "numbers of time" as Plato put it in the Timaeus, a work which particularly fascinated Vitruvius' contemporaries.[185] In the opening chapter of Book 10, on mechanics, Vitruvius writes, "Now all machinery is brought forth from the nature of things and founded on the teaching and guidance of the revolution of the universe (*mundus*)."[186]

The necessary connection between architecture and nature – between architecture and universal order – is in part Pythagorean, but above all grounded in Stoicism. The Stoic system's coherence for the younger Cato, its fervent apologist in Cicero's *De finibus*, was as perfect and complete as that of the natural order it accounted for.[187] Indeed, Cato intimates, it is – as a system – even *more* coherent than the natural order:

*Nothing is more finished, more nicely ordered, than nature; but what has nature, what have works made by hand to show that is so well constructed, so firmly jointed and welded into one* (as the Stoic philosophy)*? Where do you find a conclusion inconsistent with its premise, or a discrepancy between an earlier and a later statement? Where is lacking such close interconnection of the parts that, if you alter a single letter the whole thing falls apart. Though indeed there is nothing that it would be possible to alter.*[188]

Stoicism and Pythagoreanism both belonged to what Varro called "natural theology" in the *Antiquitates rerum divinarum*, his now lost work on Roman religion whose

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*lacrimarum ergo si in parva particula terreni tanta discrepantia invenitur saporum, non est mirandum si tanta in magnitudine terrae innumerabiles sucorum reperientur varietates . . .*

[185] *Timaeus* 38c. Griffin 1994, p. 709.

[186] Vitruvius 10.1.4: *Omnis autem est machinatio rerum natura procreata ac praeceptrice et magistra mundi versatione instituta.*

[187] See Striker 1991, pp. 2-13.

[188] Cicero *De finibus* 3.74. Cf. Long 1971, p. 103. For a general account of stoicism, see Long 1986, pp. 107-209.

essentials St. Augustine relates in the *City of God*.[189] Natural theology was the second of the three parts of the *ratio* – theology as a whole – whereby the gods are "explained."[190] The first "mythical" part was poetic and "particularly suited to the theatre," the third belonged to the city, and the second, the special domain of philosophers, concerned the world (*mundus* – universe), "the most important of all existing things."[191] For, as the stoic Balbus explains in Cicero's *De natura deorum*,

*There is nothing besides the world* (mundus) *that has nothing wanting, but is fully equipped and complete and perfect* (perfectus) *in all its numbers and parts. For as Chrysippus put it, . . . man himself came into existence for the purpose of contemplating and imitating the world; he is by no means perfect, but he is a small fragment of that which is perfect. The world . . . since it embraces all things and since nothing exists which is not within it, is entirely perfect.*[192]

The perfection of ten is, mathematically, the perfection of the perfect Stoic world and of *De architectura* as well. At the level of *fabrica*, just as the stoic sage was to live "according to nature" so, in effect, says Vitruvius in Book 2 where stoic physics governs

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[189] Mainly in books 4, 6 and 8. All the surviving fragments of Varro's *Antiquitates rerum divinarum* have been collected in Cardauns 1976. Cf. Rawson 1985, pp. 299-300.

[190] Augustine *City of God* 6.5: (*theologia*) *est rationis quae de diis explicatur.* On Varro's theology, see Boyancé 1955 and 1975, Cardauns 1976 and 1978 (*ANRW*, with bibliography), Lieberg 1973, and Pépin 1956, who understands the three parts of Varro's theology as entirely interdependent, with the civil acting as the link between the two others.

[191] Augustine *City of God* 6.5. On natural theology, Augustine cites Varro directly: *The second kind (natural theology) which I have pointed out is the one on which the philosophers have left a number of works, in which they discuss who the gods are: whether they came into being at a certain time, or have always existed: whether they derive their being from fire (the belief of Heraclitus) or from numbers (as Pythagoras thought) or from atoms (as Epicurus alleges). And there are other like questions all of which men's ears can more readily tolerate in the lecture room* (in schola) *than outside in the market place* (extra in foro).

[192] Cicero *De natura deorum* 2.37-39.

the choice of materials, the architect must build according to nature.[193] But if he is to have *auctoritas*, he will understand *architectura* as a *ratio* which accounts for the world in the same way that "natural theology" does, as a perfectly coherent whole. The ten scrolls which deploy it make *architectura* a *disciplina* as perfect as the decad was for Speusippus: the "organizing idea of cosmic events," the "most natural and most initiative of realities."[194] A reality – being "initiative" – that allowed for "increase."

Indeed, Vitruvius brooks no delay in "increasing" ten in the paragraphs that immediately follow his discussion of its perfection. For all its cosmic force, ten was not the only perfect or complete number. Six, according to the mathematicians (as opposed to the "ancients" who favoured ten), was also perfect, although the mathematical reasons for its perfection seem to have escaped Vitruvius.[195] He understands the *corporeal* justification for its completeness perfectly, however.

*Also because the foot is one sixth a man's height (and so six times the length of a foot defines the height of a body) they call six perfect, observing that a cubit consists of six*

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[193] Cicero *De finibus* 3.73 (Cato speaking): The same honour (i.e. the title of "virtue") is also bestowed with good reason upon natural philosophy, because he who is to live in accordance with nature must take his cue from the entire world and its good government (*ab omni mundo atque ab eius procuratione*). Long (1996, pp. 202-223) relates living according to nature – the "harmonics of stoic virtue" – to number (four in particular) and to ancient musical theory. See also Striker 1991, pp. 2-13.

[194] Above n. 176: *Physikōtatēn . . . kai telestikōtatēn tōn ontōn*, in Greek. *Telestikos* means "fit for bringing to fulfilment." (*LSJ*, s.v.).

[195] Vitruvius 3.1.6: Mathematicians dispute this, saying the number six is perfect because according to their calculations, its divisions add up to this number: one is a sixth of six, two is a third of it, three is a half, four. . . is two thirds, five . . . is five sixths, six is perfect. *Mathematici vero contra disputantes ea re perfectum dixerunt esse numerum sex dicitur quod is numerus habet partitiones eorum rationibus sex numero convenientes: sic sextantum unum, trientem duo, semissem tria, bessem. . . quattuor, quintarium . . . sex.* The reason six was perfect was because it was the sum of its factors: 1+2+3=6; 1x2x3=6. See Theon of Smyrna (ed. Hiller 45.9–46.19; as cited *Greek Mathematical Works I*, pp.85-86) who also discusses three and twenty-eight, and Augustine *City of God* 11.30. Cf. Gros, Vitruvius 3 (1990), pp. 73-74. Vitruvius seems to think that the "divisions" (*partitiones*) of six mean not only one, two and three, but also four and five. 1+2+3+4+5 do *not* add up to six and this, no doubt, is why he adds the qualification "according to their calculations," deferring to an authority he has not quite understood.

*palms and of twenty-four fingers.*[196]

Greek currency was based on six, with six *obols* making a *drachma*. Romans, however, preferred the "ancient" number ten, says Vitruvius, and made the *denarius* ("tenner"), consisting of ten *asses*, the basis of their currency.[197] In time, however (in 141 B.C., actually, when Roman bronze coinage was devalued) the *denarius*, while remaining in name a "tenner," was valued at sixteen *asses*.[198] Vitruvius claims that this was because the Romans

*recognized that both numbers are perfect, both six and ten, and joined both into one and made the supremely perfect number sixteen. They found the rationale for this in the foot. That is, if you subtract two palms from the cubit you are left with a foot of four palms, and a palm has four fingers. So a foot has sixteen fingers and a bronze denarius as many asses.*[199]

As already demonstrated ten, geometrically, is a triangular number – spatially, a tripartite whole. So is six:

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To add ten and six geometrically is to add two triangles and "complete" the square of four

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[196] Vitruvius 3.1.7: *Non minus etiam quod pes hominis altitudinis sextam habet partem, ita etiam ex eo quod perficitur pedem numero, sexies, corporis altitudinis terminatio, eum perfectum constituerunt, cubitumque adnimadverterunt ex sex palmis constare digitisque XXIIII.*

[197] Varro (*De lingua latina* 5.171-173) explains that *denarii*, also called a *decussis* for ten asses (*decem asses*) – the same word Vitruvius uses for "decad" (3.1.5) – are so called from *deni aeris* "ten *asses* of copper."

[198] Crawford, *OCD*, s.v. coinage, Roman.

[199] Vitruvius 3.1.8: *Postea autem quam animadverterunt utrosque numeros esse perfectos et sex et decem, utrosque in unum coiecerunt et fecerunt perfectissimum decusis sexis. Huis autem rei auctorem invenerunt pedem: e cubito enim cum dempti sunt palmi duo, relinquitur pes quattuor palmorum, palmus autem habet quattuor digitos. Ita efficitur uti habeat pes sedecim digitos et totidem asses aeracius denarius.*

(sixteen): a double tetractys, as it were, with the four pebbles on the square's diagonal being the base of both sixes.[200]

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"Squaring" and squares were, supremely, at once the agents and evidence of Roman order, as will be discussed further in Chapter 3 of this study.

If ten can be said to belong to what Varro called "natural theology," sixteen would have belonged to what he called the theology of the city. The Etruscans, from whom the Romans had learned the art of divination "in its entirety" – an art maintained (in spite of the logical shortcomings intellectuals saw in it) because of its great service to the commonwealth – divided the sky into sixteen parts for the purposes of divination, a number obtained by doubling the four cardinal points, and then doubling them again: four squared, in other words.[201] Vitruvius does not say this, but then he did not have to. In a context where interpretation of prodigies and portents was a daily occurrence, this kind of thing would have been common knowledge – if not among the general populace, then certainly among Vitruvius' intended readership who had read their Varro.

There is another thing Vitruvius does not mention and did not need to. This is

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[200] Joseph Rykwert first pointed this out to me and also referred me to March 1996, who discusses the matter on p. 56 in connection with Alberti and the mathematical works of Nicomachus of Gerasa, who flourished ca. 100 A.D. (*OCD*), and whose *Introduction to Arithemetic*, a compendium of Pythagorean mathematcial lore, shows how two triangular numbers added together make a square number. See also March 1996, p. 63, n. 7 for the connection with Vitruvius 3.1.8.

[201] Cicero *De divinatione* 1.3 (divination from the Etruscans); 2.70 (divination as a service to the state); *De divinatione* 2.42, and Pliny *Natural History* 2.138 (sixteen-part sky). Cf. Vitruvius 1.4.9. It is more than

nature of the new Roman coinage of which both he (as the recipient of *commoda*, stipends, from Augustus whose generosity he gratefully acknowledges in his first preface) and his patron (who issued many of the new coins of which *commoda* were constituted) would have had common, first hand knowledge. "Thus because I was bound to you by this benefice, so that to the end of my life I need have no fear of scarcity, I began to write this work for you."[202]

Fergus Millar has pointed out that "from 31 B.C. onwards almost every single issue of official Roman coinage, in gold, in silver and bronze portrays Octavian-Augustus."[203] This was revolutionary. Until the last year of Julius Caesar's life (44 B.C.) no Roman coin appears ever to have portrayed a living Roman and then – until 31 – relatively rarely.[204] Sixteen-*as denarii* were preponderant among the coins in circulation, whose authority as legal tender throughout the whole known world was, now, guaranteed by the ruler's head on the obverse.[205] It is unlikely that the numerology Vitruvius invokes shaped the denominations of Roman coinage in quite the straightforward and direct way he claims, but recording facts was not, in any event, his primary aim.[206] The appeal was rhetorical, to assent underwritten by universal consensus as to worth of Roman (now almost exclusively

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likely that Varro divided his *Antiquitates rerum divinarum* into sixteen books for precisely this reason. See also Rykwert 1988, Thulin 1906-1909 and Weinstock 1946.

[202] Vitruvius 1.pref.3: *Cum ergo eo beneficio essem obligatus, ut ad exitum vitae non haberem inopiae timorem, haec tibi scribere coepi.* Crook (1996, p. 142) has called this the frankest known statement of the *quid pro quo* of Augustan patronage.

[203] Millar 1984, p. 44. Cf. Levick 1982, Pollini 1990, Wallace-Hadrill 1986.

[204] Wallace-Hadrill 1986, p. 70. Until that time the "head," if there was one, was usually that of a god.

[205] Crawford, *OCD*, s.v. coinage, Roman. Kienast 1982, p. 416: "The silver currency, based on the *denarius*, now (i.e. in the reign of Augustus) had widespread uniformity." Millar 1984, p. 44: "The story of the non-Roman coinage of the Empire is if anything more dramatic . . . between 31 B.C. and A.D. 14 portrayals of Augustus are known from 189 different places."

[206] Gros, Vitruvius 3 (1990), pp. 75-77, reveals more than one factual error. But see my discussion of caryatids (pp. 37-39, above).

Augustan) currency, and by the theology, both civil and natural, that "explained" it.[207]

The same theology explains Roman feet. Coins gave known numerical measure to value; feet to distance and size.[208]

Arrian, writing in the second century A.D., tells the following story about Alexander the Great's arrival in India.

*. . . some Indian sophists, the story goes, were found by Alexander in the open air in a meadow, where they used to have their disputations; when they saw Alexander and his army, they did nothing more than beat with their feet on the ground they stood on. When Alexander enquired through interpreters what their action meant, they replied: "King Alexander, each man possesses no more of this earth than the patch we stand on.*[209]

The futility of conquest. But what if the transitory relation between feet and ground were a quantifiable matter of known and lasting record? Not the feet of any single mortal, but the immortal, theologically correct feet of an entire nation?[210]

Among Alexander's followers were writers to record for posterity his every heroic move.[211] Romans like Caesar and Augustus who "commented" their own achievements, then went on to measure them – presumably in sixteen-finger Roman feet.[212]

According to Vitruvius, one of the three "ideas" or forms of a building's

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[207] Varro called theology the *ratio* whereby the gods are *explicata* (Augustine *City of God* 6.5)
[208] The relation between monetary units and units of measurement insisted upon by Vitruvius at 3.1.7 was an ancient one. On this relation see Dörpfeld 1887; cf. Gros, Vitruvius 3 (1990), p. 76. A short work on metrology by L. Volusius Maecianus, written in the second century A.D., dealt with *res pecunariae* in terms both of coinage and of measurement. See Nicolet, Introduction, in Nicolet and Gros eds., 1996, p. 4.
[209] Arrian *Anabasis of Alexander* 7.1.5-6. Cf. Purcell 1990.
[210] Footprints, divine and human, carved into the pavements of many Graeco-Roman monuments left lasting visible trace of a supplicant's fleeting encounter with divinity (Dunbabin 1990).
[211] Ptolemy and Aristobulus, whose writings Arrian claims were his sources (*Anabasis* 1.1.1).
[212] On Caesar's commentaries, above pp. 29-32. Augustus's testament, the *Res gestae* – "The Achievements of the Divine Augustus" – could also be considered a *commentarius*. Written specifically for

arrangement is its *ichnographia*, the Greek word he uses for what is usually understood as its ground plan.[213] *Ichnographia*, literally the "drawing of a footstep," is "the properly related use of compass and ruler that renders how figures are marked out on the grounds of areas."[214] Varro corroborates, if a little cryptically. "The base for standing is a foot (*pes*), from which in buildings the ground is called a great foot (*pes magnus*)," he writes in *De lingua latina*, in a context which invokes etymological evidence for a connection between *pes* and *pecunia* (money).[215]

The paragraph on ten and the ones on supremely perfect sixteen-part Roman measurement, both monetary and linear, appear in the chapter that introduces the two books (3 and 4) Vitruvius devotes to temples. Among built works of architecture, temples above all at once propitiated and testified to the correct relation with the gods understood to guarantee Roman supremacy.[216] Temple-building and temple restoration, which Augustus saw as particularly important and took special pains to record in some detail,[217] was a major

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public inscription (Suetonius *Divus Augustus* 101.1-4), its gaunt style makes Caesar look verbose by comparison.

[213] Vitruvius 1.2.2: The forms of arrangement, called "ideas" in Greek, are these: *ichnographia, orthographia, scaenographia. Species dispositionis, quae graece dicuntur* ideai, *sunt hae: ichnographia, orthographia, scaenographia. Orthographia* is usually understood as the elevation of a building. *Scaenographia*, a controversial term, is frequently taken to be perspective representation, although this is far from certain. For a review of the various interpretations of *scaenographia*, see Fleury, Vitruvius 1 (1990), pp. 110-112.

[214] *Ichnos*: "track, footstep;" *graphia*: "drawing, delineation" (*LSJ*, s.v.) Vitruvius 1.2.2: *Ichnographia est circini regulaeque modice continens usus e qua capiuntur formarum in solis arearum descriptiones.* In the order of activities implicit here, the tracing on the ground precedes rendering of the figure in the drawing of a plan, rather than (as today) vice versa.

[215] Varro *De lingua latina* 5.95. G.P.Goold, the Loeb translator, has noted that there is no etymological relation between *pes* and *pecunia*. The etymology may be erroneous, but this in no way obviates the perceived connection, nor – more importantly (below, pp. 96-98) – the perceived necessity for grounding it linguistically.

[216] Below, Chapter 3, pp. 213-231.

[217] Augustus *Res gestae* 19-21; on which see especially Elsner 1996. Cf. Suetonius *Divus Augustus* 29.1-3, Gros 1976a and below, Chapter 3 pp. 217-227.

aspect of the world-wide building boom that followed his seizure of command.[218] It would be difficult to prove the precise extent of the role played by Roman foot in imperial building programs in the provinces, although there are scholars who suggest it was considerable.[219] But once again, the theology implicit in the Roman foot is the same as that implicit in the buildings (temples in particular, and especially those dedicated to the imperial cult) whose ubiquitous "footprints" marked the grounds of areas all over the world they thus helped to make Roman. Theology for the Romans included the theology of victory.[220]

**Unified Bodies**

Vitruvius assumes a connection between money and linear measurement, and stresses their common relation to body measurement. Connected by the same "reckoning, account, calculation, computation," money and measurement have the same *ratio*, a word Vitruvius does not actually use in this context – surprisingly for someone who uses it virtually everywhere else.[221] *De architectura*, in which the noun appears more often than any other (a total of 331 times) is shot through with *ratio*.[222]

*Ratio* is not limited to numerical calculation of course, neither in Vitruvius nor in

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[218] Below, Chapter 4 pp. 305-333.

[219] See Aupert 1985, pp. 256-257; Knell 1984 pp. 35-37. Aupert claims that the small tholos of Roma and Augustus, one of the earliest shrines devoted to the imperial cult, erected in about 25 B.C. directly in front of Parthenon on the Athenian acropolis, has a diameter of precisely 25 Roman feet. Knell's point is that the dactylic Roman foot – a *fixed* measurement – replaces (both in Vitruvius and in Roman building) the module, which is variable.

[220] On the theology of victory, see Fears 1981 (with bibliography): " 'Theology of Victory,' with its implications, is not a modern scholarly conception forced upon the ancient sources; rather it is a notion which, properly understood within the religious mentality of antiquity, corresponds to and correctly describes the role of Victory as religio-political phenomenon at Rome" (p. 739, n. 2). See also Gagé 1933; Picard 1957.

general. Nor are numbers excluded by the qualitative relations that are the province of speculative *ratio* (reason), as Pythagoreanism and Vitruvius' own adaptation of it attest.[223] Indeed, if *architectura* depends on *ordinatio* "which is constituted from quantity, called *posotês* in Greek,"[224] it also depends (among other things) on arrangement, "the suitable assembly of things and their fitting execution in works that are put together with quality (*cum qualitate*)."[225]

At the time Vitruvius wrote, *qualitas* was a fairly new word in Latin. It first appears in Cicero's *Academica* as a neologism coined by Varro to provide a Latin equivalent for the Greek *poiotês*: how things are put together or made (*poiô*, I make), which determines qualitatively what they are *like*, and indeed that they be like anything at all, the assumption being that existence excludes the possibility of formlessness.[226] As Varro put it in Cicero's account, when active force combines with passive matter "they called (the product) 'body,' (*corpus*) and, if I may use the term, 'quality.'"[227] Further,

*the force that we have called "quality" . . . is made into the things which they term "qualified," out of which . . . one world, a continuum united with all its parts, has been produced, outside of which there is no portion of matter and no body* (corpus), *while all the things that are in the world are part of it, held together by a sentient being, in which*

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[221] Lewis and Short (s.v. *ratio*) gives these as the primary English equivalents. *Ratio* is derived from the verb *reor* (past participle *ratus*): "reckon, calculate" and, by extension, "believe, think, imagine, judge."
[222] Callebat et al. 1984. *Locus*, used 295 times, is the next most frequent.
[223] The best general account of Pythagoreanism remains Burkert 1972.
[224] Vitruvius 1.2.2 *Haec componitur ex quantitate, quae graece* posotês *dicitur.*
[225] Vitruvius 1.2.2: *Dispositio autem est rerum apta conlocatio elegansque compositionibus effectus operis cum qualitate.*
[226] Cicero *Academica* 1.25 (Varro speaking): "I have therefore given the name of "qualities" to the things the Greeks call *poiotêtes*" (cf. Cicero *De natura deorum* 2.94). The discussion in the *Academica* appears in the context of an exposé of the physics of Antiochus of Ascalon, with whom both Cicero and Varro had studied. His thinking, technically "academic," was heavily infused with Pythagoreanism and was, as Cicero

*perfect reason* (ratio) *is immanent and immutable . . . and this force they say is the soul of the world, and is also perfect intelligence and wisdom . . .* [228]

*Ratio*, which Cicero here has Varro equate with *qualitas*, was the immanent "soul of the world" that brought bodies into being and ensured their continued existence. It would not be very difficult to see in the action of *ratio*, thus expressed, a cosmic parallel with the action of a Roman *auctor* who, in the human sphere, brought something into being and guaranteed its continued existence.[229] Elsewhere in Cicero this world-soul is the providential *divina mens* or divine mind that organizes the universe and presides over its destiny.[230] So too in Vitruvius, where *divina mens* is not only the mind that presides over the cosmic phenomena of Book 9,[231] but also the one that, in the first chapter of Book 6, has placed the Roman people in the ideal position at the centre to "seize command of the world."[232] Indeed, *De architectura* begins by invoking a divine mind. "When your divine mind and power, Imperator Caesar, were seizing command of the world. . ." wrote Vitruvius, using for Augustus in the very first words of the treatise terms that are virtually interchangeable with those he uses later in the passage just cited when writing of the Roman people as a whole.[233] The *divina mens* that ruled the world had its analogue in a man's

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observed, virtually identical to Stoicism (*Academica* 2.132). On Antiochus, see especially Barnes 1989 and Long 1986, pp. 222-229.

[227] Cicero, *Academica* 1.24.

[228] Cicero, *Academica* 1.28.

[229] Above, pp. 41-42.

[230] The term *divina mens* is a favorite with Cicero, who uses it 23 times in his philosophical works (Pease, ed. 1920, p. 102; cf. Soubiran, Vitruvius 9 [1969], p. 70).

[231] Vitruvius 8.pref.3; 9.1.1; 9.5.4.

[232] Vitruvius 6.1.11: *Ita divina mens civitatem populi Romani egregia temperataque regione conlocavit, uti orbis terrarum imperii potiretur.*

[233] Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum. . .* Cicero had referred previously to Pompey, as well as to Augustus himself (*Pro Milone* 21 and *Philippics* 3.3, respectively) as being endowed with a *divina quadam mente*: "a certain" or "something like a" divine mind. Cf. Fleury, Vitruvius 1, 1990, p. 51, and Morgan 1909, pp. 152-153. At Vitruvius 9.6.3, the ability of certain learned men to predict the weather makes them *seem* to have a divine mind (*ut etiam videantur*

body which was ruled by what the Stoics called its *hêgemonikon*, its soul or "ruling principle," which was located his chest.[234]

Bodies were wholes whose wholeness as qualified matter was, above all, a question of coherence.[235] This was true both of the body of the world and of all the bodies in it. All bodies – as bodies – cohered through *ratio*, but not all in precisely the same way. The Stoics, whose definitions eventually made their way into the 6th-century A.D. compendium of law known as the *Digest* of Justinian, distinguished three different kinds of bodies, according to the way they held together.[236] Writing in Greek, Sextus Empiricus, an important 3rd-century A.D. source on Stoic thought, explains:

*Of bodies, some are unified* (henômena), *some made up of things joined together* (synaptomenôn), *some of separate things* (diestôtôn). *Unified bodies are ruled by a single bond* (hexis), *such as plants and animals; those made of things that are joined are put together of adjacent elements which tend to combine in a single principal entity such as chains and buildings and ships; those formed of separate things, like armies, flocks and choruses, are the sum of parts which are disjoined, and isolated and which exist by themselves.*[237]

That the *kosmos* is a unified body of the first kind is proven, says Sextus of the Stoics, by "sympathies" (*sympatheiai* – between the moon and the tides, for instance). The

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*divina mente*). The foregoing divine minds of men are all qualified or mitigated in some way. That of Augustus at Vitruvius 1.pref.1 is not.

[234] Chrysippus, *SVF* 2.911 (cf. Lapidge 1978, pp. 168-169); Cicero *De natura deorum* 2.29 (*hêgemonikon* in men is *mens*). See also Long 1986, pp. 171-172.

[235] Long 1996, p.228: the Stoics also understood bodies as qualified matter.

[236] These definitions evolved from the related Stoic classification of mixtures, also tripartite, initially formulated by Crysippus in the third century B.C. and given its fullest surviving account by Alexander of Aphrodisias in his *De mixtione* of the late second century A.D. See Todd 1976.

[237] Sextus Empiricus *Adversus mathematicos* 9.78-79 (= SVF II 1013; = *Adversus physicos* 1.78-80 in the Loeb edition). See Long 1996, ch. 10, especially pp. 229 ff.

elements that form jointed bodies or those made up of separate parts do not "sympathize" with one another, as they do in a unified body, for "when the finger is cut, the whole body shares in its condition." Obviously, the paradigm of unified bodies here is human.

Seneca's late 1st-century A.D. account in Latin is similar. Some *corpora*, like man, are *continua*, joined in uninterrupted succession, he writes. Others, such as ships and houses are *composita*, put together; and others, like a an army, a people or the senate, are made up of *membra separata*, separate members, which cohere through law or office (*iure aut officio cohaerent*). No good comes of things that are discontinuous or disparate, Seneca observes.[238]

For Pomponius, the Roman lawyer of the second century A.D. many of whose writings, including his definition of bodies, were incorporated into Justinian's *Digest*, the first kind of body is contained by a "single spirit" (*uno spiritu*) and includes not only men but also building materials – timbers, stones and "similar things." The second kind depends on connections of physical proximity (*ex contingentibus*) to establish coherence between many things and includes buildings, ships, and armaments. The third kind is constituted when many separate bodies "are not dispersed, but are subordinated under a single name such as a people, a legion, a flock."[239]

In all three cases, the order of coherence progresses from most to least unified. The jointed body – less coherent than the unit (animal, plant, man, timber, stone), but more so than the body assembled from spatially disparate units (chorus, people, legion, senate, army, flock) – falls halfway between the two. On the one hand, the jointed, specifically *built* body joins together in ships, buildings and armaments the inanimate units of timbers and stones.

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[238] Seneca *Epistulae* 102.6-7.

On the other, in the final category, beings, usually men – separate *living* "units" – are subordinated, in the Latin versions, to a name, or cohere through office (*officium*) or by law. It is, moreover, the built body which appears in the order of definition as the connective middle term, between units and the assemblies in which units retain their own identities, to make the entire notion of body a single, tripartite whole.

Vitruvius himself neither makes, nor overtly observes, nor even draws attention to such distinctions. Although, as already noted, Stoic themes inform much of *De architectura*, Vitruvius was no doctrinaire Stoic, and evinces no interest in dogmatic hairsplitting.[240] Quite the contrary. Marked by a propensity for seeing all schools of thought as related or at least generically similar in purpose, his tendency in these matters – fairly typically for the time – was to eclecticism.[241] Lucretius, whose *De rerum natura* vindicated Epicureanism, is named along with Varro and Cicero as a much-admired source.[242] Yet the views of Epicureans, who saw the world as inherently without purpose – a cosmic accident, produced by the random collision of free-floating atoms – were

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[239] Pomponius *Digest* 41.3.30.

[240] Others who have detected stoic influences in *De architectura* include Gros 1989a, Romano 1987, Rykwert 1981and Watzinger 1909.

[241] Similarities between philosophies: 2.2.1-2. In 6.pref. the Socratic philosopher, Aristippus, the peripatetic Theophrastus and Epicurus are all held to have said essentially the same thing (that learning is worth more than money): *Haec ita etiam plures philosophi dixerunt* (6.pref.3). At 7.pref.10 he expresses gratitude to the many sources who, each in its own way, have nourished his own project. Cf. Frézouls 1966, p. 449; Pollitt 1974, p. 68. On eclecticism in general see Dillon and Long 1988, a collection of essays which rescues the thinkers active between the first century B.C. and the second century A.D., "when it was apparently impossible to be a 'pure-blooded' follower of any of the traditional schools" (p. 1), from the disparagement traditionally attached to the label "eclectic" by historians of philosophy such as Eduard Zeller.

[242] Vitruvius 9.pref.17. On the influence of Lucretius see Ferguson 1990, p. 2270; Merrill 1904; Pelatti 1921; Schrijvers 1974. The key chapter here is Book 2 chapter 1, on the origins of building, where the anthropology closely parallels that of Lucretius (5.925 ff). Cicero's introduction to *De inventione* contains a similar, rather briefer and less poetic account (below, Chapter 2, p. 170). On the other hand Oder (1899, p. 367 n. 187, referring to Seneca *Epistulae* 90.6) saw the same, allegedly Epicurean, anthropology as originating with Posidonius who was a Stoic. Peripatetic influences have been noted by Tomei 1943; cf. Pollitt 1974, p. 67. See also Rykwert 1981, pp. 110-111.

anathema to Stoics.[243] For Stoics, the self-evident beauty and order of the world cried out against such opinions.[244] "If the clash of atoms can produce a world," argues Balbus, Cicero's spokesman for Stoicism in *De natura deorum*, "why can it not produce a colonnade, a temple, a house a city, which are less and indeed much less difficult things to make?"[245] Balbus evokes the self-evident purposefulness of the built work and makes it the metaphor for universal order.[246] Conversely, Vitruvius understood architecture in terms of a purposeful universe, a world-body shot through with same cohesive *ratio* that made, for Cato, the Stoic system which reflected it "so well constructed, so firmly jointed and welded into one."[247] In this, for all its eclecticism, *De architectura* belongs to Stoicism, and shares in the same unquestioning assumption of the cardinal value of coherence that underwrites each and every aspect of it including, especially, its account of bodies. Being above all a *value*, coherence is not the same as consistency, uniformity or, for that matter, even accuracy.

That coherence should be a value in building is obvious: buildings are expected not to fall apart; the materials used to build them are expected to be solid and durable. But coherence, for Vitruvius, is also a value in *architectura*, which, he is careful to point out, is not the same thing as building.[248] *Architectura* is a form of knowledge, equivalent for

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[243] For a summary of Epicureanism, see Long 1986, ch. 2.
[244] See for example Cicero *De natura deorum* 1.111-117; 2.46-49.
[245] Cicero *De natura deorum* 2.94.
[246] I have speculated elsewhere that whole notion of universal order (*kosmos*) is architecturally grounded (McEwen 1993).
[247] Cicero *De finibus* 3.74: *tam compositum tamque compactum et coagmentatum*.
[248] Vitruvius 2.1.8: For this book (Book 2) does not disclose whence architecture is born, but how the origins of building were established. *Namque hic liber non profitetur, unde architectura nascatur, sed unde origines aedificiorum sunt insitutae.*

Vitruvius to the "knowledge of the architect."[249] It is the coherence of this knowledge, the coherence of *architectura*, that makes it a body, which, like all bodies, coheres through *rationes* – the same that Cicero claimed in *De oratore* were the prerequisite for the formation of any *ars* (geometry, oratory, grammar etc.) in order to cement fragmentary knowledge, formerly "diffuse and all in pieces," and bind it together.[250]

In this (once again, following Sextus Empiricus' exegesis of the Stoic view) *architectura* bears all the marks of truth.

*It is held by some, particularly the Stoics, that truth* (alêtheia) *differs from the true* (to alêthes) *in three ways: in substance, in composition and in power. In substance* (ousiai) *since truth is corporeal but the true is incorporeal . . . for the true is a judgment and the judgment is an expression* (lekton), *and* lekta *are incorporeal . . . . They differ in composition since the true is regarded as uniform and simple in its nature. . . . whereas truth, consisting in knowledge, is . . . a collection of several elements. Thus, just as a people* (dêmos) *is . . . a collection composed of many citizens, so truth corresponds to a people and the true to the individual citizen. And they differ from one another in power* (dynamei), *since the true does not altogether depend on knowledge, (the fool, the infant and the madman at times say something true . . . ), whereas truth is considered to involve*

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[249] Compare Vitruvius 1.1.1: The knowledge of the architect is furnished with many disciplines and various kinds of learning. *Architecti est scientia pluribus disciplinis et variis eruditionibus ornata* and 2.1.8: In order to write the body of architecture, I decided to set out in the first scroll with what disciplines and kinds of learning it should be furnished . . . . *Cum corpus architecturae scriberem, primo volumine putavi, quibus eruditionibus et disciplinis esset ornata* . . . . Since he qualifies the "knowledge of the architect" and the "body of architecture," in precisely the same terms, Vitruvius must have considered them equivalent.
[250] Cicero *De oratore* 1.188: *quae rem dissolutam divulsamque conglutinaret, et ratione quadam constringeret.* Compare Vitruvius 4.pref. Cf. Gros 1989a, p. 15; Novara 1983, pp. 287-290. *De oratore* was one of Vitruvius' much-admired sources (9.pref.17).

*knowledge.*[251]

Everything that properly speaking can be said to exist (*ousia*) was corporeal for the Stoics. So too *alêtheia*, truth, which as well as being a quality of knowledge was also to a certain extent reality itself.[252] The true, a statement or expression, was what a verbal or written assertion signified. Not the object of reference, but what was *said* – a quasi-real incorporeal which the Stoics called a *lekton*, and which was either true or false. *Lekta*, being incorporeal did not really exist but were thought, rather, to *sub*sist.[253] Corporeal truth, on the other hand, could contain falsehoods, for truth was a "disposition," was "a collection (*athroisma*) of many elements."[254] Sextus explains that when a doctor says something false for the good of his patient, or a general relays a false message in order to encourage his men, truth, a corporeal quality, persists and is indeed enhanced. "The sage (*ho sophos*) never speaks falsely," he elaborates, "even if he says what is false, because he does not utter it from an evil but from a humane (*asteios* – literally "town-bred") disposition."[255] The true, as such, had no intrinsic value in the Stoic scheme of things. Truth (like health, victory and viable cities) did. Since it could contain "falsehoods," uttered in keeping with the mutability of circumstance, truth was neither uniform nor even necessarily consistent. What mattered was that it be coherent with its value.

Thus, *architectura* the knowledge of the architect, a tripartite *corpus* "furnished with many disciplines and various kinds of learning" – belongs to truth. *De architectura*

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[251] Sextus Empiricus *Adversus mathematicos* 7.38-42 (=SVF II 132; =*Adversus dogmaticos* 1.38-42 in the Loeb edition); cf. *Outlines of Pyrrhonism* 2.80-83. My discussion follows Long 1971, pp. 98-106.
[252] Long 1971, p. 98.
[253] The Stoics recognized four incorporeals: *lekta*, void, place and time. See Bréhier 1970. On *lekta*, Long 1971 and below, pp. 102-104.
[254] Sextus Empiricus *Adversus mathematicos* 7.40. Cf. Galen *De placitis Hippocratis et Platonis* 5.3.2, where Crysippus defines the human *logos* as "an *athroisma* of certain general notions and conceptions." Cf. Long 1971, p. 99.

contains many "falsehoods," as Vitruvius' modern critics have often pointed out. Stories of dubious factual authenticity such as the one about Caryatids discussed earlier are cases in point.[256] Similarly, Vitruvius' proportional schemata, so often at odds with available archaeological evidence, are also "falsehoods," or at best evidence of an irrelevant or unrealistic compulsion to rationalize architectural practice. But with Stoicism – especially the notion of corporeal truth – taken as cognitive background, the colour of such "falsehoods" alters considerably. The reader who, by an effort of the imagination, is willing to assume this background along with the analogical reasoning that sustains it, is moved less to prune *De architectura* of its blunders than to try to understand how, in any given context, such blunders might contribute to the perceived truth value of *architectura* as a whole.

If *architectura* is "truth" in the Stoic sense, or at least very much like it, what kind of body would it have been? *Architectura*, knowledge constituted as a compound, also has what Vitruvius calls an *officium*, which he claims to have dealt with in his first book.[257] So too the third kind of Stoic body – essentially political – which, according to Seneca, coheres through law or *officium*.

An *officium* could be many things but mainly had to do, simultaneously, with moral obligation and public office or position, for the former was largely determined by the latter.[258] Cicero's *De officiis* (usually translated *On Duties*) which was written in 43 B.C., the last year of Cicero's life, and which exerted considerable influence on Vitruvius,[259] is

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[255] Sextus Empiricus, *Adversus mathematicos* 7.42.
[256] Above, pp. 37-39.
[257] Vitruvius 2.pref.5; 2.18. See above.
[258] Cicero *De officiis* 1.53-55. See also Brunt 1975, p. 12
[259] Romano 1987, pp. 143-161 and 1994.

less about the duty prescribed by categorical imperatives than about the appropriate behaviour dictated by situation and circumstance. *Officium* for Cicero approximated the Greek *kathêkon*, a key term of Stoic ethics which meant, roughly, "fitting behaviour."[260] The fitness of "fitting behaviour" was also assessed by its coherence, as the 3rd-century A.D. doxographer Diogenes Laertius, explains:

*The term* kathêkon *is applied to that for which, when done, a reasonable defense can be adduced, such as coherence in the course of life* (akolouthon en tei zôei), *which indeed pervades the growth of plants and animals. For even in plants and animals, they (the Stoics) hold, you may discern fitness of behaviour* (kathêkonta).[261]

The body constituted when many separate bodies "are not dispersed, but are subordinated under a single name such as a people, a legion, a flock" (Pomponius),[262] coheres, according to Seneca, through law or *officium*: the behaviour befitting the collectivity.[263] A sheep who behaves like a wolf cannot belong to a flock, nor a senator who behaves like soldier belong in the senate. Pompey, whose career until he was elected consul in 70 B.C. had been entirely military realized this and had Varro write him a commentary *de officio senatus habendi* so that "he might learn what to say and do when he consulted the Senate."[264]

Cicero, for whom law was the bond of civil society, called the *res publica*, the

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[260] *Ad Atticum* 16.11.4 and 16.14.3. *Kathêkô*: "it is meet" (LSJ, sv). Cicero based his *De officiis* on the Stoic Panaetius' *Peri kathêkonta*. The term *kathêkon* was first used, according to Diogenes Laertius (7.108) by Zeno, founder of the Stoic school. Cf. Powell 1995, p. xvi.
[261] Diogenes Laertius 7.107.
[262] Pomponius *Digest* 41.3.30.
[263] Seneca *Epistulae* 102.6.
[264] Aulus Gellius *Noctes Atticae* 14.7.2. .

Roman commonwealth, a body.[265] The *corpus rei publicae* was sick, he wrote in the hectic year that followed Caesar's assassination, a diseased body whose pestiferous members ought to be amputated so that the whole might survive.[266] The body politic may, according to the Stoics, have been made up of separate members, but in the language that people like Cicero chose to describe it, that body in its ideal state was unquestionably of the first kind – living, unified and human.

Caesar, whose philosophical affiliations, if any, are alleged by some to have tended to Epicureanism,[267] had the insolence (so Suetonius, in the early 2nd century A.D., citing a contemporary of Caesar's) to proclaim publicly that the *res publica* was nothing but a name, without body or visible form (*species*).[268] That the pronouncement should have been considered insolent obviously assumes a different, antithetical consensus about the true nature and value of the relation between "*res publica*" and reality.

At the end of his account of the nine disciplines an architect should know, Vitruvius writes,

*It might seem astonishing to inexperienced men that a person, by nature, should be able achieve mastery of so many subjects and contain them in his memory. But they will easily believe it possible once they realize that all disciplines are joined to each other by the things they have in common. For the whole of learning is put together just like a single*

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[265] Law as bond: Cicero *De republica* 1.49 and passim; *De legibus* passim. *Corpus rei publicae*: *De inventione* 2.168; *Pro Murena* 51; *Philippics* 8.15; *De officiis* 1.85, 3.22, 3.32.
[266] Cicero *Philippics* 8.15; *De officiis* 3.32. The health of the *polis*, understood in corporeal terms, was frequent theme in what Nestle (1926-27, pp. 353-355) has called the *homonoia* literature of late fifth century and fourth century B.C. Athens, and was taken up in the so-called fable of Menenius Agrippa, recorded by both Dionysius of Halicarnassus (*Antiquitates romanae* 6.86) Livy (*Ab urbe condita* 2.32) in the early Augustan period (cf. Nestle, p. 350).
[267] Mulgan 1978-79; Rawson 1989, p. 242.
[268] Suetonius *Divus Julius* 77: *nihil esse rem publicam, apellationem modo sine corpore ac specie*. The pronouncement was recorded by one Titus Amplius, who was Caesar's contemporary.

*body, from its members.*[269]

The "things" the various disciplines have in common can be summed up in a single word: *ratio*, the not entirely adequate Latin equivalent of the Greek *logos*. The knowledge of the architect (*architectura*) "is brought into being by *fabrica* and *ratiocinatio*," Vitruvius wrote at the beginning of Book 1, chapter 1.[270] Every *ars*, he elaborates here, near the end of the same chapter,

*is made up of two things: the work and its* ratiocinatio. *The first of these belongs to those who are trained in particular things: that is, the execution of a work. The second is common to all learned men: that is,* ratio. *For instance, the* ratio *concerning the rhythm of the pulse and movement of the feet is common to both musicians and medical doctors . . . . Similarly, between astrologers and musicians there is common discourse* (disputatio) *concerning the sympathy* (sympathia) *of the stars and musical harmony. . . . and in all the other subjects many, even all things are held in common for the purposes of discussion* (ad disputandum).[271]

*Ratio* in this context has less to do with calculation or even "quality" than, specifically, with language. The learned men (*docti*), elsewhere identified as *philologi* (lovers of *logos*), who held nearly all things in common "for the purposes of discussion,"

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[269] Vitruvius 1.1.12: *At fortasse mirum videbitur imperitis hominibus posse naturam tantum numerum doctrinarum perdiscere et memoria continere. Cum autem animadverterint omnes disciplinas inter se coniunctionem rerum et communicationem habere, fieri posse faciliter credent: encyclios enim disciplina uti corpus unum ex his membris est composita.* Cf. Cicero *Pro Archia* 1.2; *De oratore* 3.21.

[270] Vitruvius 1.1.1.

[271] Vitruvius 1.1.15-16: *. . . ex duabus rebus singulas artes esse compositas, ex opere et eius ratiocinatione, ex his autem unum proprium esse eorum qui singulis rebus sunt exercitati: id est operis effectus, alterum commune cum omnibus doctis: id est rationem; uti medicis et musicis est de venarum rythmo et ad pedum motus. . . . Similiter cum astrologis et musicis est disputatio communis de sympathia stellarum et symphoniarum. . . . ceterisque omnibus doctrinis multae res vel omnes communes sunt dumtaxat ad disputandum.*

were men whose reasoning or reckoning took linguistic form.[272] In the Stoic view, without language there *was* no reasoning. Being rational and human meant being able to use language. Not necessarily the capacity to speak, but rather the capacity for "internal speech," – what A.A. Long has called "articulate thought."[273] What this capacity amounts to is man's possessing an idea of connection or sequence.[274]

According to the Stoics it is, precisely, because of his capacity for "articulate thought" which entails the mutually dependent abilities to infer, connect *and* use language, that man, uniquely among all living creatures, is able to mirror the world-ordering activity of the cosmic *logos*. If *ratio*-as-language is understood as the privileged channel of communication with the order of the cosmos, it is not surprising that Vitruvius, determined as he was to demonstrate the connection of *architectura* to that order, should have favoured writing over drawing.[275]

*Fabrica* is as much a parent of the architect's knowledge as is *ratiocinatio*.[276] Architects without *ratiocinatio* "who aim at employing themselves with their hands without the aid of writing will never be able to achieve authority equal to their labours." But those who bypass *fabrica*, and "rely only on *ratiocinatio* and writing will look as if they have

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[272] "*philologi*" Vitruvius 6.pref.4; 6.7.7; 9.pref.17. See Kuck 1965, who argues that the Greek term *philologos* meant precisely those who practiced their learning through "discussion."

[273] Lewis and Short, s.v. *disputo*: "Originally in mercantile language. . . . to calculate a sum by going over its items;. . . beyond the mercantile sphere, to weigh examine, investigate, treat of, discuss a doubtful subject either by meditating, or (more commonly) by speaking upon it. . . . very frequent in Cicero's philosophical and rhetorical writings." On "articulate thought," see Long 1971; 1986, pp. 124-125, 175; 1996, p. 246: "The central insight of the Stoics (is that) the human soul is a capacity for living as a language animal."

[274] Sextus Empiricus *Adversus mathematicos* 8.275 ff. (= *Adversus dogmaticos* 2.275 ff. in the Loeb edition). "Connection" or "sequence" – *akolouthia* in Greek. Cf. Long 1986, p. 125.

[275] Gros 1996b and above, pp. 20-22, 40.

[276] Vitruvius 1.1.1: (The knowledge of the architect) is brought into being by *fabrica* and *ratiocinatio*. Ea *nascitur ex fabrica et ratiocinatio*.

chased a shadow, and not the thing itself."[277] How, within the framework set out here, might one understand *fabrica*'s contribution to the body of *architectura*?

*Fabrica*, Vitruvius insists, is a question of repeated manual activity, a habit acquired from long experience: "the continuous and routine practice of the activity the hands accomplish out of matter; its offspring is the work whose form is in keeping with its intended purpose."[278] *Fabrica*, thus described, is the Latin equivalent for what the Greeks called *technē*, the purposeful activity which depended on the trained ability Aristotle called *hexis*.[279] For Aristotle, *hexis* was also the acquired habit of ethical conduct.[280] Because of their shared condition of *hexis* (trained ability), both the craftsman and the moral person perform in ways that are at once coherent and appropriate to the specific task at hand. The notion is also present in Stoic ethics. "Of mental goods, some are habits (*hexeis*), others are dispositions (*diatheseis*). . . . The virtues are dispositions, while accomplishments or avocations are matters of habit," reports Diogenes Laertius.[281]

The Stoics, according to Sextus Empiricus, called the cohesive bond of unified bodies *hexis*.[282] Diogenes Laertius adds an important refinement to the notion, bringing to bear a distinction which is helpful for understanding the respective contributions to *architectura* of *fabrica* and of *ratiocinatio*. Citing works by Chrysippus and Posidonius,

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[277] Vitruvius 1.1.2: *Itaque architecti qui sine litteris contenderant ut manibus essent exercitati non potuerunt efficere ut haberent pro laboribus auctoritatem: qui autem ratiocinationibus et litteris solis confisi fuerunt umbram non rem persecuti videntur.*

[278] Vitruvius 1.1.1: *Fabrica est continuata ac trita usus meditatio quae manibus perficitur e materia ciuscumque generis opus est ad propositum deformationis.* The terms *continuata*, *trita*, *usus*, and *meditatio* all stress – to the point of redundancy – the importance of the *habitual* nature of *fabrica* as shaped by repeated activity. The literal meaning of *tritus* is "worn down by rubbing."

[279] Aristotle *Nicomachean ethics* 1140a9-10. Cf. Pollitt 1974, p. 32-37.

[280] Aristotle *Nicomachean ethics* 1106b36. Cf. Pollitt 1974, p. 50.

[281] Diogenes Laertius 7.98.

[282] Sextus Empiricus *Adversus mathematicos* 9.78: "Unified bodies are ruled by a single bond (*hexis*), such as plants and animals." See above, p. 71.

Stoics respectively of the 3rd and early 1st centuries B.C., Diogenes writes that in the Stoic view mind (*nous*) pervades every part of the cosmos, just as the soul (*psychê*) pervades us, but that through some parts it is more pervasive, through some less. "For through some parts it passes as *hexis*, as through the bones and sinews; but through others it passes as *nous*, as through the ruling part (*hêgemonikon*)."[283] Thus, to summarize a rather complex matter,[284] world-pervasive *pneuma* would appear to behave in two different ways. As *hexis*, it bonds human and animal bodies *qua* bones and sinews, as well as those of plants. In a different form, *hexis* also bonds the lifeless bodies of stones and timbers. This *hexis*, shared by all unified bodies including those of men, is sometimes, following Aristotle, called the "vegetative" soul. It is as *nous* or *logos*, however – as "articulate thought" indissociable from language – that *pneuma* permeates the *hêgemonikon* or "ruling part" unique to human beings.

*Fabrica*, to follow this line of reasoning, contributes to the body of *architectura* as *hexis* does to the "vegetative" coherence of unified bodies: bodies which, even in their mute bone-and-sinew aspect, were (since nothing Stoic was) emphatically not without soul. *Fabrica*, the *hexis* of hands and fingers, gives *architectura* its vegetative soul in the palpable world of qualified matter. Of course, once *fabrica* and *ratiocinatio* have brought *architectura* into being as an arena of discourse and once it has been circumscribed in a written body, its connection to the bones and sinews of hands-on practice runs the risk of becoming increasingly tenuous.

It is generally agreed that the cosmic physics of the Stoics, first developed by

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[283] Diogenes Laertius 7.138-139. Cf. Long 1996, p. 233.
[284] Argued in detail by Long 1996, pp. 224-249, whose discussion forms the basis for my understanding of the question.

Chrysippus in the third century B.C., is based on contemporary medical theory.[285] In cases of "complete blending" where unified bodies cohere, *pneuma* (active divine breath made up of fire and air) completely permeates matter (passive earth and water) to constitute the unified bodies not only of stones and men, but also the living body of the entire world.[286] Health – which is the natural state of all animal bodies (human included) – is maintained by a proper balance of these same four elements, as Vitruvius writes in Book 1 in the chapter he devotes to choosing a healthy site for a city.

*For just as all bodies are put together from the elements the Greeks call* stoicheia *(that is, heat and moisture, earth and air) so too, through their natural tempering by mixtures, the qualities* (qualitates) *of all the animals in the world are fashioned, each according to its kind.*[287]

A healthy body is a mixture, maintained by the "natural tempering" (*naturali temperatura*) of elements. A healthy body is a *unified* body: the words Vitruvius uses repeatedly in this context to describe the result of an unhealthy imbalance of elements all invoke the dissolving, weakening or loosening of bonds. Too much heat "cooks out" firmness, for example; cold strengthens.[288] "If moisture occupies the pores of bodies and unbalances them, the other elements, as though spoiled by the liquid, are washed away, and the strength in their bonds is undone."[289] Bodies are not autonomous, moreover, and the

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[285] Lapidge 1978, pp. 168-175; Hays 1983, p. 44.
[286] "Complete blending" – *krasis di' holōn*: Chrysippus, SVF 2.473; cf. Long 1996, pp. 230-231. See also Cicero *De natura deorum* 2.84.
[287] Vitruvius 1.4.5: *Namque e principiis, quae Graeci* stoiecheia *appellant, ut omnia corpora sunt composita, id est e calore et umore, terreno et aere, et ita mixtionibus naturali temperatura figurantur omnium animalium in mundo generatim qualitates.* Cf. Pellati 1951 and Fleury, Vitruvius I (1990), p. 128, where the theory is traced to Empedocles and the pre-Socratics, as indeed Vitruvius himself does at 2.2.1.
[288] Vitruvius 1.4.3; 1.4.4.
[289] Vitruvius 1.4.6: *Item si umor occupavit corporum venas inparesque eas fecit, cetera principia, ut a liquido corrupta, diluuntur et disolvuntur compositionibus virtutes..*

"natural tempering by mixtures" in fish – a little heat, mainly air and earth, no water, because they live in it – is not the same as in land animals or in birds whose habitats supplement, in each case, a different element.[290]

*Therefore, if these things are indeed as we have said, and if we agree that the bodies of animals are put together from elements by whose excesses or shortfalls, we conclude, they are afflicted and dissolved, we have no doubt that we must take great care to try to choose the most temperate regions of the sky when seeking healthfulness in the positioning of city walls.*[291]

Among humans, people of Italic race, being at the centre, are the best tempered (*temperatissmae*) of all, both in mind and in limb, writes Vitruvius in the first chapter of Book 6. Placing them at the centre is how the divine mind has made them particularly suited to "seize command of the world," for just as Jove rules the heavens because his star (the planet Jupiter) is situated halfway between fiery Mars and freezing cold Saturn, so too do the Roman people, who occupy the territory "that is truly in the middle of the whole world," rule the earth.[292] Because their situation fosters a proper balance of elements in them, such bodies (Jove and Rome) are the ones which in turn have "the most tempering

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[290] Vitruvius 1.4.7. The theory as articulated here is in complete contradiction with that of Aristotle (*Historia animalium, De partibus animalium, De respiratione*) who seems to have believed that the health of animals was dependent upon their having more, not less of their native element in their bodies: fish, in Aristotle's view, were full of water for instance. Cf. Fleury, Vitruvius 1 (1990), p. 129. Vitruvius' view underwrites a symbiotic rather than a sympathetic relation of the animal with its habitat, a view which in turn is coherent with his account of the behaviour of building materials in the following book, and may indeed have been adopted for that very reason.

[291] Vitruvius 1.4.8: *Ergo si haec ita videntur quemadmodum proposuimus et e principiis animalium corpora composita sensu percipimus et e superationibus aut defectionibus et laborare dissolvique iudicamus, non dubitamus quin diligentius quaeri oporteat uti temperatissimas caeli regiones eligamus cum quaerenda fuerit in moenium conlocationibus salubritas.* Choosing "the most temperate regions of the sky" refers to the proper orientation of a city.

[292] Vitruvius 6.1.10-11. Cf. 9.1.16. See also Cicero *De natura deorum* 2.119, Pliny *Natural History* 2.34; 3.39.

effects."[293] Clearly Vitruvius imagined the Roman people as a single, unified body

The *rationes*, or principles, invoked for the proper choice of building materials in Book 2 are virtually identical to those invoked for health, with *temperatura* called on repeatedly to account for their internal coherence as *corpora* and for their enduring coherence with one another when assembled on a building site. Stones for instance, "just like other bodies, are tempered out of elements."[294] Alder, a poor wood for building above ground is, on the other hand, excellent for pile foundations in marshy areas because it is *temperata* with much fire and air, leaving room for the penetration of water into its *corpus*. As a result, a perfect balance of elements makes alder piles "imperishable for all eternity."[295]

Two things should be emphasized. The first is that, as Vitruvius tells it, the bonds of unified bodies consist in the relationship (*ratio*) between their constituent elements, which in turn depends on the situation of the body in question. Second, the good bonds so constituted make for bodies that *last*.

Architecture, according to Vitruvius, depends on *ordinatio*, "the proper relation of parts of a work taken separately and the provision of proportions for overall symmetry," which was constituted from quantity, and on arrangement, "the suitable assembly of things . . . that are put together with quality."[296] Third on the list is eurythmy, "the beautiful appearance and fitting aspect of the parts once they have been put together."[297] Fourth comes symmetry, already mentioned in connection with *ordinatio* which helps provide for it.

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[293] Vitruvius 9.1.16. *Ex eo Iovis, cum inter utriusque* (Mars and Saturn) *circumitiones habeat cursum . . . . temperatissimos habere videtur effectus.*
[294] Vitruvius 2.5.2: *e principiis, uti cetera corpora, ita et saxa sunt temperata.*
[295] Vitruvius 2.9.10: *permanet inmortalis ad aeternitatem.*
[296] Vitruvius 1.2.2. See above n. 223 for the Latin.

*Likewise, symmetry is the fitting concord* (consensus) *between members of the work to each other and the correspondence of individual elements to the form of the whole figure by means of a fixed part* (ratae partis). *Just as in a man's body the symmetrical quality* (qualitas) *of eurythmy is achieved from the cubit, foot, palm, finger and other small parts, so too in works that have been brought to completion.*[298]

There was, as Pliny the Elder later affirmed, no word for *symmetria* in Latin.[299] Vitruvius sometimes approximates with *commodulatio*, *commensus* or, adjectivally, with *commodus*.[300] Commensurability – that each part bear a measurable relation to every other part as well as to the configuration of the whole – is its constitutive principle. The means to it, says Vitruvius, is the choice of a *rata pars*, a fixed or calculated part taken, in a temple, from the thickness of a column or a triglyph, for example; in artillery, from the size of the hole through which the projectile is shot.[301] "Symmetries" are the bonds achieved through *compositio*, "putting together," by means of a fixed part. Although the symmetrical quality of such paradigmatically jointed bodies as temples and catapults is not identical with the *temperatura* that makes for healthy long-lasting bonds in the unified bodies of men, animals and building materials, *symmetria* and *temperatura* for Vitruvius, are clearly analogous, as the 3rd-century B.C. Stoic Chrysippus, who understood both as *symmetria*, had affirmed.[302]

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[297] Vitruvius 1.2.3: *Eurythmia est venusta species commodusque in compositionibus membrorum aspectus.*
[298] Vitruvius 1.2.4: *Item symmetria est ex ipsius operis membris conveniens consensus ex partibusque separatis ad universae figurae speciem ratae partis responsus. Uti in hominis corpore e cubito, pede, palmo, digito ceterisque particulis symmetros est eurythmiae qualitas, sic est in operum perfectionibus.* See also 1.2.2; 3.1.1; 3.1.3; 3.1.4; 3.1.9 and ch. 3 below, where the question will be discussed more fully.
[299] Pliny *Natural History* 34.65. The Latin *symmetria* is a transliteration of the Greek word. See especially Pollitt 1974, pp. 14-22 and pp. 256-258.
[300] See, for example, 3.1.1; 6.2.1.
[301] Vitruvius 1.2.4.
[302] Chrysippus in Galen *De placitis Hippocratis et Platonis* 5.2.32-33: "Health in the body is a kind of good blend and symmetry (*eukrasia kai symmetria*) of the elements. . . *symmetria* or lack of it in the sinews is strength or weakness, firmness or softness; *symmetria* or lack of it in the limbs is beauty or ugliness." A

Vitruvius sees them as complementary, since "tempering" must come to the aid of *symmetria* by helping to ensure that good bonds have visibility in beautiful appearance and fitting aspect (eurythmy) "once the parts have been put together." It was not enough that good bonds exist: they must be *seen* to exist.

Tempering, says Vitruvius, is to supplement *symmetria* when the *rationes* of fixed parts (proportions) are to be adjusted "by additions or diminutions" to the specific circumstances of site, situation and use – the practice usually referred to, a little reductively, in later literature as "optical correction."[303] Writing about theatres in Book 5, Vitruvius says that symmetries

*cannot answer to all conditions and purposes in all theatres, but an architect must consider with what proportions it is necessary to follow symmetry and which ones to temper to the nature of the site or the size of the work.*[304]

In the "Dream of Scipio," the Pythagorean vision of the cosmos that concludes Cicero's *De republica*, "tempering" is presented as the result of *symmetria*. The intervals between the celestial spheres, explains Africanus, Scipio's celestial guide, "though unequal, are exactly arranged in keeping with the *ratio* of a fixed part (*pro rata parte ratione distinctis*)."[305] The sweet sound of the harmonies produced by the revolutions of this perfectly calibrated celestial mechanism is the result of a "blending (*temperans*) of high and

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few paragraphs later (5.3.14). Galen comments, "For he distinguished them (health and beauty) accurately in the case of the body, placing health in the *symmetria* of the elements, and beauty in the *symmetria* of the members." Chrysippus felt that the two symmetries were related, because analogous; Galen, writing some 500 years later, no longer did, or at least that their relation, because incalculable, was not demonstrable. Cf. Pollitt 1974, p. 14 ff.; Raven 1959, pp. 149-150; Rykwert 1996, p. 109.

[303] Vitruvius 6.2.1: *tum etiam acuminis est proprium providere ad naturam loci aut usum aut speciem detractionibus aut adiectionibus temperaturas . . .* Cf. 3.3.13: *uti quod fallitur temperatione adaugeatur .*

[304] Vitruvius 5.6.7: *Nec tamen in omnibus theatris symmetriae ad omnes rationes et effectus possunt respondere, sed oportet architectum animadvertere quibus proportionibus necesse sit sequi symmetriam et auibus ad loci naturam aut magnitudinem operis temperari.*

low tones." This is the music *docti* seek to imitate with stringed instruments and in song, Africanus says. The exact arrangement of unequal intervals between the spheres, determined by the *ratio* of a fixed part, is not itself the cause of the blending or tempering Scipio hears as harmony, although the proportional relations so established are stipulated as its necessary condition. The blending of high and low tones can only occur when the spheres revolve. When the instrument, so to speak, is *played*.

Earlier in *De republica*, Cicero, for whom distinctions in rank were, like the "unequal intervals" between the heavenly spheres, essential for true harmony in the commonwealth,[306] wrote of civic concord as the result of the "blending together of upper, middle and lower classes, just as if they were musical tones."

*What the musicians call harmony in song is concord in a state, the strongest and best bond of permanent union in any commonwealth* (res publica)*; and such concord can never be brought about without the aid of justice.*[307]

Whether calculation, reason, money, measurement, language or a condition of ineffable "tempering," *ratio* was essentially a question of relation: a bond.

Vitruvius was active professionally during the tumultuous years of almost uninterrupted civil strife that marked the transition from republic to empire. Claude Moatti has argued that the reason people like Cicero took such an interest in philosophy, and the reason for Varro's huge systematizing compilations, was to *rationalize* in written remedies alternatives to the disintegration of traditional *mores* perceived to be at the core of the

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[305] Cicero *De republica* 6.18.
[306] Cicero *De republica* 1.43. According to Cicero, lack of such class distinctions were responsible for the decline of Athens. See also Livy 1.42.4. Cf. Cohen 1975.
[307] Cicero *De republica* 2.69: *artissimum omni in re publica vinculum incolumitatis. . .*

rotting *res publica*.[308] It was rather as if these authors of what Moatti has called a literature of crisis imagined that the articulations of the *hêgemonikon* could assume the "vegetative" role of *hexis* and make coherence in books stand in for the discordant realities of public life.

Cicero died in 43 B.C., Varro in 27 at the age of 90. By then, as everyone agreed, the situation had been saved by Augustus, whose victory over Mark Antony and Cleopatra at Actium four years earlier had brought the civil wars to an end. It was then, when the literature of crisis was being replaced by works such as those of Virgil and Horace which celebrated the dawning of a new age, that *De architectura* was completed.[309]

In one of his early odes, written in 29 or 28 BC, Horace asks to which of the gods Jupiter should assign the task of restoring the right relation with the gods to whose rupture recent civil discord has testified.[310] Apollo? Venus? Mars? No, not to these – the gods who had presided over the conflicts that were now over – but rather, writes Horace, "to you, winged son of benign Maia who, with your form changed into that of a young man here on earth, would accept being called Caesar's avenger."[311] Caesar's avenger is Octavian, soon to be named Augustus. The winged son of Maia, doubled by Octavian in the poem, is Mercury.

"Provider of profit and giver of speech,"[312] it was Mercury who, more than any other Roman god, conveyed the relational quality of *ratio* outside the lecture rooms frequented by *philologi* in the religion of the marketplace and in the "mythical theology" of

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[308] Moatti 1988 and 1991.
[309] For the dating, see Introduction, p. 1, n. 2.
[310] Horace *Odes* 1.2. Cf. Bickerman 1961; Farnoux 1981, pp. 486-500; Nisbet and Hubbard 1970, pp. 34-36.
[311] Horace *Odes* 1.2.41-44: *sive mutata iuvenem figura / ales in terris imitaris almae / filius Maiae, patiens vocari / Caesaris ultor.*.
[312] *ILS* 2.1.3200: *Lucri repertor atque sermonis dator. . . .*

poets like Horace.[313] At once Hermes, Greek god of world-pervading *logos* and *Mercurius*, Roman god of the *mercator* who mediated commerce by fixing a negotiated value on the object of a transaction, to whom Hermes was assimilated,[314] the winged Mercury of Augustan Rome – money bag in one hand, herald's *caduceus*, a sign of peace, in the other – was the ubiquitous power inherent in good bonds and measurable relations (Figs. 5 and 6).[315] In Horace's ode and in the new Roman coins that from 30 BC on almost never circulated without Octavian-Augustus's image on them, this power now belonged to Caesar's avenger.[316] There are even coins, "most perfect" sixteen-*as denarii*, issued at or around the time the poem was written, on which Octavian appears in the guise of Hermes-Mercury in images that make the *mercurius* of negotiated value which inhered in all coins visibly identifiable as a single, living person – a *praesens divus*, present god, as Horace would call Augustus in a later ode.[317] Reciprocally, all Augustan coins, and those with Mercury-Octavian on them with particular point, demonstrated that the new ruler's person

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[313] Varro in Augustine *City of God* 6.5. Natural theology (the theology of the philosophers) discusses questions "which men's ears can more readily tolerate in the lecture room (*in schola*) than outside in the market place (*extra in foro*)." On Varro's tripartite theology, above p. 60. Mercury is mentioned five times in *De architectura*. At the end of Book 1 (1.7.1), where Vitruvius reviews the most appropriate choice of site for various public buildings, temples in particular, he says that temples to Mercury are to be situated in forum or "as for Isis and Serapis, in the emporium." Also mentioned: a temple to Mercury and Venus at Halicarnassus (2.8.11) and the planet Mercury (9.1.5, 9.1.6, and 9.1.8).

[314] Ovid *Fasti* 5.663-692; Farnoux 1981, pp. 466–467.

[315] On the iconography of Mercury, see *LIMC* V, 500-554. Stoic accounts of Hermes appear in chapter 16 of Cornutus' *Epitome* and chapter 72 of Heraclitus Homericus' *Homèrica Promblêmata*, both of the first century A.D. Typically, "now Hermes is Reason, which the gods sent to us from heaven . . ." (Cornutus 16.1); "Hermes, that is to say reasonable speech . . . painters and sculptors give him a squared shape because right speech always stands on firm ground: it does not slip or roll from side to side." (Heraclitus 72.4-6).

[316] There is also a carved gem, dated to the 20's B.C., in the Marlborough Collection, on which Augustus's head appears in profile, accompanied by a caduceus which is also taken to be an identification with Mercury. See Farnoux 1981, pp. 492–493 and *LIMC* V, s.v. Mercurius , no. 187.

[317] Horace *Odes* 3.5.2.

Fig. 5

Mercury with moneybag and caduceus in the porch of a small temple-building.
Wall painting from a shop at Pompeii.

inhered in the negotiated value of all currency,[318] whose habitual use (currency) throughout the Roman world was one way of transfiguring hegemony as *hexis*.[319] Architecture was another.[320] Indeed, Augustus's imperial "head" on coins was sometimes complemented by a building, often a temple, as its reverse type,[321] joining all three – the coin, the building and the builder – in a single world-pervasive *ratio*.

Like most coins, almost all major building activity from 29-28 BC was now indissociable from the person of the new ruler. From that time forward, every major new project in Rome and many away from it referred directly to him and/or to his immediate family, even if someone else had initiated the project.[322] The *divina mens* Vitruvius invokes in the first words of his first preface is the *ratio* of the conqueror who has brought peace, ("when your divine mind and power Imperator Caesar were seizing command of the world . . ."), of the negotiated value of currency and, in *De architectura*, specifically that of a builder. *The* builder, as Vitruvius fulsomely acknowledges.[323] That is why, he concludes,

*I have delineated a complete set of rules so that by considering them you yourself can take account both of what finished works are like and of how future ones will be; for in*

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[318] London, British Museum 195154: reverse of a *denarius*, ca. 31-29 B.C., Mercury seated on a rock. British Museum, 134202: obverse of a *denarius*, ca. 29-27 BC, terminal bust of Octavian. British Museum 195155: reverse of a *denarius*, ca. 29-27 BC, ithyphallic herm of Octavian. Cf. Pollini 1990, figs. 14, 16 and 17 where all three coins are illustrated.

[319] For a particularly incisive discussion of *logos* and money, whose shared field of operations dates from the archaic period of Greek culture (6th century BC) which followed the first appearance of coinage, see Nimis 1988. Cf. Carson 1993. The Greek tradition of monumental architecture inherited by Vitruvius was also initiated at this time. On the intertwining of the use and operation of both money and writing in the Roman empire, see Hopkins 1991, p. 157.

[320] See below, Chapter 4.

[321] Hill 1989; cf. Elsner 1996, p. 41. Hill (p. 7) says that first appearance of a monument on a coin appears to have been in around 135 BC. The practice became common from the reign of Augustus on.

[322] See Gros and Sauron 1988, pp. 58-59.

[323] Vitruvius 1.pref.3.

*these scrolls I have laid out all the principles* (rationes) *of the discipline.*[324]

The first preface began with the words *divina mens*: the divine mind or *logos* that belongs to Imperator Caesar. It ends with the word *rationes*. Regularly reinvoked as "Imperator" or "Caesar" or both in each of the subsequent prefaces,[325] the *divina mens* of IMP. CAESAR adds the final, authoritative layer to the pervasive *rationes* of *De architectura* that make it a unified body.[326]

The work may, as others have suggested, been begun as early as the thirties B.C.[327] As already intimated, there is evidence that Vitruvius was thinking about it earlier still, during the time when he was "attached" to Julius Caesar's might.[328] But the treatise, although unquestionably influenced by the encyclopaedic rationalizations of earlier crisis literature, took final shape after Actium, when *ratio* became a living person. The prefaces invoking Augustus written (as most agree) last, which "temper" *De architectura* to the nexus of specific circumstances that attended its completion, are the final adjustments Vitruvius makes toward achieving, one might say, its eurythmy, "the beautiful appearance and fitting aspect of the parts once they have been put together;"[329] the visible coherence of form which the architect must strive to achieve by adjusting the *rationes* of fixed parts so as

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[324] Vitruvius 1.pref.3: *conscripsi praescriptiones terminatas ut eas adtendens et ante facta et futura qualia sint opera per te posses nota habere: namque his voluminibus aperui omnes disciplinae rationes.*

[325] *Imperator Caesar*: 1.pref.1; *Imperator*: 2.pref.4, 3.pref.4, 10.pref.4; *Caesar*: 1.1.18, 6.pref.5, 7.pref.10, 9.pref.18. The prefaces to Books 4 and 5 have both, opening with *Imperator* (4.pref.1, 5.pref.1) and invoking *Caesar* a little further on (4.pref.1; 5.pref.5). Cf. Fleury, Vitruvius 1 (1990), pp. 51-52, and above n. 123.

[326] Callebat 1989, p. 37: . . . *l'auteur prenant progressivement conscience d'une unité profonde des diverses matières traitées et élaborant ce concept original de* corpus - *que les préfaces, peut-être rédigées prostérieurement, allaient contribuer à orchestrer.* Callebat's choice of the word "orchestrate" to describe the role of the prefaces is particularly interesting, if one recalls the Dream of Scipio, and Cicero's understanding that what musicians call harmony in song is concord in the state (*De republica* 2.69), with music the paradigm of "perfect blending."

[327] See Introduction, p. 1, n 2.

[328] Vitruvius 1.pref.2 and above, pp. 44-47.

[329] Vitruvius 1.2.3: *Eurythmia est venusta species commodusque in compositionibus membrorum aspectus.*

to flatter the eye of the beholder.[330] This was less a question of agenda than of *officium* – of "fitting behaviour."

St. Augustine, almost certainly following Varro, writes,

*Now it may be said that it is language itself that is Mercury. This is suggested by the interpretation they give of him; for they derive the name Mercury from* medius currens *"running in between," because speech "runs between" men. His name in Greek is Hermes, because speech, or rather interpretation – which is clearly connected with speech – is called* hermeneia. *The reason why Mercury presides over commerce is that speech is the means of communication between sellers and buyers. The wings on his head and feet symbolize the swift flight of speech through the air; he is called a messenger because it is through speech that thoughts are conveyed.*[331]

If there is justifiable logic in understanding the relational quality of Mercury as a "running in between," ("currency," after all, comes from *currens*, "running") that quality does not inhere in any etymological link between *Mercurius* and "*medius currens*," as Varro would have one believe.[332] But if Varro was mistaken, as he almost certainly was, what was the valued truth this "falsehood" was meant to sustain? What, in other words, was the perceived link between the form of words and what they meant? What, more specifically still, linked *De architectura* to architecture? All the assiduous body-building discussed so far was not – certainly not in the body-builder's view – simply an arbitrary construction. It

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[330] Vitruvius 3.3.13: *Venustates enim persequitur visus, cuius si non blandimur voluptati proportione et modulorum adienctionibus uti quod fallitur temperatione adaugeatur, vastus et invenustus conspicientibus remittetur aspectus.*

[331] Augustine *City of God* 7.14.

[332] Henry Bettenson, translator of the Penguin edition, (*City of God*, p. 272 n. 36), has called the etymology "fantastic." Many of Varro's etymologies, like the one claiming a relation between *pes* and *pecunia* (*De lingua latina* 5.95, and above pp. 66-67), are. Mercurius is connected with *merx*, as the Augustan

meant something, but what? Or more to the point, *how*?

**Signification**

Julius Caesar, who so insolently dismissed the *res publica* as nothing but a name, without body or visible form,[333] also wrote a work on grammar called *De analogia* which he dedicated to Cicero.[334] The work was his contribution to the dispute among late republican intellectuals about whether language was a natural or a conventional phenomenon – another iteration, clearly, of the *nomos-physis* debate which, when it arose in classical Greece, first made the distinction that remains key even now in post-modern discourse about the relation (or lack thereof) between culture and nature.[335] Caesar – predictably, given his pronouncement on "*res publica*" – took what was known as the analogist position: that language was conventional, independent of nature, and ought to be governed by strict rules of regularity, which is to say by *analogia* (*ana-logon*, "according to *logos*"[336]). The opposite view, which was Stoic in origin, was that language was a natural growth which was reflected in the linguistic irregularity – "anomaly" – justified by common usage.

Varro gives a complete account of both positions in Books 8 to 10 of his *De lingua latina*, a work Vitruvius names in the context of his encomium on the universal benefits of

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*philologus* Verrius Flaccus noted. Cf. Farnoux 1981, pp. 465–466, who argues that the *merx* at the root of *mercurius* is a relation of negotiated exchange, not merchandise-as-object.

[333] Suetonius *Divus Julius* 77: *nihil esse rem publicam, apellationem modo sine corpore ac specie.*

[334] Pliny *Natural History* 7.117.

[335] On Caesar's *De analogia*, see Hendrickson 1906. The earliest discussion of the connection between words and things appears in Plato *Cratylus* 389-390. Cf. Griffin 1994, pp. 703-704; Rawson 1985, p. 121-129.

[336] Varro *De lingua latina* 10.2.

Fig. 6

Marble statue of Mercury with moneybag and caduceus, now in the Conservatori Museum, Rome. 1st century A.D. (Photo author).

writing in the preface to Book 9.[337] Varro's own conclusion is a compromise position: linguistic regularity exists in nature, which common usage, while allowing for variants, imitates.

*Those who give us advice in the matter of speaking, some saying to follow usage and others to follow* ratio, *are not so much at variance, because usage and regularity* (analogia) *are more closely connected with each other than those people think. For* analogia *is sprung from a certain usage in speech, and from this usage likewise is sprung* anomalia. *Therefore, since usage consists of unlike and like words. . . neither* anomalia *nor* analogia *is to be cast aside, unless man is not of soul because he is of body and soul.*[338]

The final, rather startling leap from the coexistence in language of both anomaly and analogy to the assertion obviously meant to clinch the argument – "unless man is not of soul because he is of body and soul"[339] – is the most intriguing part of the passage. In the gap lies Varro's unspoken appeal to an assumption about the perfect blending of body and soul in man and, even more interestingly, the intimation that language is like that. Admitting the anomalies attending individual bodies does not allow the denial of soul (=*ratio*), which is "regularity" itself in men for, Varro implies, the order of nature is reflected in the order of words, *as in the order of the human body*.

Varro's understanding of the order of words as a specifically corporeal order receives additional corroberation further along, where he discusses the irregular nominatives of nouns such as *Hercules* and *homo*.[340] An anomalous nominative like these – he calls it a "head" (*caput*) – is neverthess followed by oblique cases (genetive, dative,

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[337] Vitruvius 9.pref.17.
[338] Varro *De lingua latina* 9.2-3. See also 9.113-114 and 10.1.
[339] *nisi si non est homo ex anima, quod est ex corpore et anima.*

accusative etc.) which do, however, exhibit regularity (*analogia*) in their inflections. "Is it not a fact," he continues again assuming common knowledge, "that, if you should put the head of Philip on a statue of Alexander and the limbs should conform to *ratio* (*membra conveniant ad rationem*), so too would the head (Philip's) that corresponds to the limbs of Alexander's likeness?" The point of this rather cryptic pronouncement seems to be that if a statue's limbs are properly proportioned, you can put an "anomalous" head on it and still end up with a perfectly satisfactory overall *ratio*; so too with *Hercules*, *homo* and their inflections.[341] Once again, the order of words is like the order of a man's body, ultimately to be appreciated in the totality of its overall coherence.

Moreover, if there is a *ratio* that connects the meaning of *pes* to that of *pecunia* (both are measurements), or the meaning of *Mercurius* to the *medis currens* of both money and language, then that *ratio* must – allowing for variants – be embedded in the particular shapes of the words themselves.[342] Otherwise body and soul would not really be connected and coherence would founder. Factual evidence is adduced by the etymologies, so many of them erroneous by modern standards, which Varro brings to bear.[343] Similarly, for Vitruvius, the perfect *ratio* of ten was embedded in – and proven by – the corporeal *fact* that men have ten fingers and further that, through measurement, these fingers modulate the overall shapes both of men and temples. The cosmic order of *De architectura* is a linguistic order, which is also the order of a man's body or of a temple, whose symmetry "arises from

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[340] *De lingua latina* 9.79.
[341] The practice of changing the heads of statues was, in fact, quite common in antiquity: see below, Chapter 2, pp. 151-152, and also Ronald G. Kent's notes on the passage in the Loeb edition (pp. 500-501). I have emended Kent's translation slightly.
[342] See Varro *De lingua latina* 9.40: To those who ask in what part a word ought to be similar, in utterance or in signification, we answer that it should be so in utterance. *Quod rogant ex qua parte oporteat simile esse verbum, a voce an a significatione, respondemus a voce.*
[343] Cf. Dahlmann 1932, pp. 10-14; Lloyd 1971, pp.61-62.

proportion, which is called *analogia* in Greek."[344]

This still does not answer the question of signification, however; of how the perfect body of *De architectura* connects with architecture. Vitruvius himself raises the issue very near the beginning of his first book.

*These two things are contained in all things, but above all in architecture: that which is signified and that which signifies. What is signified is the matter* (res) *set forth by what is said. What signifies this is a demonstration developed through the principles* (rationes) *of learning.*[345]

The usual reading of this passage is to take the "signified" (the thing set forth by what is said) as *fabrica* or construction, and the "signifier" (the demonstration developed through the *rationes* of learning) as *ratiocinatio*.[346] *Ratiocinatio*, in this bi-polar view, "signifies" or represents *fabrica* the way a portrait statue represents its subject. Thus *De architectura* would represent architecture. This leads to frustration among some modern readers when they discover that Roman ruins reveal a reality which the treatise often *mis*represents, and that many things considered quintessentially Roman in architecture – amphitheatres for example, and above all vaulted construction – are not represented or referred to in it at all. One fairly common conclusion is that Vitruvius, who favoured Hellenistic precedents, was an emeritus, a *laudator temporis acti* – a eulogist of times gone

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[344] Vitruvius 3.1.1: *Ea autem paritur a proportione, quae graece* analogia *dicitur*. Cf. Varro *De lingua latina* 10.37: "What is the *ratio* that is *pro portione*? This is called *ana logon* in Greek, from which comes *analogia*.." The question of proportion will be treated more fully below in chapter 3. For the moment the point is its (by no means exclusive) relation to Varro's account of language. See also Gros, Vitruvius 3 (1990) pp. 58-60.

[345] Vitruvius 1.1.3: *Cum in omnibus enim rebus tum maxime etiam in architectura haec duo insunt: quod significatur et quod significat. Significatur proposita res de qua dicitur: hanc autem significat demonstratio rationibus doctrinarum explicata.*

[346] Callebat 1994, p. 35; Fleury, Vitruvius 1 (1990) pp. 69-70, for a review of opinions to date.

by, and more than a little out of date.[347] The operative assumption here is that something called architecture was already there, and that Vitruvius, through his conservatism, failed to do it justice; that architecture pre-existed *De architectura* the way, for example, the ritual year pre-exised the calendars that, in his day, were publicly posted in many major Roman cities. But did it? The foregoing sections of this chapter have explored a number of areas in which the indications point in quite the opposite direction. Moreover, the ritual year did not preexist the calendars, according to Richard Gordon who has studied them and argued that they were in fact *sui generis*, and created their own ideological field of operations which bore only a tenuous relation to the far from uniform experience of ritual practice.[348] Building on this argument, Mary Beard has claimed that the calendars, "allowed the year to be seen as a whole and permanently displayed," and further that the totality they allegedly represented "existed only as written display."[349]

There is another possible approach to this crucial question of signification which suggests an alternative way of understanding what Vitruvius meant when he claimed to be writing the body of architecture. Two approaches, in fact, which are mutually illuminating and which are both firmly rooted in the immediate context of its writing. One is through an account of ritual signification as explored by John Scheid.[350] The other is through the Stoic theory of language, specifically, the theory of what Stoics called the *lekton*.

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[347] For example, Boethius 1939, p. 116; MacDonald 1982, pp. 10-11; Sackur 1925, p. 155. Wilson Jones 2000 gives a useful summary of the traditionally alleged failings of *De architectura* in his chapter on Vitruvius.

[348] Gordon 1990a, pp. 184-191. See also Feeney 1998, p. 141, on the difficulty of reconstructing Roman ritual through literary accounts: "we may wish that Roman literature had been more 'faithful' to 'real' religion, but this is to overlook the fact that there was no one real religion for literature to be faithful to in the first place."

[349] Beard 1991, p. 55.

[350] Scheid 1986.

It is important, first of all, to stress that *significare* in Latin means to "show by signs," not "represent." John Scheid's essay deals with three instances of Roman ritual practice which involve such signification – the case of the *flamen*, or priest of Jupiter, that of the triumphant general, and that of the vestal virgins. The conventional interpretation has been to take each of these cases as an instance where the person in question, costumed for his or her role and bound by strict ritual constraints, somehow "represents" a god in a living image. For the lifelong duration of his office, the *flamen* represented Jupiter. So did the triumphant general, but only for the day of his triumph when, with his face painted red like Jupiter's statue, he climbed to the god's temple on the Capitol in Rome. For the 40 or so years they were bound by their vows, vestals represented Vesta, goddess of Rome's public hearth.

Scheid's contention is that these people were *not* the living image of the god or goddess, but rather the god's double, the same way that the archaic Greek *kolossos* studied by Jean-Pierre Vernant "doubled" a dead man or woman, and fixed the power of death in the world of the living by giving it a visible form.[351] The *flamen*, with his costume and ritual behaviour did not *represent* the god but rather, Scheid argues, as double, *signified* the god's power – showed it by signs – and made it visible. Scheid points out that St. Augustine uses the verb *significare* to describe precisely this kind of ritual activity.[352] Thus, the signifier in this ritual context would be a man or woman who wore certain clothes and performed certain gestures. The signified was not another being, but the ephemeral

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[351] Vernant 1985, pp. 325-338. The archaic *kolossos* was not a giant statue, but a stele, which was not an image or even very large, and was planted in the ground. Fixity was the salient feature of these menhir-like pillars (Roux 1960, p. 31). The *kolossos* only became a giant statue in the Hellenistic period, with the colossos of Rhodes at the beginning of the 4th century BC (Roux 1960, p. 5). See also Benveniste 1932.
[352] Augustine *City of God* 6.9.2.

*power* or meaning of another being, which mediated between the signifying celebrant and the absent god he or she celebrated. The arrest of the prescribed behaviour would mean the evanescence of that power – and the disappearance of the god. The triumphant general only mediated the god's power for a day. The *flamen*, however, who was never allowed to be absent from Rome and who, moreover, could never sleep away from his home where the legs of his bed were coated with the mud of Roman soil, fixed the signified power permanently, or as permanently as humanly possible, in a specific place. This does not imply that the gods were "constructed," for their existence was never in question.[353] But it does imply that their presence in human communities was a fragile affair which coexisted with human action.

The notion of signifier-signified, first developed by Greek sophists in the 5th century BC, was a key aspect of Stoic language theory.[354] Words bore a special relation to things and a well-formed locution could even at times surpass the "thing" referred to.[355] Cato's encomium on the beauty of the Stoic system in Cicero's *De finibus*, where he insists that its coherence surpasses that of any artifact and even the coherence of the natural order it accounts for, is a striking case in point.[356] But signifier-signified is a truncation of the full Stoic formulation which has three terms, not just two: signifier, signified and the thing referred to, which of course means that the signified and the thing referred to are not the same.

This is how Sextus Empiricus explained the theory in the 3rd century A.D.

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[353] See Beard 1994.

[354] On semiotics in classical antiquity, see Manetti 1993. Manetti (p. 92) says that "the Stoic school of philosophy was responsible for the most rigorous and profound reflection on semiotics which is to be found in ancient philosophy."

[355] Ferri, Vitruvius (1960), pp. 34-35; Cf. Gros 1995, p. 174; 1996b, p. 27.

"*The stoics . . . (say) . . . that three things are linked together, what is signified* (to sêmainomenon), *that which signifies* (to sêmainon), *and the existing thing* (to tynchanon). *That which signifies is the utterance ("Dion" for instance); what is signified is the specific state of affairs* (to pragma) *indicated by the spoken word and which we grasp as coexistent with our thought, whereas the barbarians although hearing the sound do not understand it; the existing thing is the external reality, such as Dion himself. Of these, two are bodies, the utterance and the existing thing. But the state of affairs signified is not a body but a* lekton . . .[357]

*Lekta* are not bodies. Like void, place and time, *lekta* are what the Stoics called "incorporeals."[358] *Lekta*, things signified, mediate between words, considered as significant utterances and existing things.[359] Since everything that strictly speaking existed for Stoics was a body, *lekta* had no independent existence. Their existence, rather, was temporally dependent on the duration of thoughts and sentences.[360] Although Sextus gives "Dion" as an example of a signifier, the signs or signifiers which constitute significant utterances do not – at least according to Seneca – strictly speaking, name things, however. Significant utterances, rather, say something *about* something, for as Seneca, writing on Stoic language theory, points out "there is the greatest difference between naming a certain thing and speaking about it (*de illo*)."[361] Thus, although *lekta* are not themselves bodies, and indeed do not create them, they can affect the appearance of what the Stoics called the

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[356] Cicero *De finibus* 3.74, cited above p. 60.
[357] Sextus Empiricus *Adversus Mathematicos* 8.11-12 (=*Adversus dogmaticos* 2.11-12 in the Loeb edition). Cf. Long 1971, p. 76. See also Diogenes Laertius 7.62-63, who attributes the theory to Chrysippus (3rd century B.C.).
[358] On the Stoic theory of incorporeals, see Bréhier 1970.
[359] Long 1971, p. 79.
[360] Long 1971, p. 97.
[361] Seneca *Epistulae* 117.13: *Plurimum autem interest utrum illum dicas an de illo.*

"representations" (*phantasia*) of bodies – how the human mind perceives things – by articulating their "qualities" and determining what they may be seen to be *like*[362] – all, of course, for a good Stoic, in keeping with the cohesive *logos* of the natural order. *De architectura* is *about* architecture, a ten-scroll written work which, if one follows this line of reasoning, did not so much bring architecture into being as shape its *phantasia*, its representation: a perfect body which had to be written if it were not to evanesce with the thought or utterance with which it coexisted. If, in other words, what it signified were to last. "An architect should know writing so as to be able to bring about a stronger memory in commentaries."[363]

Seneca reports the use of three Latin equivalents for the Greek word "*lekton*:" *effatum*," "pronouncement," *enuntiatum*, "declaration," and *dictum*, "thing said."[364] Another Latin counterpart seems to have been *res*, the "matter" of utterances for, wrote Quintilian in his *Institutio oratoria* at the end of the first century AD,

*Every speech* (oratio) *consists of those things which are signified* (ex iis quae significantur) *and those which signify* (quae significant), *that is, of matter and words* (ex rebus et verbis).[365]

Silvio Ferri who, like others, claims that Vitruvius' *quod significatur* (signified) is construction, bases his conclusion on the assumption that Vitruvius, or his source, popularized the notion. Vitruvius continues his paragraph on the matter by asserting that whoever would call himself an architect should be trained (*exercitatus*) "in each part" – that

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[362] Long, 1996, p. 284-285.
[363] Vitruvius 1.1.4: *Litteras architectum scire oportet uti commentariis memoriam firmiorem efficere possit.*
[364] Seneca *Epistulae* 117.13.
[365] Quintilian 3.5.1. Cf. Ferri, Vitruvius (1960), p. 35. Callebat 1994, p. 35. See also 3.6.37, where Quintilian attributes the distinction to the Stoic Posidonius. Cf. Watzinger 1909, pp. 206-207.

is, both in signifiers and in what they signify. The obvious conclusion, for Ferri and others, is the *ratiocinatio* = signifier, *fabrica*=signified equation. This is understandable enough, given that Vitruvius has just written (paragraph 1) that *fabrica* and *ratiocinatio* together bring the knowledge of the architect into being, and further (paragraph 2) that they jointly constitute the "arms" which allow the architect to attain his goal speedily and with authority.[366] Would he be saying more or less the same thing yet again in paragraph 3? Vitruvius was no stranger to redundancy, and the paragraph in question may indeed be another example of his tendency to repeat himself. But he concludes the signifier-signified paragraph by listing the nine disciplines that he considers to be the means to the architect's attaining expertise "in each part;" what the architect needs to know to become a *perfectum artificem* – an accomplished master of the art.[367] And there is not a single reference to *fabrica* or construction in the list that follows, nor in the ensuing paragraphs (4 to 10) which explain why each of the disciplines is needed.

This should come as no surprise, if one recalls that *fabrica*, "the continuous and routine practice of the activity the hands accomplish out of matter," is the habit or *hexis* of hands-on practice that, as argued earlier, gives architecture its vegetative soul. Clearly, *disciplinae* cannot have a great deal to do with *fabrica* thus defined. The first three disciplines Vitruvius lists – writing, drawing, geometry – would appear, rather, to furnish signifying skills; the following six (history, philosophy, music, medicine, law and the *rationes* of the sky) to contribute to the stock of "matter" which may be signified. In

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[366] Vitruvius 1.1.1: *ea nascitur ex fabrica et rationcinatione*; 1.1.2: *At qui utrumque(sc. fabrica et ratiocinatio) perdidicerunt, uti omnibus armis ornati, citius cum auctoritate quod fuit propositum sunt adsecuti.*

[367] Vitruvius 1.1.3.

paragraph 3, while still obviously writing about *architectura*, Vitruvius seems no longer to be concerned with *fabrica* and *ratiocinatio* but to have broached another, related topic.

According to Vitruvius, the signifiers and signifieds contained in "all things" inhere *tum maxime*, to the highest degree, in architecture.[368] Why in architecture above all?

If one may, with Quintilian, understand that every *oratio* consists of signifying *verba* (words) and signified *res* (matter), then signifier and signified, while belonging in general to language, belong, in this context, specifically to the discipline of rhetoric. So too, as a number of scholars have shown, (in its method and structure, at least) does *De architectura*, whose author cites Cicero's *De oratore*, along with Varro's *De lingua latina*, as a work he particularly admires.[369] For instance, many of the words Vitruvius uses for the things on which architecture depends – *ordinatio*, *dispositio* (arrangement), *eurythmia* – are also rhetorical terms which, Louis Callebat has suggested, signal an author with some rhetorical training who was thus able to formulate an architectural discourse using terms which were familiar to his audience – members of the Roman élite who were virtually all trained, practicing orators, but who were unlikely to know a great deal about architecture.[370] Also part of this rhetorical vocabulary were "signifier" and "signified," *verba* and *res*, which indeed were an orator's stock in trade.

Naturally, there was more to the art of rhetoric than just matter and words. Through *inventio* they had to be thought up; through *distributio*, properly arranged; through *elocutio*, well said; and through *actio*, delivered. They also had to be stored for

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[368] Vitruvius 1.1.3: These two things are contained in all things, but above all in architecture: that which is signified and that which signifies. *Cum in omnibus rebus tum maxime etiam in architectura haec duo insunt: quod significatur et quod significat.*

[369] *De architectura* and rhetoric: André 1987; Brown 1963; Callebat 1994; Gros 1979. Mention of *De oratore*: Vitruvius 9.pref.17.

ready recall, which was where *memoria* came in.[371] Not natural memory, but artificial memory – the "art" of memory, so called, on which two of the three surviving ancient sources date from the first century BC, one of these being at the end of Book 2 of Cicero's *De oratore*.[372] *Rerum memoria propria est oratoris*, Cicero wrote, "the memory of things is the special property of the orator."[373]

To review the now familiar procedure, the practitioner of the art of memory "deposited" *res* or *verba*, represented by images (*imagines*) into a series of ordered locations (*loci*) in his mind and had only to revisit these locations for the matter or words to be recalled in their proper order. Order is the crucial operative. Cicero says that it is order above all (*maxime*) that lights up the memory,[374] which in this mnemonic context is clearly more spatial than temporal. Further, fixing *res* in the memory was more expeditious than fixing *verba* (of which in any case there were far too many) for if one were able to recall one's "matter," words would follow of their own accord.[375] *Loci* were required to lodge the *imagines* that signified *res* because, said Cicero, voicing what was a commonplace of

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[371] Callebat 1994, p. 45.

[372] *Inventio, distributio, elocutio, memoria* and *actio* are the five parts of classical rhetoric, dealt with in Roman treatises such as the *Rhetorica ad Herennium*, Cicero's *De oratore* and Quintilian's *Institutio oratoria*. Cicero's *Partitiones oratoriae*, a short work written for his son, gives an especially succinct account. Memory has received a great deal of scholarly attention in recent years, beginning with Yates 1966. See also Blum 1969; Carruthers 1990; Vasaly 1993, pp. 89-104; and most recently Small 1997. Specific studies of texts and monuments which take the art of memory as their reference and point of departure include Bergmann 1994; Elsner 1996; Güven 1998; Jaeger 1997; McEwen 1994 and 1995.

[373] See *Rhetorica ad Herennium* 3.28-40, (written ca. 85 BC); Cicero *De oratore* 2.350-361; Quintilian 11.2.1-51. Cf., especially, Yates 1966, ch. 1; Small 1997.

[374] Cicero *De oratore* 2.359.

[375] Cicero *De oratore* 2.353: . . . *ordinem esse maxime qui memoriae lumen afferret*. This key principle was discovered by Simonides of Ceos (556-468 BC) when he was able to give names to mangled corpses, crushed beyond recognition in the course of a banquet by a collapsed ceiling, because he remembered who had been sitting where and in what order before the accident (*De oratore* 2.351-353; Quintilian *Institutio Oratoria* 11.2.11-16). Simonides, significantly, was an epitaphic poet, allegedly the first to be paid for his work (Carson 1993).

[375] *Rhetorica ad Herennium* 3.39; Cicero *De oratore* 2.359.

the ancient thought, "a body without a *locus* is unintelligible."[376]

But as Jocelyn Penny Small has stressed, in the Greeks never counfounded the places (*chòrai*, or *chòroi*) without which bodies were unintelligible, with the rhetorical *topoi* of mnemonic systems, as Cicero does in the passage just cited.[377] *Topoi*, for Aristotle and the Greeks, were "purely mental constructs with no physical aspects."[378] The transfiguration of the Greek orator's mnemonic *topoi* into *loci* imagined as real – in principle measurable – places occured in late republican Rome.

What, for the Romans, constituted these *loci* were houses, according to the anonymous, first century B.C. of the *Rhetorica ad Herennium*, intercolumnar spaces, recesses, arches and the like.[379] Quintilian, a century and a half later, elaborates on the use of houses, but adds that one can also use public buildings, a long road, the ramparts of a city and pictures.[380] None of these, of course, exists without building: one of the three parts of architecture in which, says Vitruvius – *tum maxime* – signifiers and signifieds are contained.[381] He would appear to have meant this quite literally, if indeed signifiers and signifieds are for Vitruvius as for Quintilian, *verba* and *res*, although of course the orator's "artificial" memory locations, even if drawn from the real world, were rebuilt, as it were, inside his mind.

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[376] Cicero *De oratore* 2.358: . . .*corpus intellegi sine loco non potest*. See Plato *Timaeus* 52B. Plato's view was that place (*chòra*) ideally, or as an object of thought, preexists the things that occupy it. For the Stoics who followed Aristotle on this, place – incorporeal, like *lekta* – coexisted with bodies, just as *lekta* coexist with their signifiers on whose existence their *sub*sistence depends. See Bréhier 1970, pp. 37-44.
[377] Small 1997, pp. 95-116 and 239.
[378] Small 1997, p. 94.
[379] *Rhetorica ad Herennium* 3.16.
[380] Quintilian *Institutio oratoria* 11.2.21.
[381] One might argue that pictures are not built works, but should recall that Book 7 of *De architectura*, the last of the seven devoted to building (7.14.3: *Itaque omnes aedificationum perfectiones . . . septem voluminibus sunt finitae*) is on finishes and indeed has quite a lot to say about pictures, which moreover

The role of the hut of Romulus on the Capitol, says Vitruvius, was to "signify (*significare*) the *mores* of ancient times and impress them on the mind."[382] The image here is of a primitive hut. But primitive construction methods are not its signified matter. For an educated Roman, the *mores vetustates* signified by the hut of Rome's founder would have been the same as the customs of ancient times that Cicero claimed were the foundation of the Roman commonwealth.[383] Given its *locus* on the Capitol next to the Temple of Jupiter Capitolinus, it also signified the first beginnings of Rome's greatness.[384]

Placing images in such locations is just like writing, according to the Roman sources, "for the *loci* are very much like wax tablets or papyrus, the images like letters, the arrangement and disposition of the images like the script, and the delivery is like reading."[385] Indeed, Quintilian's personal mnemonic favoured writing itself over the place-and-image system.[386] For him written words, which acted like *imagines*, while impressing "matter" on the places of the wax tablet on the writer's knees simultaneously impressed it onto the tables of his memory, from whose *loci* he could, as in the more traditional system, then

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were usually tied to built locations. See further Bergmann 1994 for a reading of the pictures in the House of the Tragic Poet at Pompeii in precisely such terms.

[382] Vitruvius 2.1.5: *Item in Capitolio commonfacere potest et significare mores vetustates Romuli casa.*

[383] Cicero *De re publica* 5.1, citing Ennius: *moribus antiquis res stat Romana virisque.*

[384] There was another, far better documented and probably older hut of Romulus on the Palatine: Pensabene 1990-91; cf. Corso and Romano, commentary ad loc in Vitruvius 1997, p. 177, for the numerous citations which begin, chronologically, with Varro (*De lingua latina* 5.54). See also, especially, Edwards 1996, pp. 32-43. Balland 1984, pp. 73-74 thinks the hut on the Capitol was built in the early part of Augustus's reign, probably during the reconstruction of the *area Capitolina* in 26-20 B.C (Gros 1976a, p. 97; cf. Edwards 1996, p. 37). Besides Vitruvius, among the writers (far fewer than for the Palatine hut, and all Augustan or later) who mention the Capitoline hut is Virgil who includes it in his description of Aeneas' shield (*Aeneid* 8.654), whose images – the hut among them – chronicle Rome's past as prophesy of its accomplishment in the reign of Augustus (Edwards, pp. 35-36). Virgil locates the hut in front of the Temple of Jupiter, as does Vitruvius' near contemporary the elder Seneca (*Controversiae* 1.6.4). See further below, Chapter 2, pp. 171-177. On the hut as signifier of Rome's greatness Valerius Maximus 2.8: . . . military discipline keenly holds fast its source, and makes from Romulus' small hut the column of the whole world. *disciplina militaris acriter retenta . . . ortum . . . e parvula Romuli casa totius terrarum orbis fecit columen.* Valerius Maximus wrote under Tiberius, Augustus's successor.

[385] *Rhetorica ad Herennium* 3.30. Cf. *De oratore* 2.354 and 2.360; Quintilian 11.2.21.

draw it forth at will.[387]

According to Mary Jaeger, Livy wrote his *Ab urbe condita* as a *monumentum*, reminder, in which the events – *res gestae populi Romani* (achievements of the Roman people) – Livy records are so fused to his written record of the places of Rome's collective memory as to be unintelligible without them.[388] While discussing Livy's history in general terms of monumental narrative space, she also adduces the art of memory as a contributory factor. Jaeger suggests among other things that Livy's division of his work into pentads of five books each reflects the prescription that each fifth *locus* of the artificial memory be clearly marked, and that Livy's selectivity in his choice of Roman monuments is not so much reductive as the necessary concomitant of mnemonic schematization:[389] a Rome tailored, one might say, for writing on the mind.

Ann Vasaly has shown that Cicero consistently made the city and its monuments "an integral part of the perceptible proof that formed the chief subject matter of (an) oration."[390] In one of his last speeches, addressed to Julius Caesar in 44 B.C., Cicero complains about having to speak indoors where he could not longer invoke the incontestable material presence of these potent signifiers.[391] You can use words to reply to an argument made with words. But how do you answer to the self-evident *fact* of a building? Partcularly one about whose signification (the hut of Romulus or the Temple of Jupiter, for instance) there is, or should be, no collective doubt? Cicero's frustration on the occasion cited leads one to

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[386] Quintilian *Institutio oratoria* 11.2.26.
[387] Quintilian *Institutio oratoria* 11.2.10.
[388] Livy *Ab urbe condita* Pref.3: *Rerum gestarum memoriae principis terrarum populi . . . consuluisse*. Jaeger 1997, ch. 1.
[389] Marking each fifth *locus*: *Rhetorica ad Herennium* 3.31; Jaeger 1997, pp. 20-21.
[390] Vasaly 1993, p. 77, with specific reference to Cicero *In Catalinam* 3.
[391] Cicero *Pro rege Deiotaro* 6. Cf. Vasaly 1993, p. 34.

believe that he would have agreed with, or at least understood, Vitruvius' claim that architecture above all is the repository of signifiers and of signified matter. "So great a power of suggestion resides in places (*locis*)," Cicero wrote in *De finibus*, "that it is no wonder the discipline of memory is based on it."[392]

Virgil too makes monumental Rome an integral part of his narrative in the *Aeneid*, to the point where, according to T.P. Wiseman, to miss such allusions is to miss the poet's rhetorical intent.[393] Being implicit rather than explicit, such evocations (principally of Augustan monuments) often elude the modern reader, but would have been obvious to the ancient Roman one. In Virgil, as in Cicero and Livy, the signifying power of words is made to depend upon the far greater signifying power of built works and their topographical *loci*: on architecture, in other words.

"To write about architecture is not like writing history or poetry," writes Vitruvius (after Cicero, and at about the same time as Livy and Virgil) in the preface to Book 5, a preface whose text is developed between the "Imperator" he opens with and the "Caesar" he addresses at its close.[394] The theme of the preface is the difficulty of transmitting architectural knowledge.[395]

Histories hold the reader's attention through suspense, says Vitruvius; poems by meter and the "choice arrangement of words," neither of which is at the disposition of the

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[392] Cicero *De finibus* 5.2: *Tanta vis admonitionis inest in locis: ut non sine causa ex iis memoriae ducta sit disciplina.* Cf. Vasaly 1993, p. 88.

[393] Wiseman 1984, p. 122, referring in particular to the Temple of the Magna Mater on the Palatine (Virgil *Aeneid* 6.781-787) and to the tour of Rome Evander gives to Aeneas (*Aeneid* 8.306-369), where the chosen itinerary implicitly invokes the sites of future Augustan monuments. On the latter, see especially Grimal 1948.

[394] Vitruvius 5.pref.1: *Non enim de architectura sic scribitur uti historia aut poemata.* For a detailed study of this preface, see Kessissoglu 1993, who considers the fifth preface as the only surviving ancient account to clearly set out a method for technical (as opposed to historical or poetical) writing. He makes no mention of the art of memory, however.

writer on architecture. The amplification orators use to elaborate on, and lend authority to their themes is no help either, for amplification would only further confuse architectural writings where both the terms and the procedures described are already unfamiliar.[396]

*Therefore, in pronouncing strange terms and giving the proportions of the members of works, my explanations will be brief so that they may enter into memory; for in this way, minds will be able to receive them easily.*[397]

There follows his discussion of writing according to Pythagorean "cubical principles." When it is thrown, a cube, like dice he says, remains immobile on whatever side it rests. Similarly, cubical writing "will produce motionless stability of the memory there (*ibi*)" – presumably in the place where it lands.[398] As mentioned earlier, Vitruvius himself does not appear to have followed such principles.[399] Rather, what he seems to be doing, is (memorably) marking this, his fifth preface – *ibi*, there – as a memory *locus*, with an *imago* that is the stablest of geometrical solids, halfway between the "Imperator" of his opening address and the "Caesar" of his concluding one, and – if one imagines the ten scrolls stacked up in the form of the *tetractys* – anchoring the entire work at the spatial centre of its triangular deployment:

I

II III

IV V VI

VII VIII IX X

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[395] On the difficulty of signifying or "grasping" architecture in writing see also Vitruvius 4.8.7 and 10.11.9.
[396] On *amplificatio* see *Rhetorica ad Herennium* 2.20; Cicero *Partitiones oratoriae* 15; Quintilian 2.5.9.
[397] Vitruvius 5.pref.2: *Itaque occultas nominationes commensusque e membris operum pronuntians, ut memoriae tradantur, breviter exponam; sic enim expeditius ea recipere poterunt mentes.*
[398] Vitruvius 5.pref.4: *inmotum efficiat ibi memoriae stabilitatem.*

Although he does not seem to have followed the prescriptions of cubical writing, Vitruvius does appear to understand that his recourse to brevity serves a similar "cubical" purpose.[400] At least as important mnemonically, if not more so, is his recourse to order – what Cicero called the light of memory – also stressed here in the fifth preface: writing a single body of architecture, with a separate scroll for each different subject, which may be recalled at will because its *locus* is part of an ordered sequence.[401]

Vitruvius understood the efficacy of the principle perfectly. In the preface to Book 7, he tells the story of Aristophanes of Byzantium, one of the judges of a literary competition held at the Library in Alexandria, who was able to identify six of the seven contestants as plagiarists because "every day, with supreme application and the greatest diligence, he (Aristophanes) would read through all the books *in their proper order*."[402] Thus, after the all the poets had made their presentations, Aristophanes "trusting in his memory," was able to go directly to the right shelves, pull out the appropriate scrolls and, by comparing the texts in the library to those that had just been read, force the spurious poets to acknowledge their guilt.[403] The question of fraud would, of course, not even have arisen had neither the fraudulent poems nor their sources been written down. More importantly, Aristophanes was able to unmask the deception because his memory was

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[399] See above, p. 51.

[400] After describing the cubical principles (216 lines per *conscriptio*), Vitruvius writes (5.pref.5): Therefore . . . I have determined to write in short scrolls, so that they might reach the perceptions of readers more easily, and so be expedited to the understanding. *Ergo . . . quo facilius ad sensus legentium pervenire possint, brevibus voluminibus iudicavi scribere: ita enim expedita erunt ad intellegendum.* The implication of the "therefore" is clearly that his brevity is similarly (in principle at least) "cubical."

[401] Vitruvius 5.pref.5: "I set up their order (of the scrolls) so that inquirers need not gather explanations piecemeal, but can obtain them from a single body with different subjects treated in separate scrolls." *Eorum ordinationes institui, uti non sint quaerentibus separatim colligenda, sed e corpore uno et in singulis voluminibus generum haberent explicationes.*

spatially ordered in the same way as the library shelves.

The same ordering principle governs Vitruvius' insistent and repeated identification of the relative position of each of his own scrolls, whereby every one begins and ends with a connective paragraph that clearly defines its location with respect to the others.[404] Given these spatial coordinates within the framework of the whole ten-scroll *corpus*, the "matter" in each scroll is properly placed for ready recall.

The two short paragraphs of the preface to Book 4 constitute the very briefest (most "cubical") of Vitruvius' ten prefaces. It is the only preface besides the clearly marked fifth one to address both "Imperator" and "Caesar" and separate them with a block of text. Moreover, it is within this strategically placed block of text that the stress on order occurs – an emphasis which recurs, similarly located and almost verbatim, in the following preface.

*When I noticed,* Imperator, *that many who have provided rules and scrolls of commentaries on architecture have not left orderly works but only incomplete drafts, scattered like fragments, I decided it would be a worthy and most useful thing to bring the whole body of this great discipline to complete order and, in separate scrolls, to develop a register of conditions for each of its different subjects. Therefore,* Caesar, *in the first scroll I set out for you what its* officium *is . . . .*[405]

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[402] My emphasis. Vitruvius 7.pref.5: *qui summo studio summaque diligentia cotidie omnes libros ex ordine perlegeret.* Oder 1899, p. 185, n. 186, argued that Varro, who wrote a book on libraries called *De bibliothecis*, is the source for the anecdote, as does Frazer 1970, p. 117.

[403] Vitruvius 7.pref.7: . . *fretus memoria e certis armariis infinita volumina eduxit* . . .

[404] Thus, typically, concluding the preface to Book 5 (5.pref.5), "Therefore, Caesar, I have set forth the principles of temples in the third and fourth scrolls, and in this book, I will develop the arrangements of public places." *Itaque, Caesar, tertio et quarto volumine aedium sacrarum rationes exposui, hoc libro publicorum locorum expediam dispositiones.*

[405] Vitruvius 4.pref.1: *Cum adnimadvertissem, Imperator, plures de architectura praecepta voluminaque commentariorum non ordinata sed incepta uti particulas errabundas reliquisse, dignam et utilissimam rem putavi tantae disciplinae corpus ad perfectam ordinationem perducere et praescriptas in singulis*

Between the "Imperator" and the "Caesar" of this, the preface to Book 4 (and also, later, of Book 5), is where Vitruvius locates the *order* of the work or, more precisely, where he locates the sentence that *describes* its order. Words (*verba*, signifiers) are positioned between "Imperator" and "Caesar," which are other words, but these last in the vocative case which address a particular person – a body. The words which describe the order of *De architectura* are not "just" words, of course. They are *about* something: as signifiers, they say something *about* architecture, *de architectura*. Since what these words signify – the *lekta* or schematized matter of the whole work – coexist with the signifying words, where Vitruvius puts them is also, obviously, where he puts their signified matter. The order signified is lodged inside the person signified by IMP. and CAESAR, their enframing architectural *locus*, who here and again in the preface to Book 5, becomes the mnemonic house of *architectura*.

The trope, moreover, works both ways. In the single, long and particularly dense sentence that constitutes the concluding paragraph of his first preface, Vitruvius summarizes his reasons for writing *De architectura* for Augustus. Memory is one of them. He began to write for him because he was bound to his patron by benefits received, he starts out. Also, he continues, because he has noticed how much Augustus has been, is, and is planning to build

*both public and private buildings in keeping with the greatness of your achievements* (rerum gestarum) *so that these might be transmitted to the memory of posterity and abide in its care, I have delineated complete and detailed rules so that by considering them you yourself can take account both of what finished works are like and of*

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*voluminibus singulorum generum qualitates explicare. Itaque, Caesar, primo volumine tibi de officio eius.*

*how future ones will be; for in these scrolls I have laid out all the principles of the discipline.*[406]

On the one hand the buildings built by Augustus – architecture in its narrow sense – provide the places of posterity's memory into whose abiding care his *res gestae*, achievements, are consigned.[407] On the other, the *praescriptiones terminatas*, complete and detailed rules, that Vitruvius claims to provide in his treatise, circumscribe and delimit (spatially, again, with *terminus*, limit, primarily spatial) in writing the knowledge (*architectura*) Augustus needs in order grasp for himself what these places are or will be like.

Two complementary memories are at work here. One, posterity's, is to be furnished with buildings that locate the builder's *res gestae*, achievements which, without such *loci* to give them substance would drift into oblivion, evanescent as *lekta* or the forgotten "matter" of a public address. The other memory belongs to the builder Augustus. The first, the memory of posterity, Vitruvius implies, needs the second, whose mnemonic frame is the

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*exposui.*

[406] Vitruvius 1.pref.3: . . .*et publicorum et privatorum aedificiorum pro amplitudine rerum gestarum ut posteris memoriae traderentur curam habiturum, conscripsi praescriptiones terminatas ut eas adtendens et ante facta et futura qualia sint opera per te posses nota habere; namque his voluminibus aperui omnes disciplinae rationes.*

[407] It is worth recalling that Augustus's *Res gestae*, his autobiography in which particular stress in laid on his built works, was in fact in fact later inscribed, in Latin and Greek, on the walls of the Temple of Roma and Augustus at Ankara in the Roman province of Galatia. This Ionic octastyle pseudodipteral temple, built around 20 B.C. was thought initially to date from the second century B.C., because built according to Hermogenean principles. See now Güven 1998 and also Elsner 1996. If the temple may be called "Hermogenean" it is largely thanks to Vitruvius who attributes the invention of the octastyle pseudodipteral to Hermogenes of Alabanda, an architect he greatly admires. This kind of temple, he says, while retaining an authoritative aspect, saves both expense and work by eliminating the second, interior row of columns characteristic of the true dipteral (3.3.8). It is therefore, arguably, also thanks to Vitruvius that a "Hermogenean" temple should have been build so late in the day. The two other surviving copies of the *Res gestae* were also found in Galatia: one as a Greek inscription, in Apollonia; the other as a Latin one, in the Roman colony of Antioch in Pisidia (Güven 1998, pp. 32-34; Mitchell and Waelkens 1999, pp. 148-150; Ramsay and von Premerstein 1927). The work had been meant for inscription, not literary publication, from the outset. According to Suetonius (*Divus Augustus* 101.1-4) Augustus had deposited it with the

spatial schematic of a perfect body of ten discrete scrolls. Common to both is the person of the new ruler, repeatedly invoked as Imperator, or Caesar or both in all ten prefaces save one.

Book 8, as intimated earlier, is an anomaly among the ten books. Although necessary for completing Vitruvius' perfect decad, its subject matter, water, does not fit into the tripartite whole of architecture – building, the construction of clocks, mechanics. It is also the only book not overtly addressed to Augustus. Louis Callebat has suggested that the absence of an "Imperator" or a "Caesar" in the eighth preface may simply be an accident of transcription.[408] On the other hand, the omission may also have something to do with what Book 8 is *about*.

Romans certainly made every effort to contain, channel, direct and control water, whose flow Heraclitus, memorably, made the phenomenal analogue for the ever-changing flux of lived experience.[409] Water, Vitruvius stresses, is the source of life itself.[410] But in Book 2 where he discusses how the elements combine in bodies and in building materials, it is water, the enemy of coherence, that more than any of the other elements dissolves good bonds. Profoundly ambiguous archetype of pre-literate, mythical memory and forgetfulness,[411] water is also the enemy of mnemonic schematization.

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Vestals along with his will, with instructions that it be inscribed on two bronze tablets in front of his mausoleum after his death.

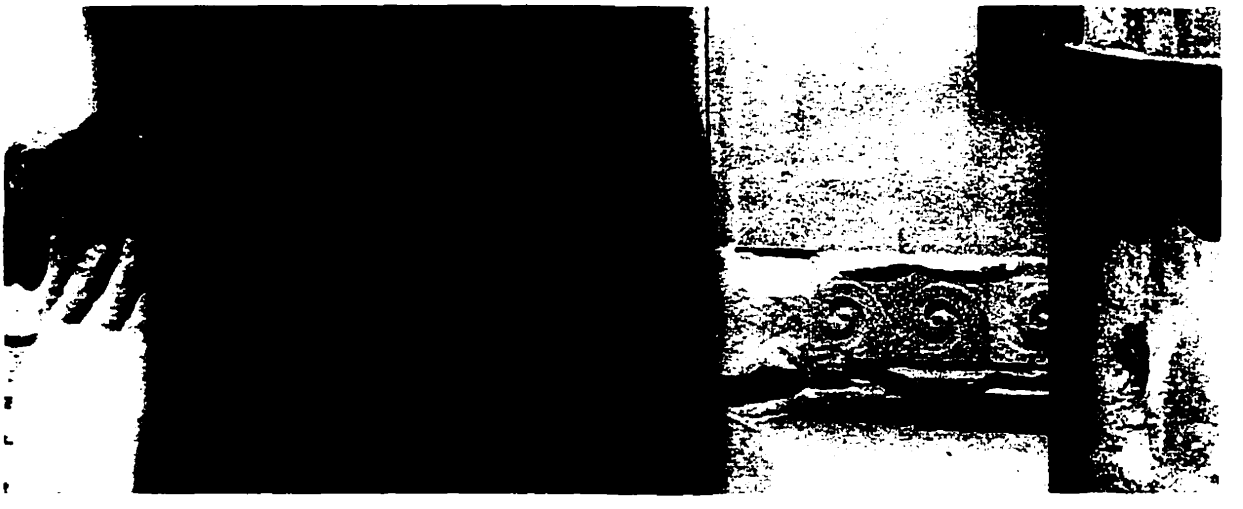
[408] Callebat, Vitruvius 8 (1973), p. viii.

[409] Heraclitus fr. 12; cf. Kirk, Raven and Schofield 1983, pp. 194-197.

[410] Vitruvius 8.pref.4; 8.1.1.

[411] See Illich 1985; Vernant 1959.

Fig. 7



Wave motive at the base of the cella wall of the Temple of Mars Ultor in the Forum of Augustus, inaugurated in 2 B.C. (Photo author).

Chapter Two

# THE HERCULEAN BODY

## The King's Double. The Once and Future King. Benefiting the World.

*When Alexander was mastering the world, the architect Dinocrates, confident in skill and the power of thought, came out of Macedonia to the royal garrison eager for recommendation. Out of his homeland he brought letters from friends and relations to the highest ranks of the king's officers so as to gain easier admission.*[1]

Unable to obtain the speedy access he desired, Dinocrates impatiently took up his own defence.

*His stature was more than ample, his appearance comely, his build majestic. And so, putting his trust in these gifts of nature, he left his clothes at his lodging, anointed his body with oil, crowned his head with poplar leaves, covered his left shoulder with a lion skin and, grasping a club in his right hand, came to the tribunal where the king was giving justice. When the king's men turned toward this apparition, Alexander caught sight of him. Wonderstruck, he ordered them to make room so that the man could approach and asked who he was.*

*"Dinocrates," he answered, "the Macedonian architect who brings to you*

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[1] Vitruvius 2.pref.1: *Dinocrates architectus cogitationibus et sollertia fretus, cum Alexander rerum potiretur, profectus est e Macedonia ad exercitum regiae cupidus commendationis. Is e patria a propinquis et amicis tulit ad primos ordines et purpuratos litteras, ut aditus haberet faciliores.*

*ideas and designs worthy of your renown. For I have formed Mount Athos into the shape of the statue of a man in whose left hand I have traced the walls of a most spacious city. In his right, there is a bowl to draw out all the rivers that are in that mountain, water which from there pours out into the sea."*

*This kind of design delighted Alexander, who immediately asked if there were fields around which could maintain the city with supplies of grain. When he discovered that this could not be done without transport from beyond the sea he said, "Dinocrates, I appreciate how very well this design has been put together, and am delighted by it. But . . ."*[2]

The king's objection is Dinocrates' poor choice of location for such a city which, like a baby without a nurse's milk, would be unable to grow or thrive without a ready supply of grain.

*"Therefore, much as I think your design is to be esteemed, I judge the place not so; yet I want you to stay with me because I will make use of your works." From then on Dinocrates did not leave the king and followed him into Egypt. There, when Alexander noticed the naturally safe harbour, the excellent market, the grain-bearing fields throughout the whole of Egypt, and the great advantages of the vast river Nile, he commanded Dinocrates to establish the city of Alexandria in his name. And so*

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[2] 2.pref.1-3: *Fuerat enim amplissima statura, facie grata, forma dignitateque summa. His igitur naturae muneribus confisus vestimenta posuit in hospitio et oleo corpus perunxit caputque coronavit populea fronde, laevm umerum pelle leonina texit, dextra clavam tenens incessit contra tribunal regis ius dicentis. Novitas populum cum arvertisset, conspexit eum Alexander. Admirans ei iussit locum dari, ut accederet, interrogavitque, quis esset. "Dinocrates," inquit, "architectus Macedo, qui at te cogitationes et formas adfero dignas tuae claritati. Namque Athon montem formavi in statuae virilis figuram, cuius manu laeva designavi civitatis amplissimae moenia, dextra pateram, quae exciperet omnium fluminum, quae sunt in eo monte, aquam, ut inde in mare profunderetur." Delectatus Alexander ratione formae statim quaesiit, si essent agri circa, qui possent frumentaria ratione eam*

*Dinocrates, commended by his appearance and the stateliness of his body, came to such renown. As for me, Imperator, nature has not given me stature, age has spoiled my appearance and bad health has sapped my strength. And so, because I have been deserted by these defences, it is with the help of knowledge and writings that I hope to attain recognition.*[3]

**The King's Double**

The story of Dinocrates and Alexander constitutes the sum and substance of Vitruvius' preface to Book 2, the one on building materials.[4] In no other preface is an anecdote, if there is one, given such exclusive prominence.[5] Although Varro has been named as the source for the story, and although other ancient authors mention Dinocrates, Vitruvius is the earliest to do so at first hand.[6] His account, moreover, is

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*civitatem tueri. Cum invenisset no posse nisi trans marinis subvectionibus: "Dinocrates," inquit, "attendo egregiam formae compositionem et ea delector, sed . . ."*

[3] 2.pref.3-4: *"Itaque quemadmodum formationem puto probandum, sic iudico locum inprobandum; teque volo esse mecum, quod tua opera sum usurus." Ex eo Dinocrates ab rege non discessit et in Aegyptum est eum persecutus. Ibi Alexander cum animadvertisset portum naturaliter tutum, emporium egregium, campos circa totam Aegyptum frumentarios, inmanis fluminis Nili magnas utilitates, iussit eum suo nomine civitatem Alexandriam constituere. Ita Dinocrates a facie dignitateque corporis commendatus ad eam nobilitatem pervenit. Mihi autem, imperator, staturam non tribuit natura, faciem deformvit aetas, valetudo detraxit vires. Itaque quoniam ab his praesidiis sum desertus, per auxilia scientiae scriptaque, ut spero, perveniam ad commendationem.*

[4] The preface contains only one further paragraph, which in essence repeats the concluding paragraph of Book 1 (1.7.2). Its purpose is to clearly situate Book 2 in the order of composition (see above, Chapter 1, p. 113): "Now since in the first scroll I wrote at length about the office of architecture . . . and will follow with the order of temples. . . I thought I should first write about the supplies of materials from whose assembly . . . . buildings are completed." *Cum autem primo volumine de officio architecturae . . . perscripsi . . . . insequatur ordo de aedilibus sacris . . . putavi . . . prius de materiae copiis, e quibus conlatis aedificia . . . perficiuntur . . . exposuissem* (2.pref.5).

[5] The Aristippus story which opens the preface to Book 6 is the only comparable one, but it constitutes only a single brief paragraph before the moralizing – which goes on for a further six – begins.

[6] Varro as the source: Oder 1899, p. 365, n. 186, and following him, Frazer 1970, p. 117. The names "Dinocrates" is given vary enormously: see below and Mansuelli 1983, p. 87 for the onomastic tradition. See also commentary *ad loc.*, Corso and Romano, Vitruvius 1997, pp. 164-165; Fabricius,

Fig. 8

Gilded bronze statue of Hercules from the Forum Boarium at Rome, probably of the first century B.C. Conservatori Museums 1265; h=2.41 m. (Photo author).

the most complete surviving one, and its details, for the most part, are tellingly unique.

At a time when architects had trouble gaining recognition,[7] Dinocrates seems indeed to have succeeded. Named as "Dinochares," he is the fifth on Pliny's list of five architects whom he considers to have excelled in their craft, and whom he also names twice in connection with the foundation of Alexandria.[8] In Ausonius' fourth century A.D. poem on the Moselle, "Dinochares" again appears, this time as seventh of seven great architects in a list headed by the legendary Daedalus and credited to the tenth book of Varro's *Hebdomades*.[9] Ausonius (presumably following Varro) makes him the builder of Ptolemy I's palace at Alexandria, of a four-sided pyramid which "devours its own shadow," and of a miraculous levitating statue of Arsinoë in her temple at Pharos.[10]

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RE, sv. Deinocrates (6), cols 2392-3; Frazer 1972, II, p. 4, n. 12; Tomlinson 1996; Traina 1988, pp. 311-316.

[7] See above, Introduction, pp. 9-10.

[8] Pliny *Natural History* 38.125: Archimedes, Chersiphron, Philo, Ctesibius, Dinochares; foundation of Alexandria: *Natural History* 5.62 and 7.125.

[9] Ausonius *Mosella* 300-317: Daedalus, Philo, Archimedes, Menecrates, Chersiphron, Ictinus, Dinochares. Cf. Schrijvers 1989a, p. 17. There is no known architect called Menecrates. In his note on the passage, Hugh G. Evelyn-White, the Loeb translator, suggests that Ausonius may have substituted "Menecrates" for "Metagenes" for reasons of metre. The son of Chersiphron, Metagenes completed the archaic Temple of Artemis at Ephesus which his father began. On the other hand, during the reign of Alexander's father, Philip of Macedon, a doctor called Menecrates who considered himself the life-giver Zeus, dressed accordingly and, surrounding himself in public with helpers dressed as Hercules, Asclepius, Hermes and Apollo, presented himself as such to Philip (Athenaeus *Deipnosophistai* 7.289, cf. Meyer 1986, p. 24). The parallels with Vitruvius' anecdote are obvious, as Meyer has pointed out. What is less obvious and more than a little curious is how this Menecrates (if Menecrates indeed it is) came to appear on Varro's list of seven top architects along with "Dinochares," who (in Vitruvius, at least) is partial to the same kind of tactic. The coincidence tends to lend support the suggestion that Varro was Vitruvius' source for his story (see p.119 and n. 6, above). On Varro's now lost *Hebdomades*, a collection of portraits and notices of 700 famous men, and Varro's numerology generally, see above, Chapter 1, p. 50. Given Varro's numerological bias, it is worth noting that the architects are said to be listed in his *tenth* book.

[10] *Mosella* 311-317: "Dinochares" gets the longest notice of the seven architects named. When the sun is at a certain altitude, a pyramid "devours its shadow" (*ipsa suas consumit pyramis umbras*) because the shadow of the apex falls within the area of its square base (Cf. Ammianus Marcellinus 22.15.29, and Hugh G. Evelyn White's note *ad loc.* in the Loeb edition of Ausonius). As a devourer of shadows, a pyramid contains time; casting no shadow, it is timeless. Pliny (*Natural History* 34.148)

"Dinochares" is not the only variation. For Strabo, who writes of Alexandria's foundation mentioning only the involvement of unnamed, plural "architects,"[11] and following Strabo, for the third-century A.D. grammarian Solinus, a "Cheirocrates," from Rhodes (not Macedonia) collaborated in the rebuilding, under Alexander's patronage, of the colossal Temple of Artemis at Ephesus in the latter part of the fourth century B.C.[12] The surviving manuscripts of Pseudo-Callisthenes' third-century A.D. Alexander Romance hesitate between "Hermocrates" and "Hippocrates" (again from Rhodes) as Alexander's architect at Alexandria.[13] The Mount Athos project is discussed twice by Plutarch, but its perpetrator is one "Stasicrates" who also, according to Plutarch, designed a magnificent funerary monument for Hephaestion, Alexander's inseparable companion, the Patroclus to his Achilles.[14]

Three authors besides Vitruvius name "Dinocrates" in connection with Alexandria: Valerius Maximus, Ammianus Marcellinus, and Julius Valerius, a Roman historian of the late third century A.D.[15] Like Pseudo-Callisthenes, Strabo and Solinus, Julius Valerius also gives Rhodes as the architect's place of origin.

All these names converge less on a single identifiable historical personage than on a persona who emerges from a nexus of constants – grand architectural projects

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makes "Timochares" the architect of the Temple of Arsinoë, deified sister and bride of Ptolemy Philadelphus, second of the Ptolemaic kings of Egypt.

[11] Strabo 17.1.6.

[12] Strabo 14.1.23; Solinus 40.5.

[13] Pseudo-Callisthenes 1.31. Cf. Fabricius, RE (see n. 8, above). Tomlinson 1996, p. 155 points out that, according to recent archaeological research, the grid layout of Alexandria takes the late fifth-century B.C. city of Rhodes as its model.

[14] Plutarch *Alexander* 72.3; *Fortune of Alexander*, *Moralia* 335 C-E. Lucian, Plutarch's near contemporary of the 2nd century A.D., also writes of the Mount Athos project, but he does not name its architect (*Pro imaginibus* 9; *Quomodo historia conscribenda sit* 12). On Alexander and Hephaestion as Achilles and Patroclus see *inter alia*, Green 1991, p. 167; Hammond 1989, p. 16.

(real or imagined), architect and king – all related in a gloss on power for which the name "Dinocrates," most frequent of the aliases, can be read as a kind of epitome.

*Kratos*, of course, is power or might itself, particularly mastery through bodily strength.[16] *Kratos* was also the name the Pythagoreans gave to the number ten.[17] The masculine noun *ho dinos* has to do with circularity or circular motion – whirlpools, eddies, circular threshing floors, the whirling of a sling.[18] Like the feminine *hē dinē*, *dinos* can also be the rotation of the heavens: the whirling the pre-Socratic philosopher Anaxagoras held to be the effect of *nous* as regulator of the universe.[19] A creative force of nature that resonates with the natural power Vitruvius says was constructed (*architectata*) to govern the revolutions of the universe – the same cosmic spin which is said in Book 10 to bring the principles of machinery into being.[20]

The adjective *deinos* means fearful, terrible, clever, skilful – boldly or dangerously skilful as often as not.[21] In Sophocles' *Philoctetes*, wily Odysseus speaks with skill and wisdom (*deinou kai sophou*);[22] in Plato, Socrates tells the sophist Protagoras, more with censure than approval, that he is *sophos kai deinos*.[23]

Confident in *sollertia* and *cogitationes* – in the skill and power of thought that are cognates, respectively, of the *fabrica* and *ratiocinatio* that together bring

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[15] Valerius Maximus 1.4.7, for which one manuscript reads "Dimocrates." Cf. Frazer 1972, II, p. 4, n. 12. Ammianus Marcellinus 22.16.7; Julius Valerius 1.25.
[16] LSJ, sv. *kratos*.
[17] Iamblichus *Theologoumena arithmetica* 59. The Pythagoreans gave names to all the numbers. One, for example, was *nous* and *ousia*; two, *doxa* and so on. Cf. Burkert 1972, pp. 467-468.
[18] LSJ, sv. *dinos*.
[19] Clement of Alexandria *Stromateis* 2.14.
[20] Vitruvius 9.1.2: *Id (mundus) volvitur continenter circum terram atque mare per axis cardines extremos. Namque in his locis naturalis potestas ita architectata est . . .* 10.1.4: *Omnis autem est machinatio rerum natura procreata ac praeceptrice et magistra mundi versatione instituta.* See above, Chapter 1, pp. 58-60 and McEwen 1993 pp. 24-25.
[21] On skill as the cunning intelligence the Greeks called *metis* see Detienne and Vernant 1978.

*architectura* into being[24] – Vitruvius' "Dinocrates" comes out of Macedonia, the *patria* this version uniquely makes him share with Alexander. Alexander of Macedon and "Dinocrates, *architectus Macedo*" are countrymen. Vitruvius is insistent that they come from the same *place*.[25] The man who announces himself thus to Alexander is immensely tall, superbly built, and – except for the freshly-applied coat of oil, the poplar-leaf crown, the lion skin and the club – stark naked.

The reader is meant to recognise him of course. So is Alexander. The spectacularly nude man who calls himself "Dinocrates *architectus Macedo*" looks like Hercules. Or at least like the Hercules Roman audiences were instantly able to recognise in paintings, sculpture, coins and written descriptions, thanks to the standard code of "attributes" Vitruvius so carefully details here: nudity, inordinate size, muscular build, lion skin, and club. Even Dinocrates' well-oiled skin resonates curiously with two well-known larger-than-life bronzes which also glisten – not with oil, but with gold (Fig. 8, p. 118a, above).[26] (The crown of poplar leaves has not been

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[22] *Philoctetes* 440.
[23] Plato *Protagoras* 341a.
[24] Vitruvius 1.1.1.
[25] In an effort to reconcile this Macedonian architect with the one the other sources overwhelmingly make from Rhodes, Traina (1988, p. 316) suggests Dinocrates' claim to be a Macedonian simply means that he was part of Alexander's following. Vitruvius places far too much insistence on the architect's Macedonian origin for this to be plausible. Where the opening sentence of the preface says he came *e Macedonia*, "out of Macedonia," the very next one declares that he brought letters with him *e patria*, "out of his homeland," clearly equating the two (2.pref.1). In the first words he addresses to Alexander he identifies himself, with unmistakable rhetorical point, as "Dinocrates, *architectus Macedo*" (2.pref.2).
[26] Conservatori Museums 1265: gilded bronze, h=2.41 m.; *LIMC* IV, s.v. Herakles #372; cf. Palagia 1990 with bibliography. Vatican 252, gilded bronze, h=3.83 m.; *LIMC* 4, no. 302 ; Pietrangeli 1949-50, pp. 37-52, and figs 4-7. The Conservatori bronze is missing its lion skin, but is thought to have had one originally. At least one of these statues may have been prominently visible in the Vitruvius' Rome: the Conservatori Hercules, usually dated to the second or first century B.C. (Palagia dates it later), was located in the Forum Boarium, where the cult of Hercules was concentrated (see below, p. 140 and n. 101). The Vatican bronze, from the sanctuary of Venus Victrix, which was part of Pompey's vast theatre-and-portico complex is dated to 150-200 A.D. For a catalogue of ancient

forgotten: it will be dealt with in due course.)

In no other version does Dinocrates impersonate Hercules. No other source even mentions Dinocrates' appearance.

It was normally Alexander's own prerogative to appear as Hercules, from whom the Macedonian kings, and Alexander himself with particular insistence, claimed descent (Fig. 9).[27] Alexander's extraordinary exploits were regularly identified with the hero's twelve labours, both by others and by himself.[28] Sacrifices to Hercules were often part of Alexander's religious observances.[29] Hercules also appeared to Alexander in dreams to encourage him when an especially challenging conquest lay ahead.[30]

In Vitruvius' story, the man with his club and lion skin doubles the king's own preferred persona. Moreover, the man wearing, as it were, the mask of Hercules is an architect. Dinocrates' ruse – which is really Vitruvius' ploy, of course, since he has set it up – is far more than just a courtly compliment, or even a bid for attention, although

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representations of Herakles/Hercules, see *LIMC* 4, pp. 728-838. For the sake of simplicity and since Vitruvius was a Roman writer, I am using the Latin "Hercules" throughout (except in quotations where the version of the text cited is reproduced), even when referring to Greek or Hellenistic contexts – as indeed Vitruvius would have done.

[27] Unequivocally, Plutarch *Alexander* 1.2: "As for the lineage of Alexander, on his father's side he was a descendent of Heracles through Caranus. . . this is accepted without any question." For other evidence, see Anderson 1928, pp. 12-29; Green 1991, *passim*; Hammond 1989, *passim*. Coins issued by Alexander from Sidon after its submission in 332 B.C. show Alexander wearing Hercules' traditional lion-skin, trophy of the hero's first labour, as a helmet. Most famously perhaps, so does the marble Alexander Sarcophagus, also from Sidon, now in the Istanbul Archaeological Museum (Inv. 370), of the late fourth century B.C. Cf. Green 1991, p. 246. For a catalogue of Alexander portraits, including the many where he is represented as Hercules, see Bieber 1964. For a critical view of Bieber's catalogue, Schwarzenberg 1976, p. 223. On Hercules in ruler portraiture, including that of Alexander, Palagia 1986.

[28] For example, Arrian *Anabasis* 4.8.2-3, cf. Green 1991, p. 361. In India, Alexander erected twelve gigantic stone altars to twelve divinities, including Hercules, in order to mark the limit of his army's advance to the east. These altars were also intended to be "memorials of his own labours" (Arrian 5.29.1, cf. Hammond 1989, pp.219-220).

[29] Green 1991, p. 129 and *passim*; Hammond 1989, p. 239 and *passim*.

[30] Outside the seemingly impregnable fortress of Tyre Alexander told his soldiers, in order to encourage them, that he had had a dream in which he saw Hercules standing on the walls of Tyre and beckoning to him (Arrian *Anabasis* 2.181-2; Plutarch *Alexander* 24.3; cf. Green 1991, p. 251).

there is no denying it is these too. On the face of it, there is considerable slippage between what the signifying *verba*, "Dinocrates *architectus Macedo*," signify (*architectura*, the knowledge of the architect) and what the massive physical presence unmistakably shows by signs ("Hercules," but named otherwise).[31] There is a space between the two. In this space, which is the space of signified rhetorical "matter," the contours of *architectura* merge with those of "Hercules." Or, to put it another way, situated in the same rhetorical *locus*, the matter signified by "Dinocrates *architectus Macedo*" and the matter represented by the unforgettable image Vitruvius sets before the king (and the reader) are one and the same. The terms bracket architecture with the king's own Herculean persona. Moreover, the "knowledge of the architect" (Dinocrates' *sollertia* and *cogitationes* – the "angelic" body of *architectura*, as argued in Chapter 1) is now made wholly palpable in the body of Hercules: as incontrovertible a physical fact as Mount Athos itself. "I am you, Alexander; both 'Hercules' and *architectura* – which together double your true self:"

*"Dinocrates, the Macedonian architect who brings to you ideas and designs worthy of your renown. For I have formed Mount Athos into the shape of the statue of a man in whose left hand I have traced the walls of a most spacious city. In his right, there is a bowl to draw out all the rivers that are in that mountain, water which from there pours out into the sea."*[32]

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[31] See the discussion of signification above, Chapter 1, pp. 95-116.

[32] Vitruvius 2.pref.2. For the Latin, see above, n. 2. See further Daniele Barbaro's 16th-century commentary on this preface (Barbaro, Vitruvius 1567, p. 67): *"Pensieri e forme" vuol dire Fabrica e discorso, la cosa significata e quella che significa; l'opera e la ragione: dalle quali cose nasce la Architettura.* Cf. Oechslin 1982, p. 15, in an article which, with illustrations, surveys the various interpretations, beginning with Francesco di Giorgio in the fifteenth century, down to the twentieth. In Francesco di Giorgio's drawing (Codex Magliabechiano II.1.141, pl. 27; cf. Oechslin, p. 12), it is

Fig. 9

Detail of Alexander the Great as represented on the marble Alexander Sarcophagus, from Sidon, now in the Istanbul Archaeological Museum (Inv. 370), of the late 4th century B.C. (Photo author).

In Plutarch's *Moralia* of the second century A.D., Mount Athos seen from a distance already has something like the shape of a man, with projections that make one think of limbs, joints and human proportions.[33] "Stasicrates," who points this out in Plutarch's version, has followed Alexander into Asia and, finding the work of Alexander's usual portraitists unequal to the king's true majesty, proposes fixing Alexander's image in the mountain's immovable bulk. As in Vitruvius, the statue is to have a city in one hand (10,000 inhabitants are specified, although which hand is not) and in the other, an urn out of which a river flows down to the sea. Besides his precision about left and right hands, Vitruvius also differs is in his stipulation that the projected statue is of an unspecified man (*statuae virilis figura*), not – at least not overtly – of Alexander.[34]

In both versions Alexander is delighted. In both versions he declines. In Plutarch, (where, one should recall, there is no intervening Hercules) Alexander loftily replies that he can do without such a monument to vanity, because the mountain ranges of Asia already bear the imprint of his exploits. In Vitruvius, however, Alexander rejects the project because the city is badly located and the people in it would starve.

Vitruvius has the king enter gladly into the Herculean dialogue Dinocrates has set in motion with a response that makes Alexander even more Herculean than the Hercules look-alike who stands before him. For the club-wielding slayer of monsters

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Dinocrates/Hercules himself who, doubling his own project, holds the city and the bowl. See also Meyer 1986.

[33] Plutarch *Alexander* 72.3; *Fortune of Alexander, Moralia* 335 C-E. The latter is the fuller of the two accounts.

[34] Many interpreters, influenced perhaps by Plutarch's version , have assumed that Vitruvius means Alexander. Francesco di Giorgio (see n. 32, above) conflated the project with the architect's Hercules impersonation. See also Körte 1937, Meyer 1986, Oechslin 1982.

was also traditionally *philanthropos*, a friend of men, city-founder and a benefactor.[35] It had been above all in *philanthropia* that the Athenian orator Isocrates had enjoined Alexander's father, Philip of Macedon, to be like his ancestor.[36] Prefiguring the Everyman of medieval allegories, when the Hercules of Prodicus' fifth-century B.C. fable meets Vice and Virtue (*Kakia* and *Arêtê*) at the crossroads of his life, he chooses the hard road signposted by *Arêtê*, who trains (*paideuei*) his *physis* (nature) in the ways of goodness.[37] This Hercules' great strength is moral strength. The mythographers said that performance of his labours was his path to immortality.[38] Romans said it was his service to mankind.[39] Around, or shortly after the time Prodicus wrote his fable, the 5th-century B.C. historian Herodorus recorded an entirely allegorised Hercules whose club, philosophy, overcomes "the earthly struggle of vile desire," and who wears his lion skin as the "garb of noble reason."[40]

Vitruvius' second preface is not just about Dinocrates and Alexander. If Dinocrates doubles the king, he is in turn doubled by Vitruvius, who himself doubles the "Imperator Caesar" to whom *De architectura* is addressed. But Vitruvius is nothing like Dinocrates, at least not physically.

*As for me, Imperator, nature has not given me stature, age has spoiled my appearance and bad health has sapped my strength. And so, because I have been*

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[35] See Anderson 1928, p. 9; Galinsky 1972, ch. 5 and *passim*; *RE* supp. III, s.v. Heracles, 1010.37-1013.9.

[36] Isocrates *Letter to Philip* 109-114. Cf. Galinsky 1972, p. 106; Green 1991, p. 49.

[37] Xenephon *Memorabilia* 2.1.20-34. Cf. Galinsky 1972, p. 102. Untersteiner 1954, pp. 216-217 reads the fable as an evolution from *physis* to *nomos*. Cicero retells the fable at *De officiis* 1.118.

[38] Apollodorus 2.4.12; Diodorus Siculus 4.9.5; 4.24.2.

[39] See, for example, Cicero *De finibus* 3.66, *De officiis* 5.25 ("Thus Hercules denied himself and underwent toil and tribulation for the world and out of gratitude for his services, popular belief has given him a place in the council of the gods"); *Pro Sestio* 143; *Tusculanae disputationes* 1.32. Cf. Galinsky 1972, p. 150, n. 9.

*deserted by these defences, it is with the help of knowledge and writings that I hope to attain recognition.*[41]

Nature, age and bad health have robbed Vitruvius of the very three defences – more than ample stature, comely appearance and majestic build – in which Dinocrates put his trust. Or so Vitruvius says. One should above all not be misled by the artful disclaimer which has provided many Vitruvius scholars not only with otherwise scanty biographical evidence but also with support for the view, discussed in the previous chapter, that Vitruvius was hopelessly conservative and (understandably, given his advanced years) out of touch with the realities of current architectural practice.[42] But if his age was really such a disadvantage why, apart from false modesty and considerations of rhetorical symmetry, would he draw attention to it? One imagines he had his reasons.

According to traditional reckoning, old age began at forty-six, and was the time when public honours began to accrue.[43] And the crowning glory of old age, writes Cicero, is *auctoritas*.[44] Greater than the sensual pleasures of youth, and invulnerable to wrinkles and grey hair, *auctoritas* he says brings honour and distinction: "the morning visit, being sought after, being made way for, having people rise at one's approach, being escorted to and from the forum, being asked for advice . . . ."[45] Writing, as

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[40] Herodorus, *FGH* 31F14. Trans. Galinsky 1972, p. 56.
[41] Vitruvius 2.pref.4. See above, n. 3 for the Latin.
[42] See above, Chapter 1, pp. 38-39, 98-99. The other main internal sources of biographical evidence are 1.pref.2 (his previous attachment to Caesar and his collaboration with P. Minidius and Gn. Cornelius in the repair of military engines) and 6.pref.4 (his gratitude to his parents for his education). See further above, Introduction, n. 2).
[43] Ovid *Fasti* 5.64; Quintilian *Institutio Oratoria* 1.6.33; Servius *Ad Aeneid* 1.426; cf. Maltby 1991, *senatus* sv. Cicero *De senectute* 60.
[44] Cicero *De senectute* 61: *Apex est autem senectutis auctoritas.*
[45] Cicero *De senectute* 62.

Vitruvius made clear in Book 1, gave an architect *auctoritas*, that specifically Roman measure of worth discussed in some detail in the previous chapter.[46] How much more authoritative, then, an architect/author who is old.[47] Or better still, dead.

It will be, writes Vitruvius in his ninth preface, "as if face to face" with Lucretius that those born in later times will be able to discuss the nature of things; the art of rhetoric with Cicero himself; the Latin language with Varro. The opinions of the Greek philosophers and of wise writers such as these, "their bodies absent, will flower in old age . . . and have greater authority than all those who are present."[48]

Hercules himself was not always young either. Bearded representations make him if not exactly old, as least visibly mature. Most famous among these is the Farnese Hercules: Lysippus' celebrated mountain of a man who slumps tiredly over his club after completing his labours (Fig. 10, p. 130a, below).[49] A curious story, told in Greek by 2nd-century writer Lucian in one of his essays, tells of a very aged Gallic Hercules, known as Ogmios, as he says the Gauls call Hercules.

*In their pictures . . . they make him out as old as can be: the few hairs he has*

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[46] Above, Chapter 1, pp. 40–48..

[47] Grimal 1945, p. 269 estimates that when Athenodorus of Tarsus, the stoic philosopher who became the young Octavian's philosophical advisor, arrived at Rome in 50 B.C. he would have been at least forty-five: an age when a philosopher began to have enough authority to give moral direction. Cicero did not really begin to take Athenodorus seriously until six years later. Compare Cicero *Ad familiares* 3.7.5, written in 50, and the letters to Atticus written in 44 (*Ad Atticum* 16.11.4; 16.14.4). Cf. Grimal 1945, p. 270; p. 265 nn. 1 and 2. Only thirty when he first came to Rome in the second century A.D. Epictetus, another Stoic, failed completely to attract a following; fifteen years later, he was successful (Grimal, p. 269)

[48] Vitruvius 9.pref.17: *Item plures post nostram memoriam nascentes cum Lucretio videbuntur velut coram de rerum natura disputare, de arte vero rhetorica cum Cicerone, multi posterorum cum Varrone conferent sermonem de lingua latina, non minus etiam plures philologi, cum Graecorum sapientibus multa deliberantes, secretos cum his videbuntur habere sermones; et ad summam, sapientium scriptorum sententiae, corporibus absentibus vetustate florentes . . . maiores habent quam praesentium sunt auctoritates omnes.*

*left (he is quite bald in front) are dead white and his skin is wrinkled and tanned as black as any old salt's. . . . Such as he is, however, he has all the proper attributes of that God: the lion's-skin hangs over his shoulder, his right hand grasps the club . . . nothing is wanting to the Heraclean equipment.*[50]

The strangest thing about this Gallic Hercules is his following, for he drags along with him a willing crowd of men whose ears are attached by delicate chains of gold and amber to his tongue. Lucian is flummoxed until his Gallic interlocutor enlightens him.

*"We Gauls connect eloquence not with Hermes, as you do, but with the mightier Heracles. Nor need it surprise you to see him represented as an old man. It is the prerogative of eloquence, that it reaches perfection in old age. . . . Hence if you will consider the relation that exists between tongue and ear, you will find nothing more natural that the way in which our Heracles, who is Eloquence personified, draws men along with their ears tied to his tongue."*[51]

This Hercules is not Lucian's invention: there really was an Ogmios in Gallic religion, one whose head, filling the centre of a Gallic gold coin of the first century B.C., is chained with what appear to be strings of beads to the other smaller heads that encircle its edge.[52] Ogmios, related to Ogma the inventor of writing, shared with his brother Dagda possession of a magic cauldron filled with a potion that conferred

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[49] Marble copy (pobably of the third century A.D., and signed "Glykon" on the left shoulder). 3.17 m. high, of a bronze by the 4th-century B.C. Greek sculptor Lysippus, found at the Baths of Caracalla and now in the Naples Archaeological Museum.

[50] Lucian *Hercules* 1. H.G. Fowler and F.G. Fowler, trans. Cf. Galinsky 1972, p. 108.

[51] Lucian *Hercules* 4-5. H.G. Folwer and F.G. Fowler, trans.

[52] Benoit 1969, fig 76: coin of the Aulerci Cenomeni tribe from a region of western Gaul situated in the area that corresponds roughly to modern Normandy (Paris, Bibliothèque nationale). A similar image also appears on a Lucanian *askos* of the third century B.C. (Reggio Museum, Calabria, cf. Benoit 1952, p. 104: "*L'enchainement n'est pas une figure littéraire, née de l'imagination de Lucien*

immortality on all who partook of it – enough for a army.[53] Ogmios does indeed appear to have combined Herculean "attributes," notably the club, with those of Mercury (the Gauls' chief god, according to Julius Caesar) when, in the first century B.C., the Gauls began to give their gods images drawn from the repertoire of Greco-Roman culture.[54]

The fusion or pairing of Hercules and Mercury Lucian describes was not unique to northern barbarians. On the obverse of a Roman coin of 87 B.C., the faces of Hercules and Mercury appear back to back as the two faces of Janus.[55] Spatially, the gate, temporally, the beginning – existentially, the point of transition which is all points, with some points of course more importantly transitional than others – Janus, an indigenously Roman god, had no equivalent in Greek mythology.[56] His two faces, usually identical, but here not, clearly signalled an identity of Hercules and Mercury, whose pairing, one imagines, gave a certain precision to the generic meaning of gates and beginnings.[57] To the left of Hercules, who faces left, is the ubiquitous club; to the right of Mercury's winged head, his caduceus, sign of peace, of negotiated relations and of a herald's right to speak.[58]

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*ou une fantaisie décorative des monnayeurs gaulois*"), which suggests a wider cultural base for the representation than just Gaul.

[53] Benoit 1952, p. 108; 1969, p. 11.

[54] Julius Caesar *Bellum Gallicum* 6.17: "Among the gods, they most worship Mercury. There are numerous images of him; they declare him the inventor of all arts, the guide for every road and journey, and they deem him to have the greatest influence for all money-making and traffic." On the complex relation between Gallic and Greco-Roman gods, see Benoit 1952, 1969.

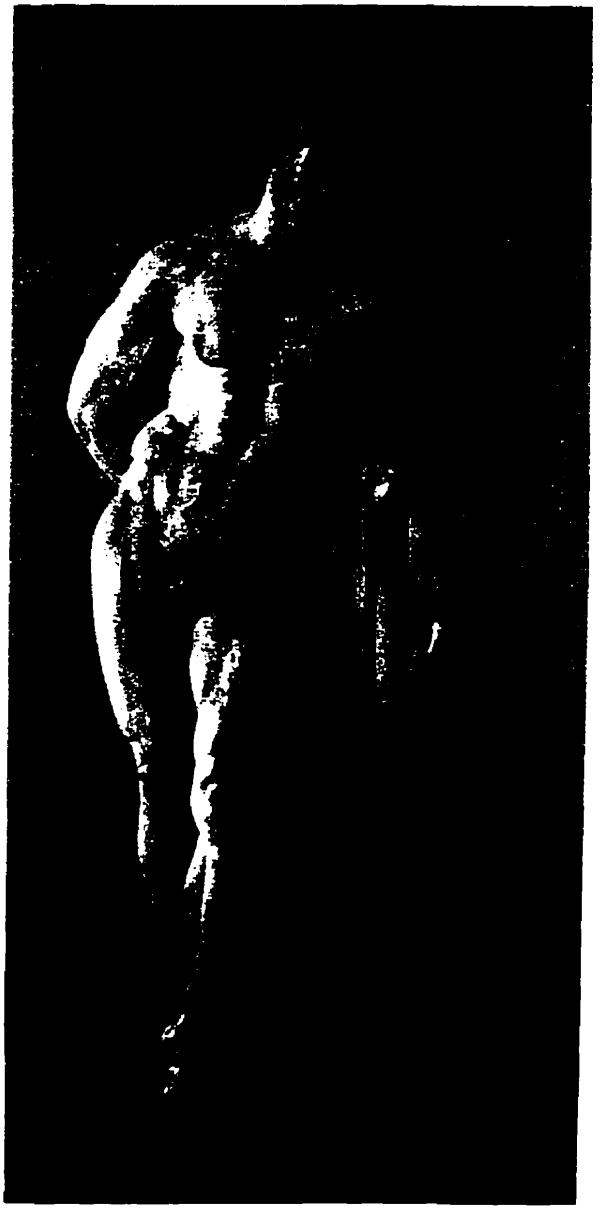
[55] Crawford *RRC* 348.6, who says there is no convincing explanation for pairing them. Hepding 1907, p. 268, discussing an inscription in the gymnasium at Pergamon, said that both were gods of the palaestra. This is corroborated by Athenaeus *Deipnosophistae* 561d (see below, p. 134).

[56] On Janus, see Dumézil 1987, pp. 333-342, with bibliography, and especially Holland 1961.

[57] Janiform herms which couple Hercules with another god, sometimes Hermes (*LIMC* IV, s.v. Herakles, nos. 1205-1207), are thought to be an invention of the first century A.D. (*LIMC* IV, p. 795). The pairing on the Republican coin appears to be unique.

[58] On the caduceus, Farnoux 1981, pp. 474-478; cf. Kellum 1990, p. 288.

Fig. 10



The Farnese Hercules: marble copy, probably of the third century A.D., 3.17 m. high, of a bronze by the 4th-century B.C. Greek sculptor Lysippus, found at the Baths of Caracalla at Rome and now in the Naples Archaeological Museum. (Photo author).

Just under a hundred years later, the two gods were again paired. Evidence appears on the reverse of a sestertius of Tiberius, issued in 35-36 A.D, which shows the main elevation of the *Aedes Concordia Augustae* in the Forum Romanum (Fig. 11).[59] On the right of the broad entrance stair to the temple stands a statue of Hercules, cradling his club on his left arm, with his right hand lifted up behind his head. On the left, Mercury holds up his caduceus in his right hand; from his left hangs his moneybag. Tiberius, Augustus's step son and designated heir, dedicated the temple in his own and his dead brother Drusus' name on the 16th of January, 10 A.D., anniversary of the day Augustus had received his new name in 27 B.C.: the day that was celebrated as marking the beginning of the principate.[60] This T-shaped Corinthian hexastyle temple, faced with Luna marble, was the last and by far most dominant Augustan work in the Forum Romanum, completing its transformation into a dynastic monument, begun when Augustus dedicated the temple of his deified father, directly opposite, nearly forty years earlier.[61] The Temple of Concord was situated at the foot of the Capitol, at the western end of the Sacra Via, just below the Tabularium, which housed the Roman archives. A caduceus was carved into the marble threshold of the cella, a little to the left of centre. The corresponding slab to the right is missing, but it is assumed that its

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[59] *BMCRE* I, p.137, 139; 116, pl. 24; p. 139, 132-34; pl. 25. Cf. *LIMC* IV, s.v. Herakles, no. 739; Gasparri 1979, figs 5-6; Kellum 1990, fig. 2; Pekary 1966-67, pl. 39.4; Vermeule 1957, pl. 1.4-6. On the temple itself, see also Rebert and Marceau 1925 and *LTUR*, s.v. Concordia, aedes, with bibliography.

[60] On the importance of such anniversaries and the case of the Temple of Concordia in particular, see Gros 1976a, pp. 28-34. Ovid *Fasti* 1.637-38 gives a date of 10 A.D., whereas Suetonius *Tiberius* 20 says the temple was consecrated in 12 A.D. Whichever the year, the day (January 16th) is not disputed. See further Degrassi 1963, pp. 398-400. I am grateful to Jane Francis for drawing my attention the question.

[61] The Temple of Divus Julius, built on the site of Caesar's funeral pyre at the eastern end of the Forum, had been vowed in 42 B.C. and was dedicated in August of 29. See Gros 1976a, pp. 85-92 and

surface was cut with a club.[62]

Projected outwards to the Forum by their prominent position on the front ends of the high balustrades that framed the entrance stair, the statues of Mercury and Hercules together constituted the temple gate through which anyone approaching the sanctuary necessarily passed, joint custodians of Augustan *Concordia*: peace, cosmic harmony, a unified empire, civic concord, the reconciliation of opposites, all inescapably bound up with the person of Augustus, his family and his succession.[63] Further inward at the precise point of entry, the club and the caduceus that epitomised them cut Hercules and Mercury into the cella threshold with signs whose signified "matter" converged with the spatio-temporal "matter" of this and every Roman door. The *Aedes Concordiae Augustae* celebrated the Augustan peace that was rooted in the Roman past (at least two earlier temples of Concord had stood on the same site);[64] that had began on January 16th, 27 B.C.; and that would continue through Augustus's heirs of whom Tiberius, who dedicated the temple on January 16th 37 years later, was to be the first. Its context fixed this particular Roman door – spatially the point of entry to the cella of a temple whose *dies natalis* was January 16th – as the enduring instant of that insistently repeated beginning.

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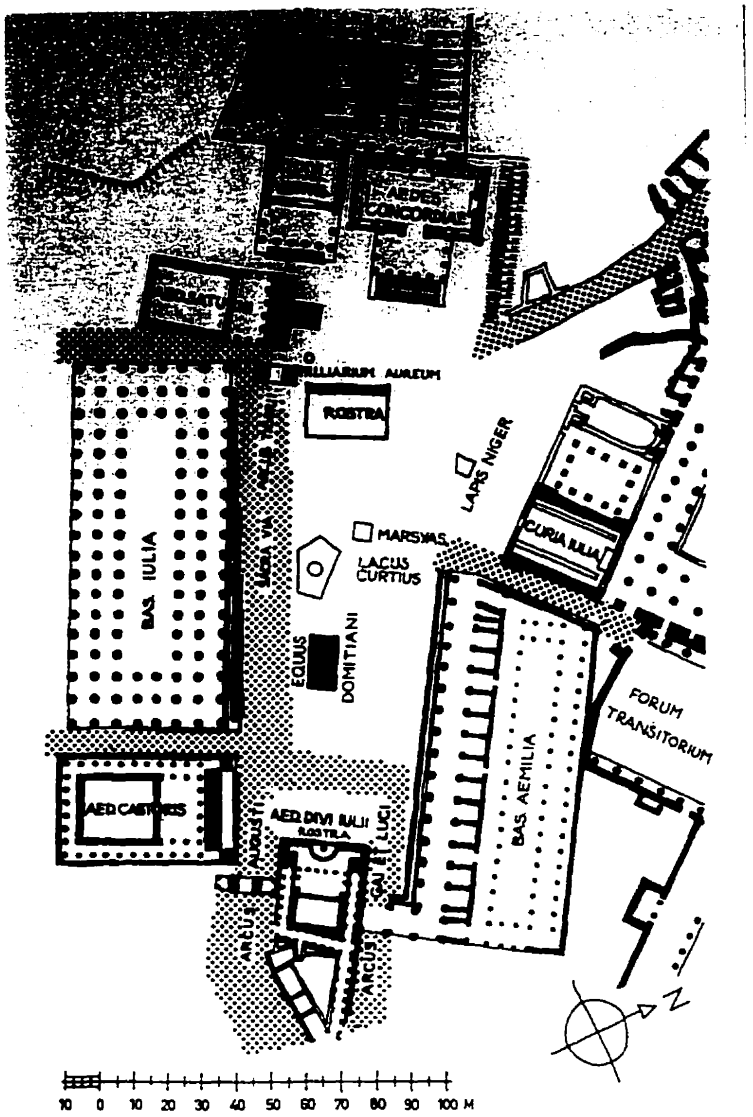
207-210, and below, Chapter 3, pp. 206-209. On the Augustan transformation of the Forum, especially Zanker 1972.

[62] Rebert and Marceau 1925, p. 73.

[63] For an in depth account, including a detailed analysis, based on Manilius, of the temple interior in astrological terms, see Kellum 1990. Concluding her essay, Kellum writes (pp.295-296): "From whatever angle it was approached and on every level, the program of the temple was Concordia Augusta manifest. . . . That message was of *pax deorum*, the very essence of Concordia Augusta, mirroring the balance struck between members of the imperial family, between social orders within the state and ultimately reflecting the order of the cosmos as a whole."

[64] The first was dedicated by Camillus in 367 B.C. to celebrate the reconciliation of the plebeians with the patricians after a long period of discord. The second, after the death of Gracchus in 121 B.C., by L.

Fig. 11




Plan of the Forum Romanum in the 2nd century A.D. After P. Zanker.

Reverse of a Sestertius of Tiberius. 36 A.D., showing the east front of the Aedes Concordiae Augustae, with Mercury on the left and Hercules on the right. BMCRE I. p. 137, 139; 116, pl. 24.

What did Hercules and Mercury have to do with it? In the most obvious terms, the club and the caduceus were the dual aspects of Roman power:[65] brute force and *logos*, the power of reasoned speech, with the latter tied, as discussed earlier,[66] to commerce, on which the peaceful unity of the Empire also depended.[67] Pliny mentions a "two faced Janus" dedicated by Numa "which is worshipped as indicating war and peace," who is also, he says, the god of the duration of time.[68] The mighty Hercules (war) and rational Mercury (peace) fit quite neatly, but there is more.

Athenaeus, in his late second century A.D. *Deipnosophistae*, writes that Zeno, 4th-century B.C. founder of the Stoic school, claimed in his now lost *Republic* that "Eros is a god who stands ready to help in furthering the safety of the city (*pros tēn tēs poleōs sōterian*)." Others who preceded Zeno, Athenaeus continues, knew

*Eros as a god far from anything ignoble . . . (for) in the public gymnasia he is enshrined along with Hermes and Heracles, the first presiding over eloquence, the second over physical strength; when these are united, friendship and concord* (philia te

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Opimius. See Gasparri 1979, pp. 11-13; Rebert and Marceau 1925, pp. 53-54 and *LTUR*, s.v. Concordia, aedes.

[65] Terms which were taken up again inside, where Mercury was paired with Mars, the god of war (Kellum 1990, p. 287). Indeed there was an ancient identification made between Mars and Hercules, as Macrobius (*Saturnalia* 3.12.1-10) explains, commenting on Virgil *Aeneid* 8.285, where the Salii who normally sing and dance for Mars, do so for Hercules.

[66] Above, Chapter 1, pp. 90-92.

[67] Suetonius *Divus Augustus* 93.2.

[68] Pliny *Natural History* 34.33. Among the achievements in which Augustus took special pride was the closing of the Temple of Janus, decreed by the *maiores* "when victories had secured peace by land and sea throughout the whole empire of the Roman people: from the foundation of the city down to my birth, tradition records that it was shut only twice, but while I was the leading citizen the senate resolved that it should be shut on three occasions" (*Res gestae* 13: *cum per totum imperium populi Romani terra marique esset parta victoriis pax, cum, priusquam nescerer, a condita urbe bis omnino clausum fuisse prodatur memoriae, ter me principe senatus claudendum esse censuit* ). The translation is by P.A. Brunt and J.M. Moore. Gros 1976a, p. 28 has understood the Temple of Augustan Concord as the fulfilment of Caesar's intention to build a temple to Concordia Nova, and to give *pax civilis* a properly Augustan identity. On the connection between *pax, concordia* and the cult

kai homonoia) *are born* . . . [69]

Cornutus, a Stoic who wrote in the first century A.D., concludes his allegorised account of Hermes-*logos*, with the following.

*People also give him homage at the palaestra along with Herakles because it is necessary to employ strength with reasoning. For to the person who places his trust only in the power of the body, but disregards Reason, which introduced skills into life, a person might properly respond, "Dearest, your own great strength will be your death."*[70]

Hercules and Mercury were not simply the binary opposites of brawn and brain, at least not for Stoics. Hercules, as noted earlier was *philanthropos*, a model of virtue among philosophers. Indeed, for the Stoic allegorists, as he had been for Herodorus, Hercules was himself a philosopher.[71] According to Heraclitus Homericus, a near contemporary of Cornutus, the three heads of Cerberus, whom Hercules brings up from Hades into the light of day, are the three parts of philosophy: logic, physics and ethics.[72] As the light of divine reason, Heraclitus continues, Hercules dispels the fog of ignorance.[73] Plutarch writes that when he grew old Hercules became a philosopher, an

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of Janus, with specific reference to Augustus, see Richard 1963 and more recently Turcan 1981, pp. 376-380.

[69] Athenaeus *Deipnosophistae* 561d. Cf. Schofield 1991, p. 49. The point about Eros' being "far from anything ignoble" is that the Stoic Eros which upholds the safety of cities is not lust but friendship (Schofield 1991 pp. 28-46 and below Chapter 3, pp. 244-247).

[70] Cornutus *Epidrome* 16.11. The *Epidrome* was a compilation from works of earlier philosophers. See Hays 1983, introduction, and Most 1989, who gives Apollodorus of Athens (2nd century B.C.) as the most likely source (p. 2016).

[71] Above, p. 127.

[72] Heraclitus Homericus *Homerica Problêmata* 33.9. Like Cornutus with whom he shares many similarities, Heraclitus is thought to have used Apollodorus of Athens as a source. See Buffière, introduction to the Budé edition, pp. xxxi-xxxii. This Heraclitus has nothing to do with the better-known "obscure" Heraclitus of 6th century B.C. Ephesus.

[73] Heraclitus Homericus *Homerica Problêmata* 34.2.

expert in both dialectic and divination.[74]

For Cornutus, "Herakles is the universal *logos* in its aspect of making Nature strong, in control and indomitable."[75] The Pythagoreans, much earlier, had called him *dynamis tês physeôs*, the force of nature, a notion further developed by the Stoic Cleanthes in the fourth century B.C.[76] Near the end of his life, Pythagoras himself is reported to have concluded an address which dealt with concord, among other moral issues, by evoking Hercules and reminding his audience that Hercules had founded Croton, Pythagoras' adopted city in southern Italy where his sect first flourished in the sixth century B.C.[77]

In the natural theology of the philosophers, Hercules was not simply the brawn that complemented Mercury's brain.[78] Divine reason was a single, world pervasive *pneuma*, but it permeated the world-body in two different ways, to recall Diogenes Laertius' report of the Stoics' illuminating distinction.[79] As a natural, vegetative, and (one might interpolate) Herculean force, it was the tension that bonded bodies in their bones-and-sinews aspect. As Mercurial *nous*, it was the articulate thought unique to human beings: the eloquence that, in Lucian's story, bound the Gallic Hercules to his willing following. Understood in these terms, Hercules and Mercury, like the two faces

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[74] Plutarch *De E Delphico*, *Moralia* 387 d.
[75] Cornutus *Epidrome* 31.1.
[76] Iamblichus *Vita Pythagorae* 155; cf. Detienne 1960, p. 43. On the Pythagorean Hercules, see also Carcopino 1943.
[77] Iamblichus *Vita Pythagorae* 50; cf. Detienne 1960, p. 22. The story of Hercules' foundation of Croton is thought to have been the model for the one of his arrival at Rome, which it prefigures in almost every important detail (Carcopino 1943; Detienne 1960).
[78] On natural theology in the context of Varro's tripartite classification, see above, Chapter 1, pp. 60.
[79] Above, Chapter 1, p. 82.

of Janus whom Varro called *mundus*, the world, are indissociable:[80] at once the key to the coherent totality of things and the specific point in time at which, in the Temple in the Forum, Augustan *Concordia* repeatedly begins.

Manilius' *Astronomica*, begun at the end of Augustus's reign, has provided Barbara Kellum with the key to the temple's astrological program, in which the signs of the zodiac are all related in a coherent narrative through the spatial deployment of emblematic statues inside the cella.[81] Manilius also relates these signs both the parts of the body and to the parts of the world.[82] The coherence of temple's cosmic/dynastic narrative, literally built into the shrine's very fabric, is a profoundly Stoic and, like the building, ultimately corporeal in its coherence.

Like many Augustan authors, Manilius was a Stoic.[83] So were Livy and Virgil, who wrote at the beginning of Augustus's reign.[84] Pierre Grimal has suggested that if Augustan literature had such a strong Stoic orientation, it took its cue, or at least drew support, from Augustus himself whose tutor from early adolescence until about 30 B.C. was the Stoic Athenodorus of Tarsus, whom Augustus very much admired.[85] For the next twenty years after the conquest of Egypt, the Alexandrian Stoic Arius

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[80] Varro in Augustine *City of God* 7.7. It is perhaps not a coincidence that the Republican coin discussed above was minted in 87 B.C.: the one year the highly influential Stoic Posidonius is definitely known to have been in Rome (OCD, Posidonius, sv.).

[81] Kellum 1990.

[82] Manilius *Astronomica* 2.453-484: "Now learn how the parts of the human frame are distributed among the constellations . . . ;" and again 4.701-710. Zodiac and parts of the world: 4.744-817.

[83] For further evidence of Manilius' Stoicism, *Astronomica* 1.247-254; 2.60-135; 3.48-55; 4.866-935.

[84] Walsh 1958, among others.

[85] Grimal 1945-46. It was Athenodorus, who taught Augustus to recite the twenty-four letters of the alphabet before speaking in anger, who perhaps first inculcated his legendary reserve (Plutarch *Apophtegmata Augusti* 7, as cited Yavetz 1990, p. 33). On Augustus's preference for Stoicism see also Lana 1953, pp. 9-12.

Didymus was philosophical intimate and advisor to the mature world ruler.[86] Arius was the author of an abridgment of mainly Stoic philosophy which survives only in fragmentary form, a work known as the *Epitome*, which he may well have written for Augustus as a philosophical résumé similar in schematizing intent to that of Vitruvius' architectural *commentarius*.[87]

C. Julius Theon of Alexandria, another Stoic, succeeded Arius Didymus as Augustus's philosophical advisor.[88] Among Augustus's written works, Suetonius mentions an "Exhortations to Philosophy."[89] A number of Roman historians in the past have studied the advent of the principate itself in terms of the "slow but steady flow of Greek philosophical ideas into Roman political life."[90] The Stoicism that was a common ground between many Augustan authors and their patron was also a shared *topos* through which Vitruvius, clearly addressing a *lecteur averti*, presented Augustus with his case for architecture.

Hercules and Mercury together constitute the gateway to the cosmic/dynastic narrative of the Temple of Concord, built at end of Augustus's reign. From Hercules and Mercury, Athenaeus reports, *philia* and *homonoia*, friendship and concord, are

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[86] When Augustus captured Alexandria in 30 B.C., he entered the city arm-in-arm with Arius, announcing to the Alexandrians that he would spare them for the sake of "their god Serapis, their founder Alexander . . . and their fellow-citizen Arius, of whose philosophising and companionship he availed himself" (Dio Cassius 51.16.3-4; cf. Plutarch *Moralia* 814 D, *Antony* 80). Arius wrote a consolation, much admired by Seneca, to Augustus's wife Livia on the death of her son Drusus in 9 B.C. (Seneca *Consolatio ad Marciam* 9). Cf. Kahn 1983, p.6. On Arius' close personal relationship with Augustus, of whose household he was a member, see Hahm 1990, pp. 3035-3047. On Roman rulers and philosophical advisors in general, Rawson 1989.

[87] The largest fragments survive in Stobaeus' *Anthologium* of the 5th century A.D. On Arius and the *Epitome*, Fortenbaugh, ed. 1983; Hahm 1990. See further below, Chapter 3, p. 245; Chapter 4, pp. 259, 269-270. An abridgement like Arius' *Epitome* – perhaps even the work itself – was almost certainly the source for many of Vitruvius' philosophical notions.

[88] Rawson 1989, p. 245.

[89] Suetonius *Divus Augustus* 85.1.

[90] Yavetz 1984, p. 24 and p.35 n. 201 for a partial list.

born.[91] Of this, the Temple of Concord stood as incontrovertible built "proof." At the beginning of Augustus's reign, Vitruvius made their stoicized selves, immanent in *fabrica* and *ratiocinatio*, the point at which both *architectura* and *De architectura* began.[92]

**The Once and Future King**

The Hercules in front of the *Aedes Concordia Augustae* has his right hand raised behind his head: he is crowning himself, although with what exactly cannot be deciphered from the small, rather fuzzy image on the Tiberian coin.[93] Crowns or wreaths belonged to winners. Triumphant generals wore laurel, as Hercules also did at times. Victorious Olympic athletes wore olive, as does the gilded bronze Hercules in the Conservatori Museum.[94] In the preface to Book 9, Vitruvius complains that such crowns really belong to writers, not to athletes.[95] After taking off all his clothes and before striding off in search of Alexander, the Dinocrates-Hercules of Vitruvius' story crowns himself with poplar leaves.[96] Why poplar? The white poplar is sacred to Hercules, say Virgil, Ovid and Pliny the Elder.[97] Pausanias, in his second century A.D. *Description of Greece*, reports that the Eleans use white poplar wood in their sacrifices to Zeus because Hercules brought the tree to Elis from the banks of the Acheron, the

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[91] Athenaeus *Deipnosophistae* 561d.
[92] Vitruvius 1.1.1: *Ea nascitur ex fabrica et rationcinatione.*
[93] See n. 59, above, and Vermeule 1957, who discusses the representation as a certain statue type.
[94] Palagia 1990, p. 55 and n. 26 above.
[95] Vitruvius 9.pref.1.
[96] Vitruvius 2.pref.1.
[97] Virgil *Eclogues* 7.61; *Georgics* 2.66; *Aeneid* 8.276; Ovid *Heroïdes* 9.64; Pliny *Natural History* 12.3.

river of Hades: a holy provenance, bound up with intimations of immortality for anyone who could go there and get back.[98] Virgil, insistently, makes poplar – and so too Hercules – native to Rome.

On the eve of Aeneas' first arrival at Rome in Book 8 of Virgil's epic, just as he is about to fall asleep on the riverbank, the river god appears before him "raising his aged head among the poplar leaves" to prophesy the city's foundation.[99] Except that, as old Tiberinus foretells, there is already a city there, or at least a settlement, ruled by the Arcadian king Evander.[100] When Aeneas arrives at the site with his fleet, Evander and his Arcadians are in the middle of celebrating the rite of the *ara maxima*, the annual feast of Hercules, at this the "greatest altar" dedicated to him in the place that, historically, was the Forum Boarium, the cattle market beside the river where the cult of Hercules was indeed concentrated, and near which the late Republican round temple of Hercules still stands (Figs. 12,13 and 14).[101] Evander interrupts the celebrations to

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[98] Pausanias *Description of Greece* 5.14.2; Homer, who as Pausanias points out calls the poplar "Acheroïd" (*Iliad* 13.389 and 16.482), has Odysseus consult the spirits of the underworld on the bank of the Acheron, which he says is a branch of the Styx (*Odyssey* 10.513 and Book 11). Cf. Becatti 1968, p. 4. The Roman epic poet Ennius also writes of the Acheron as the river of Hades. Cf. Cicero *Tusculan Disputations* 1.48; Varro *De lingua latina* 7.6. For Lucretius, Acheron is the the underworld itself: see especially 3.978-1023.

[99] Virgil *Aeneid* 8.33-65.

[100] Virgil *Aeneid* 8.138.

[101] Forum Boarium in general: Coarelli 1988. Rite of the *ara maxima*: Dumézil 1987, pp. 443–448; Latte 1960, pp. 213-215. Just behind the *ara maxima Herculis invicti*, to the east, stood a Tuscan style *Aedes Herculis Invicti*, also known as the *Aedes Herculis Pompeiani*, from Pompey's restoration of in the first century B.C. Vitruvius mentions it along with the Capitoline Temple of Jupiter as an example of an areostyle temple (3.3.5). To the north of the altar was a round *Aedes Aemiliana Herculis* (also possibly "Hercules Victor") dedicated perhaps by Scipio Aemilianus in 142 B.C. Its remains were destroyed by Pope Sixtus IV$^{th}$ at the end the fifteenth century. The surviving round temple of Hercules Victor (also known as Hercules *Olivarius*) "*ad Portam Trigeminam*" was not in the Forum Boarium proper, standing as it did next to the Forum just outside the Servian wall. Palagia 1990, pp. 51-54 gives a particularly clear summary of the somewhat confusing evidence. On the surviving round temple, especially Rakob and Heilmeyer 1973 and Ziolkowki 1988 who argues (disagreeing with Coarelli 1988, p. 186) that it was dedicated in 142 B.C. by the Roman general Mummius as a victory monument celebrating his defeat of the Achaeans and his destruction of Corinth in 146. On all of these temples, *LTUR*, s.v., with bibliographies.

greet the new arrival, whom he recognises as the hero from Troy, and invites him to sit down on a lion's skin to listen to the story of the ritual's origin.[102]

When Hercules "glorying in the spoils of triple Geryon" – his tenth labour, in the course of which he slew the three-bodied monster in question and stole his magnificent herd of red cattle – arrived with his stolen herd at the very place where Aeneas and Evander are sitting, the valley between the Aventine, the Palatine and the Capitol was being terrorised by Cacus, the fire-breathing monster who lived there. Cacus whose name (*kakos*, bad man) makes him as unmistakably evil as Evander's (*eu-andros*, good man) makes him good,[103] steals four of the herd's best bulls and as many heifers. To make Virgil's rather long story short,[104] Hercules discovers the theft, throttles Cacus with his bare hands until he vomits blood and "his eyes burst forth," and then retrieves his booty from the cavern where Cacus has hidden it. "From that time this service has been solemnised," concludes Evander, "and joyous posterity has kept the day."[105] All – Aeneas's men, Evander himself, and the Salii who dance around the altars singing of Hercules' deeds – then wreath their hair with poplar, "the shade dear to Hercules" and resume feasting.[106]

As in Prodicus' fable, the Hercules of Virgil's story is once again "at the crossroads," with Cacus and Evander standing in for the *Kakia* and *Arêtê* of the earlier version.[107] But Prodicus' "crossroads" occurred at a geographically non-specific point

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[102] Virgil *Aeneid* 8.180.
[103] Béranger 1953, p. 181; Carcopino 1943, p. 179; Fuchs 1973, p. 21.
[104] Virgil *Aeneid* 8.184-267.
[105] *Aeneid* 8.268-9.
[106] *Aeneid* 8.274-305.
[107] For Prodicus' fable: Xenephon *Memorabilia* 2.1.20-34. The first-century A.D. poet Silius Italicus places Scipio Aftricanus, the first of the many great Romans to present themselves as Hercules, at a

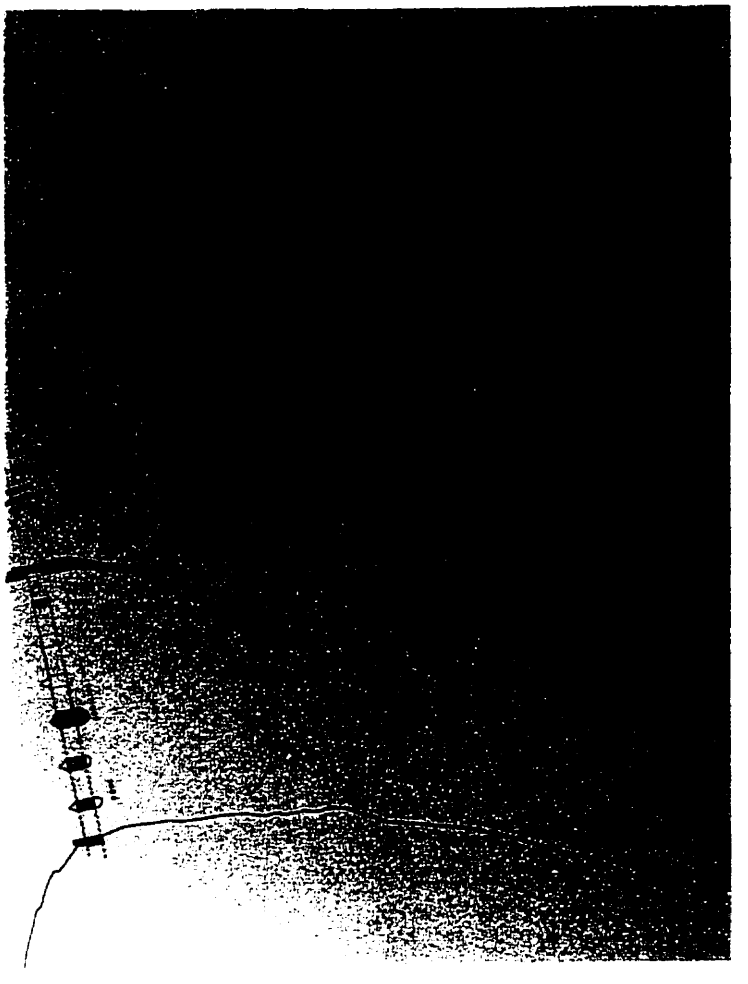
Fig. 12


Plan of republican Rome, after A. Vasaly.

Fig. 13

Forum Boarium, Rome with the Temple of Hercules Victor (left) and the Temple of Portunus (right), both probably of the Ist century B.C. (Photo author).

Fig. 14



The Forum Boarium in the late Republic. After Coarelli.

in Hercules' life, and *Kakia* – the road not chosen – was not killed but simply bypassed in favour of *Arêtê*. In Virgil good triumphs on the left bank of the Tiber in the cattle market between the Aventine, the Palatine and the Capitol, where Virgil situates the temporal beginning of Rome. Literally at the crossroads between the land road that connected central Italy to Etruria in the North and the Tiber which was the water road inland from the sea, the riverbank site was also Rome's geographical point of entry.[108] In the Roman context, Hercules' defeat of Cacus, the monster who personifies evil, is the original lustration of the swampy, uninhabitable *place* of arrival that prepares it for all the arrivals that are to follow.[109]

A force for good, Hercules also brought to Rome *humanitas* in its specifically cultural or learned aspects. North of the Forum Boarium, in the Circus Flaminius where the spoils of war were traditionally displayed during the days that preceded the triumphs that set out from there, were two more temples of Hercules. One of them, built by Fulvius Nobilior from the spoils of his victory at Ambracia in western Greece in 189 B.C., was the round temple of Hercules Musarum, which contained statues of the muses as well as one of Hercules playing the lyre (Fig. 15).[110] The temple was

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"crossroads" in terms that are virtually identical to those of Prodicus' fable (*Punica* 15.69-119; cf. Anderson 1928, p. 36).

[108] Dumézil 1987, p. 434; Levi 1997, p. 31.

[109] Carcopino 1943, pp. 182-183 notes that there were at least four locations in the area which bore the name "Cacus," one of which was the Forum Boarium itself (*forum Boarium quem Cacum dicunt*, Aethicus *Varia Historia*, p. 83 Riese). *Cacus s'est bonnement étendu, comme un vocable géographique, sur la région qu'il désignait et qui a dû embrasser à l'origine tout le terrain marécageux situé entre le fleuve d'une part, le Capitole, le Palatin et l'Aventin d'autre part. . . . (les mythographes) on insufflé la vie à un nom de lieu incompréhensible, animé d'une matière inerte, et en quelque sorte, héroïsé la carte* (Carcopino, p. 183).

[110] *LTUR*, s.v. Hercules Musarum, Aedes. The other, the older of the two, was dedicated to Hercules Custos, the protector, in the late third century B.C (*LTUR*, s.v. Hercules Custos, Aedes). On the statuary group of Hercules and the muses, Marabini Moevs 1981, who has identified the Hercules in question as an actor playing Hercules. For a summary of the scholaship, Ridgway 1990, pp. 246-252. My thanks to Jane Francis for drawing my attention to the matter.

dedicated to a Hercules scholars have identified as Pythagorean: a lyre-playing *musagetes* (leader of the muses), set up here in Fulvius' victory monument as patron of the arts and orchestrator of universal harmony.[111] Cicero points appreciatively to the temple's dual signification when defending *humanitas* in his oration on behalf of the poet Archias.[112]

"Why had Hercules and the Muses an altar in common?" asks Plutarch in one of his *Roman Questions*. "Is it because Hercules taught Evander how to read, as Juba records?"[113] In another passage in Plutarch, for which no source is given, Hercules' knowledge of letters enables him to read an ancient inscription urging "the Greeks to live . . . in peace, by always taking philosophy as their field of contention . . . . and settling their disputes by an appeal to the Muses and discussion."[114] Writing around the same time as the temple of Hercules Musarum was built, Fabius Pictor, Rome's earliest historian, attributed the introduction of the alphabet to Rome to Evander, whom Livy later credited with the same "miraculous" invention.[115] The Hercules who made the future site of Rome hospitable to Evander's small Greek colony – and so to goodness itself – was perhaps the same who "as Juba records" taught the good king how to read.

The Hercules-Cacus episode in the *Aeneid* is made part of Hercules' tenth labour, the one that should have marked their accomplishment, according to some

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[111] On Pythagoreanism, Hercules and the muses, see Boyancé 1937 and 1955; Détienne 1960; Dugas 1944; Sauron 1994, pp. 84-90. The cult statue of the temple – Hercules wearing a lion-skin and playing the lyre, his club in front of him – appears on the reverse of a denarius Q. Pomponius Musa of 66 B.C. (Crawford *RRC*, 410.1). The obverse type is a head of Apollo, the more traditional *musagetes*, whose function Hercules here doubles.
[112] Cicero *Pro Archia* 27. See also Eumenius *Panegyrici Latini* 9.7.3 (cf. Boyancé 1955, p. 175).
[113] Plutarch *Roman Questions* 59. Juba was a historian contemporary with Vitruvius.
[114] Plutarch *On the Signs of Socrates*, *Moralia* 579.
[115] Fabius Pictor, as cited on a fragmentary inscription discovered at Taormina in 1969 (Cf. Manganaro 1974, pp. 394-395). Livy 1.7.8: *miraculo litterarum*.

Fig. 15

Hercules Musarum: reverse of a denarius of Q. Pomponius Musa, 66 B.C. Crawford RRC 437, 410; pl. 50, 21.

mythographers.[116] The Augustan poet Propertius, apparently following this tradition, has Hercules address his stolen herd as "the final labour of (his) club."[117] The hymn of the Salii in Virgil's story is an enumeration of all the monsters Hercules has killed, beginning with the snakes he strangled in his cradle and ending with the slaughter of Cacus – his crowning achievement, as Virgil tells it, and tenth on Virgil's list.[118] Those who took oaths and made agreements at the *ara maxima* owed a tithe, or tenth part of their profits, including war booty, to Hercules.[119]

Almost every surviving Augustan author of note tells the story of Hercules' arrival at Rome, although only Virgil lays such stress on the poplar.[120] In historical times, celebrants of the rite of the *ara maxima* wore laurel, but when the ritual first began, before the founding of the city, at the first celebration of its initial lustration, this was not yet the case.[121] So Virgil tells it at any rate, thus establishing the autochthony both of Hercules and his cult, celebrated here by men who, like the river itself since

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[116] In his *Bibliotheca* of the second century B.C., Apollodorus of Athens relates that the Pythian priestess at Delphi told Hercules "to dwell in Tyrins serving Eurystheus for twelve years and to perform the ten labours imposed on him, and so, she said, when the tasks were accomplished, he would be immortal" (2.4.12). Apollodorus explains that there ended up being twelve of them because Eurystheus discounted two on technical grounds: the Lernian Hydra (second) because Hercules had the help of Iolaus and did not perform it alone and the Augean Stables (fifth) "because it had been performed for hire" (*Bibliotheca* 2.5.5, cf. 2.5.11). Diodorus Siculus says twelve labours were imposed originally (4.9.5) but then contradicts himself at 4.24.2, where he says that immortality was to be the reward for ten.

[117] Propertius *Elegies* 4.9.17: *labor ultime clavae*.

[118] Virgil *Aeneid* 8.288-304.

[119] Diodorus Siculus 4.21.3; Dionysius of Halicarnassus 1.40.6; Plutarch *Roman Questions* 18. Sulla, for example, offered a tenth of the spoils of his Greek victories to Hercules when he triumphed in 82 B.C. (Plutarch *Sulla* 35.1).

[120] Besides Virgil, Livy 1.7.3-15; Propertius 4.9; Ovid *Fasti* 1.543-586. Among Greek writers, Diodorus Siculus (who completed his *Bibliothêkê* at Rome between 56 and 30 B.C.) 4.21.1-4; Dionysius of Halicarnassus (living in Rome and contemporary with Vitruvius) *Antiquitates romanae* 1.39; Strabo (late Augustan) 5.3.3. Cf. Bayet 1926, pp. 127-128; Winter 1910, pp. 171-273. Levi 1997 claims that the Augustan canon on the Roman Hercules is a hellenization of the archaic Etruscan Hercle who was, properly, a god and not a divinized hero (p. 25 and pp. 117-118). The authentically Roman Hercules (Hercle), according to Levi, was connected with the commerce and the good faith (*fides*) that predated law as the bond of civil society (pp. 79-96). See also Coarelli 1988, Chapter 2.

time immemorial, are poplar-crowned.[122]

Hercules purified the future site of Rome in a struggle that was accomplished at the Forum Boarium. When? In mythical time, before the arrival of Aeneas at the time of Evander, long before the time of Romulus, Aeneas' descendent and Rome's eponymous founder for whose divinization that of Hercules, according to Livy, served as a model.[123] But in historical time too.

The rite of the *ara maxima* is generally agreed to have been celebrated annually on the 12th or the 13th of August.[124] Augustus's triple triumph, celebrating his victories in Dalmatia, at Actium and at Alexandria – the three-day triumph that marked the end of the civil wars and the dawn of a new era – began on August 13th of 29 B.C.[125] This meant that every year, from that time forward, when Romans celebrated Hercules and his victory over evil, they would also have been celebrating Augustus.[126]

The eighth book of Virgil's *Aeneid* opens in the mythical past with Aeneas, a new Hercules,[127] arriving at Rome on the same day as Hercules had, "glorying in the spoils of triple Geryon." It concludes historically with Augustus "entering the walls of

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[121] Macrobius *Saturnalia* 12.1-5, who cites Varro as his source. Cf. Coarelli 1988, p. 165.
[122] Women were in fact barred from the rite of the *ara maxima* (Plutarch *Roman Questions* 60); Propertius (*Elegies* 4.9.52-72, following Varro, cited Macrobius *Saturnalia* 1.12.28) says that it was because the priestess of the exclusively feminine cult of the Bona Dea refused to let Hercules drink at her well when he was maddened with thirst after killing Cacus. He did anyway, and vowed in revenge that women would never be allowed to celebrate at his altar.
[123] Livy 1.7.15. Similarly Cicero, citing Ennius (*Disputationes Tusculanae* 1.28; cf. Anderson 1928, pp. 29-30).
[124] *CIL* VI 312-319; Degrassi 1963, p. 493. Cf. Dumézil 1987, p. 437; Grimal 1951, p. 52 and n. 2; Palmer 1990, p. 235, n. 5. Coarelli (1988, pp. 61-77) and others have identified a platform of large tufa blocks under the rear of the church of Sta. Maria in Cosmedin as being the remains of the *ara maxima*.
[125] *CIL* I² p. 180; Macrobius *Saturnalia* 1.12.3-5. Cf. Grimal 1951, p. 53.
[126] The date also coincides with Pompey's dedication of the Temple of Hercules Invictus in the Forum Boarium (Grimal 1951, p. 53).

Rome in triple triumph," the culminating event of all of Roman history prophetically enshrined in Virgil's long description of Aeneas' shield.[128] As Pierre Grimal has shown, the whole point of Virgil's making Aeneas arrive at Rome on the day he does is to have the Augustan present fulfil that mythical beginning: "*Auguste est bien le seul Hercule pacificateur et triomphant.*"[129] Virgil was not the only Augustan writer to affirm an identity of Hercules and Augustus. The association was almost canonical, with particular stress laid on Augustus's Herculean *virtus* as well as on his *humanitas*.[130] There is little evidence that Augustus himself actively promoted the identification (one supposes he did not have to), although Suetonius says that when he was at Tibur, "he very often gave justice in the porticoes of the Temple of Hercules," where, according to epigraphic evidence, the cult of Augustus was directly linked with that of Hercules.[131]

Near the end of the sixth book of the *Aeneid*, Virgil had already prophesied Augustus's reign, which was to surpass in greatness even the most glorious of Hercules' exploits.[132] The panegyric is a Latin rendering of traditional encomia of

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[127] Virgil deliberately makes Aeneas Herculean right from the beginning of his epic, with Aeneas setting out from Troy with a lion's skin slung over his shoulders (*Aeneid* 2. 721-723). Cf. Galinsky 1972, pp. 143-145.

[128] The model for Aeneas' shield is of course that of Achilles (*Iliad* 18.478-608), but Homer's description is entirely without chronology or teleological intent: Achilles' shield, a shimmering *phainomenon*, comes into being as Hephaestus' makes it and as Homer tells it (McEwen 1993, pp. 62-64). In Virgil, Aeneas' mother Venus brings him the finished product from Vulcan's smithy and the knowing reader follows the description through Aeneas' eyes as he uncomprehendingly reviews, in strict chronological sequence, the progress of Roman destiny that culminates in Augustus's triumph.

[129] Grimal 1951, p. 60.

[130] Anderson 1928, pp. 44-58; Béranger 1953, pp. 180-182; Galinsky 1972, pp. 128 ff.

[131] Jaczynowska 1981, pp. 634-635; Schilling 1942. Suetonius *Divus Augustus* 57.2. Cult of Hercules and Augustus at Tibur: *CIL* XIV 3665, 3681, 3679, 3679a; similarly in southern Italy at Grumentum (*CIL* X, 320; cf. Anderson 1928, p. 45).

[132] Virgil, *Aeneid* 6.791-807.

Alexander the Great.[133] If Hercules mediates between Dinocrates and Alexander in Vitruvius' second preface, he also, in Virgil, mediated between Augustus and Alexander. Indeed, it has been argued that, historically, the old Italic Hercules of the Forum Boarium, patron originally of merchants and traders, only became the Hercules Victor and Invictus who championed Roman generals when, from the time of Scipio Africanus in the third century B.C., Alexander himself became their envied model and inspiration.[134] Roman generals, in other words, were seen or saw themselves as Herculean *through* the paradigm of Alexander, which appears to have been primary.[135]

The third day of the triple triumph of 29 B.C. celebrated Augustus's conquest of Egypt the year before. When he was in Alexandria, he visited the tomb of its founder.

*About this time he had the sarcophagus and body of Alexander the Great brought forth from its shrine, and after gazing on it, showed his respect by placing upon it a golden crown and strewing it with flowers; and being then asked if he wished to see the tomb of the Ptolemies as well, he replied, "My wish was to see a king, not corpses."*[136]

That year, or possibly the following one, Augustus adopted a new official seal.[137]

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[133] Norden 1899; cf. Anderson 1928, p. 53; Kienast 1969, p. 436 and Schwarzenberg 1975, p. 241; Vidal-Naquet 1984, p. 339, who all concur with Norden's conclusions.
[134] Michel 1967, and especially Weinstock 1957. For a list of statues dedicated to Hercules by republican generals, Latte 1960, pp. 219-220.
[135] The evidence presented in Anderson 1928, pp. 31-58, tends to (but does not reach) the same conclusion as that drawn by Weinstock thirty years later (1957). See also Michel 1967.
[136] Suetonius *Divus Augustus* 18.1. Cf. Dio Cassius 51.16.3-15; Vidal-Naquet 1984, p. 339: "*Symboliquement, le geste d'Octavien annule l'histoire hellénisque, issue des partages qui suivent la mort d'Alexandre.*" The gesture was itself an imitation of Alexander who, when he arrived at Troy, placed a gold crown on the supposed tomb of Achilles, his own early model of heroism (Arrian *Anabasis* 1.12.1; Plutarch *Alexander* 15.8; cf. Instinsky 1962, p. 33).
[137] Suetonius *Divus Augustus* 50; Pliny *Natural History* 37.10; Dio Cassius 51.3.4. On Augustus's seal, Instinsky 1962; cf. Kienast 1969, pp. 435-436.

After Caesar's murder, he had used Caesar's seal ring with Venus Victrix on it.[138] The paternal seal was followed in turn by the image of a sphinx. From his Alexandrian conquest in 30 B.C., most probably until 23, he sealed all his official and personal documents with the head of Alexander including, one assumes, any communication he might have addressed to Vitruvius who completed *De architectura* during the period in question.[139] No record survives to affirm how Alexander was portrayed on this seal ring, but the majority of Hellenistic and Roman coins, medals and indeed rings with his head on them make him a Hercules, helmeted with a lion skin.[140]

The earliest possible date for the completion of *De architectura* is thought to be 29 B.C. The key piece of evidence for this *terminus post quem* is the opening of Vitruvius' first preface.

*When your divine mind and power, Imperator Caesar, were seizing command of the world, and all your enemies had been crushed by your invincible strength and citizens were glorying in your triumph and victory . . . . In the midst of such great*

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[138] Dio Cassius 47.41.2. Cf. Instinsky 1962, p. 24.

[139] Suetonius says that Augustus used his own image after he used Alexander's (*Divus Augustus* 50), without saying when he changed it. Kienast 1969, p. 425 argues that this probably happened after he recovered from a near-fatal illness in 23, since poets like Virgil and Horace were still identifying him with Alexander in the late 20's. Instinsky (1962, pp. 36-39), who cannot stomach the idea that Augustus would have signed the papers allegedly restoring republic in 27-26 (*Res gestae* 34) with the head of Alexander, argues that the change must have taken place then, when Augustus received his new name. For the dating of *De architectura* see above, Introduction p. 1 and n. 2. Nenci 1958, pp. 285-308 has argued that Augustus's *Res gestae* (full title: *Rerum gestarum divi Augusti, quibus orbem terrarum imperio populi Romani subiecit*) is another *imitatio Alexandri*. Cf. Schwarzenberg 1975, p. 242.

[140] See Bieber 1964, figs. 30-32, 61-64, 112, 115, 117-122. Fig. 62 has Alexander-Hercules on a Hellenistic gold ring (Metropolitan Museum) which Bieber (p. 72) suggests might be of the kind Augustus used for his seal. Cf. Instinsky 1962, p. 33 and Plate 4: a glass paste cameo of Alexander-Hercules, not included in Bieber's catalogue, in the Musée du Cinquantenaire in Brussels, and which Instinsky tentatively dates to the early Augustan period. Other coin and medal portraits have him bare-headed with his leonine mane of hair rising energetically in the famous *anastolē* over his forehead; with an elephant-head helmet (referring to his Indian conquests) and crowned with a diadem (see Bieber).

*preoccupations, and fearing to vex you by intruding at a bad time, I did not dare to bring forth the writings on architecture I had developed with much deliberation.*[141]

The time referred to is the triumphal period that followed Augustus's conquest of Egypt: specifically, according to many commentators, the triple triumph of 13-14-15 August in 29 B.C.,[142] celebrated with processions that after their departure from the Circus Flaminius, entered the walls of Rome at the Forum Boarium where a very ancient statue of Hercules *triumphalis*, alleged to have been dedicated by Evander himself, was dressed for the occasion in the same triumphal garb as the triumphator himself.[143] The Imperator Caesar Vitruvius addresses whose enemies have been laid low by his *invictus virtus* (invincible strength) is clearly Herculean. Herculean too is the *cura*, care that Vitruvius says he noticed Augustus has "not only for the common life of all men and for the security of the commonwealth but also for the fitness of public buildings."[144]

One of the *curae* or curatorships that Augustus undertook in his early career as *princeps*, and directly linked to the "common life of all men," was the *cura annonae*, which put him in charge of the *frumentationes*, distributions of free grain, that took place either in or near the same Forum Boarium.[145] It was Agrippa, his right hand man,

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[141] Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum invictaque virtute cunctis hostibus stratis triumpho victoriaque tua cives gloriarentur. . . non audebam, tantis occupationibus, de architectura scripta et magnis cogitationibus explicata edere, metuens ne, non apto tempore interpellans, subirem tui animi offensionem.*

[142] Grenade 1961, p. 106; Fleury, Vitruvius I (1990) p. 52; Corso and Romano, Vitruvius 1997, p. 59.

[143] On the triumphal route: Coarelli 1988, pp. 365-414. Hercules *triumphalis*: Pliny *Natural History* 34.33; cf. Bayet 1926, pp. 308, 328, 353; Coarelli 1988, pp. 17, 165; Versnel 1970, p. 90.

[144] Vitruvius 1.pref.2: . . . *non solum de vita communi omnium curam publicaeque rei constitutione habere, sed etiam de opportunitate publicorum aedificiorum . . .*

[145] Coarelli 1988, pp. 74-76, 150. In 22 B.C., after the floods and famines of the previous year, Augustus accepted the *cura annonae*, not held by any single man since Pompey in 56 B.C. (Rilkman

who took charge of Rome's water supply.[146] After the Alexandrian conquest, at least a third of Rome's grain came from Egypt whose *frumentarios*, granaries or grain-bearing fields, says Vitruvius, were one of the reasons why Alexander "commanded Dinocrates to establish the city of Alexandria in his name." These same *frumentarios* were one reason why, for the Romans, Egypt was such coveted prize.[147] Thanks to Augustus, Alexandria and the grain-bearing fields that surrounded it now belonged to Rome.[148]

Among the eight large reliefs on Trajan's early second-century A.D. arch at Beneventum, one has Trajan at Rome engaged in a *frumentatio* (Fig. 16).[149] The activity can be located with some precision because in the background, presiding over it, are the statues of three gods: Portunus on the left, Apollo Caelispex on the right, and in the middle, Hercules. Filippo Coarelli has shown that each represents the cult statue of his respective temple near the Forum Boarium: Portunus of the small surviving Ionic temple near the Tiber traditionally called the Temple of Fortuna Virilis; Apollo Caelispex of *his* no longer extant small temple further to the south, and Hercules of the still extant Corinthian round temple of Hercules Victor that stood between them.[150] The cult statue of Hercules Victor (also known as "Olivarius"),

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1980, pp. 58-62). Unofficially Augustus had been making distributions of grain and money since 44 (Rilkman, p. 179). Such distributions, "made at (his) own cost and by (his) own efforts, (*impensa et cura mea*)" figure largely in his *Res gestae* (5.2; 15; 18; Brunt and Moore, trans.). See also van Berchem 1975.

[146] See above, Chapter 1, p. 25 and n. 31.

[147] Rilkman 1980, p. 61.

[148] Augustus 27: "I added Egypt to the empire of the Roman people" (*Aegyptum imperio populi Romani adieci*; Brunt and Moore, trans.). The assertion is repeated almost verbatim in the inscriptions on the bases of two obelisks brought to Rome from Heliopolis as a trophies in the 20's B.C. – one set up on the spina of the Circus Maximus, the other used as the gnomon for the *Horologium Augusti*, Augustus's great sun clock in the Campus Martius (*CIL* 6.701; 6.702; and below, Chapter 4, pp. 280-282).

[149] Coarelli 1988, p. 197; Gauer 1974, p. 130: the *annona* relief, so-called, appears in the middle level on the right-hand side of the city facade of the arch. See also Simon 1981, p. 8.

[150] Coarelli 1988, pp. 197-200.

reproduced on Trajan's arch, was made late in the second century B.C. by C. Scopas *minor*, about the same time as the temple itself was built.[151] Both the temple and its statue were part of the city Vitruvius knew first hand.[152] The Hercules in question has a lion skin on his left shoulder, grasps club in his right hand and wears a crown of poplar leaves.[153]

Unlike any other surviving representation of him,[154] this Hercules, in every detail without exception, is outfitted in exactly the same way as the Dinocrates/Hercules who doubles Alexander in Vitruvius' second preface. Except, of course, for the head which, even crowned with poplar leaves would have remained recognisably Dinocrates' own.

When, in Vitruvius' story, the king objects to the Mount Athos project because it has failed to take the crucial question of grain supplies into consideration, it is not the voice of Alexander speaking, for indeed Plutarch's Alexander makes no such objection. Rather – as if Vitruvius had suddenly substituted Augustus's head for that of Alexander – the reply, thoroughly Augustan in tone, affirms at once Augustus's own *cura* and its reflection in the philanthropic avocation of a Hercules, also Victor and Invictus, who is specifically sited at the place of Rome's mythical first foundation. If you can change the head on a statue, as Romans often did, how much more easily in

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[151] Becatti 1968, pp. 9-10; Coarelli 1988, p. 199.

[152] He does not mention this particular temple, but he does mention the temple of Hercules Invictus (or Pompeianus) which stood nearby in the Forum Boarium (Vitruvius 3.3.5).

[153] Both of Hercules' hands are now missing, but what remains of the club (about a third of it) rests on his right shoulder, so he must have been grasping it in his raised right hand. The left hand, missing only from the wrist, is held forward.

[154] See *LIMC* IV, s.v. Herakles. Poplar-crowned statues include the so-called "Cook" Hercules (Museo Nazionale Romano, 182596; *LIMC* IV, s.v. Herakles., no. 574) to which Becatti (1968, p.10) gives the same approximate date as the Hercules Victor (Olivarius) represented on Trajan's arch. The Cook Hercules, who cradles a cornucopia on his left arm, does not grasp his club, but rests his right hand on it, like a cane (Becatti, fig. 1). As on many representations, the lion skin is draped over his left forearm, not his shoulder as in Vitruvius and on the Hercules Victor (Olivarius) in question. The

Fig. 16

The so-called *annona* relief on Trajan's arch at Beneventum, near Naples. Early 2nd century A.D. The middle figure on the upper left is Hercules (detail below).

a piece of writing.

Julius Caesar had the head of the equestrian statue of Alexander by Lysippus he set up in his Forum removed and replaced with his own.[155] Later, in the first century A.D. under Claudius, the head of Alexander in two paintings by Apelles in the Forum Augustum was replaced with that of Augustus.[156] Varro assumes common knowledge of such practices in the late Republic when he asks in *De lingua latina*, "Is it not a fact that, if you should put the head of Philip on a statue of Alexander and the limbs should conform to *ratio* (i.e. are properly proportioned), so too would the head (Philip's) that corresponds to the limbs of Alexander's likeness?"[157] The same principle would apply to the head of Caesar or Augustus placed on Alexander's body or, for that matter, to the head of Dinocrates on that of Hercules. What counts is the coherence of the overall *ratio* which, if it is regular or "analogous," can accommodate a variety of anomalous heads, just as – and this is the linguistic point of Varro's rhetorical question – the regular declensions that follow them can accommodate anomalous nominatives ("heads," he calls them) like "*Hercules*" and "*homo*."[158] The order of words is the same as the order of the human body.

Given this Varronian line of reasoning, and provided that the overall *ratio* of their bodies conforms to regularity, could you not likewise change the head of the

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Hadrianic Hope Hercules in the Getty Museum (*LIMC* IV, s.v. Herakles, no. 319), and a number herms, also of the second-century A.D. (*LIMC* IV, nos. 1174-1176) are crowned with poplar.

[155] Statius *Silvae* 1.1.86; Pliny *Natural History* 35.4; cf. Schilling 1982, p. 310; Schwarzenberg 1975, p. 258; Weinstock 1957, p. 233.

[156] Pliny *Natural History* 35.92-94. Cf. Anderson 1928, p. 55. On changing the heads of statues, see also Suetonius *Divus Gaius (Caligula)* 22. The head of the Hope Hercules (see above n. 154) is the portrait head of a deceased young man.

[157] Varro *De lingua latina* 9.79.

[158] See above, Chapter 1, pp. 95-96.. The cast of characters in Varro's demonstration is uncannily close to that of Vitruvius' second preface.

world – or of a book?

Vitruvius, who admired Varro greatly, seems to have thought so.[159] His first preface, which many believe was written last as an introduction to the entire work, heads both the highly theoretical Book 1 and all of *De architectura*. It begins with a ruler preoccupied with "seizing command of the world" and with an architect wondering if he can approach him to present him with his work. In the second preface, which begins the body proper of the work, the architect has found in Hercules a way to do just that. As architect an world-ruler respectively, the Vitruvius and Augustus of the first preface replace the Dinocrates and Alexander of the second. The persons named ("heads" or "nominatives," if you will) have changed, but the overall *ratio* has not. Vitruvius even provides the reader with a numerically precise point of reference against which to test this.

The second preface begins, *Dinocrates architectus cogitationibus et sollertia fretus, cum Alexander rerum potiretur*; the first, *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum*. The tenth word in both prefaces is *potiretur*. Twice Vitruvius uses the same person, tense and mood (third person singular, imperfect subjunctive) of the deponent verb *potior*, "take possession of," "become master of," and gives it the same relative position in his text. In the second preface, Alexander *rerum potiretur*. *Rerum potior* means to have "complete," or "supreme" mastery of.[160] In the first preface, Augustus *imperio potiretur orbis*

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[159] *De lingua latina* is mentioned specifically at 9.pref.17.

[160] Lewis and Short, s.v. *potior*. Cicero reports that the Stoic Cleanthes thought the sun was lord and master of the world (*solem dominari et rerum potiri; Academica* 2.126). In his Augustus writes of his sixth and seventh consulships, held in the two years that followed his triple triumph, as a time when "with universal consent (he) was in complete control of affairs" (*per consensum universorum potitus*

*terrarum*. *Imperio potior* means to take possession of with *imperium*, in Rome the legally vested power of supreme command.[161] *Potior* is a very strong verb. In his first two prefaces – surely no accidental symmetry – Vitruvius gives *potior* the same powerful tenth position. But the first preface, being first, takes textual precedence. It sits, if one imagines Vitruvius' ten scrolls spatially deployed in the triangular form of a *tetractys*, at the top of the heap.[162] So too Imperator Caesar.

The same manoeuvre substitutes Vitruvius for Dinocrates, whose body, as already discussed, is that of Hercules, the king's double. In pointedly disclaiming any similarity between that body and his own, Vitruvius in fact affirms the opposite in order to present his knowledge and writings as rhetorically identical with the Herculean body that commands Alexander's attention. After their initial encounter, Dinocrates never leaves Alexander's side.[163] They may have been an inseparable team, but they were still two different people. In *De architectura*, Vitruvius obviates that difference through writing, grafting as it were Augustus's head onto his own ten-scroll "perfect body of architecture:"[164] something Varro says you can do both with statues and with words and still maintain coherence.

Before *De architectura* was written, Vitruvius and Augustus, like Dinocrates and Alexander, were two separate people, occasionally associated through the services

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*rerum omnium*: *Res gestae* 34). The tone in Latin has greater finality than in Brunt and Moore's English translation which is the one followed here. Grenade 1961, pp. 105-108, has pointed out this and other similarities between the *Res gestae* and Vitruvius' first preface. Cf. Gros 1989b, p. 126; Ramage 1987, p. 63. For uses of *potior*, see also Vitruvius 6.1.11; 7. pref.17; Suetonius *Divus Augustus* 94.2.

[161] OCD, *imperium* sv.

[162] See above, Chapter 1, pp. 55 and 110.

[163] Vitruvius 2.pref.3.

[164] Vitruvius 9.8.15: "*Corpus emendatum architecturae*." See above, Introduction, p. 9 and n. 40.

Vitruvius performed and the *beneficia* he says he received for them.[165] Following Mary Beard's insights on the matter of writing and religion, it is possible to understand that when, in *De architectura*, Vitruvius records that relationship and seals it with repeated written invocations of "Imperator" and "Caesar," he turns it into a permanent, indissoluble connection.[166] Without Imperator Caesar, Vitruvius' "perfect body of architecture" is headless. Without *De architectura* the emperor has no body.

**Benefiting the World**

Dionysius of Halicarnassus, a Greek writing like Vitruvius in Rome in the early years of Augustus's reign, tells the same story as Virgil about Hercules' arrival at the future site of Rome, except that the celebrants of the initial rite of the *ara maxima* wear laurel, not poplar.[167] Dionysius, however, follows this "mythical" account with an allegedly "true" one, in which a pointedly philanthropic Hercules,

*the greatest commander of his age, marched at the head of a large force through all the country that lies on this side of the Ocean, destroying any despotisms that were grievous and oppressive to their subjects . . . established lawful monarchies, well-ordered governments and humane and sociable* (philanthrôpa kai koinopathê) *modes of life. Furthermore, he mingled barbarians with Greeks* (something

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[165] Vitruvius *De architectura* I.pref.2-3.

[166] See Beard 1991, pp. 45-46 on the role of votive tablets which *named* both the dedicator and the god invoked: "It was in the indelible, inscribed definition of one's relation to the gods, it was in the fixed written record of one's engagement in ritual, that the idea of 'membership' or 'belonging' to the pagan community could most clearly and permanently be defined. Inscribed votive texts enacted that crucial conversion of an *occasional* sacrifice into a *permanent* relationship."

Alexander famously tried to do) . . . *groups which hitherto had been distrustful and unsocial in their dealings with each other; he also built cities in desert places, turned the course of rivers that overflowed the fields, cut roads through inaccessible mountains, and contrived other means by which every land an sea might lie open to the use of all mankind.*[168]

The *philanthropia* of Dionysius' Hercules – clearly not without its architectural dimension – is an apology for world conquest. Indeed, this Hercules would be lost without architecture, particularly without the machinery to which Vitruvius devotes the last and longest of his ten books: the third "part" of architecture which includes the machinery of war as well as the very engines such a Hercules would need for cutting roads through mountains and changing the courses of rivers.[169] So too the Hercules who rescues Prometheus near the beginning of Diodorus Siculus' "Library of History." As Diodorus, a near contemporary of Dionysius, tells it Prometheus was a governor of Egypt and when the Nile, called "eagle" because of its strong current, flooded excessively, Hercules turned the river back to its former course, and thus saved Prometheus.[170]

Both Dionysius' and Diodorus' accounts of Hercules reflect Euhemerism.

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[167] Dionysius of Halicarnassus *Antiquitates romanae* 1.39-40. "The Aborigines and the Arcadians who lived at Pallantium . . . . plucking branches of laurel which grew there in great plenty, crowned both (Hercules) and themselves with it" (1.40.1). .

[168] Dionysius of Halicarnassus *Antiquitates romanae* 1.41.1. On Alexander's concern for *homonoia* and the partnership between Macedonians and Persians, Arrian *Anabasis* 7.7.8-9. At the famous mass-marriage at Susa, Alexander himself took two Persian wives and forced 10,000 of his men to marry Persian women as well (Arrian 7.4.4-8; cf. Hammond 1989, p. 265).

[169] Vitruvius 1.1.3: *Partes ipsius architecturae sunt tres: aedificatio, gnomonice, machinatio.* On Book 10, see Fleury 1993.

[170] Diodorus Siculus 1.19.1-4: "Consequently certain of the Greek poets worked the incident into a myth, to the effect that Heracles had killed the eagle which was devouring the liver of Prometheus." Cf. Galinsky 1972, p. 129. Diodorus also makes Hercules a road-builder at 4.22.1-2.

According to Euhemerus of Messene's *Hiera anagraphè* written some twenty years after Alexander's death, the gods, all originally great rulers, became gods through the posterity's grateful recognition of their services.[171] In the early part of the second century B.C., just over a hundred years after it was written, the Roman epic poet Ennius, whom Vitruvius singles out as a personal favourite, translated it as *Historia sacra*: the earliest Greek work to be translated into Latin.[172]

Vitruvius thinks that *De architectura* will be of service.[173] In the preface to Book 6, he expresses the hope "that once these scrolls have been published (he) will be known even to posterity,"[174] adding a little later that he "decided to write the whole body of architecture and its principles with the greatest of care, thinking it would be a not unwelcome service to all peoples (*omnibus gentibus*)."[175]

The phrase "*omnes gentes*" reappears in a similar context in the preface to Book 9, where Vitruvius writes of the honours that ought to be bestowed on writers "who perform unlimited services to all peoples (*omnibus gentibus*) for all time," rather than on athletes, who do not.[176] He continues by naming Pythagoras, Democritus, Plato, Aristotle and "other wise men" as examples of such writers: men whose precepts bear fruit "not only among their fellow citizens but among all peoples (*omnibus gentibus*)."[177] Who are all these "peoples?"

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[171] On Euhemerism, Feeney 1991, pp. 120-128; Price 1984, pp. 38-46; Voegelin 1974, pp. 101-113.
[172] Vitruvius 9. Pref.16.
[173] On this question, see Gros 1994a; Novara 1983 and 1994.
[174] Vitruvius 6.pref.5. *Sed tamen his voluminibus editis, ut spero, etiam posteris ero notus.*
[175] Vitruvius 6.pref.7: . . . *corpus architecturae rationesque eius putavi diligentissime conscribendas, opinans munus omnibus gentibus non ingratum futurum.*
[176] Vitruvius 9.pref.1: *qui infinitas utilitates aevo perpetuo omnibus gentibus praestant.* Cf. Novara 1983, p. 297; 1994, p. 60.
[177] Vitruvius 9.pref.2: *non solum suis civibus, sed etiam omnibus gentes. . . . e quibus. . . instituunt civitatibus humanitatis mores.*

Fig. 17

Hercules rescuing Prometheus. Marble relief from the Sebasteion at Aphrodisias in Caria. 1st century A.D. (Photo author).

The Stoic Athenodorus of Tarsus, the first of Augustus's many philosophical advisors, used similar terms when he likewise compared the fairly useless cultivation of an athlete's body to the philosophical cultivation of a political leader's soul: the liberal education, pursued from boyhood on, whose purpose was to make such a leader useful to his "fellow citizens and to all mortals." "*Civibus mortalibusque*" is the phrase in Seneca's Latin citation of a passage Athenodorus would originally have written in Greek.[178] In Greek "mortals," *thnêtoi*, are everyone who is not *athanatos*, immortal – all humans, in other words. The background in Athenodorus' case is the common humanity and brotherhood of man: a key notion of Stoic ethics, grounded in the unique relation to the cosmic order all humans share.[179] It would not be unreasonable to suppose a similar background in Vitruvius' hope to be of service to "all peoples," who thus constitute "mankind."[180] But the expression he uses is not *mortales* but *omnes gentes*. If his sentiments are Stoic, this "*omnes gentes*" gives them a decidedly Roman spin.

"*Omnes gentes*" also appears at the opening of Vitruvius' first preface. "When your divine mind and power, Imperator Caesar, were seizing command of the world, and . . . all subjected peoples (*gentes omnes subactae*) awaited your nod . . ."[181]

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[178] Seneca *De tranquillitate animi* 3.1: *cum utilem se efficere civibus mortalibusque propositum habeat*. Cf. Goguey 1978, p. 105; Grimal 1946, p. 70.

[179] Zeno, cited in Plutarch, *The Virtue of Alexander, Moralia* 329a is the earliest source. Cicero, *De officiis* 1.153: Wisdom . . . is the knowledge of things human and divine, which is concerned with the bonds of union between gods and men and the relations of man to man (*hominum communitas et societas inter ipsos*). Cf. Verbeke 1973, pp. 4-5.

[180] Vitruvius' Stoic orientation has already been discussed at some length. See especially above, pp. 72-73 and 137-138). The *Thesaurus Linguae Latinae*, citing *De architectura* 6.pref.7 and 9.pref.1, notes that Vitruvius here is the first and only non-Christian prose writer to use *gentes* in the sense of the whole human race, which is to say "mankind." *TLL* s.v. *gens*, 1862.4-6 and 22-25.

[181] Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum . . . et gentes omnes subactae tum spectarent nutum . . .*

When other Roman writers use "*omnes gentes*" (rather than just "*gentes*"), the context is almost invariably identical.[182] For instance, when the anonymous author of the early first century B.C. rhetorical treatise, *Rhetorica ad Herennium*, gives an example of a standard "middle style" speech, it concerns traitorous allies who would "attempt to usurp that sovereignty over the whole world (*imperium orbis terrae*) – the command all peoples (*imperio omnes gentes*). . . have accepted, when conquered either by the arms of Rome or by her generosity."[183] Pompey, whose *res gestae*, achievements, "crowned by glorious victory on land and sea encompassed all peoples (*omnes gentes*)" in one of Cicero's elogia of him, is *victor omnium gentium*, conqueror of all peoples, in another.[184] In the *Philippics*, Cicero writes that the Roman people are not meant to be slaves, since the immortal gods have decreed their command of *omnibus gentibus*.[185] In his fourth Catalinarian oration, he calls the *curia*, the senate house in the Forum Romanum, their "ultimate refuge;" in another speech, the Capitol is their citadel.[186] At the end of the first century A.D., Martial says in one of his epigrams that he is "acclaimed and read through the whole world (*toto orbe*)" and that he is "spread out over all the peoples held by Rome."[187] Martial's phrasing (poetic license, no doubt) allows the possibility of peoples *not* held by Rome, but generally speaking the Roman representation of mankind ignored that possibility.

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[182] *TLL* s.v. *gens*.

[183] *Rhetorica ad Herennium* 4.9.13: *illi imperium orbis terrae, cui imperio omnes gentes . . . consenserunt, cum aut armis aut liberalitate a populo Romano superati essent.* It is worth noting that the *auctor ad Herennium* presents this kind of thing as standard and exemplary.

[184] Cicero *Pro Balbo* 16: *cuius res gestae omnes gentes cum clarissima victoria terra marique peragrassent. In Pisonem* 34: *victor omnium gentium.*

[185] Cicero *Philippics* 6.19: *poplulum Romanum servire fas non est, quem di immortales omnibus gentibius imperare voluerunt.* See also *Epistulae ad familiares* 11.5.3, *De oratore* 1.14, *Pro Milone* 19.

[186] Cicero *In Catalinam* 4.2: *curia, summum auxilium omnium gentium*; *De lege agraria* 1.18.

To properly qualify as mankind, you had to be civilised, and being civilised meant being ruled by Rome, placed by the "divine mind" (so Vitruvius in the chapter that immediately follows his sixth preface) at the centre, "in an excellent and temperate region so that it might seize command of the world (*orbis terrarum imperii potiretur*)."[188] In a similar vein, and sounding very much like Dionysius of Halicaranassus on the subject of the philanthropic Hercules in the passage cited earlier, Pliny the Elder writes of Italy as

*a land which is the nursling and mother of all other lands, chosen by the providence of the gods to make heaven itself more glorious, to unite empires, to temper manners, to draw together in mutual comprehension by community of language the jarring and uncouth tongues of so many nations, to give mankind* humanitas *and in a word to become throughout the world the single fatherland of all peoples.*[189]

The *omnes gentes* to whom Vitruvius hopes to be of service in his sixth preface can be none other than the subjected peoples who await the nod of Imperator Caesar in the preface to Book 1. You cannot disengage them, any more than you can disentangle the philanthropic Hercules from Hercules Victor and Invictus. The world community of which Romans saw themselves as custodians, did not extend beyond – indeed depended upon – the reach of Roman *imperium*. It was not so much that the

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[187] Martial *Epigrams* 61.3-5: *orbe cantor et legor toto . . . spargor per omnes Roma quas tenet gentes.*
[188] Vitruvius 6.1.11: *Ita divina mens civitatem populi Romani egregia temperataque regione conlocavit, uti orbis terrarum imperii potiretur.* For a similar view, see Strabo 2.5.26.
[189] Pliny *Natural History* 3.5.39. Cf. Dionysius of Halicarnassus *Antiquitates romanae* 1.39–40, cited above p. 155.

Romans implemented the Stoic ideal, as that the universal scope of the Stoic ideal gave imperialism its *ratio*.

An Olympic athlete like Milo of Croton may be *invictus*, writes Vitruvius, without mentioning that, curiously enough, this same Milo disguised himself as Hercules when he led an attack on Sybaris in 510 B.C.[190] But such a man bequeaths nothing to other men except the short-lived honour of victory among his fellow-citizens. The benefits bestowed by wise men like Plato and Pythagoras are universal and longer lasting. These are not bestowed directly on all peoples, however. Rather, says Vitruvius, it is through the learning of such men that others are able to acquire the necessary wisdom to institute in cities "the ways of *humanitas*, equable justice and laws, without which no city can be safe and whole."[191]

Vitruvius follows with examples of the kind of learning which, one must assume, he understands as paving the way to the spread of *humanitas*: Plato's method for doubling the square; Pythagoras' discovery (by *ratio* and not by *ars*) of the theorem that bears his name, and permits the accurate construction of 3-4-5 set squares which bypass the trial and error methods of artisans.[192] These two geometrical operations above all, Monique Clavel-Levêque has shown, are fundamental in centuriation, the process whereby Romans, instituted what she calls *l'ordre du carré*, inscribing the geometrical order of the cosmos and of Rome onto the landscapes of Europe.[193]

Vitruvius sums up these and other mathematical discoveries as having been channelled

[190] Vitruvius 9.pref.2. On Croton's attack on Sybaris and Milo's disguise, Diodorus Siculus 12.9.2; cf. Detienne 1960, pp. 20-21.

[191] Vitruvius 9.pref.2: . . .*instituunt civitatibus humanitatis mores, aequa iura, leges, quibus absentibus nulla potest esse civitas incolumis.*

[192] Vitruvius 9.pref.3-7.

not only towards the "correction" of *mores* but also, everlastingly, towards the service of all.[194]

Geometry, writes Vitruvius in his sixth preface, is the very footprint of man.

*When the Socratic philosopher Aristippus was cast upon the shore of Rhodes by a shipwreck, he noticed drawings of geometric shapes and, it is said, exclaimed to his companions, "Be of good cheer! I see the footprints of men." He then proceeded to the town of Rhodes and went directly to the gymnasium, where he was given gifts because of his philosophical discourse – enough not only to outfit himself, but also to supply those who were with him with clothing and other vital necessities. When his companions wanted to return to their country and asked him what they should report at home, this is what he told them to say: that children should be equipped only with such possessions and travelling supplies as could swim ashore with them from a shipwreck.*[195]

Learning alone, of which geometrical figures are the *vestigia* "footprints," he continues, makes a man a citizen in every city, and able to withstand the vicissitudes of fortune.[196] Further along, in one of his rare autobiographical interpolations,[197]

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[193] Clavel-Levêque 1992. See also Guillaumin 1994.

[194] The next two examples are Archimedes' principle (9.pref.9-12) and the doubling of the cube, discovered both by Archytas of Tarentum and by Eratosthenes of Cyrene (13-14). Vitruvius 9.pref.15: *. . . non solum ad mores corrigendos, sed etiam ad omnium utilitatem perpetuo sunt praeparata.*

[195] Vitruvius 6.pref.1: *Aristippus philosophus Socraticus, naufragio cum eiectus ad Rhodiensium litus animadvertisset geometrica schemata descripta, exclamavisse ad comites ita dicitur: "bene speremus! hominum enim vestigia video." Statimque in oppidum Rhodum contendit et recta gymnasium devenit, ibique de philosophiea disputans muneribus est donatus, ut non tantum se ornaret, set etiam eis qui una fuerunt, et vestitum et cetera, quae opus essent ad vitum, praestaret. Cum autem eius comites in patriam reverti voluissent interogarentque eum, quidnam vellet domum renuniari, tunc ita mandavit dicere: eiusmodi possessiones et viatica liberis oportere parari, quae etiam e naufragio una possent enatare.*

[196] Vitruvius 6.pref.2: *doctum ex omnibus solum neque in alienis locis peregrinum neque amissis familiaribus et necessariis inopem amicorum, sed in omni civitate esse civem difficiliesque fortunae sine timore posse despicere casus.*

Vitruvius expresses gratitude to his parents for his own education, and for the care they took in having him instructed in an art "which cannot demonstrated without knowledge of letters and all the learned disciplines."[198]

Cicero has the younger Scipio tell the same story in the first book of *De republica* in order to illustrate the point that "though others may be called men only those are men who are perfected in the arts of *humanitas* (*humanitati artibus*)."[199] Although the shipwrecked philosopher – "Plato, or perhaps someone else" in Cicero's version – also notices cultivated fields, only the geometrical figures in the sand are taken as evidence of the presence of men, *educated* men being the only real humans in the view presented here.[200] The purpose of education, in the context of the discussion in *De republica*, is to form men who serve the state. But *De republica*, on the best form of government, written in the mid fifties B.C., and set much earlier in 129, focuses on the specifically Roman situation. There is no talk of education making one a "citizen of every city." To be a leading citizen of Rome was enough for Cicero's Scipio who, moreover, considered the precepts and examples of one's Roman elders more important than liberal education ("Greek" learning) for the formation of the ideal

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[197] See above p. 128 and n. 42.

[198] Vitruvius 6.pref.4: (*ars*) . . . *quae non potest probata sine litteratura encyclioque doctrinarum omnium disciplina.* Cf. 1.1.1: The knowledge of the architect is furnished with many disciplines and various kinds of learning. Judiciously exercised, it demonstrates everything the other arts achieve. (*Architecti est scientia pluribus disciplinis et variis eruditionibus ornata cuius iudicio probantur omnia quae ab ceteris artibus perficiuntur opera*), where the same verb, *probo*, is used. For the grammatical justification of this reading, which departs somewhat from conventional ones, see above, Chapter 1, p. 40, n. 100.

[199] Cicero *De republica* 1.28-29. In Cicero, the place of the shipwreck is unspecified. Varro might have been a common source (Oder 1899, p. 365; Frazer 1970, p. 117). Other versions of the story appear in later works: Aelian's *Varia Historia* (9.20) of the late second century A.D., and Galen's *Exhortatio ad artes addiscendas* (5) written slightly earlier. Cf. Corso and Romano, Vitruvius 1997, p. 860. On the Aristippus story in later interpretations, Oechslin 1981.

statesman.[201] Rome might rule the world, as by Cicero's day most prominent Romans already claimed, but world-citizenship was not part of the agenda.[202]

Vitruvius, who wrote thirty years later in the early principate, takes a far broader view. The Aristippus story appears in the preface to his book on private construction. He begins its first chapter by asserting that, because of differences in climate, the kinds of buildings built in Egypt must be different from those in Spain, in the Pontus (on the Black Sea) and in Rome, surveying in his short list the outermost limits of the territories inhabited by *omnes gentes*, and concluding it with Rome – the centre from which, as he argues at the end of the same chapter, the divine mind has ordained that they be ruled.[203]

The course of the sun that "tempers" all these different climates, along with the constitutions of the men who inhabit them, is the same "tempering power" that determines all the different kinds of water in the world, listed with evident relish and amazement in a particularly long chapter of Book 8.[204] Without such variety in the earth's juices there would be no incense-bearing trees, no peppercorns, or myrrh, or

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[201] Diogenes Laertius 2.70, citing Aristippus: "Better to be a beggar than uneducated: the first lacks money; the second humanity (*anthrōpismos*)." Aristippus would indeed seem to be the best match for the philosopher of Cicero's version.
[202] Cicero *De republica* 1.35.
[202] Cf. Vasaly 1993, p. 134: "By the first century B.C. the victories of Pompey in the East and of Caesar in the West gave birth to the fiction that the "whole world" had succumbed to Roman arms . . ." That philosophers, particularly Stoics, were world citizens is a notion expressed, for example, by Cicero in his late (45 B.C.) *Tusculan Disputations* (5.106-121), written as a disappointed politician in enforced retirement during the troubled last year before Caesar's assassination. *Patria est, ubicumque est bene*, "one's country is wherever it is good to be" he writes (5.108), citing the second-century B.C. Roman poet Pacuvius. World-citizenship is here divorced from political reality. The idea of Stoic world-citizenship as a possible political reality towards which the Roman imperial project was directed only comes to fruition in the reign of Augustus. See Wright 1995.
[203] Vitruvius 6.1.1: *Namque aliter Aegypto, aliter Hispania, non eodem modo Ponto, dissimiliter Romae . . . oportere videntur constitui genera aedificiorum. . . .*; 6.1.11: *Ita divina mens civitatem populi Romani egregiam temperatamque regionem conlocavit, uti orbis terrarum imperii potiretur.*
[204] Vitruvius 8.3.

silphium, and everything the earth brought forth would be the same.[205] Nor is such variety surprising. If the human body – composed mainly of earth – can contain juices as varied as blood, milk, urine, sweat and tears how much more variety is to be expected in the far greater body of the earth, of which the human body is but a small fragment.[206] Vitruvius has observed some of these aquatic phenomena first hand; he has culled the others from the works of Greek authors.[207]

After another discussion of "geometrical footprints" – for so might one call the discoveries, reviewed above, of Plato and Pythagoras – Book 9, on clock construction, opens with the observation that the divine mind has so constituted matters that "the shadow of the gnomon at the equinox has a certain length in Athens, another in Alexandria and yet another in Rome. . . "[208] The lengthening and diminution of the shadows of gnomons determine the configuration of the analemma, or "face" of a sun clock, which itself is the pattern (another "geometrical footprint") of the order of the universe which Vitruvius says is discovered through "architectural principles and the tracings of the compass."[209]

*Ichnographia*, the plan of a building – the "drawing" (*graphia*) of its "footprint" (*ichnos*) – is, according to Vitruvius, "the properly related use of compass and ruler

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[205] Vitruvius 8.3.13: *in omni terra regionibus eodem genere omnia procreantur.* Silphium was a rare herb valued both as a condiment and a medicine. Cf. Callebat, commentary ad loc., Vitruvius 8 (1973).

[206] Vitruvius 8.3.26: *Cum haec tanta varietas sit disparibus rebus natura distributa, quod humanum corpus est ex aliqua parte terrenum, in eo autem multa genera sunt umorum, uti sanguinis, lactis, sudoris, urinae, lacrimarum – ergo si in parva particula terreni tanta discrepantia invenitur saporum, non est mirandum si tanta in magnitudine terrae innumerabiles sucorum reperientur varietates . . .*

[207] Vitruvius 8.3.28: seven authors are listed.

[208] Vitruvius 9.1.1: *Ea autem sunt divina mente comparata habentque admirationem magnam considerantibus, quod umbra gnomonis aequinoctialis alia magnitudine est Athenis, alia Alexandriae, alia Romae. . .*

that renders how figures are marked out on the grounds of areas."[210] Plans cannot be drawn without geometry, which "teaches the use of straight lines and the compass – particularly important for readily delineating the way buildings are marked out in areas – as well the use of set squares, levels and lines," providing also the means for resolving "the difficult questions of symmetries."[211]

Properly orienting a new city entails geometrical methods similar to those involved in laying out the analemma of sun clock, with a bronze gnomon playing the crucial role of determining the cardinal points, and hence the directions of the prevailing winds to be avoided in laying out the streets of new cities.[212] Vitruvius must have thought the procedure particularly important, since he describes it twice: once, as surveying operation, conducted on the ground, and again at the end of the chapter as a diagrammatic geometrical operation, referring to two no longer extant *schemata* at the end of his first scroll.[213] This "geometrical footprint" appears in one of the four chapters of Book 1 devoted to the essentials of founding new cities:[214] not without relevance in the 20's B.C., at the very peak of what Fergus Millar has called "the first and only period (that of Caesar, the Triumvirs and Augustus) in Roman history which saw the state engaged in active and large-scale settlement of citizens outside Italy,"

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[210] Vitruvius 9.1.1: *Antemma est ratio conquista solis cursu et umbrae crescentis ad brumam observatione inventa, e que per rationes architectonicas circinique descriptiones est inventus effectus in mundo.* On the analemma, see Soubiran's useful commentary, Vitruvius 9 (1969), pp. 71-73.
[211] Vitruvius 1.2.2: *Ichnographia est circini regulaeque modice continens usus e qua capiuntur formarum in solis arearum descriptiones.*
[212] Vitruvius 1.1.4: *Geometria . . . ex euthygrammis circini tradit usum, e quo maxime facilius aedificiorum in areis expediuntur descriptiones normarumque et librationum et linearum directiones. . . . difficilesque symmetriarum quaestiones geometricis rationibus et methodis inveniuntur.*
[212] Vitruvius 1.6.
[213] Vitruvius 1.6.6-8 and again 1.6.12-13.
[214] 1.4: choice of site; 1.5: walls and ramparts; 1.6: laying out streets; 1.7: locating *fora*, temples and public buildings.

with colonial foundations bearing, initially Caesar's and later (far more frequently), Augustus's name in all the territories held by Rome.[215] Detailed plans and land grants for such settlements were recorded in a document called the *liber beneficiorum*, the book of benefits, which was kept in the imperial archives.[216] *Architectura*, the art above all of the geometrical footprint, was the purveyor of such benefits.

True riches are what you can save from a shipwreck; to put your trust in fortune is to travel on slippery roads; learning is the one stable centre that also, as in the case of Aristippus, ultimately provides all the necessities of life.[217] On these points Vitruvius' sixth preface is particularly long-winded and redundant, with corroborative citations not only from philosophers but also from poets and playwrights, all of them Greek like Aristippus. Of this learning, which makes a man at home anywhere in the world, the geometrical footprint is both the evidence and the emblem. Euclidean geometry, Luciano Canfora has observed in a different context, was the common language of the learned world whose chief centre, from the century third B.C. century on, was Alexandria, with its international community of Greek scholars, its museum and its great library.[218] The shift of that centre to Rome had begun in the late Republic. Augustus's Alexandrian conquest marked its definitive accomplishment.

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[215] Millar 1984, p. 50.

[216] Hyginus Gromaticus *De conditionibus agrorum* and *Constitutio limitum* in Thulin 1971, pp. 82-83 and 165-66, respectively. Cf. Millar 1984, p. 50. See also Millar 1977, pp. 263-264.

[217] According to Diogenes Laertius (2.60) Aristippus was the first philosopher to charge for his teaching, a practice which elicited nothing but scorn from Socrates, his avowed mentor. Aristippus was something of an Epicurean *avant la lettre*, which may explain Cicero's (perhaps deliberate) forgetfulness of his name (*De republica* 1.28).

[218] Canfora 1992, p. 50: *Cette communauté (de savants à Alexandrie), qui n'éprouve pas le besoin de suivre les éculubrations des philosophes, si appréciés à Athènes, pour mener à bien ses recherches, possède en revanche un language commun pour exprimer ses "principes": la géométrie euclidienne.* On Alexandria, see also Canfora 1991 (particularly on its library, which he argues was identical with the museum); Frazer 1972.

In the old days when the Romans waged war on savage tribes, wrote Strabo at the end of Augustus's reign, there was no need of education for "force is stronger than reason in dealing with barbarians."[219] Boeotia, he says, although perfectly situated climatically for hegemony lost its natural advantage because its leaders belittled discourse (*logos*) and neglected training and education (*agōgē kai paideia*): things that are "particularly useful in dealing with the Greeks."[220] The Romans knew better, says Strabo, and "from the time that they began to have dealings with more civilised tribes and races, applied themselves to *paideia*, and so established themselves as lords of all."[221]

"Only when the Republic was crumbling could *paideia* properly take root (in Rome)," Andrew Wallace-Hadrill has noted.[222] Claude Moatti has explored the reasons for this, concluding that for intellectuals of the late Republic, Greek learning provided rational alternatives to the disintegration of traditional *mores* perceived to be at the core of the rotting *res publica*.[223] That the commonwealth was "shipwrecked" was a common way of referring to the crisis.[224]

Destruction threatens the Roman ship of state at its mythical beginning when Aeneas sets out from Troy in the first book of the *Aeneid* and a violent storm imperils

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[219] Strabo 9.2.2. Cf. Rawson 1985, pp. 321-325; Wallace-Hadrill 1988. For a similar view, see Cicero *Ad Quintum fratrem* 1.1.27 (cf. Woolf 1994, p. 119).

[220] The Boeotians must have had something of a reputation for philistinism: Plutarch, writing of the education of Hercules in *De E Delphico* (*Moralia* 387 D), asserts that in his youth, before acquiring wisdom, Hercules despised dialectic and syllogistic reasoning, "like a real Boeotian." Cf. Dugas 1944, p. 68.

[221] Cf. Cicero *Ad Quintum Fratrem* 1.1.27: "But seeing that we are governing that race of mankind (i.e. the Greeks) in which not only do we find real civilization, but from which it is also supposed to have spread to others, it is at any rate our duty to bestow upon them, above all things, just that which they have bestowed upon us."

[222] Wallace-Hadrill 1988, p. 232.

[223] Moatti 1988 and 1991.

his fleet. Neptune intervenes to calm the waves with his words just as, writes Virgil, when violence breaks out in a great nation, a man "honoured for noble character and service" intervenes to calm the insurgents with his speech.[225] That the Neptune of the passage is also Augustus, who saved Rome from the incipient shipwreck of the civil wars, has been widely recognised and need not be dwelt on here.[226] What is worth stressing in the present context is the power of *speech* to put an end to conflict.

*Vis dicendi* is the power of speaking that belongs to the orator.[227] The purpose of Cicero's *De oratore*, one of Vitruvius acknowledged sources, was to shape that power into an *ars*, a communicable body of (for Cicero, Roman) knowledge, by giving it a *ratio* drawn for the most part from Greek teaching.[228] A number of scholars have noted that *De architectura* has a similar purpose, and that it draws heavily on Cicero, especially *De oratore*, for its method.[229] In a frequently-cited article written over thirty years ago, Frank E. Brown argued that Vitruvius' aim in so doing was to dignify the architect's profession by turning what was looked down on as a manual trade into a liberal art for which rhetoric was the model.[230] Pierre Gros has recently questioned Brown's view on the grounds that Vitruvius' primary' purpose was attain distinction

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[224] Cicero *De republica* 1, *passim*; *Pro Sestio* 6.1.5: *naufragium rei publicae*; Horace *Odes* 1.14 (interpreted by Quintilian 8.6.44). Cf. Blumenberg 1997, pp. 10-17; Schäfer 1972.
[225] Virgil *Aeneid* 1.132-156. *Ille regit dictis animos et pectora mulcet* (1.153).
[226] See most recently Galinsky 1996, pp. 21-23. An intaglio in the Boston Museum of Fine Arts (Inv. 27.733) similarly pictures Augustus as Neptune, riding over the waves in a chariot drawn by hippocamps; cf. Zanker 1988, pp. 96-97.
[227] Cicero *Academica* 1.32; *De oratore* 1.13: *summa dicendi vis*.
[228] Cicero *De oratore* 1.13-16; 186-188. *De oratore* as a source, along with Varro's *De lingua latina* and Lucretius' *De rerum natura*: Vitruvius 9.pref.17.
[229] André 1987 (in conclusion, p. 289: *Nous croyons que la matière ample, généreuse, ornée de Vitruve . . . reflète sutout le magistère cicéronien*); Callebat 1994; Gros 1989a, pp. 13-15; Novara 1983, pp. 287-290; Romano 1987, pp. 57-59, 68-75.
[230] Brown 1963.

(*honores*) by serving the state, which is to say, by serving the men who ruled it.[231] Such men include those Vitruvius calls *aedificantes* – the magistrates traditionally charged with public building – and the *patres familiarum*, heads of households, to whom he hopes his sixth book, on domestic construction, will be of particular use, as well as to "all learned men;" but above all and especially to the man who by 29 B.C. had supplanted them all to become, in the public sphere at least, sole builder – Augustus for whom, Gros argues, *De architectura* was to serve as a kind of brief.[232] What has the art of the orator to do such service?

Speech is unique to humans, insists Cicero's Crassus in *De oratore*.[233] As discussed in the previous chapter, speech-as-*logos* was the privileged channel of communication with the order of the Stoic cosmos.[234] For Cicero's Crassus, the speech of an educated man is the hallmark of *humanitas*.[235] Most important of all, says Crassus, there is no other power strong enough to have gathered "scattered humanity into one place (*unum in locum*), or to lead it out of its brutish existence in the wilderness (*a fera agrestique vita*) up to our present state of civilisation as men and as citizens or, once cities were established, to give shape to laws, tribunals and civic

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[231] Gros 1994a.

[232] "All learned men." Vitruvius 1.1.18: *omnibus sapientibus*. On the protocol of building in the Roman Republic, and the profound changes in that protocol, which began in the early to mid first century B.C. and culminated with first emperor's sole charge of public construction, see Gros and Sauron 1988. Gros 1994a, p. 89: *Vitruve, s'adressant à Auguste, lui propose en somme un catalogue complet destiné à lui permettre une rapide appréciation de ce doit être accompli.* See also Novara 1983 and 1994.

[233] Cicero *De oratore* 1.32.

[234] See above, Chapter 1, pp. 79-82.

[235] Cicero *De oratore* 1.32: . . . *quid esse potest in otio aut iucundus, aut magis proprium humanitatis, quam sermo facetus ac nulla in re rudis?*

rights."[236] This power was first discovered, wrote Cicero in his earlier *De inventione*, at "a time when men wandered at large in the fields like animals and lived on wild fare," unguided by reason and relying chiefly on bodily strength (*viribus corporibus*). It was the articulate force of a "great and wise man" – the first orator – that persuaded this scattered multitude of savages, mutinous and rebarbative at first, to come together into once place (*unum in locum*) and, with speech and reason (*propter rationem atque orationem*), eventually tamed them to gentleness.[237]

The first chapter of Vitruvius' second book, immediately following the anecdote about Dinocrates and Alexander with its point that the book is to replace the body, is his account of how, as he puts it, the *rationes* of building arose: the origins of building, or the history of the primitive hut, as it became known in later literature.[238] The unnamed writers on matters concerning the beginning of *humanitas* to whom Vitruvius refers include Lucretius, as has often been recognised, possibly Varro and

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[236] Cicero *De oratore* 1.33: *quae vis alia potuit aut dispersos homines unum in locum congregare, aut a fera agrestique vita ad hunc humanum cultum civilemque deducere, aut, iam constitutis civitatibus, leges, iudicia, iura, describere*

[237] Cicero *De inventione* 1.2: *Nam fuit quoddam tempus cum in agris homines passim bestiarum modo vagabantur et sibi victu fero vitam propagabant, nec ratione animi quicquam, sed pleraque viribus corporis administrabant . . . magnus . . . vir et sapiens . . . qui dispersos homines in agros et in tectis silvestribus abditos ratione quadam compulit unum in locum et congregavit et eos in unam quamque rem inducens utilem atque honestam primo propter insolentiam reclamantes, deinde propter rationem atque orationem studiosius audientes ex feris et immanibus mites reddidit et mansuetos.* See also Quintilian *De institutione oratoria* 2.16.9: "Never . . would the founders of cities have induced their unsettled multititudes to form communities had they not moved them by the magic of their eloquence . . "

[238] Vitruvius 2.pref.5: . . . *de aedificiorum rationibus, unde initia ceperint* . . . Rykwert 1981, with its exploration of the paradigm's iterations throughout history, remains fundamental; on Vitruvius' chapter see especially pp. 105-140. See also Romano 1987, pp. 108-122 with bibliography to date, and more recently the commentary in Corso and Romano, Vitruvius 1997, pp. 172-178. The "primitive hut" of Vitruvius' chapter is the *capanna* of Romano 1987, *La capanna e il tempio* (the *tempio* is *architectura*).

also, certainly, Cicero [239]

"In their old way of life, men were begotten like animals in forests, caves and groves and spent their lives feeding on wild food," Vitruvius begins.[240] When, as a result of a violent storm, the trees in a certain place caught fire, the people nearby were terrified at first and fled. In time, however, realising how beneficial the fire was to their bodies, they came closer, maintained it with more fuel and, through repeated attempts to communicate with one another, eventually acquired the faculty of speech.

*Thus, because of the discovery of fire, the first assembly, deliberation and society among men were brought into being. And as more came together into one place* (in unum locum) *people who, unlike other animals, had this prize from nature, that they walked not face down but upright so as to look at the magnificence of the world and of the stars, and also that they easily handled any thing they liked with their hands and fingers . . . together they began to build shelters . . .*"[241]

Vitruvius follows with a catalogue of huts and their methods of construction, describing those still observable among foreign nations, first circling the least civilised, outermost reaches of the Roman *orbis* – Gaul, Hispania Lusitania, Aquitania, the Pontus – then progressing inward through Phrygia, Marseilles, and Athens to conclude

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[239] Vitruvius 2.pref.5: . . . *insequar inventiones perquisitas eorum scriptorum, qui ingressus antiquitatis rerum naturae et initia humanitatis praeceptis dedicaverunt.* Lucretius (*De rerum natura* 5.925-1104) as a source: Merrill 1904; Romano 1987, p. 111; Rykwert 1981, pp. 112-113. Varro's now lost *Antiquitates rerum humanarum*, which would almost certainly have included a similar account, is another probable source. Such accounts of the origins of civilisation have been traced to the fifth century B.C. Greek atomist Democritus: Burford 1972, p. 186; Cole 1967.

[240] Vitruvius 2.1.1: *Homines vetere more ut ferae in silvis et speluncis et nemoribus nascebantur ciboque agresti vescundo vitam exigebant.*

[241] Vitruvius 2.1.2: *Ergo cum propter ignis inventionem conventus intitio apud homines et concilium et convictus esset natus, et in unum locum convenirent habentes ab natura praemium praeter reliqua animalia, ut non proni sed erecti ambularent mundique et astrorum magnificentiam aspicerent, item manibus et articulis quam vellent rem faciliter tractarent, coeperunt in eo coetu . . . facere tecta . . .*

with what (as any educated Roman would have instantly recognised) was the foreordained nexus of civilisation's origin:[242] the hut of Romulus on the Capitol and the thatched shrines on the citadel next to it.[243] *Arx omnium gentium*, the citadel of all peoples, Cicero once called it.[244] There was another, probably older and certainly much better documented, hut of Romulus on the Palatine.[245] Of the two huts, whose primitive construction methods would have been virtually identical, Vitruvius chooses to evoke the one located at the head of the world.[246]

In Lucretius, lawless brutes become civilised (a mitigated good, as he presents it) for no apparent reason and to no apparent purpose. Lucretius, after all, was an Epicurean. After his vivid account of the savage state, he goes on, "next, when they had got themselves huts and skins and fire . . . the human race first began to grow soft."[247]

The fire in Lucretius is almost incidental, as are the huts.[248] In Cicero there are neither huts nor fire. But there is *ratio*, and the original orator, its mouthpiece, which,

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[242] Feeney 1991, p. 119; Gordon 1990c, p. 235.

[243] Vitruvius 2.1.5: *Item in Capitolio commonfacere potest et significare mores vetustates Romuli casa et in arce sacrorum stramentis tecta.* Cf. Livy 5.39.12: *arx Capitolumque, sedes deorum.* I have taken Hispania Lusitania not as two separate regions but as the single Augustan province that included what is now western Spain and Portugal until its southernmost part – Lusitania – was founded as a separate province between 16 and 13 B.C. (*OCD*, s.v. Lusitania; Alarcão and Etienne 1979, p. 878)

[244] Cicero *De lege agraria* 1.18. Cf. Vasaly 1993, p. 36.

[245] Pensabene 1990-91; cf. Corso and Romano, commentary ad loc. in Vitruvius 1997, p. 177, for the numerous citations referring to the Palatine hut which begin, chronologically, with Varro (*De lingua latina* 5.54). See also Edwards 1996, pp. 32–43 and above, Chapter 1, p. 107 and n. 384, for additional discussion and documentation of both huts.

[246] See for example Vitruvius' contemporary, Dionysius of Halicarnassus *Antiquitates romanae* 1.79.11, who writes of the Palatine hut as being built (and repeatedly rebuilt) out of sticks and reeds (cf. Edwards 1996, p. 33).

[247] Lucretius *De rerum natura* 5.1011-1014.

[248] He does speculate how fire may first have been discovered in terms (a storm, tree branches rubbing together and so on: 1.897-903; 5.1091-1111) which Vitruvius has interpolated into his version, but its discovery, for Lucretius, is in no way *the* key to the beginnings of civilisation.

like Vitruvius' fire, brings the scattered multitude together into one place (*in unum locum* – both Cicero and Vitruvius use the same key phrase) to form the first human community. For the early Stoics, as it had been for the presocratic Heraclitus, *logos was* fire; nature, the coherent totality of things, was a *pyr technikon*, a craftsmanlike fire.[249] Stoics thought the cyclical renewal of the world, its *renovatio*, was brought about by fire: "a living being and a god."[250] The Stoic Arius Didymus, Augustus's philosophical advisor from 30 B.C. on, wrote that fire was the "seed" that contained the *logoi* of all things – the causes of everything that has been, is and will be.[251] Varro too called fire the soul of the world.[252]

At the centre of the world in the Forum Romanum, the Temple of Vesta sheltered the public hearth of Rome – and of *omnes gentes*. Two months after Augustus became *pontifex maximus* in 12 B.C., Rome acquired a new, second public hearth in the shrine Augustus built for Vesta next to his house on the Palatine.[253]

According to Posidonius, the Stoic who perhaps more than any other shaped Roman Stoicism in the early part of the first century B.C., man's ultimate purpose was to live in contemplation of the order of the universe, co-operating as far as possible in bringing it about.[254] If Cicero's orator is the persuasive voice of this order, its *hands*

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[249] Zeno, *SVF* 1.34; cf. Long 1986, pp. 154-156.
[250] Cicero *De natura deorum* 2.118 (Balbus, the Stoic speaking): . . .*ignem, a quo rursum animante ac deo renovatio mundi fieret.*
[251] Arius Didymus in Eusebius *Evangelicae praeparationis* 15.14: *To mentoi prôton pyr einai kathaperei ti sperma, tôn apantôn echon tous logous kai tas aitias tôn gegonotôn kai tôn gignomenôn kai tôn esomenôn.*
[252] Varro *Antiquitates rerum divinarum* fr. 23.15-16 (Cardauns 1976), cited by Tertullian *Ad nationes* 2.2.19: "Varro too makes fire the soul of the universe; for just as fire rules everything in the universe, so the soul in us." *Et Varro ignem mundi animum facit, ut perinde in mundo ignis omnia gubernet sicut animus in nobis.* Cf. Pépin 1956, p. 268.
[253] *ILLRP* 452; cf. Beard, North and Price 1998, I, pp. 189-191; Price 1996, p 826.
[254] Lapidge 1978, p. 162, paraphrasing Posidonius fr. 186 (Edelstein and Kidd 1972).

are Vitruvius' hut-builders, who "unlike other animals" walk upright, can contemplate "the magnificence of the world and of the stars" and are uniquely endowed not with speech, as in Cicero, but with hands and fingers. Ten of the them, to be precise: a revelation, Vitruvius writes later in Book 3, of the human body's perfection.[255] The power of fire to renew the world works through the hands and fingers of builders.

For both Cicero and Vitruvius the ultimate good, unrecognised by Epicureans like Lucretius who shunned political engagement, is coming together into one place: the fundamental prerequisite for the formation of political communities.[256] To serve that community – a community indistinguishable, for Cicero, from the Roman *res publica* – was the very highest *officium* and was epitomised in the art of the orator.[257] Like Hercules, Cicero writes elsewhere, those who perform such services to "this great *res publica*" obtain immortal glory.[258] The service Vitruvius understands himself to be performing has the same beneficent purpose as the orator's art. But being world-wide in its scope, it operates through the persuasive force of *architectura*.

Huts, of course, are just the beginning. Nature not only furnished people with senses like other animals, Vitruvius continues. She also armed their minds with the power of thought and deliberation, which subjected the other animals to their power.

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[255] Vitruvius 3.1.5. See above, Chapter 1, pp. 52-54.

[256] See also Cicero *De republica* 1.40-41.

[257] Cicero *De officiis* 1.153: *For that wisdom which I said was the first is knowledge of human and divine things in which the community and society of gods and men are joined to one another, and if it is the greatest, as it certainly is, it follows that the* officium *which is linked with community is the greatest one. De republica* 1.25: *A commonwealth is the property of a people* (Est igitur . . . res publica res populi). *But a people is not any collection of human beings brought together in any sort of way, but an assemblage of people in large numbers associated in an agreement with respect to justice and a partnership for the common good.* Cf. Schofield 1995, p. 67: (in Cicero) "there is no logical space for the idea of a state or commonwealth distinct from people or community." See further Skinner 1989: In the modern, impersonal, concept of the state "we distinguish the state's authority from that of the ruler's or magistrate's . . . . and also distinguish its authority from that of the whole

And so, step by step, advancing from the construction of buildings to the other arts and disciplines, they were led from their brutish existence in the wilderness (*e fera agrestique vita* – precisely Cicero's phrase) to gentle *humanitas*.[259] From huts people advanced to houses with foundations, tiled roofs, and walls of brick or stone, and finally, Vitruvius concludes, "by applying themselves to their studies, were led from wayward and uncertain opinions to the certain calculations (*rationes*) of symmetries."[260]

*Humanitas*, for Vitruvius, begins with building. *Architectura* is its summation. The disciplines which arm the architect in Book 1 – the steps (*gradus*) by which he ascends to the *summum templum architecturae*, the highest temple of architecture – are the same as those through which the hut builders of Vitruvius' story advance *gradatim*, step by step, from building to gentle *humanitas*, eventually reaching the "certain *rationes* of symmetries."[261] As every Roman knew, the Capitol was where the highest temple in Rome, the Temple of Jupiter, stood.[262] So too, of Romulus' two huts, does the one mentioned by Vitruvius.

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society or community over which its powers are exercised" (p. 112).

[258] Cicero *Pro Sestio* 143.

[259] Vitruvius 2.1.6: *Cum . . . natura non solum sensibus ornavisset gentes quemadmodum reliqua animalia, sed etiam cogitationibus et consiliis armavisset mentes et subiecisset cetera animlia sub potestate, tunc vero ex fabricationibus aedificiorum gradatim progressi ad ceteras artes et disciplinas, e fera agrestique vita ad mansuetam perduxerunt humanitatem.* Compare Cicero *De oratore* 1.33 (see above, n. 236).

[260] Vitruvius 2.1.7: . . . *deinde observationibus studiorum e vagantibus iudiciis et incertis ad certas symmmetriarum perduxerunt rationes.*

[261] Vitruvius 1.1.11: . . . *his gradibus disciplinarum scandendo scientia plerarumque litterarum et artium nutriti pervenerint ad summum templum architecturae.*

[262] On "*summum templum architecturae*" as a trope for the Temple of Jupiter Capitolinus, metonymic guarantor of Roman *imperium*, see above, Chapter 1, pp. 36-37. *Summum* has been taken in the dual sense of physically "highest" and also "greatest, most important." The "highest" temple in Rome housed Jupiter Capitolinus, Rome's greatest and most important god.

The elder Seneca, Vitruvius' near contemporary, also evokes the hut on the Capitol, explicitly connecting it with the great gleaming temple by whose "gables of pure gold" he says the hut is "illuminated." For the Romans, Seneca continues, do not "conceal their humble origins but instead make a display of them and consider nothing great unless it is made obvious that it rose from a small beginning."[263] Greatness, being relative, needs smallness to give it its proper scale; a smallness which greatness in turn illuminates. The huts in Gaul, the Pontus, and in Aquitania that Vitruvius catalogues would not have stood in the same light.

It is Vulcan, god of the forge – *Ignipotens*, "the power of fire," as Virgil names him repeatedly and with some insistence – who fashions Aeneas' shield in the eighth book of the *Aeneid*.[264] Virgil's description, overtly concerned with the summation of Roman destiny, locates the Capitoline hut directly in front of the Temple of Jupiter, placing both hut and temple at the top (*in summo*) of the shield itself.[265] The victory at Actium is located at its centre, celebrated on the second day of Augustus's triple triumph of 29 B.C., which Virgil also describes, as discussed earlier.[266] In the concluding scene, Augustus reviews the parade of captives: "conquered peoples (who)

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[263] Seneca the Elder *Controversiae* 1.6.4: *nihil est humili casa nobilius: fastigatis supra tectis auro puro fulgens praelucet Capitolium. Potes obiurgare Romanos, quod humilitatem suam cum obscurare possint ostendunt et haec non putant magna, nisi apparuerit ex parvis surrexisse?* Cf. Edwards 1996, p. 38, whose translation I have followed in part. When the Temple of Jupiter was rebuilt in the early part of the first century B.C., it was, apparently, roofed with gilded bronze tiles (see also Seneca *Controversiae* 2.1.1; Pliny *Natural History* 33.57 and above, Chapter 1, n. 80).

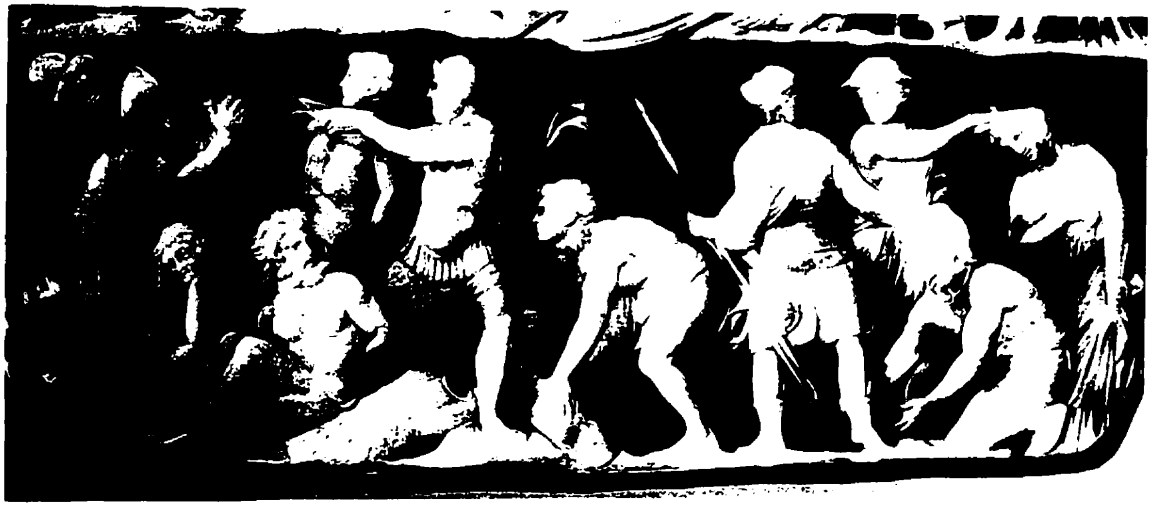
[264] Virgil *Aeneid* 8.414, 423, 628, 710. Virgil's use of the epithet appears to be unique (*TLL*, s.v. *Ignipotens*).

[265] Virgil *Aeneid* 8.562-564. I would venture that if Romulus' Palatine hut was duplicated on the Capitol by Augustus in the in the early part his reign (Balland 1984), it was precisely for scale-giving reasons discussed by the elder Seneca.

[266] Virgil *Aeneid* 8.675.

Fig. 18

The Gemma Augustea, so-called, a late Augustan sardonyx cameo of about 10 A.D., now in the Kunsthistorisches Museum in Vienna. Augustus appears seated next to Roma in the upper register. In the lower register (detail below), "*gentes omnes subactae*."



move in long array, as diverse in fashion of dress and arms as in tongues.[267] The "Nomad race", the "ungirt Africans" the Leleges and Carians and "quivered Gelonians" – *gentes omnes subactae*, to recall Vitruvius' phrase, all assembled within the confines of the shield's circumference which Virgil bounds, not with the mythical river Ocean as Homer, Virgil's model, did the shield of Achilles, but with the Euphrates, the Rhine and the Araxes – rivers at the limits of the Roman world.[268]

If the great golden Temple of Jupiter Capitolinus became all the more magnificent with the rustic little thatched hut as its foil, "*summum templum architecturae*" is similarly enhanced. In the hut of Romulus on the Capitol, the "body of the great discipline" that Vitruvius elsewhere says he has assembled in *De architectura* acquires the same scale-giving humble origin – and present greatness – as the city of Rome to whose destiny *architectura* is thereby inextricably bound.[269]

Building can only begin after the fire has gathered Vitruvius' scattered multitude into one place. Architecture can only begin when, by an analogous process, wayward and uncertain opinions coalesce into the certain *rationes* of symmetries: the

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[267] Virgil *Aeneid* 8.722-723.

[268] *Gentes omnes subactae*: Vitruvius 1.pref.1. Homer *Iliad* 18.607-608; Virgil *Aeneid* 8.724-729. It is more than a little painful to recognize in Virgil's parade of captives his parallel for Homer's *choros* – "Ariadne's dance," with which the latter concludes his description of Achilles' shield (*Iliad* 18.590-606), just before bounding it with Ocean.

[269] Vitruvius 4.pref.1 *tantae disciplinae corpus* (see below for the complete passage). Vitruvius also insists on the greatness of his discipline, which "overflows" with the ornaments of different kinds of learning at 1.1.11, opening the sentence that concludes with the ascent to "*summum templum architecturae*" (*Cum ergo tanta haec disciplina sit condecororata et abundans eruditionibus variis ac pluribus . . . .* ). This abundance of ornament does indeed bring to mind the Temple of Jupiter itself, with its gold roof, and other magnificent materials and ornaments which included gilded acroteria (Cf. Cicero *Ad Verrem* 2.68-69; Ovid *Ars amatoria* 3.115; Dionysius of Halicarnassus *Antiquitates romanae* 4.61.4). At 6.pref.6 . Vitruvius complains about "such an immensely great discipline" being professed by ignorant practitioners: *Cum autem animadverto ab indoctis et inperitis tantae disciplinae magnitudinem iactari. . .* On the imperial significance of the hut of Romulus, Valerius Maxiumus 2.8: . . . military discipline keenly holds fast its source and makes from Romulus' small

very process that, by Vitruvius' own account, attended his compilation of incomplete drafts and scattered fragments in the "whole body" of *De architectura*.[270] The first hut villages are the germs of future cities. *In summo* stands *architectura*, the knowledge of the architect: the city of the mind.

"The knowledge of the architect is furnished with many disciplines and various kinds of learning," writes Vitruvius at the opening of his first book. "Judiciously exercised, it demonstrates everything the other arts achieve."[271] For Cicero the art of the orator, with its power to assemble the vagrant multitude, had been the *summum* of learning."[272] Huts are the initial *demonstration* of that same power. *Architectura*, the art of the geometrical footprint, is metonymic evidence of both of universal order and of the learning possessed by the cultivated man who has knowledge of it. The "proving" of all the other arts (*probantur omnia quae ab ceteris artibus perficiuntur opera*), it is a *demonstration* of learning and as such a passport to ubiquity. To understand the scale, as it were, of this intention, it is worth recalling that in the archaic Greek world it had been the craftsman, not the learned man, who found a home "in

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hut column of the whole world. *disciplina militaris acriter retenta . . . ortum . . . e parvula Romuli casa totius terrarum orbis fecit columen.*

[270] Vitruvius 4.pref.1: When I noticed, Imperator, that many who have provided rules and scrolls of commentaries on architecture have not left orderly works but only incomplete drafts, scattered like fragments, I decided it would be a worthy and most useful thing to bring the whole body of this great discipline to complete order and, in separate scrolls, to develop a register of conditions for each of its different subjects. *Cum animadvertissem, Imperator, plures de architectura praecepta voluminaque commentariorum non ordinata sed incepta uti particulas errabundas reliquisse, dignam et utilissimam rem putavi tantae disciplinae corpus ad perfectam ordinationem perducere et praescriptas in singulis voluminibus singulorum generum qualitates explicare.*

[271] Vitruvius 1.1.1: *Architecti est scientia pluribus disciplinis et variis eruditionibus ornata cuius iudicio probantur omnia quae ab ceteris artibus perficiuntur opera.* For a justification of my slightly unconventional reading, see above, Chapter 1, n. 100.

[272] For example, Cicero *De oratore* 1.20: *nemo poterit esse omni laude cumulalatus orator, nisi erit omnium rerum magnarum atque artium scientiam consecutus.* See also Vasaly 1993, p. 187.

every city."[273]

The shipwrecked philosopher in Cicero's version of the Aristippus story does not recognise cultivated fields as human footprints. As an educated man, he only "recognises" other educated men, which is to say men of the city – of every city, as Vitruvius tells it. The Stoic view, as reported by Arius Didymus, Augustus's second philosophical advisor, was that the rusticity of wild men who are *agresti* (literally "of the fields") was a sign not only of brutishness, but of wickedness as well.[274] The citification of such brutes, both in Cicero and in Vitruvius, is reciprocally concomitant with their education: with *humanitas*, a term Cicero more than once equates with *urbanitas*.[275] That "a city teaches a man" was already recognised by the time of Simonides in late archaic Greece.[276] The great Hellenistic cities – Rhodes, Antioch, Pergamon, and above all Alexandria – were all centres of learning. The heroes of the Hellenistic literature of third and second centuries B.C. – at once men of action, characterised by *philanthropia*, educated, and, unlike countrymen, able to appreciate what is beautiful – are all city-dwellers.[277] E.S. Ramage has pointed out that in this

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[273] Homer *Odyssey* 17.381-384; 9.124-129; cf. McEwen 1993, p. 73.

[274] Arius Didymus in Stobaeus II 103.24: "They say that every wicked man is also a rustic. For rusticity is inexperience of the practices and laws in a city." *Phasi de kai agroikon einai panta phaulon: tên gar agroikian apeirian einai tôn kata polin ethôn kai nomôn.* Cf. Schofield 1991, p. 137, whose translation I have followed here. On Arius Didymus, see above p. 138-138, and further below Chapter 3, p. 245 and Chapter 4, pp. 259, 269-270.

[275] For example, Cicero *Pro Roscio* Amerino 120 ff.; *De oratore* 2.40 (cf. Ramage 1973, p. 56). The "urbane" man is more than just a man of the city (*urbs*) of course, but being "of the city" is something of a fundamental requirement. On the question of *urbanitas* (ancient sophistication and refinement), see especially Ramage.

[276] Simonides of Ceos (556–468 B.C.), *eleg.* 25: *polis andra didaskei*. Cf. Ramage 1973, pp. 158-159.

[277] Ramage 1973, pp. 14-19, citing, among others, Heliodorus (third century B.C.) Menander (second century B.C.) and Chariton (second century B.C.). For example, Dionysius, a hero in Chariton's *Chaereas and Callirhoe*, "known for his piety and *philanthropia*," (2.5.4), is "a Greek . . . . one who is a member of a city characterized by *philanthropia*, an educated man" (2.5.11; as cited Ramage, p. 18). The notion that only the "humane" man can appreciate beauty finds an echo in Varro when he writes that any cup at al will satisfy a man who is thirsty, whereas a man of *humanitas* requires a cup that is

context even love, a special form of such appreciation, was an urban phenomenon.[278]

Cities are the common thread that runs through the various – notoriously difficult to pin down – aspects of *humanitas*, whether the term is taken as a translation of *philanthropia* and *paideia*, or as the softness that stands in contrast to barbarian harshness.[279] Near the end of his second book, Vitruvius writes of a spring near a temple of Venus and Mercury in the Greek city of Halicarnassus, whose water was reputed to afflict men with lasciviousness (*veneris morbo*), making them effeminate and shameless (*molles et inpudicos*). Not so, says Vitruvius, revealing an awareness of how easily the "softness" of *humanitas* can be confused with degeneracy and carefully underscoring the difference.[280] He explains that the reason for the spring's false reputation was that barbarians who, a little like the brutes at the beginning of Book 2, lived in the hills surrounding the city, were drawn into civilised society by the clear, pure water, next to which an astute innkeeper had built an inn.

*So down they came one by one to meet together in assembly and, returning readily by choice, gave up their rough and savage ways for the delights of Greek customs. That is how the water acquired its reputation: not from a corrupt and*

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also beautiful (*De lingua latina* 8.31: *quod aliud homini, aliud hmanitati satis est; quodvis sitienti homini poculum idoneum, humanitati nisi bellum parum*. Cf. Novara 1983, p. 306).

[278] Ramage 1973, p. 18, referring specifically to the Hellenistic context. One might recall that the lovers of Ovid's late Augustan *Ars amatoria* all disport themselves exclusively in the Roman *Urbs*. On love and the Stoic city, see below, Chapter 3, pp. 244-248.

[279] Aulus Gellius *Noctes Atticae* 13.17, citing Varro and Cicero on the question of *humanitas*, *philanthropia*, and *paideia*. Among other secondary sources, see Ramage 1973, Rieks 1967, Schadewaldt 1973 (with bibliography to date). For a useful summary, and a discussion of *humanitas* as the badge of elite superiority, Gordon 1990c, pp. 235-238. See also Veyne 1993 on *humanitas* as what distinguished the civilised man from the savage: the Roman from the non-Roman. On the spread of *humanitas* as the justification for world-conquest, Brunt 1978, Erskine 1990, pp. 192-200; Gabba 1982 and 1984, Woolf 1994 and 1998, pp. 54-71. The *locus classicus* for the latter is the passage from Pliny's *Natural History* (3.5.39) cited above, p. 159.

[280] Julius Caesar (*Bellum Gallicum* 1.1.3) was also aware of the dangerously feminizing potential of *humanitas*. Cf. Veyne 1993, p. 343.

*shameless disease, but from the souls of the barbarians being softened by the sweetness of* humanitas.[281]

In *humanitas* lay not only the power to soften the souls of barbarians but also the means, as Strabo pointed out, for dealing with Greeks.[282] The essence of its power, whether as *paideia*, *philanthropia* or mollification, lay in the ability to gather people into one place and keep them there (". . . returning readily *by choice* . . ").[283] Cicero understood that power as residing in the speech of the cultivated Roman. Vitruvius' insight – and it was brilliant – was to see its demonstration, its "*proof*," in *architectura*, the judiciously-exercised knowledge of the architect. That, ultimately, is what makes the art of the orator his model, and that is why he makes architecture a liberal art. Not just one of several: all of them together.

And the *artes* specific to Rome, Virgil proclaimed in the very best-known lines of the *Aeneid*, were conquest and world dominion: "to rule peoples with supreme command . . . to spare the vanquished and war down the proud."[284] Of these arts, *architectura* – being Herculean – is also proof.

Tacitus' acerbic remarks on Rome's civilising mission are testimony that architecture indeed came to play (or at least was assumed by Roman conquerors to play), the very role for which Vitrvuius' theoretical demonstration, written over a century earlier, appears with the benefit of hindsight to be, if not demonstrably

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[281] Vitruvius 2.8.12: *Ita singillatim decurrentes et ad coetus convenientes et duro feroque more commutati in Graecorum consuetudinem et suavitatem sua voluntate reducebantur. Ergo ea aqua non inpudico morbi vitio, sed humanitatis dulcedine mollitis animis barbarorum eam famam est adepta.*
[282] Strabo 9.2.2. Cf. Cicero *Ad Quintum fratrem* 1.1.27.
[283] On the nomad as the ultimate barbaric type in classical thought. Shaw 1982. Cf. Woolf 1998, p. 106.
[284] Virgil *Aeneid* 6.851-853: *Tu regere imperio populos, Romane, memento (hae tibi erunt artes) pacique imponere morem, parcere subiectis et debellare superbos.*

perscriptive, at least uncannily clairvoyant.

In the mid first century A.D., the Roman *orbis* expanded to include Britain. Agricola, Tacitus' father-in-law, governed there from 77 to 84. During his first winter, writes Tacitus, Agricola undertook "most salutory measures."

*By private encouragement he set about persuading men who were scattered, ignorant and easily aroused to warfare, to become peaceable and accustomed to the pleasures offered by leisure. In public he assisted them to build temples,* fora *and homes, praising those who were quick to follow his advice and criticizing those who were slow . . . . He went on to give the sons of the nobility a proper education . . . so that the natives who used to reject the Latin tongue, now aspired to rhetoric; even the wearing of our dress came into fashion and little by little, the Britons were sduced into alluring vices: to the portico, the baths, the well-appointe dinner table. The simple natives clled all this* humanitas, *when it was really a facet of their enslavement.*"[285]

In another context, Tacitus reports that when Clodius Thrasea, a dissident of the Nero's day, was sentenced to death in 66 A.D., his accusers, who viewed him as fundamentally and irredeemably un-Roman, condemned him as a man who "shunned

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[285] Tacitus *Agricola* 21.2: *Sequens hiems saluberrimis consiliis absumpta. Namque ut homines dispersi ac rudes eoque in bella faciles quieti et otio per voluptates adsuescerent, hortari privatim, adiuvare publice, ut templa fora domos extruerent, laudando promptos, castigando segnes . . . . iam vero principum filios liberalibus artibus erudire . . . ut qui modo linguam Romanum abnuebant, eloquentiam concupiscerent. Inde etiam habitus nostri honor et frequens toga. Paulatimque discessum ad delenimenta vitiorum, porticus et balineas et conviviorum elegantiam. Idque apud imperitos humanitas vocabatur, cum pars servitutis esset.* The translation follows Woolf 1998, p. 69 for the first part, Beard and North, introduction to Gordon 1990c, for the second. Woolf 1998, p. 70 points to temples and *fora* as the "symbols" Tacitus has chosed to represent civilisation. On the quintessentially Romanizing role of baths and Hercules' part in it, see Beard 1996 who takes the situation of the Farnese Hercules in the 3rd-century A.D. Baths of Caracalla (its original site) as emblematic. Vitruvius on baths: 5.10.

the fora, the theatres and the temples."[286] *Fora, theatra* and *templa*: the topics which form the bulk of Vitruvius three books (3, 4 and 5) on public building. The essentials of the Roman city – the essentials, as Paul Veyne would have it, of *humanitas* and the Roman way of life.[287]

*Humanitas* begins when people come together in one place. The place is the city. *The* City, at this historical juncture – Rome, the *Urbs* that was rhetorically identical with the *orbis*. *Romanae spatium est Urbis et orbis idem* wrote Ovid, famously reiterating an alliterative commonplace that had been current since the late Republic.[288] "The world and the city of Rome occupy the same space."[289] Varro, ever eager to find evidence in the forms of the words themselves, derives "*urbs*" from "*orbis*" (circle) because, he says, the boundary of the city was first ploughed in a circle.[290]

The sum of learning is also a circle: the *orbis doctrinae*, as the Latins termed what the Greeks called the *encyclios paideia*. Vitruvius mixes Greek and Latin terms, as he sometimes does, when he writes in Book 1 that the *encyclios disciplina*, the whole of learning, "is put together just like a single body from its members."[291] So too in his sixth preface, expressing gratitude to his parents for having educated him in an art which cannot be "proven" (*probata*) without knowledge of letters and the *encyclios*

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[286] Tacitus *Annals* 16.28.
[287] Veyne 1993, p. 368.
[288] Ovid *Fasti* 2.684. Cf. Bréguet 1969, who cites all the occurrences beginning with Cicero's Catalinarian orations of 63 B.C (pp. 143-145). See also Edwards 1996, p. 99-100; Nicolet 1991, pp. 111-114; Romm 1992, pp. 46-48.
[289] The translation is Edwards' (1996, p. 100), who glosses that "Rome extends through the whole world and at the same time all the world is concentrated in Rome."
[290] Varro *De lingua latina* 5.143. Servius *Ad Aeneidem* 1.12: *urbs dicta est ab orbe* . . . Cf. Maltby 1991, s.v. *urbs*.

*disciplina* that includes all branches of learning.[292] An art that cannot be proven without *humanitas*, in other words. Its power, Vitruvius claims in his second preface, lies in the Herculean body not of a Dinocrates, but of his own "knowledge and writings" – *architectura* and *De architectura*. In the scrolls (a whole, complete and perfect ten of them) which he earlier said he hoped would vouch for "the power of the art and its inherent principles beyond question and with the greatest authority – not only to builders (*aedificantibus*) but to all learned men."[293] The demonstration lies in showing how *architectura* can make the circle of learning and the circle of the world coincide in the single geometrical footprint whose centre and circumference are Rome. Beyond question and with the greatest authority.

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[291] Vitruvius 1.1.12: . . . *encyclios enim disciplina uti corpus unum ex his membris est composita* Cf. Cicero *Pro Archia* 1.2; *De oratore* 3.21.

[292] Vitruvius 6.pref.4: (*ars*) . . . *quae non potest probata sine litteratura encyclioque doctrinarum omnium disciplina.*

[293] Vitruvius 1.1.18: *De artis vero potestate quaeque insunt in ea ratiocinationes, polliceor, uti spero, his voluminibus non modo aedificantibus, sed etiam omnibus sapientibus cum maxima auctoritate me sine dubio praestaturum.*

Fig. 19

Gilded bronze statue of Hercules from the Forum Boarium at Rome, probably of the first century B.C. Conservatori Museums 1265. Detail. (Photo author).

**Chapter 3**

# THE BODY BEAUTIFUL

**Vitruvian Man. *Religio.* Venus. *venustas.* Corinthia.**

*Likewise, the members of sacred dwellings ought to have a symmetry that corresponds completely, in every detail and with perfect fitness to the entire magnitude of the whole. For nature has made the navel the centre of the body. Indeed, if a man were placed on his back with his hands and feet outspread and the midpoint of a compass put on his navel, both his fingers and toes would be touched by the line of the circle going around him. You could also find a squared layout in the body in the same way as you made it produce the circular shape. For if you measured from the bottom of his feet to the top of his head and compared that measurement to his outspread hands you would find the breadth the same as the height, just as in areas that have been squared with a set square.*[1]

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[1] Vitruvius 3.1.3: *Similiter vero sacrarum aedium membra ad universam totius magnitudinis summam ex partibus singulis convenientissimum debent habere commensus responsum. Item corporis centrum medium naturaliter est umbilicus; namque si homo conlocatus fuerit supinus manibus et pedibus pansis circinique conlocatum centrum in umbilico eius, circumagendo rotundationem utrarumque manuum et pedum digiti linea tangentur. Non minus quemadmodum schema rotundationis in corpore efficitur, item quadrata designatio in eo invenietur; nam si a pedibus imis ad summum caput mensum erit eaque mensura relata fuerit ad manus pansas, invenietur eadem latitudo uti altitudo, quemadmodum areae, quae ad normam sunt quadratae.*

**Vitruvian Man**

If Vitruvius can indeed be said to have written the body of architecture, this is its epitome, its geometrical proof. But the picture that inevitably springs to mind in connection with it – the arresting image of a naked male body circumscribed by a circle and a square – was not drawn by Vitruvius: Leonardo da Vinci drew it a millennium and half later, near the end of the 15th century.[2] Like the images that appeared after it in architectural treatises and illustrated Vitruvius editions,[3] Leonardo's figure says more about Renaissance humanism than about the geometrical footprints of Roman *humanitas*. The drawings, particularly Leonardo's, are familiar to the point of utter banality – more so by far than Vitruvius' text – creating a situation that encourages the curiously anachronistic tendency to read Vitruvius' words as a textual transcription of the images. Vitruvius is, for this study, the primary source and Vitruvius (obviously) was not describing the pictures Leonardo and the others drew. Although Vitruvius' intentions could and did resonate richly well beyond their initial textual formulation, it is well to insist that the context of that initial formulation was early imperial Roman.

There is no evidence that Vitruvius himself ever made a drawing to accompany his text. He makes no reference here to any appended *schema* or *forma*, as he does elsewhere

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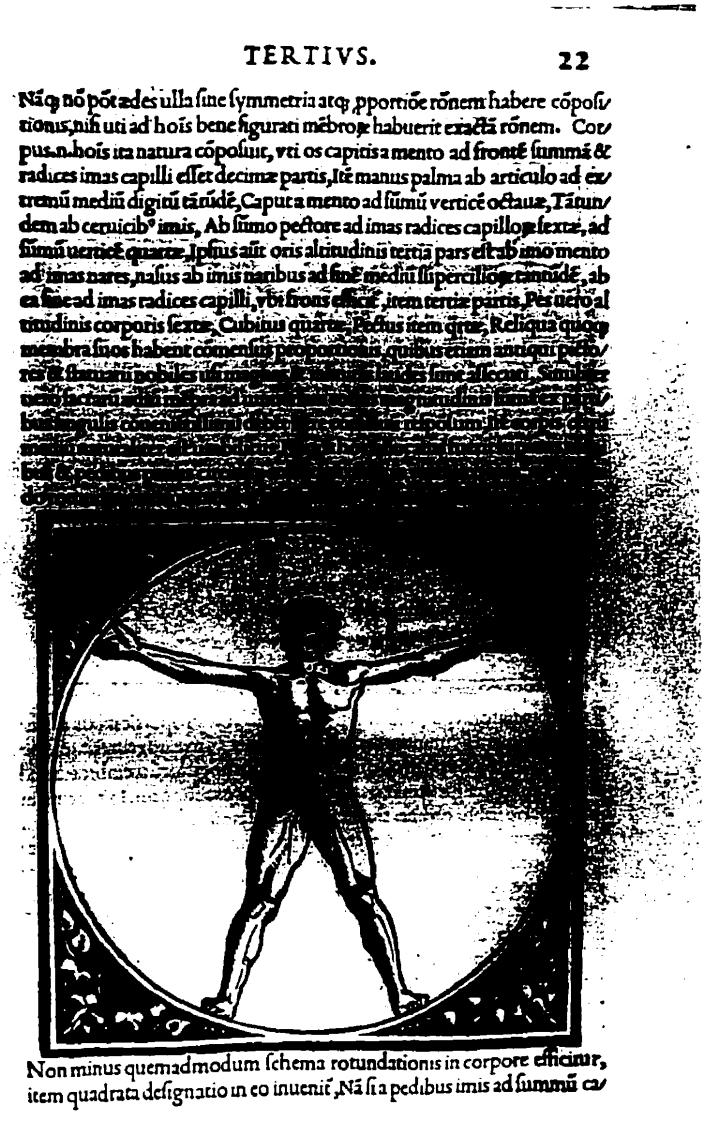
[2] On Leonardo's drawing (Accademia, Florence, no. 228) see Rykwert 1996, pp. 86-90, 97-99 and notes for the bibliography to date. In fact the earliest surviving attempt to give the text an image, appears to be one drawn in the first quarter of the 15th century by Pietro Mariano Taccola, a contemporary of Brunelleschi's (Rykwert, p. 86; see p. 87 for the somewhat sinister ink rendering in a manuscript now in the Staatsbibliothek, Munich). Francesco di Giorgio Martini's graceful drawing which illustrates two different codices (Saluzziano 148, Torino, fol. 6v; Ashburnham 361, Florence, fol. 5v) is virtually contemporaneous with that of Leonardo with whom he was associated (Rykwert pp. 60, 86; for the dating, Hart, ed., 1998, p. 20; Rykwert 1996 p. 421, nn. 55 and 56). After Leonardo, beginning with Fra Giocondo's first illustrated Vitruvius edition of 1511 (fols. 22r and v), the renderings are legion. For further discussion of Vitruvian Man see among others, Knell 1985, Lücke 1991, Naredi-Rainer 1982, Zöllner 1987.

[3] For the bibliography, see Introduction , p. 2, n. 8.

Fig. 20



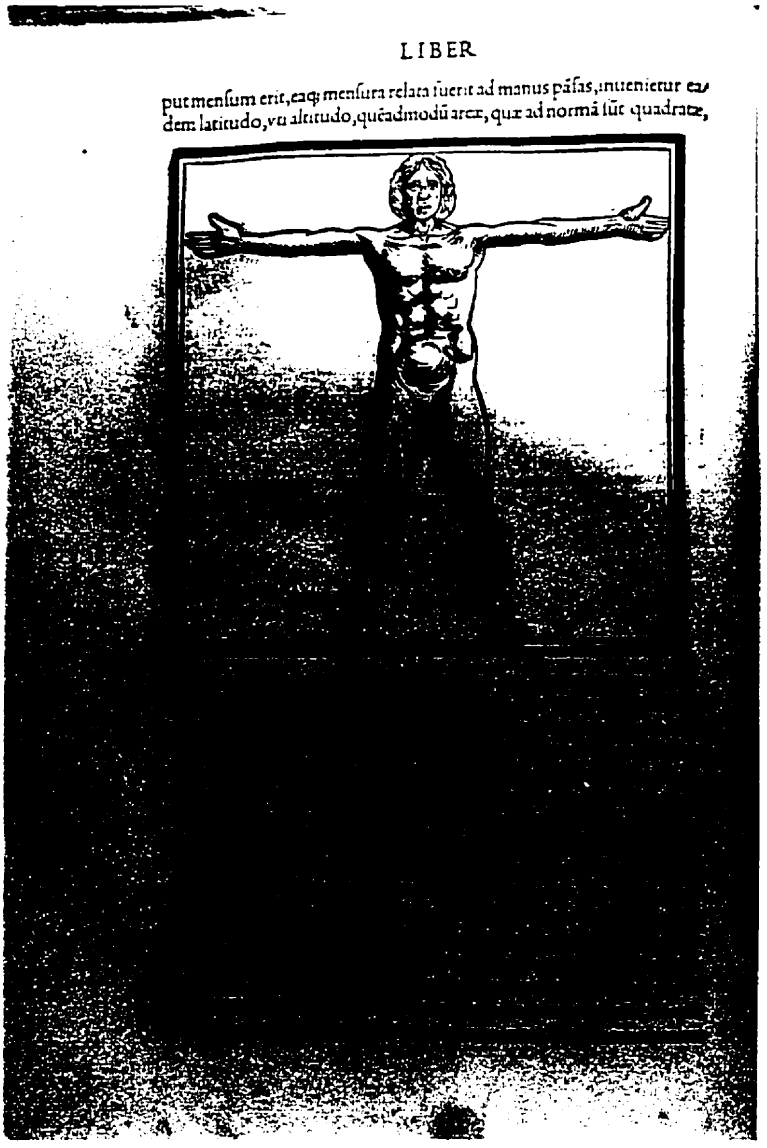
TERTIVS. 22

Nãq; nõ pōt ædes ulla ſine ſymmetria atq; ꝓportiõe rõnem habere cõpoſitionis, niſi uti ad hoīs bene figurati mẽbroꝝ habuerit exactã rõnem. Corpus.n.hoīs ita natura cõpoſuit, vti os capitis a mento ad frontẽ ſummã & radices imas capilli eſſet decimæ partis, Itẽ manus palma ab articulo ad extremũ mediũ digitũ tãndẽ, Caput a mento ad ſũmũ verticẽ octauæ, Tãtundem ab ceruicib⁹ imis, Ab ſũmo pectore ad imas radices capilloꝝ ſextæ, ad ſũmũ uerticẽ quartæ. Ipſius aũt oris altitudinis tertia pars eſt ab imo mento ad imas nares, naſus ab imis naribus ad finẽ mediũ ſuperciliorũ tãndẽ, ab ea fine ad imas radices capilli, vbi frons efficit, item tertiæ partis. Pes uero altitudinis corporis ſextæ, Cubitus quartæ, Pectus item quartæ, Reliqua quoq; membra ſuos habent commentũ pro portionis, quibus eriam antiqui pictores & ſtatuarii nobiles vſi mag[illegible] laudes ſunt aſſecuti. Simili[illegible] uero factum eſſe [illegible] altitudinis tam ex parte [illegible] hominis [illegible] ſingulis commentariis [illegible] [illegible] [illegible]

Non minus quemadmodum ſchema rotundationis in corpore efficitur, item quadrata deſignatio in eo inueniẽ, Nã ſi a pedibus imis ad ſummũ ca/

Vitruvius 3.1.3. as published in Giocondo. Vitruvius 1511. the first illustrated edition of *De architectura* (fol. 22R).

Fig. 21




Vitruvius 3.1.3-4, as published in Giocondo. Vitruvius 1511 (fol. 22V).

in the few instances where it is generally agreed that drawings were originally included.[4] That, in any event, he favoured writing over drawing, and the reasons for his doing so were discussed in the first chapter of this study.[5] Most of the ten no longer extant figures to which he does refer are of a technical "how-to" nature: the schematic for the entasis of columns, for example, or that for Ionic volutes.[6] Vitruvian man can hardly be called a how-to description of the same instructional kind. These are not directives for putting together a male body: certainly not of a Renaissance Man. Vitruvian man is not produced by geometry, like the entasis of a column or an Ionic volute. He is, as Vitruvius describes him, geometry's *source*.

His man is *given* passively, *conlocatus*, placed on his back, and a compass point, passively again, *conlocatum* on his navel. His fingers and toes are touched (passively *tangentur*) by the line the compass makes as it goes around him. Who, if anyone, is to hold the compass in this hypothetical situation ("*if* man were placed on his back . . ."), Vitruvius does not say. The Vitruvian men of Renaissance images are invariably standing(Figs. 20 and 21).[7] Vitruvius lays his flat on the ground: a man without thickness; at once a metaphysical proposition, a ritual formula and a template.[8]

To begin with the metaphysical proposition. The Stoics followed a long tradition in upholding the view that the universe was spherical because the circle and the sphere alone

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[4] Fleury, Vitruvius I 1990, pp. lxii-lxiii.
[5] Above Chapter 1, pp. 20-22, 40, 81.
[6] Entasis, Vitruvius 3.3.13; Ionic volutes, 3.5.8. Cf. Fleury, Vitruvius I (1990), pp. lxiii-lxiv.
[7] This is true not only of the Leonardo, Francesco di Giorgio and Fra Giocondo images mentioned above in note 2, but in their subsequent iterations as well: Cesare Cesariano's wood engraving which appears in his Italian Vitruvius of 1521, for instance (fol. 50r), or the one by Jean Goujon in Jean Martin's French translation of 1547 (fol. 28v). The point here is not to make the ultimately fatuous claim that Leonardo and his successors got it wrong, but rather to stress how easily the images can obscure the text and, more importantly, the historical specificity of its signified matter.

possess, as Cicero wrote in the Stoic apologetic of his *De natura deorum*, "the property of absolute uniformity in all their parts, of having every extremity equidistant from the centre – there can be nothing more tightly bound together."[9] As discussed in Chapter 1, the ultimate criterion for qualifying bodies *as* bodies – how unified they were and, concomitantly, how long they might be expected to last – was coherence.[10] That Vitruvian man can be made to produce a circle which, as Cicero puts it, is "more tightly bound together" than anything, clearly allies him with the highest degree of coherence and indestructibility. Anyone, the Ciceronian passage continues, who has ever "meddled in the learned dust" (drawn geometrical figures in the sand like the ones Aristippus discovered on the beach in Vitruvius' sixth preface) would "understand that the uniform motion and regular disposition of the heavenly bodies could not have been maintained with any other shape."[11]

Like all the bodies in it, the spherical body of the Stoic universe is constituted by the four elements, whose up-down, side-to-side motion maintains its continuous nature, gives it unity and guarantees enduring stability.[12] The inherent implication seems to be that the coherence endemic to perfect circularity is, alone, not necessarily self-maintaining. It needs in addition the ordering vertical-horizontal action of the four elements. Cicero

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[8] Man without thickness: Gros, Vitruvius 3 (1990), p. 66, who notes that for the diagram to work fingers and toes would have to be in the same plane.

[9] Balbus, overtly challenging the Epicureans in Cicero *De natura deorum* 2.47. Cf. Plato *Timaeus* 33B. Cicero translated parts of the *Timaeus*, a work which particularly fascinated intellectuals of the late republic (above, Chapter 1, p. 59, n. 184).

[10] Above, pp. 68-95.

[11] Cicero *De natura deorum* 2.48. On Aristippus and geometrical footprints, above, Chapter 2, pp.161-166.

[12] Cicero *De natura deorum* 2.84: "Thus the parts of the world are held in union by the constant passage up and down, to and fro, of these four elements of which all things are composed." *Sic naturis his ex quibus omnia constant sursus deorsus ultro citro commeantibus mundi partium coniunctio continetur.*

notes further that when philosophers had observed the perfect regularly of the universe, they rightly inferred "not only the presence of an inhabitant of this celestial and divine abode, but also of a ruler and governor, the architect as it were of this mighty and monumental structure (*tanti operis tantique muneris*)."[13] The universe, here, is a building: a *munus*, which in the Roman context was a public building constructed at an individual's personal expense as gift or benefit (*munus*) to the people.[14] One might recall that Vitruvius calls *De architectura* a *munus*.[15]

The late Augustan poet Manilius, another Stoic, devotes over 500 lines of the first book of his *Astronomica* to various aspects of the universe's perfect roundness.[16] This, he says, is the shape of nature (*haec est naturae facies*) – a shape that "continues forever and most resembles that of the gods: nowhere in it is there beginning or end . . ."[17] Manilius, like other Stoics, understood the universe as a great body.[18] For him, as for Cicero, the order of this spherical body is fixed by the movements of the four elements.[19] Also circular is the horizon that "girdles the sky with a level boundary line" – the *orbis* which

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The view that the universe is governed by two kinds of motion, circular and rectilinear, can be traced to Aristotle (*De caelo* 1.1-2; cf. Lapidge 1978, pp.177-178).

[13] Cicero *De natura deorum* 2.90.

[14] Lewis and Short, *munus* sv. 2 b-c. Cf. Cicero *Disputationes Tusculanes* 1.70 (referring again to what creates or maintains the structure of the universe): *effector . . . moderator tanti operis et muneris.*

[15] Vitruvius 6.pref.7. See above, Chapter 2, pp. 156-157.

[16] Manilius' *Astronomica* is to a large degree a late Augustan adaptation of the Aratus of Soli's *Phaenomena* of about 280 B.C., an enormously popular work in antiquity and translated into Latin (in part) by Cicero as well as by Tiberius's nephew Germanicus, among others. On the vogue for astronomy/astrology in the early principate, see Barton 1994, pp. 47-54. Soubiran, Vitruvius 9 (1969), p. LV, has noted that Vitruvius, in Book 9, is one of its earliest exponents.

[17] Manilius *Astronomica* 1.206, 211-212: *Haec aeterna manet divisque simillima forma . . . cui neque principium est usquam nec finis in ipsa.* The discussion of circularity continues to 1.750, with particular emphasis 565 ff.

[18] Manilius *Astronomica* 1.247: *Hoc opus immensi constructum corpore mundi . . .* cf. 1.134, 148, 807; 2.705.

[19] Manilius *Astronomica* 1.147-173.

embraces the earth to limit (*horizein*, in Greek) human sight.[20] *Quattuor in partes caeli discribitur orbis*, he writes later on, "the circle of the sky is divided into four parts" – by the rising and falling of the day, the noonday heat and the Great Bear, as he puts it: the four cardinal points.[21]

Both the universe and the earth (the latter as limited by the vision of the indwelling human subject) are circular: unlimited, insofar as circles have no beginning or end, yet perfectly coherent. The limiting circle that, in experiential terms, is the encompassing horizon varies, as Cicero puts it, "without limit for different people in different places."[22] Constant within this infinite multiplicity of circles are the cardinal points whereby the earth, whatever the geographical location of its occupant, is divided in four: *quadrata*, in Latin. Four is the number of cosmic order. As demonstrated in Chapter 1, with pebbles used instead of numbers, and expanded into its constituents (. + .. + ... + ....) four is also ten, according to the Pythagoreans.[23] Writing in the sixth century A.D., but following much earlier Pythagorean sources, John Lydus calls ten "the circle and limit of all the numbers."[24] Ten, he continues, bounds the unlimited, holds all the numbers together, and is nature's special stamp on humans to whom, uniquely, it has given ten fingers.[25] John Lydus is the only surviving writer on the perfection of ten to overtly bring fingers into the discussion, which suggests that Vitruvius, for whom fingers are crucial, was drawing on

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[20] Manilius *Astronomica* 1.663-665.
[21] Manilius *Astronomica* 4.587-589.
[22] Cicero *De divinatione* 2.92. Manilius (*Astronomica* 1.661-662) makes the same observation.
[23] See above, Chapter 1, pp. 53-58.
[24] John Lydus *De mensibus* 3.4: *Kyklos pantos arithmou estin hê dekas kai peras*. On John Lydus' Pythagoreanism and its early sources, Maas 1992, pp. 58-61; Robbins 1921, pp. 97-112, and above, Chapter 1, pp. 57-58.
[25] John Lydus *De mensibus* 3.4: *Horos gar esti tês apeirias autôn . . . . hoti de pantos arithmou synektikê hê dekas, martys hê physis, mê pleious tôn deka daktylôn alla mêde elattous anthrôpôi paraschousa*. See also *De mensibus* 1.15.

the same Pythagorean tradition in which, significantly, ten is circular as well as being fourfold.

Like the circle that bounds Vitruvian man, whose ten extended fingers and toes are touched by the line the compass makes as it goes around him, ten is both the coherent, circular totality of things and the fourfold "squaring" that makes that totality constant for all peoples in all places. Read against this Pythagorean background, the circle and square that are Vitruvian man's geometrical attributes are also those of the perfect Pythagorean ten Vitruvius discusses in the paragraph almost immediately following: a discussion whose appearance in precisely this context tends to confirm the ten-ness implicit in Vitruvian man himself.[26] The same background also helps to explain the ostensibly rather odd classical Greek notion of the human body's number being ten.[27] As discussed in Chapter 1, Vitruvius constituted *De architectura* in what one might, in this light, understand as a squared circle: ten scrolls that, being ten, describe the "circle and limit of all the numbers;" a decad that is at once the coherent totality itself and the "squaring" limit of that totality which, like the cardinal points or the four elements, are constant and everywhere uniform.[28] A squared circle of ten scrolls which, being ten, constitute a perfect body that, in all respects, acquires metaphysical (or at least metaphorical) congruence with the geometry of Vitruvius' outstretched man.

Where the graphic representations tend most to steer the reader away from the

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[26] Raven 1951, p. 151-152.
[27] Discussion of ten, with special emphasis on fingers: Vitruvius 3.1.5. It has been suggested that the notion of the body's "number" being ten may originate in the pebble diagrams of one Eurytus, a fifth-century B.C. Greek mathematician known only through secondary sources: Aristotle *Metaphysics* 1092b; Theophrastus *Metaphysics* 3. See also Gros 1989a, p. 17; Pollitt 1974, pp. 18-20 and 413-414; Raven 1951 and above, Chapter 1, pp. 54-55.
[28] Above, pp. 48-68.

intentions of their ancient written source is in the fixity of the two geometrical figures, and the attendant implication that these somehow pre-exist the man, who is then fitted into them. The theoretically pure geometry projected by the images is eternal and essentially disembodied – an ideal to which Man, at the centre, is meant to aspire. The Stoics, for whom philosophy was concerned primarily with how a person should live and who thus gave metaphysics a *subject*, had a different understanding of the geometrical figure. Typically, for the Stoic Posidonius, a *schêma* ("figure" in Greek – Vitruvius uses the same word, latinized, when he writes *schema rotundationis*, "circular shape"), was not ideal, but material and, as in Vitruvius, *produced* by a limiting cause (*logos*).[29] Assuming a Stoic understanding of the geometrical figure, what is its "cause" here? The man who in Vitruvius' description is unequivocally passive, and thus ostensibly in no position to "cause" anything? Or the compass and set square – the iconic tools of the architect?

"You can also find a squared layout (*quadrata designatio*) in the body in the same way as you made it produce the circular shape," Vitruvius writes.[30] If a *designatio* ("figure" or "layout" – *schema*, again) that has been "squared" can be taken as a square, the locution so formulated evokes at once the process of the figure's production as well to the figure it produces, just as the circular shape that the compass makes by "going around" (*circumagendo*) the outstretched man is also both process and product: a fusion of process and product which is virtually impossible to convey by graphic means. The attendant implication that the geometrical figure is at once its boundary and the shape so bounded (in Vitruvius' case, the man) – both container and content, in other words – was

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[29] Posidonius fr. 196 (Edelstein and Kidd 1972, with translation and commentary, pp. 705-707); Bréhier 1914, pp. 56-57; Gros 1989a, p. 17, for the link with Vitruvian man.

also part of the Stoic understanding.[31]

Vitruvian man is a metaphysical proposition. He is also a ritual formula. It was initially in the late Republic, but especially during the reign of Augustus that the geometry of circle and square became a topic of special interest in connection with the city of Rome and its origins.[32] Varro, as often, is the earliest source. In *De lingua latina* he writes that Rome was first ploughed in a circle, thus deriving *urbs* from *orbis*.[33] But Varro is also reported to have said that Rome was first *quadrata* "so that it might be placed in equilibrium:" stable, certainly – immovable by implication – and here, with *quadrata* used as a participle, not "square" but "squared."[34] Solinus, the third-century A.D. grammarian who cites Varro on this, further locates *Roma quadrata* on the Palatine, in front of the Augustan Temple of Apollo, near the hut of Romulus.[35]

Vitruvius' Greek-speaking contemporary, Dionysius of Halicarnassus has Romulus circumscribe his newly-founded city with a *tetragônon schêma*, a square shape, writing later that Romulus could not possibly have consecrated the circular Temple of Vesta in the Forum Romanum, because the temple in question lay outside of what he says was called *tetragôna Rhomê* (square Rome) which was on the Palatine.[36] Plutarch, writing in the second century A.D., has Romulus found a "square Rome" in chapter nine of his *Life*, but

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[30] Vitruvius 3.1.3: *Non minus quemadmodum schema rotundationis in corpore efficitur, item quadrata designatio in eo invenietur.*
[31] Posidonius fr. 196 (n. 29, above).
[32] Musti 1975; Traina 1988, p. 337.
[33] Varro *De lingua latina* 5.143.
[34] Varro in Solinus 1.18: *dictaque primum est Roma quadrata, quod ad aequilibrium foret posita.* Cf. Rykwert 1988, p. 98.
[35] Solinus 1.18.
[36] Dionysius of Halicarnassus *Antiquitates romanae* 1.88.2 and 2. 65.3.

makes him plough the city's boundary in a circle in chapter eleven.[37] The centre of this circle was the *mundus* in the Forum, Plutarch says, making it awkward to locate the city so bounded (clearly not a square one in this case) on the Palatine.[38]

Another explanation for Rome's being initially "*quadrata*" is given in the lacunary text, supposed to be Augustan or earlier, preserved in a papyrus fragment from Oxyrhincus. In the restored text of Ox. pap. 2088, as it is known to papyrologists, we read that

*in the first district was the place where Rome was founded and where that Rome was fortified with squared masonry so that no one could penetrate into* Roma Quadrata. *For they considered* Roma Quadrata *to be the head of empire.*[39]

That the Palatine foundation was called *Roma quadrata* "because in the beginning it was fortified with squared masonry (*in speciem quadratam*)" is also reported by the second-century A.D. lexicographer Festus, who, like Solinus, locates his *Roma Quadrata* in front of the Augustan Temple of Apollo on the Palatine where Festus says the "things of good omen usually used for city-founding were kept."[40] What "things"? A *lituus*, or

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[37] Plutarch *Romulus* 9, transliterating *quadrata* into Greek and supplying "*tetragōna*" as a gloss: *Romulus* 11.

[38] The *mundus* Plutarch refers to was the ditch around the Comitium in the Forum. The circle may have been understood to include the Palatine but could not, under the circumstances, have been limited to it. Plutarch does not specify the extent of its circumference.

[39] Ox. pap. XVII, 1927, 2088.14-17, as restored by Piganiol 1937, p. 347: *Primoque in pago [locus erat ubi Roma con]dita est eaque Roma muro [in speciem quadratam munita est ne]quis at Romam Quadratam [accedere posset. Imperii enim c]aput Romam Quad[rat]am [existimabant.]* Cf. Wiseman 1987, p. 401, Castagnoli 1951, pp. 394-395. See Thomsen 1980, pp. 12-17 for an alternative restoration of the text, a discussion of the complete fragment, and the opinions concerning its authorship, which two of the four scholars cited attribute to the Augustan antiquarian Fenestella. The other two attributions are Cicero's friend, Tubero, and Cato the Censor.

[40] Festus 310-312L: *Quadrata Roma in Palatio ante templum Apollonis dicitur, ubi reposita sunt, quae solent boni ominis gratia in urbe condenda adhiberi, quia saxo munitus est initio in speciem quadratam.* The passage has also been taken as referring exclusively to a specific Augustan monument, containing augural implements and covered with a square stone, rather than to the supposed Romulean foundation "fortified with squared masonry," as translated here (Richardson 1992, *Roma Quadrata* sv; Rykwert 1988,

augural staff, almost certainly. Probably *the* original *lituus*, the one from which, says Cicero, all augural *litui* are derived: the one with which Romulus had founded the city, that had been stored in *curia* of the Salii on the Palatine and, miraculously, alone survived when the Gauls set fire to the Palatine in 390 B.C.[41] Also, perhaps, among other "things," the ploughshare that was used for ploughing the *sulcus primigenius*, or furrow that was a new colonial foundation's first, sacred (usually square, or at least quadrangular) boundary, set out in keeping with the ritual prescriptions of the *Etrusca disciplina*, wherein lay the foundations of much Roman "civil theology." Such "things of good omen" are reported to have been enshrined in the precinct of the temple that Augustus dedicated in 28 B.C. to the Greek god Apollo who had championed his victory over Antony and Cleopatra at Actium three years earlier.[42] The temple, exceptionally, was itself built of solid marble – with "squared stones."[43] Building thus *a quadrato* makes for tight joints and continuous, solid walls that last forever, Vitruvius says, voicing a clear preference for such walling methods.[44] But whether to build in *saxo quadrato* (squared stone), in brick or in rubble-stone, lies not within the architect's power but in the owner's, he points out elsewhere.[45]

Near the Augustan Temple of Apollo stood the hut of Romulus that was doubled

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p. 98; Zanker 1983, p. 21). My reading follows Wiseman 1987, p. 401 which leads me to the understanding that Festus was locating the putative Romulean foundation in reference to, or *in terms of* the Augustan monument – which, no doubt, was the Augustan intention. Festus continues, "Ennius recalls that place when he says 'and who would hope to rule in Roma quadrata.' (*Eius loci Ennius meminit cum ait: et qui se sperat Romae regnare quadratae*)," clearly referring to the city of Romulus (cf. Timpanaro 1950). See Gagé 1930 for Augustus's self-fashioning as second Romulus (cf. Gros 1976a, p. 28; Beard, North and Price 1998, pp. 182-184; Price 1996, p. 822).

[41] Cicero *De divinatione* 1.30. Cf. Valerius Maximus 1.1; Livy 5.41; Plutarch *Camillus* 32.

[42] *LTUR*, s.v. Apollo Palatinus, aedes.

[43] Virgil *Aeneid* 6.69; Servius *Ad Aeneidem* 8.720. The only other Augustan temple so constructed was the Temple of Jupiter Tonans on the Capitol (Pliny *Natural History* 36.50), which Augustus vowed in 26 B.C. after narrowly escaping death by lightning: another temple, like that of Apollo, intimately linked to his own person. Cf. Gros 1976a, p. 73, and below, pp. 223-226.

[44] Vitruvius 2.7.1; 2.8.5-7; 4.4.4.

by the one on the Capitol, as discussed in Chapter 2.[46] The gleaming white Luna marble temple that overlooked the Circus Maximus stood within a complex of buildings which included Augustus's own residence (Fig. 22). Indeed, Suetonius calls the temple an actual *part* of his *domus* which means that Augustus kept the "things . . . usually used for city-founding" referred to by Festus at home.[47] Ovid wrote of the Palatine *domus* as the "single . . . abode of three immortal gods:" Apollo, Vesta and Augustus.[48]

Patrizio Pensabene, following recent archaeological research in the area, locates these "things" in a pit under the altar of a rectangular *tempietto* on the eastern edge of the square portico directly in front of the lower terrace of Augustus's house, and south-west of the podium of the Temple of Apollo.[49] Not in front of the temple, as Festus and Solinus report, but in front of Augustus's house, from which, if Pensabene is correct, Festus and Solinus obviously did not differentiate the temple itself. Augustus's name, moreover, was frequently attached to the countless Roman colonies that were founded during his reign, and later: Augusta Emerita (now Merida), Augusta Praetoria (Aosta), Augusta Raurica (Augst), Augusta Taurinorum (Turin), Augusta Treverorum (Trier), to mention only a few of the better-known ones.[50] According to Suetonius, Augustus received his new name from Roman Senate in January of 27 B.C.

*on the ground that (Augustus) was not merely a new title but a more honourable*

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[45] Vitruvius 6.8.9: *in domini est potestate, utrum latericio an caementio an saxo quadrato velit aedificare.*

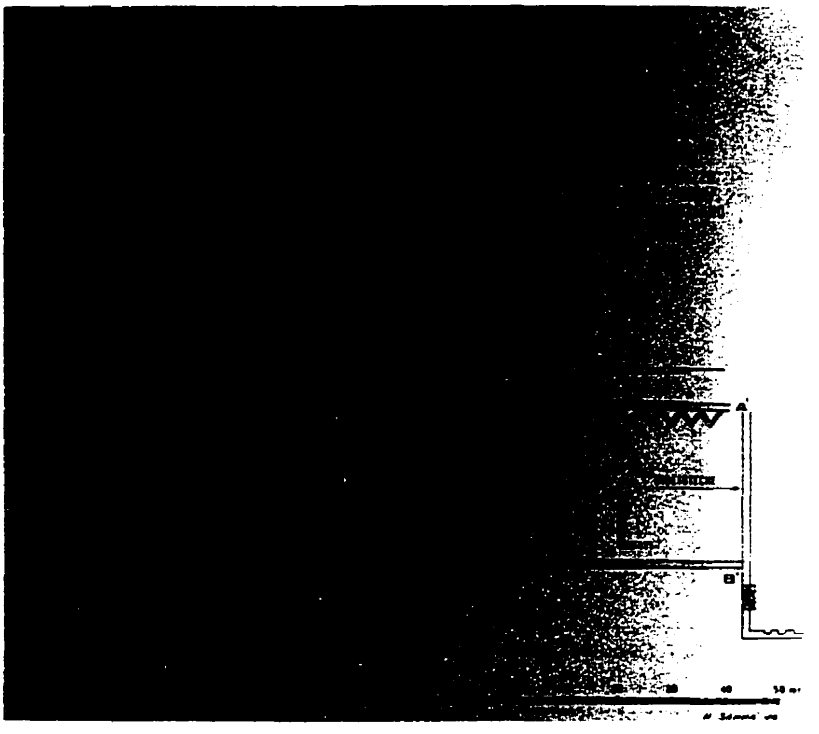
[46] Above, pp. 171-177. Cf. Edwards 1996, pp. 33-35. It was in front of the Temple of Apollo that, after 12 B.C. when he was named *pontifex maximus*, Augustus also built the second Temple of Vesta that doubled the one in the Forum (Beard, North and Price 1998, p. 189; Price 1996, p. 832).

[47] Suetonius *Divus Augustus* 29.3: *Templum Apollonis in ea parte Palatinae domus excitavit, quam fulmine ictam desiderari a deo haruspices pronuntiarant.*

[48] Ovid *Fasti* 4.951-954.

[49] Pensabene 1997 pp. 151 and 159 (plans), pp. 163-168. I am very grateful to Mark Wilson Jones for the reference.

Fig. 22



Plan: House of Augustus and Temple of Apollo Palatinus, dedicated in 28 B.C. After Carettoni.

*one (than Romulus), inasmuch as both sacred places and those in which anything is consecrated by augural rites are called* augusta *from increase* (ab auctu), *or from the movements or feeding of birds* (ab avium gestu gustuve), *as Ennius also shows when he writes, "After by augury august* (augusto augurio) *illustrious Rome had been founded."*[51]

Squaring is fundamental in augury. Not the drawing of squares, but the division into four with two lines crossing at right angles, as Arpad Szabo pointed out when he argued some years ago that *Roma quadrata* referred, therefore, not to a "square" Rome but to one that was, at least notionally, circular and then *quadrata*, "squared."[52] A *viergeteiltes und kreisförmiges Rom*, Szabo called it, a circle quartered and ritually set in proper order by its squar*ing*.[53]

An augur who set out to take the auspices needed, first of all, an unobstructed view of the area surrounding him: a view limited only by the horizon.[54] At Rome, he would normally position himself at the *auguraculum* (place for taking auspices) on the *Arx*, which was the highest, easternmost one of the two peaks of the Capitoline hill.[55] Only after "quartering" or "squaring" a given area within this encompassing circle, using (usually) his *lituus*, could the auspices properly be taken and the decision reached as to whether or not the gods favoured whatever was at issue. This would be revealed by the "quarter" in which, for instance, birds of good omen appeared, by whether or not they

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[50] Le Glay 1991, p. 123; Rey-Coquais 1991; *TLL*, s.v. *Augustus*, cols. 1415-1419.
[51] Suetonius *Divus Augustus* 7.2, drawing on the Augustan writer Verrius Flaccus, also used by Festus 2L; Ovid *Fasti* 1.608-616 (Cf. Price 1996, p. 822). See also Augustus, *Res gestae* 34.2; Dio Cassius 53.16.4; Dumézil 1957; Erkell 1952; Gagé 1930; Galinsky 1996, pp. 12-21; Speyer 1986, p. 1797; Wagenvoort 1947, pp. 12-13.
[52] Szabo 1938 and 1956. Cf. Castagnoli 1951, p. 397; Musti 1975, p. 307; Rykwert 1988, pp. 97-100.
[53] Szabo 1956, p. 243.
[54] Cicero *De legibus* 2.21.
[55] Varro *De lingua latina* 7.7; cf. Rykwert 1988, pp. 45-49.

alighted to feed and by how many of them there were.[56] So, it was said, did Romulus "mark out the quarter for taking observations when he founded the city."[57] Being random, the appearance of birds in an area *not* ritually "limited" – which is to say "divided up" – in this way would have been entirely without significance. Squaring or quartering, taken as having been originally performed when Rome was *quadrata*, appears to have been the essential prerequisite for determining the approval of the gods, and so too the prerequisite for Roman success. Augury, it has been pointed out, provided the major axis of communication between gods and men.[58]

Any ritually inaugurated or oriented place – technically a *templum minus* (town, military camp, public building, or *aedes sacra*, which is to say temple proper) – was square or quadrangular and evidence that such "squaring" had indeed been properly performed, and that any official action undertaken in such a location did so, at least ideally or in theory, with divine sanction.[59] Although repeated auspices were taken as the prelude to, for example, Senate sittings and battles the squared *place*, of which Rome itself (by Augustan times, at least) was the paradigm, remained the primary requirement for any correctly initiated political, religious or military activity – activities which, in the Roman world, were of a piece. "The highest and most important authority in the commonwealth is that of the augurs," wrote Cicero in his *Laws*, ". . . . no act of any magistrate at home or

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[56] Cicero *De divinatione* 1.31 (cf. Szabo 1956, p. 261).
[57] Cicero *De divinatione* 1.30.
[58] Gordon 1990a, p. 179. See also Beard, North and Price 1998, I, pp. 21-24, 27-28.
[59] On augury in general see Linderski 1986 (ANRW, with bibliography); on the various kinds of *templa*, pp. 2256-2296. See also Beard, North and Price 1998, I, pp. 22-23; Dumézil 1987, pp. 321-322, 586-586; Gargola 1995, pp. 25-50; Rykwert 1988, pp. 44-49. Not all temples (*aedes*) were *templa*, in the augural sense, as for example the circular temple of Vesta in the Forum. Nor, clearly, were all *templa* temples, in the sense of shrines dedicated to a deity, since a military camp or a public building such as the Curia Julia were also *templa minora*.

in the field can have any validity without their authority."[60]

Because, as Suetonius' explains, "both sacred places and those in which anything is consecrated by augural rites are called *augusta*." Augustus, upon acquiring his new name, became personally allied with all places so squared, as indeed the epithet *Augusta* attached to the names of so many new imperial foundations attests. Augur since the 40's B.C., and custodian of the (perhaps original, Romulean) *lituus* that, among the other "things of good omen," was enshrined within the precinct of his Palatine *domus*, Augustus was not only himself, by virtue of his name, made the paradigm – like Rome – of all squared places; he was the agent of such squaring as well, and principal guarantor (*auctor*) of Rome's correct relation with the gods. The countless portraits that showed him holding the augural *lituus* and the many Augustan coins on which it was featured were insistent on this point.[61]

A military man during the period of his attachment to Julius Caesar, Vitruvius would have often participated in, or at least witnessed, the setting up of military camps: square installations, invariably, and crossed by two main thoroughfares, as were most Roman towns. At their crossing in a camp, on the spot chosen for its best overall view, was pitched the general's tent, the *praetorium* that also served also as an *augurale*, or *auguratorium*, from which, as from the *auguraculum* on the citadel at Rome, auspices were taken.[62] It was to his augural power that Augustus overtly attributed his own military success.[63] After his victory at Actium, he founded the city of Nikopolis ("city of

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[60] Cicero *De legibus* 2.31.
[61] Gagé 1930; Price 1996, pp. 824-825; Vierneisel and Zanker 1979 for a catalogue of portraits; Zanker 1988, pp. 126-127.
[62] On the setting up of Roman military camps: Hyginus Gromaticus *De munitionibus castrorum*; Polybius 6.26-32. For the *augurale*, see Tacitus *Agricola* 2.13; 15.30; Quintilian 8.2.8. Hyginus (*De munitionibus castrorum* 11, as cited Gargola 1995, p. 28) gives particularly clear instructions for the placing of what he calls the *auguratorium* of a military camp.
[63] Gagé 1930, pp. 160-162.

victory") on the site of his camp. "On the spot where he had had his tent, he laid a foundation of square stones . . . and erected upon it, open to the sky, a shrine of Apollo:"[64] an Augustan Apollo whom Horace more than once qualifies as *augur* in a poetic "theology" whereby the god, while remaining the Greek god of healing on whose oracular authority at Delphi the Greeks had founded their colonies became, simultaneously and conspicuously, a god of victory and the new *Roman* founder's personal authority.[65]

It is essential to recall traditional practices when founding a new city, Vitruvius insists, referring in Book 1 to that branch of the Etruscan science of divination that involved the examination of the livers of sacrificed animals in order to determine whether or not the proposed site of a town or a camp was a healthy one.[66] The reference to such practices is buttressed by far lengthier explanations of what to look for in terms of Greek science: the theory of the four elements, the necessity of maintaining their proper balance and so on. Greek science (or "natural theology," as Varro would have called it) was respected and understood by all learned men everywhere; the arcane practices of divination, virtually impossible to "explain," were only properly understood by the Roman practitioners who performed them.[67] Thus it should not be surprising that, when Vitruvius evokes the universal benefits of squaring in the preface to Book 9, he should do

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[64] Dio Cassius 51.1.3. Cf. Suetonius *Divus Augustus* 18.2.

[65] Horace *Odes* 1.3.32; *Carmen saeculare* 5.61-62, where he is, specifically, the Apollo of the Palatine temple. The Delphic Apollo as the Greek city-founder's authority: Malkin 1987, chapter 1. See also Gagé 1955, p. 111; Wiseman 1981 and 1987: a temple of Victory was one of the many potent architectural signifiers located on the southwest corner of the Palatine along with the Temple of Apollo, Augustus's house and Romulus' hut.

[66] Vitruvius 1.4.9: *Itaque etiam atque etiam veterem revoncandam censeo rationem.*

[67] See Scheid 1993, p. 116: *Célébrer un rite signifie le comprendre, c'est à dire en saisir le sens premier, littéral, autrement dit, les enchaînements d'attitudes et de gestes quotidiens connus de tous, mais si complexes que pour arriver à les reproduire sans faute, il fallait les comprendre.* On Varro's tripartite theology – natural, civil and poetic – above, Chapter 1, p. 60.

Fig. 23

Marble relief from the Augustan altar of the *lares*. Augustus is at the centre, holding an augur's *lituus* in his right hand. After P. Zanker.

so with reference to Plato and Pythagoras, and not to augural practice.[68] Nevertheless, in Book 1, when he gives instructions for drawing the wind rose that determines the directions of the prevailing winds to be avoided in laying out the streets of new cities and divides his diagram into sixteen parts, the Etruscan discipline of augury is implicit, for indeed the Etruscans divided the sky into sixteen parts for the purposes of divination.[69] In the pebble diagrams of Pythagorean mathematicians, sixteen was a square number.[70]

The *Disciplina Etrusca* also appears to be latent and assumed in Book 9, two-thirds of which is an exegesis of Greek astronomy. Writing of the constellations and the yearly course of the sun, Vitruvius twice refers the world as having a left and a right.[71] Many ancient Greek texts, from Homer on, refer to the East as the world's right and the West as its left.[72] On the other hand, Roman writers (all Augustan, like Vitruvius) have north as the world's right and south as its left.[73] "Varro has ascribed the original source of limits to the Etruscan discipline," writes Frontinus in his *De limitibus*, a work on surveying,

*because the haruspices divide the world into two parts, from east to west. They called the one that falls in the north the right and the one in the south the left, because the sun and the moon look to the west, even as certain architects have written that*

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[68] Vitruvius 9.pref.3-8.

[69] Vitruvius 1.6.6-8 and 1.6.12-13. Vitruvius refers overtly to the prescriptions of the Etruscan discipline when he writes at 1.7.1 that temples dedicated to Venus, Vulcan and Mars should be located outside the city walls. On the sixteen-part sky, Cicero *De divinatione* 2.42; Pliny *Natural History* 2.138.

[70] Above, Chapter 1, p. 63..

[71] Vitruvius 9.4.1: *Nunc de ceteris sideribus quae sunt dextra ac sinistra zonam signorum, meridiana septentrionalique parte mundi, stellis disposita figurataque dicam.* 9.4.6: *Quae sunt ad dextram orientis inter zonam signorum et Septentrionum sidera in caelo disposita dixi esse. Nunc explicabo quae ad sinistram orientis meridianisque partibus ab natura sunt distributa.*

[72] Soubiran, Vitruvius 9 (1969), pp. 143-145, referring in particular to Cuillandre 1944, pp. 185-228. On left and right in general, Needham, ed. 1973.

*shrines, properly, should face west. The haruspices divide the earth with another line from north to south, and have named the part from the mid-day line forward* antica *(front), the other* postica *(back). From this foundation our ancestors established the principles of land measurement.*[74]

The Roman land surveyors (*agrimensores*) squared a flat earth, as did the augurs (here called haruspices) in whose methods the first principles of surveying Frontinus says are grounded.[75] But the world of itself is, objectively, without left, right, front or back. For north to be on the right and so on assumes an indwelling human subject who must be facing west. The augur takes this position because, says Frontinus, that is the way the sun faces, "east" being the its *oriens* (rising) and "west" its *occasus* (going down) – the direction of its forward movement and hence, anthropomorphically, the direction in which the sun "looks." Land-surveyors too are to adopt this practice for, by aligning themselves with the forward movement of the sun at midday, they make "the constitution of limits identical throughout the whole world."[76]

Varro, in a *locus classicus* on the augural quartering of *templa*, has his augur face

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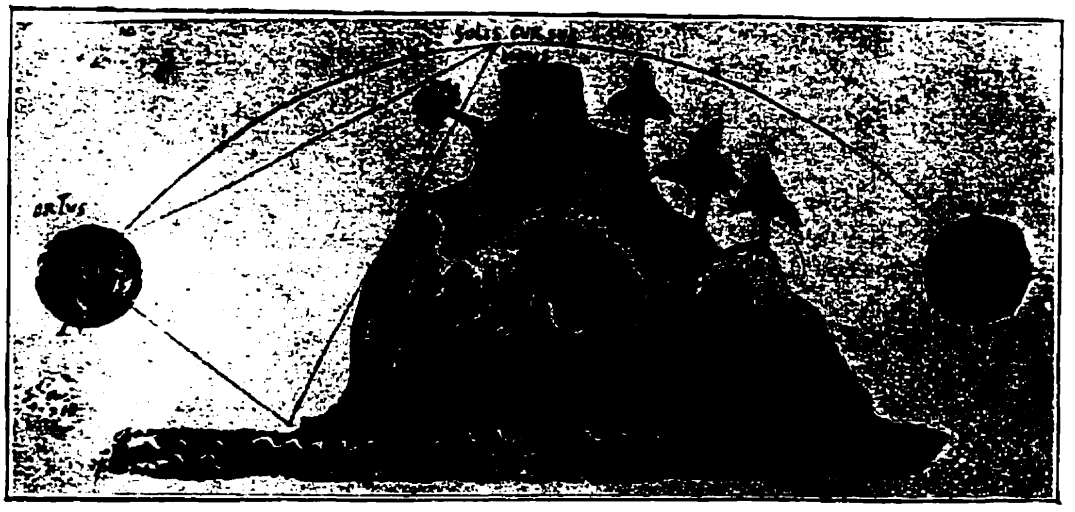
[73] Virgil *Georgics* 1.235-236; Ovid *Metamorphoses* 1.45; Manilius *Astronomica* 3.183-185. Vitruvius 9.4.1. and 9.4.6. (see above). Cf. Soubiran, Vitruvius 9 (1969) p. 144.

[74] Frontinus *De limitibus* in Thulin 1971, pp. 10-11: *Limitum prima origo, sicut Varro descripsit, ad disciplinam Etruscam: quod aruspices orbem terrarum in duas partes diviserunt, dextram apellaverunt quae septentrioni subiaceret, sinistram quae a meridiano terrae esset ab oriente ad occasum, quod eo sol et luna specataret, sicut quidam *carpiunt architecti delubra in occidentem recte spectare scripserunt. Aruspices alteram lineam a septentrione ad meridianum diviserunt terram, et a meridiano ultra antica, citra postica nominaverunt. Ab hoc fundamento maiores nostri in agrorum mensura videntur constituisse rationem.* Cf. Hyginus Gromaticus *Constitutio limitum*, in Thulin 1971, pp. 131-134, where an almost identical description appears. See also Gargola 1995, pp. 41-50. For the somewhat problematical **carpiunt architecti delubra in occidentem recte spectare scripserunt* Hyginus has (p.134) *antiqui architecti in occidentem templa recte spectare scripserunt.* Hyginus Gromaticus is variously dated between the second and fourth centuries A.D. (*OCD*, s.v Hyginus Gromaticus.); Frontinus is late first century A.D. Either both used the same source (Hyginus does not mention Varro), or Hyginus followed Frontinus.

[75] On Roman surveying, Dilke 1971.

Fig. 24



"*Solis cursus*" (the course of the sun). Image from the 9th-century A.D. Codex Palatinus of the *Corpus Agrimensorum* (Vatican lat. 1564) illustrating Hyginus Gromaticus' *Constitutio limitum*. After C.O.Thulin (Cf. Thulin 1971, p. 72 and fig. 98a).

Image from the 6th-century A.D. Codex Arcerianus of the *Corpus Agrimen*sorum (Wolfenbüttel, Herzog-August Bibliothek, Guelferb 2403) illustrating the passage in Hyginus Gromaticus' *Constitutio limitum* on west-facing temples. After C.O. Thulin (cf. Thulin 1971, pp. 131-134 and fig. 72).

# VITRUVIUS

## WRITING THE BODY OF ARCHITECTURE

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II

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south, not west, with east on the left, west on the right, south in front (*antica*) and north in back (*postica*):[77] a stance which cannot, obviously, have been taken in direct imitation of the sun or the moon. Varro elsewhere has temples face south, giving them an orientation in keeping with his stipulated south-facing augural stance, as indeed Frontinus does for west-facing temples.[78] Although he cites Varro on the augural origin of limits at the opening of his account, Frontinus, in his assumption of a west-facing augur, no longer appears to have been following Varro later on in the passage.[79] Neither were the Augustan authors who made north and south right and left respectively.[80]

Correctly oriented shrines (*delubra*) are to face west for the same reason that augurs do: to be in tune with the sun's course, in deliberate mimetic recognition of the sun as the origin of all "squaring" and the "limits" established thereby. Or so certain architects have written, says Frontinus.[81] So, certainly, wrote Vitruvius.[82]

*This is how to determine which regions of the sky* (regiones) *the temples of the immortal gods should face. If no reason stands in the way, and given the unrestricted power to do so, both the temple and the statue placed in its cella are to look towards the evening region of the sky, so that a person approaching the altar to make offerings or*

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[77] Frontinus *De limitibus*, in Thulin 1971, p. 14: *et sic per totum orbem terrarum est unaquaeque limitum constitutio . . .*

[78] Varro *De linga latina* 7.7: *Eius templi partes quattuor dicuntur, sinistra ab oriente, dextra ab occasu, antica ad meridiem, postica ad septentrionem.* See also Livy 1.18.6-7. Cf. Beard, North and Price 1998, II, pp. 86-87; Rykwert 1988, pp. 46-49.

[78] Varro in Festus 434L. Cf. Ferri, Vitruvius (1960), p. 170.

[79] Unless, of course, Varro contradicts the stipulations of *De lingua latina* in the unknown source (probably the *Antiquitates rerum divinarum*) Frontinus cites here, which is not entirely impossible.

[80] Above, n. 74.

[81] See also, at greater length, Hyginus Gromaticus *Constitutio limitum* in Thulin 1971, p. 134: *in orientem sicut aedes sacrae. Nam antiqui architecti in occidentem templa recte spectare scripserunt: postea placuit omnem religionem eo convertere, ex qua parte caeli terra inluminatur. Sic et limites in orientem consistuuntur.*

[82] Since Frontinus is one of the few ancient authors to mention Vitruvius by name (*De aquis* 1.25), the obvious implication is that when he writes "certain architects have written . . ." his source is Vitruvius.

*sacrifices faces the part of the sky where the sun rises* (ad partem caeli orientis) *as well as the statue in the temple. Thus, people undertaking vows will gaze* (contueantur) *at once upon the temple, on the sun rising in the eastern sky, and on the images themselves that also seem to rise in the east and gaze* (contueri) *in turn upon those praying and making sacrifices which obviously demands that all the altars of the gods look eastward.*[83]

Unless it is *quadrata*, the sky has no *regiones* or *partes*, and neither a temple nor its cult statue has a "region" to look upon – regions which here, as in Frontinus, refer with considerable emphasis directly to the sun's course, whose westward direction the temple (like Frontinus' augur) is to imitate. Supplicants stand at the altar in front of the temple and gaze (*contueantur* – a term with a decidedly augural ring[84]) at once upon the shrine, the cult statue in the *cella*, and the sun with whose rising at daybreak the statue is confounded. The statue (and the sun) return the supplicants' gaze. Not that this could have actually worked in practical terms. Even if, as Vitruvius implies, the temple doors were open, the sun rising behind a west-facing temple would reduce it to a silhouette and prevent anyone seeing into the cella, which would be plunged into total darkness by the contrast.

Implicit in the exchange of gazes that Vitruvius gives as the reason for west-facing temples is the partnership of gods and men; a pact sealed when the pious gaze of the supplicant is acknowledged in the benevolent, joint return gaze of the gods (statue) and

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[83] Vitruvius 4.5.1: *Regiones autem quas debent spectare aedes sacrae deorum inmortalium sic erunt constituendae uti, si nulla ratio inpedierit liberaque fuerit potestas, aedis signumque quod erit in cella conlocatum spectet ad vespertinam caeli regionem uti qui adierint ad aram immolantes aut sacrificia facientes spectent ad partem caeli orientis et simulacrum quod erit in aede, et ita vota suscipientes contueantur aedem et orientem caelum ipsaque simulacra videantur exorientia contueri supplicantes et sacrificantes, quod aras omnes deorum necesse esse videatur ad orientem spectare.*

[84] Varro *De lingua latina* 7.8-10. Cf. Beard, North and Price 1998, II, pp. 86-87; Rykwert 1988, p. 45 and notes.

nature itself (sun). An exchange that – ideally, if unrealistically – can only take place if the temple is made to face west to give the supplicant his proper orientation. The same pact was endorsed every time the auspices were taken in order to determine the gods' approval of a proposed undertaking.

Hellenistic temples, particularly those in Asia Minor, sometimes faced west, notably the great Temple of Artemis at Ephesus which Vitruvius lists, without mentioning its orientation, when he enumerates the works he considers architectural masterpieces in the preface to Book 7.[85] But in the Greek world an eastward orientation, whereby the cult statue would indeed be illuminated at sunrise, was far more common.[86] Unlike Roman ones, Greek altars – whichever way the temple faced – were usually not strictly on axis with the temple. This meant that even a west-facing Greek temple did not necessarily have an east-facing altar directly in front of it: an altar whose orientation Vitruvius seems to consider just as important as that of the temple, if not more so, since he repeats the east-facing requirement for altars at the end of Book 4, stipulating further that these should always be lower than the statues so as to oblige the supplicant to raise his eyes to the divinity.[87]

Roman temples appear to have had no fixed, or even preponderant, orientation. Only later in Christian architecture did west-facing churches and east-facing altars become canonic. Pierre Gros' survey of Augustan temples at Rome has shown that their

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[85] See Gros, Vitruvius 4 (1992), pp. 152-157. Vitruvius discusses the *aedes Ephesi Dianae* at 7.pref.16.
[86] Nissen 1869, p.162, lists 53 east-facing Greek temples as opposed to 3 that face north, 5 that face south and 5 west. Cf. Ferri, Vitruvius (1960), p. 170.
[87] Vitruvius 4.9.1: *Arae spectent ad orientem et semper inferiores sint conlocatae quam simulacra quae fuerint in aede, uti suspicientes divinitatem qui supplicant et sacrificant disparibus altitudinibus ad sui dei decorum componantur.* It is worth noting that the Ara Pacis Augustae, the altar of Augustan Peace in the Campus Martius, dedicated in 9 B.C., faced east and was intimately linked to the course of the sun by

orientations fanned out over virtually all the points of the compass, with the exclusion of an 83-degree quarter to the North.[88] What then was Vitruvius' point? Was he here, once again, arbitrarily demonstrating the disconnectedness from reality for which his critics have so often taken him to task?

Augustus Caesar's triple triumph of 29 B.C. marked the end of the civil wars and (so the poets agreed) ushered in the dawn of a new era.[89] Virgil, poetically, says that the celebration was accompanied by the dedication of "three hundred mighty shrines throughout the city."[90] In fact, although he would indeed go on to dedicate many more, on that particular occasion Augustus consecrated only one temple,[91] the Temple of Divus Julius dedicated to Julius Caesar, his deified father and the first Roman since Romulus to be so honoured.[92]

The temple was built at the eastern end of the Forum Romanum, which it dominated from a three-and-a-half metre high podium that was not accessible from the front, but only indirectly by a circuitous route from the back.[93] The temple offered the right of asylum, in imitation no doubt of the legendary asylum on the Capitoline Hill that Romulus was said to have established in order to attract settlers to his new foundation.[94]

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its siting next the Horolgium Augusti, Augustus's sun clock, just west of it (on the latter, below, Chapter 4, pp. 281-286). The principal entrance of the altar's encompassing screen wall faced west.

[88] Gros 1976a, pp. 151-152.

[89] On Augustus's triple triumph, see above, Chapter 2, pp. 144-145.

[90] Virgil *Aeneid* 8.714-716: *at Caesar, triplici invectus Romana triumpho moenia, dis Italia votum immortale sacrabat maxima ter centum totam delubra per urbem.*

[91] On the temples built or restored by Augustus (including the Temple of Divus Julius): *Res gestae* 19-21; Suetonius *Divus Augustus* 29. Cf. Gros 1976a. On the dedication of the temple on August 18th of 29 B.C., and the games that celebrated it, Dio Cassius 51.22.2 and 4-9.

[92] On Caesar's divinity, see especially Weinstock 1971 (pp. 385-401 on the temple). For an updated assessment, Beard, North and Price 1998, I, pp. 140-149.

[93] *LTUR*, s.v. Iulius, Divus, aedes.

[94] Richardson 1992 and *LTUR*, s.v. asylum. The Romulean asylum was situated between the two crests of the Capotoline, more or less in front of what is now the Palazzo del Senatore. Right of asylum in the Temple of Divus Julius: Dio Cassius 47.19.12. Cf. Beard, North and Price 1998, p. 224.

The almost square, Corinthian temple building, which Vitruvius knew and identifies as having a dense, pycnostyle intercolumniation had an exceptionally shallow cella in which stood a colossal statue of Caesar himself.[95] The statue's visibility from below was enhanced by the wide cella door and also, possibly, by an enlarged intercolumniation in front of it.[96] The configuration, stressed in coinage even before the temple was dedicated, made the temple almost secondary to the statue, for which it appears to have served as a showcase.[97]

Uniquely among Augustan foundations at Rome, the Temple of Divus Julius faced west.[98] Looking toward the Capitol, it faced the sunset of the summer solstice – in the west Northwest, to be precise (Fig. 25, top).[99] The complementary point on the horizon, directly opposite in the east Southeast, was the point at which the sun rose at the winter solstice. Thus the temple, sitting squarely on the line from midwinter sunrise to midsummer sunset, sat squarely on a line that divided both the world and the year into two equal parts. It faced west in mimetic sympathy both with the direction of the sun at the dawning of a new day *and*, even more pertinently, with the precise direction of its ascent during the first half of the solar year. When the sun rose at the winter solstice, it rose under Capricorn, which is what made Capricorn the sun's birth sign: the sign that was disseminated in the literature and in imagery of the period as Augustus's own (Fig. 25,

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[95] Pycnostyle intercolumniation: Vitruvius 3.3.2.
[96] Wide door: Statius *Silvae* 1.1.22-24. Cf. Gros 1976a, p. 86.
[97] Gros 1976a, p. 86 writes of the temple as a *présentoir* for the statue. The temple appears on the reverses of an aureus and a sestertius of 36 B.C. with a bearded Octavian on the obverse, which is stamped IMP.CAESAR.DIVI.F. ("Imperator Caesar, son of the god"). Crawford *RRC*, 540.1-2.
[98] Professor Jane Francis of Concordia University, one of the readers of this thesis, has pointed out to me that site constraints forced this orientation which, she has intimated, is therefore without significance. One might counter by asking why that particular site was chosen for the temple in the first place: clearly a deliberate choice and one in which, it can be argued, the orientation played a key role.

bottom).[100]

Also perforce facing west along with the temple that was its shrine was Caesar's statue, which appeared *capite velato*, with its head veiled in keeping with the Roman requirement for proper ritual performance, and holding – it seems almost unnecessary to add – the augural *lituus* in its right hand.[101]

From the beginning of the Augustan principate, when the sun was "born" at the winter solstice it rose, in the Forum Romanum, directly behind the Temple of Divus Julius.[102] When, as Vitruvius writes explaining the westward orientation of temples, a person approached the altar of this particular temple at sunrise, he would have faced the dawning of the year.[103] Looking into that rising sun, the supplicant would, simultaneously, have lifted his eyes to Divus Julius and to the temple that Augustus dedicated to mark his own triumph and the return of peace. Thus, the supplicant's pact with the gods and nature here became, concurrently, a pact with Caesar and the temple-builder who was Caesar's

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[100] Gros 1976a, p. 152, who links the orientation to Caesar's birthday, which was the 13th of July, the month named after him.

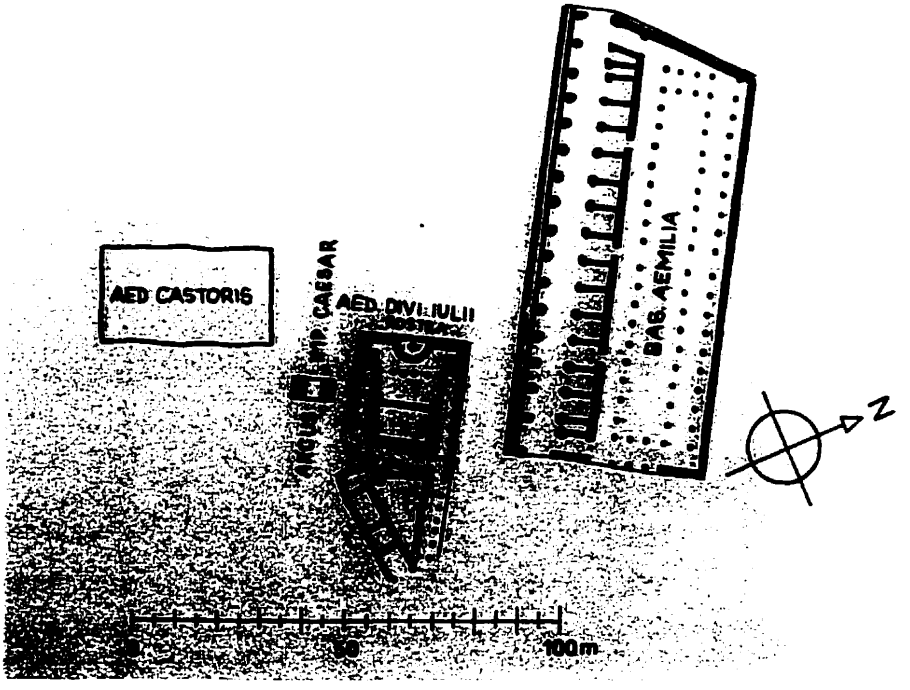
[101] Augustus was born in on September 23rd, which made him in fact a Libra, and linked his birth to the autumnal equinox, but Capricorn, the sun's birth sign – the sign under which Augustus would have been conceived – was just as frequent, if not more so, in the iconography of Augustus and his principate. See Barton 1994, pp. 40-47; Dwyer 1973; Pollini 1993, pp. 280-284. Vitruvius 9.6.2 mentions an Achinopolus (or Athenodorus), expert in Chaldean "arts" who "left detailed rules for casting nativities based not on the time of birth but of conception." (*qui etiam non e nascentia, sed ex conceptione genethialogiae rationes explicatas reliquit*). On the name and identity of the astrologer, Soubiran, Vitruvius 9 (1969), pp. 203-204 (who favours "Achinopolus") and Corso and Romano, Vitruvius 1997, p. 1276 (who opt for "Athenodorus"). Augustus was not only conceived under Capricorn; the moon was in Capricorn at the time of his birth in September (Pollini 1993, p. 281). On Augustus's relation to the sun, further below, Chapter 4, pp. 279-291, 318-319.

[102] This on the evidence of the coins described in n. 97 above.

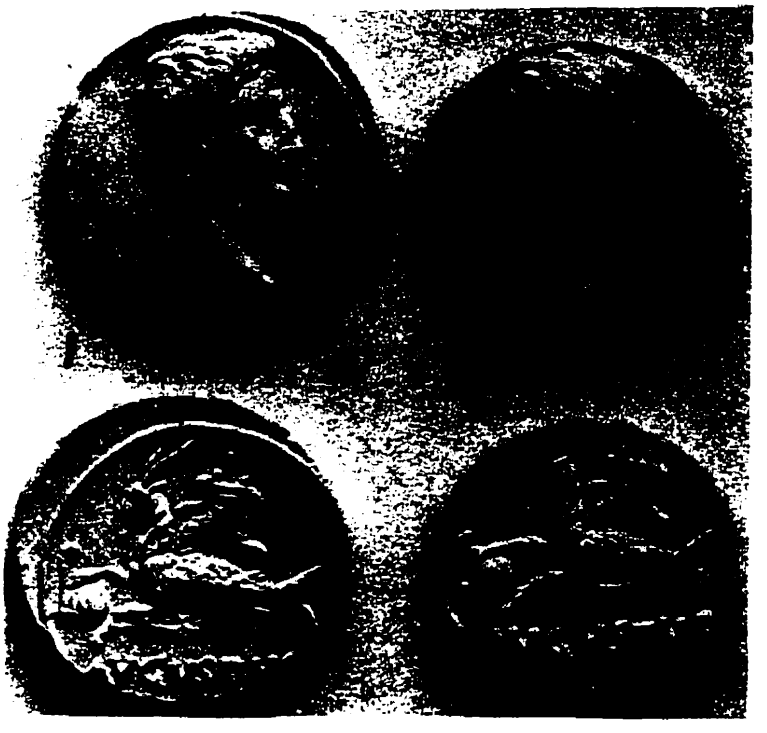
[103] This was, in fact, the orientation given to the Temple of Concordia built at the end of Augustus's reign, directly opposite the Temple of Divus Julius, at the western end of the Forum. Gros 1996a, p. 152. On the Temple of Concordia, see above, Chapter 2, pp. 131-133.

[103] The coins showing the temple (n. 97, above), show a lighted altar to the left, which suggests that particular importance was attached to it. Roman coins with representations of temples on them do not usually include the altar. It is worth noting that Virgil has Aeneas gaze at the rising run when he prays at the dawn on the day he first sets foot on the future site of Rome: "He arises, and gazing toward the eastern beams of the celestial sun . . . pours forth to heaven this prayer. . ." (*Aeneid* 8.68-70).

Fig. 25




**Above:** Plan of the eastern end of the Forum Romanum in 29 B.C., with the west-facing Temple of Divus Julius, dedicated in that year. After P. Zanker. **Below:** Aureus (left) and denarius (right) of Augustus: Spanish mint, ca. 29 B.C. Head of Augustus on obverse; Capricorn, the sun's birth sign, on the reverse. Mattingly 1923, I #'s 362, 363; pl. 7.1-2.



legitimate heir. In the practical terms outlined earlier, it seems unlikely that even this particularly prominent cult statue could have, literally, appeared to surge up out of the East along with the rising sun to return the supplicant's pious gaze, as Vitruvius describes. But read through the paradigm of the Temple of Divus Julius, Vitruvius' description makes flawless rhetorical sense. From the early Empire on, the right, left, back and front of the world (its north, south, east and west) were the left, right, front and back of the augur in the temple that here, at the world's centre, faced west. And so, writes Vitruvius, "if no reason stands in the way," should all temples.[104] The temples that did end up facing west were not, principally, at Rome but elsewhere: those which, dedicated to the imperial cult, replicated the rhetoric of the Temple of Divus Julius in other parts of the Roman world.[105]

As it turned out, the Temple of Divus Julius was the initial move in Augustus's subsequent "squaring" of the geometrically rather amorphous Republican Forum and his concomitant transformation of it into a dynastic monument.[106] By the time Augustus died

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[104] Vitruvius 4.5.1: *si nulla ratio inpedierit liberaque fuerit potestas* . . . A number of scholars (Georges Dumézil, among others) reviewed by Gros 1976a, p. 148, have speculated that Vitruvius' prescription a reflects the original, authentically Italic, orientation of temples, but there is little concrete evidence for this. I would counter that the "originality" of the orientation belongs to the time of Vitruvius – which makes it in no way inauthentic.

[105] Such monuments include the Temple of Augustus in Pisidian Antioch in the eastern province of Galatia (Asia Minor) which appears to have been oriented in sympathy with the dawn of the winter solstice and the "birth" of the sun in Capricorn, just like the Temple of Divus Julius (Mitchell and Waelkens 1998, fig. 18 and below, Chapter 4, pp. 316-318); the Temple of Augustus in Tarraco (Tarragona) in Spain (Hänlein-Schäfer 1985, A 56 and plate 61a) which according to Tacitus (*Annals*, 1.78) "gave a model to all the provinces (*datum in omnes provincias exemplum*);" both the Julian Basilica and the dynastic temple of the *gens Julia* (formerly the archaic east-facing Temple of Apollo, but now turned around: see below pp. 253 and 254a) in Roman Corinth; and, also in the Roman East, the temple of Roma and Augustus at Ankara, the Temple of Roma and Augustus at Pessinus in Phrygia, and the Sebasteion in Carian Aphrodisias. Cf. Mitchell and Waelkens 1998, p. 159.

[106] The Curia Julia, on the north side of the Forum, was begun by Caesar in 44 and dedicated by Augustus, also in 29 B.C. In his restructuring of the Forum, Augustus, as often, took his cue from Caesar's initiative. See Coarelli 1983-1985, II, pp. 233-334; Gros and Sauron 1988, pp. 60-63; Simon 1986, pp. 84-91; and especially Zanker 1972.

in 14 A.D., the Forum was completely closed in, with virtually no break in the porticos and temples (by then, all referring either directly or indirectly to the imperial family) that framed its periphery.[107] The augural squaring function on which, from the time of Romulus, Rome's unique collusion with the gods was claimed to have depended, depended now on Rome's collusion with the imperial dynasty that now controlled it.[108] In the signifying power of the architecture of the Forum Romanum lay its incontestable "proof."[109]

So too in the signifying power of Vitruvian man, whose progeny (Man) may be legion, but who materialises out of nowhere in a text that appears to have no identifiable source other than the historical circumstances of its composition.[110] For if, as argued earlier, the Augustan Vitruvius who is the focus of this study cannot be severed from the Imperator Caesar for whom he wrote his treatise,[111] no more can the man who produces the circle and the square at the beginning of the first of Vitruvius' two books on temples. But, strictly speaking, the man does not *produce* the geometry in question. Flat on his back and passive, he is *made* to produce it. The active agents, as Vitruvius tells it, are the compass and the set square. Vitruvian man is the architect's template.

Vitruvius introduced his man with, " . . . the members of sacred dwellings ought to have a symmetry that corresponds completely, in every detail and with perfect fitness to

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[107] Gros 1976a, pp. 85-92; Zanker 1972. Gros' analysis of the Augustan reconstruction of the Circus Flaminius (1976a, pp. 81-84) and the Forum of Augustus (pp. 92-95) shows that the unbroken continuity of the Forum enclosure was typical of urban development in Rome under Augustus.
[108] On fora as augural spaces, Gros 1990, pp. 32-34; 1996a, pp. 207-209.
[109] As pointed out in Chapter 1 (above, pp. 109-110), you cannot argue with a building. The sole recourse in disagreement with building is its destruction: the storming of the Bastille, for instance.
[110] See Gros, Vitruvius 3 (1990), p. 66-70. It is fairly common to invoke (as Gros does) the age-old mathematical problem of squaring the circle as latent in Vitruvius' description, but there appears to me to be no contextual justification for this.
[111] See above, Chapter 2, pp. 153-154.

the entire magnitude of the whole."[112] One can only assume that the description that follows is presented as a demonstration of the pertinence of this insistent directive, repeated with almost equal force at the opening of the paragraph immediately following. Given the metaphysical subtext reviewed earlier, the "magnitude of the whole" invokes the whole body of the world; a magnitude which, allowing also the ritual background just discussed, is interchangeably the Roman *orbis* "limited" by the imperial augur at its centre. The compass and the set square – the tools of the architect – make Vitruvius' outstretched man commensurate with these two mutually entailing totalities.

The compass, centred on the man's navel, produces a circular shape by "going around" him. Similarly, a squared layout can be found in his body by measuring his armspan and comparing it to his height, with which it will be found to be equal: "just as in areas that have been squared with a set square."[113] As in a squared "area," whose length is equal to its width, the commensurability of the man's height and armspan is evidence of squar*ing*: metaphysical, ritual, and here explicitly architectural. What exactly does Vitruvius mean by an "area?"

A groundplan (*ichnographia*), he writes in Book I is "the properly related use of compass and ruler that renders how figures are marked out on the grounds of areas."[114] Geometry, without which there are no plans, "teaches the use of straight lines and the compass (particularly important for readily delineating the way buildings are marked out in

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[112] Vitruvius 3.1.3: *Simiiter vero sacrarum aedium membra ad universam totius magnitudinis summam ex partibus singulis convenientissimum debent habere commensus responsum.*
[113] Vitruvius 3.1.3: *quemadmodum areae, quae ad normam sunt quadratae.*
[114] Vitruvius 1.2.2: *Ichnographia est circini regulaeque modice continens usus e qua capiuntur formarum in solis arearum descriptiones.*

areas) as well as the use of set squares, levels and lines."[115] "An area, strictly speaking, is an empty place," wrote the lexicographer Festus.[116] In cities, corroborates the second-century A.D. author Florus, an area is a place without buildings, in the country, a field.[117] Varro links urban "areas" to those places (also *areae*) "where the cut grain-sheaves *arescunt* (dry out) for threshing" which is why, so he says, "clean places (*loca pura*) in the city are called *areae*."[118] Perhaps, Varro continues, altars (*arae*) are so called because they too are clean; or maybe because of the fire (*ardor*) that burns on an altar. An area – the site of some future urban development – is (following Varro) more than just empty. It is *clean*, the way an altar is clean: ritually pure; a "squared" place.

Geometrically, threshing floors – *areae* where grain is separated from chaff – are circular. "Clean" or empty places in cities are squared. Once the walls of a new foundation are laid out, the future city must, writes Vitruvius, be divided up into areas by laying out the streets and lanes.[119] Determining the orientation of these thoroughfares requires the use of a compass and set square to draw the wind rose that is, essentially, a squared circle.[120] Roman foundations were almost invariably rectangular or square. But their division into areas depended upon the initial compass-rendering of the horizon's circularity so as to locate the cardinal points. It is into such always operationally *flat* areas that Vitruvius insinuates his paper-thin imperial man whose replication in the empty places of new Roman cities world-wide is the source of the squared-ness that makes them

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[115] Vitruvius 1.1.4: *Geometria . . . primum ex euthygrammis circini tradit usum, e quo maxime facilius aedificiorum in areis expediuntur descriptiones normarumque et librationum et linearum directiones.*
[116] Festus 11L: *area proprie dicitur locus vacuus.*
[117] Florus, *Digesta*, 50.16.211: *locus . . . sine aedificio in urbe area, rure ager appellatur* (as cited TLL, *area* sv., col. 496.78-79).
[118] Varro *De lingua latina* 5.38.
[119] Vitruvius 1.4.12; 1.6.1; 1.7.1; 2.pref.5.
[120] Vitruvius 1.6.6-8 and 1.6.12-13.

well and truly *augustae*. Which – and this is the crux of Vitruvius' argument – only the agency of compass and set square, only architecture, can bring about.

***Religio***

Crucial though he may be as an index of his author's intentions, Vitruvian man does not introduce *De architectura* as a whole. As it happens, his appearance is even more significantly located: at the beginning of Book 3, the first of the two books Vitruvius devotes to the "sacred dwellings of the immortal gods,"[121] which books in turn are the first two of the three that deal with public building.

Public building has three parts, Vitruvius explains in his first book. The first concerns defence, the second *religio*, and the third convenience.[122] To defence belongs the arrangement of city walls, towers and gates; to convenience, the laying out of harbours, *fora*, porticos, baths, and theatres. To *religio*, writes Vitruvius, belongs the "putting together of the sanctuaries and sacred dwellings of the immortal gods."[123]

Strategically located at the beginning of Vitruvius' account of these "sacred dwellings of the immortal gods," Vitruvian man also, perforce, belongs to *religio*. If he did not, Vitruvius would almost certainly have located him elsewhere. *Religio* is best left untranslated, for "religion" is coloured with many misleading assumptions.[124] About the

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[121] Vitruvius 3.pref.4: *Nunc in tertio de deorum inmortalium aedibus sacris dicam . . .* See also 1.7.2; 2.10.3., 4.pref.1; 4.8.7; 4.9.1; 5.pref.5, where Vitruvius identifies Book 3 in the same way. Cf. Gros, Vitruvius 3 (1990), p. vii.

[122] Vitruvius 1.3.1: *Publicorum autem distributiones sunt tres, e quibus est una defensionis, altera religionis, tertia opportunitatis.*

[123] Vitruvius 1.3.1: . . *religionis deorum inmortalium fanorum aediumque sacrarum conlocatio . . .*

[124] My discussion of Roman religion, draws heavily on the recent assessments of Beard, North and Price 1998 and Feeney 1998. For earlier studies see, among others, Dumézil 1987, Latte 1960, Scheid 1985.

necessity and desirability of separating church (religion) and state (politics), above all, and the corollary that since real religion is untainted by politics, Roman *religio*, which was political through and through, was not really religion at all. The conventional modern western view, shaped principally by the Christian tradition, has religion dependent upon belief, otherworldly in focus, and directed toward personal salvation.[125] A person's "religion," if he or she has one, tends to be measured in terms of sincerity and spiritual commitment. The incommensurability of such impalpable yardsticks with Roman *religio* points less perhaps to a failure of *religio* to qualify as religion than to an inappropriate choice of criteria.

Like many ancient religions, *religio* was entirely worldly.[126] Its worldliness was, to an overwhelming degree, what unleashed the indignant Christian polemic of St. Augustine's *City of God* in the fifth century A.D., and fuelled his imagining of that other, otherworldly city.[127] Passionately partisan (and wholly unconcerned with the balanced assessments favoured by modern scholarship), St. Augustine's unrelenting condemnation might now be viewed as inappropriate. But abstracted from the censure that invariably accompanies it, his *recognition* of *religio's* worldliness remains a perfectly accurate perception. Worldliness – glory, success, wealth, power – was, St. Augustine recognised, very much the point of Roman *religio*, aimed as it was at ensuring that no enterprise was initiated without the gods' approval. What a Roman truly believed or the state of his soul

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[125] On belief: Feeney 1998, pp. 12-46 and especially Price 1984, p.10: " 'Belief' as a religious term is profoundly Christian in its implications: it was forged out of the experience which the Apostles and Saint Paul had of the Risen Lord. The emphasis which 'belief' gives to spiritual commitment has no necessary place in the analysis of other cultures."

[126] ". . . the religions of the Romans, Greeks, Hittite, and Aztecs, . . . remember no founder, seek no converts, and aim not at the salvation of the individual in a future life but at the preservation and growth of the community in this one." Feeney 1998, p. 13, citing Pettazoni 1972, pp. 28-29.

[127] Augustine *City of God* 1.pref. and *passim*.

had very little to do with it. It was what he *did* and, even more importantly, what he was *seen* to do, that counted.[128]

*Religio* was emphatically public. "*Religio* regularly refers to the traditional honours paid to the gods by the state. . . . the focus of the term was on public, communal behaviour toward the gods of the state," in the words of one recent major study.[129] That which is sacred, writes the second century A.D. lexicographer Festus,

*is anything that has been dedicated and consecrated to the gods by the city according to law and custom: a dwelling* (aedes), *an altar, a statue, a place, or money. The Roman pontiffs do not consider any of these things sacred if they are dedicated to a god on account of private* religio.[130]

"Private *religio*," belonged to what the Romans called *superstitio*, an unregulated and therefore suspect perversion of proper, public *religio*, for which *superstitio* supplied something of a defining, if shifting, limit.[131] Often excessive, and following no traditional or officially-sanctioned rules, *superstitio*, far from contributing (as did *religio*) to the well-being of the city, was a threat to its stability. Cicero, tellingly, regularly couples *superstitio* with the practices of old women.[132] Old women were among those least likely to take part in Roman public life and would thus have been incapable of *religio* by

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[128] Succinctly, Dupont 1986, p. 233: *A Rome la religion consiste en pratiques, non en théories.*
[129] Beard, North and Price 1998, I, p. 216, with relevant citations.
[130] Festus 424L: *Gallus Aelius ait sacrum esse, quocumque modo atque instituto civitiatis consecratum sit, sive aedis, sive ara, sive signum, sive locus, sive pecunia, sive aliud, quod dis dedicatum atque consecratum sit: quod autem privatis suae religionis causa aliquid earum rerum deo dedicent, id pontifices Romoanos non existimare sacrum.* Aelius Gallus wrote in the in the early Augustan period. See also Cicero *De domo sua* 127; Gaius *Institutes* 2.6. Cf. Scheid 1985, p. 54.
[131] On *religio superstitio*, Beard, North and Price 1998, pp. 215-244. See also Gordon 1990c, pp. 237-240; Grodzynski 1974; Sachot 1991, Scheid 1985, pp. 129-147. Grodzynski (p. 59) concludes with a useful chronological summary of the changing significations of *superstitio*: in the 3rd century B.C., it had to do with divination; from the 1st century B.C. to the beginning of the 2nd century A.D., with deviation from the national religion; and from the 2nd to the 5th, it referred to other people's bad religion.

definition. By the second century A.D. Christianity, condemned among other transgressions by its brazen novelty, came to be considered the nadir of *superstitiones*.[133] Even Judaism, another *superstitio*, was grudgingly acknowledged to have at least the sanction of antiquity.[134] Augustus, according to Suetonius, "treated with great respect such foreign rites as were ancient and well established, but held the rest in contempt."[135]

"*Religio* honours the gods, *superstitio* wrongs them," wrote Seneca in the late first century A.D.[136] To "wrong" the gods through *superstitio* undercut the community of interest underwritten by Rome's exclusive pact with the gods that sanctioned what Vitruvius and his contemporaries took as her divinely-ordained mission of world-conquest.[137] The divine mind placed Rome at the centre so that she might rule the world, Vitruvius wrote.[138] Vitruvian man – the man at the centre who, as the architect's template, squares the world and makes it whole – is diagrammatic shorthand at once for *religio* itself and for the imperial mission it underwrites. Temples, above all – the "sacred dwellings of the immortal gods" that are the context and the reason for his appearance – signified *religio* as the measurable index and proof of the inseparability of these two sides of the same Roman coin.[139] Separating the spheres of God and Caesar was a Christian

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[132] Cicero *De natura deorum* 2.70, 3.92; *De domo sua* 105; *De divinatione* 1.7; 2.19, 2.125. Cf. Grodzynski 1974, p. 41.
[133] Beard, North and Price 1988, pp. 225-227.
[134] Tacitus *Histories* 5.5. Cf. Beard, North and Price 1998, p. 223.
[135] Suetonius *Divus Augustus* 93.
[136] Seneca *De clementia* 2.5.1: *religio deos colit, superstitio violat*. Cf. Beard, North and Price 1998, p. 216.
[137] See also Brunt 1978, p. 162; Harris 1979, pp. 117-130; Scheid 1985, p. 120; Woolf 1998, p. 48.
[138] Vitruvius 6.1.11: *Ita divina mens civitatem populi Romani egregia temperataque regione conlocavit, uti orbis terrarum imperii potiretur.*
[139] On the signifying power of architecture, Vitruvius 1.1.3, and above, Chapter 1, pp. 98-110.

innovation.[140]

"You will continue to atone for the sins of your ancestors undeservedly, Roman," wrote Horace around 25 B.C.,

*until you have rebuilt the temples and crumbling houses of the gods and the images fouled with black smoke. You rule because you keep yourself lesser than the gods; with them all things begin, to them refers each outcome.*[141]

Horace's was a common lament. Roman piety was, or had been, in a state of appalling decline.[142] It must have been: the political havoc of the civil wars and the near destruction of Rome itself were clear evidence that its gods had not been properly honoured.[143] The clearest evidence of all was the sorry state of Roman temples.[144] That less attention was in fact paid to the building and repair of temples during the late Republic than in earlier times is perhaps questionable,[145] but the "crumbling houses of the gods" were not just the impious foreground poets and orators projected against the ostensible piety of bygone days. Decaying temples, real or imagined, in turn and even more importantly, supplied essential rhetorical background for the shining new ones built

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[140] Beard, North and Price 1998, p. 359: ". . . the opposition implied between religion and politics is an inappropriate model for thinking about Roman religion. It is hard now to appreciate that Jesus' claim in the Gospels (Matthew 22.15-22; Mark 12.13-17; Luke 20.20-6) that one should give unto Caesar that which is Caesar's and give unto God that which is God's was, in the context of the first century A.D., utterly startling."

[141] Horace *Odes* 3.6.1-6: *Delicta maiorum immeritus lues, Romane, donec templa refeceris aedesque labentes deorum et foeda nigro simulacra fumo. Dis te minorem quod geris, imperas: hinc omne principium; huc refer exitum.* The translation follows Galinsky 1996, pp. 290-291. See also Gros 1976a, (p. 25, and n. 81) who supports a date of 28 or 27 B.C.

[142] Decay of religion: Cicero *De legibus* 2.33; *De natura deorum* 2.7, 2.9; *De divinatione* 1.25, 1.27-28; 2.71; Dionysius of Halicarnassus *Antiquitates romanae* 2.62; Pliny *Natural History* 10.20. Cf. Beard 1994; Galinsky 1996, p. 422..

[143] Horace in the Ode just cited (3.6), as well as in his other Roman Odes, frequently points to the failure of *religio* as the reason for Rome's recent near collapse. Cf. Gros 1976a, p. 25.

[144] Decay of temples: Cicero *De natura deorum* 1.82; Livy 4.20.7; Propertius *Elegies* 2.6.35-36; 3.13.47; Tacitus *Annales* 2.49.1. Cf. Gros 1976a, p. 21.

[145] Beard, North and Price 1998, pp. 120-125; Zanker 1988, pp. 65-71.

during the Augustan principate.

As long as temples were left to moulder, there would be no renewal of Rome's ruptured pact with the gods, Horace infers, nor any ratification of Roman power: "you rule because you keep yourself lesser than the gods." Of all the manifold ritual signs through which Romans communicated with their gods and the gods with them,[146] the visibility, permanence and incontestable *factuality* of temples made them pre-eminent in the exchange of signs that secured *religio*. In the Ode just cited, Horace does not point to sloppily-performed rituals as evidence that normal channels of communication with the gods have broken down. He points to decaying temples.

When Augustus triumphs in Book 8 of the *Aeneid*, Virgil makes the event concurrent with the consecration of "three hundred mighty shrines throughout the city."[147] Utterly faithful to the economy of *religio*, Virgil projects Augustus's "immortal gift" of three hundred temples to the gods and the divine approval signalled by the triumph itself as indissociable. His exaggerated number of temples at once compels appreciation of the magnitude of the triumph (losers built no temples) and dispels any doubt as to who, thus exceptionally favoured by the gods, now controls access to them. The man who, as Horace wrote in another earlier Ode, in the guise of Mercury, winged messenger god of right relations, would repair the ruptured channels of communication between gods and men to which recent civil discord had testified.[148] The custodian of the augural *lituus* on

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[146] Beard, North and Price 1998, pp. 31-41. "Roman writers represent communication between men and gods primarily through the medium of ritualized exchange and interpretation of signs – not through intervention, inspiration or incubation" (p. 31). See also Scheid 1985, pp. 51-55 and 1986, and above, Chapter 1, pp. 100-101.

[147] Virgil *Aeneid* 8.714-716: *at Caesar, triplici invectus Romana triumpho moenia, dis Italis votum immortale sacrabat maxima ter centum totam delubra per urbem.*

[148] Horace *Odes* 1.2. See above, Chapter 1, pp. 90-92. Cf. Bickerman 1961; Farnoux 1981, pp. 486-500; Nisbet and Hubbard 1970, pp. 34-36.

the Palatine and chief holder of the augural function that kept those channels open.[149] The builder of the Temple of Divus Julius in the Forum Romanum – west-facing showcase for Caesar's statue, clad in priestly robes, holding up a *lituus* – that located that augural function in the most public of Rome's public places, allied it with the order of nature and made it Augustus's, the temple-builder's legitimate inheritance.[150] The person rendered diagramatically memorable in Vitruvian man.

Livy, writing at about the same time as Vitruvius, names Augustus as "the restorer and founder of all our temples."[151] All temples, writes Ovid of Augustus a decade or so later,

*would have fallen into complete ruins, without the far seeing care of our sacred leader, under whom the shrines feel not the touch of age; and not content with doing favours to humankind he does them to the gods. O holy one, builder and rebuilder of temples, I pray the powers above may take such care of you as you of them.*[152]

The hyperbole of the "three hundred mighty shrines" Virgil prophesies in the *Aeneid*, and that of Ovid's address to their "builder and rebuilder" in the *Fasti* are poetic enhancement of what was indeed an intensive period of temple-building of which Augustus, from 33 B.C., assumed sole charge, at least in the city of Rome.[153] Augustus himself lays particular stress on this in the central, architectural paragraphs of his

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[149] Above, pp. 198-200.
[150] Above, pp. 206-209.
[151] Livy *Ab urbe condita* 4.20.7: *templorum omnium restitutorem ac conditorem*. Cf. Edwards 1996, p. 49.
[152] Ovid *Fasti* 2.59-64. *Cetera ne simili caderent labefacta ruina, cavit sacrati provida cura ducis, sub quo delubris sentitur nulla senectus; nec satis est homines, obligat ille deos. templorum positor, templorum sancte repostor, sit superis, opto, mutua cura tui.* The translation, with minor emendations, follows Beard, North and Price 1998 I, p. 197 (Price 1996, p. 831).
[153] On Augustan temples in Rome, Beard, North and Price 1998 I, pp. 196-201; Gros 1976a; Purcell 1996; Zanker 1988, pp. 65-71, 102-118, 135-56.

autobiography, listing thirteen new temples, and claiming eighty-two restorations in his sixth consulship of 28 B.C. alone.[154] His monopoly on temple-building was complemented by the exclusivity of his right to triumph and his gradual appropriation of all the major Roman priesthoods, culminating with that of *pontifex maximus* to which he was finally elected in 12 B.C.[155]

The person of the first emperor was central to all aspects of Roman religious life. This undisputed fact is less usefully interpreted as a reprehensible case of a master politician manipulating popular piety to his own ruthless ends than understood on its own terms and in its own Roman context: a context where political manipulation of religion was, strictly speaking, a logical impossibility. The notion of manipulation assumes, on the one hand, an unbelieving political manipulator and, on the other, a credulous populace innocently available for manipulation. It assumes two distinct and separate things: politics and religion. But as already discussed, the two were not separate; the one (political) hand and the other (religious) one were, so to speak, the same ruling hand, and it is not only logically but also anatomically impossible for a hand to manipulate itself. And belief, as pointed out earlier, was not an issue. Those who held political power controlled access to the gods; those who controlled access to the gods, held political power. It was ever thus. And rightly so, insisted Cicero.

*Among the many things . . . that our ancestors created and established under divine inspiration, nothing is more renowned than their decision to entrust the worship of*

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[154] Augustus *Res gestae* 19-21. See also Suetonius *Divus Augustus* 29; Elsner 1996.

[155] Accumulation of priesthoods: Beard, North and Price 1998 I, pp. 186-189. Augustus waited to seek election for the position of *pontifex maximus* until Lepidus, his former fellow triumvir who had held it since 44 B.C., died in 13 B.C. See Augustus *Res gestae* 10.2 on the universal enthusiasm with which he says he was elected.

*the gods and the highest interests of the state to the same men – so that the most eminent and illustrious citizens might ensure the maintenance of religion by the proper administration of the state and the maintenance of the state by the prudent interpretation of religion.*[156]

In the thirty or so years that elapsed between 57 B.C. when Cicero delivered the speech that opens with the solemn words just cited, and the early Augustan principate when Vitruvius (and Horace, and Virgil) were writing, the situation had changed. Not the fundamental principle that made Rome's *religio* political and its politics "religious" – that power depended on knowing how to access to gods and vice versa. This remained the same, and was recognised as being so even after the advent of Christianity, years after St. Augustine tried to discredit the notion.[157] What changed with the fall of the Republic and the rise of Augustus was the *localisation* of that power.

In the Republic, both magistracies and priesthoods were loosely distributed, usually for limited periods, among various, changing members of the ruling aristocracy.[158] Different people at different times celebrated triumphs and dedicated the temples that left permanent traces of those celebrations in the urban landscape.[159] The mediating power that Mary Beard has called the defining function of priesthood belonged, paradoxically,

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[156] Cicero *De domo sua* 1: *Cum multa divinitus . . . a maioribus nostris inventa atque instituta sunt, tum nihil praeclarius quam quod eosdem et religionibus deorum immortalium et summae rei publicae praeesse voluerunt, ut amplissimi et clarissimi cives rem publicam bene gerendo religiones, religiones sapienter interpretando rem publicam conservarent.* The translation follows Beard, North and Price 1998 I, p. 115. For additional evidence, see pp. 115-117. See also Beard 1994, pp. 729-734.

[157] Gelasius (Bishop of Rome at the end of the fifth century A.D.) *Letter against the Lupercalia* 16 as cited Beard, North and Price 1998 I, p. ix.

[158] Beard 1990, 1994.

[159] As, for example, the Temple of Hercules Musarum discussed in the previous chapter (above, pp. 142-143).

not to priests but to the body of about 300 men who made up the Roman Senate.[160] Augustus did not abolish the Senate nor does he appear to have substantially altered other traditional republican political structures, claiming with some degree of justification in his autobiography that he *restored* the republic and that after that time (27 B.C., when he was given his symbol-laden new name) he "excelled all in *auctoritas*, although (he) possessed no more power (*potestas*) than others who were (his) colleagues in the several magistracies."[161] What did change, and changed irrevocably, was the localisation of the mediating power that secured *religio* by channelling access to the gods through Augustus and through no one else.[162] Given the economy of *religio*, the exclusivity of his mediating position was what empowered Augustus, excelling all in *auctoritas*, to reign as de-facto monarch in an ostensibly restored republic where he nevertheless remained, as he claims, the equal of his colleagues.

The signs were evident in the city of Rome right from the beginning. In the Temple of Divus Julius in the Forum Romanum dedicated in 29 B.C., for instance, and in the Temple of Apollo on the Palatine, dedicated a year later.[163] And not just in the new temples. When Augustus restored the monuments of his predecessors, he often had the temples' dedication days (*dies natales* – "birthdays" subsequently celebrated as anniversaries) altered from their original ones to ones that referred to himself. The birthdays of no fewer than six restorations in and around the Circus Flaminius, a site traditionally linked to the celebration of triumphs, are known to have been changed to

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[160] Beard 1990, p. 31; 1994, pp. 731-732.

[161] Augustus *Res gestae* 34.3: *Post id tempus auctoritate praestiti, potestatis autem nihilo amplius habui quam ceteri qui mihi quoque in magistratu conlege fuerunt* (Brunt and Moore, trans.).

[162] Beard 1990, p. 48: "Official religious authority had for the first time a single human face." Beard, North and Price 1998 I, pp. 182-210; Gordon 1990a, b, c; Price 1996; Scheid 1993; Speyer 1984.

September 23rd, Augustus's own birthday.[164] In the years that followed, every year on the same day in September, the concurrent celebration of these six temples' birth would also have celebrated their restorer's, fusing the identity of the temples and their rebuilder and simultaneously obviating any connection with the temples' original dedicators.

Augustus also devoted considerable attention to the Capitol. In the late thirties B.C., allying himself with Rome's founder from the outset, he first restored the tiny, ancient Temple of Jupiter Feretrius, allegedly the first of all Roman temples which Romulus, it was said, dedicated to receive the *spolia opima* – the armour he stripped from the enemy king he had killed in single combat.[165] Augustus also restored the Temple of Jupiter Capitolinus, which Tacitus later called the "guarantee of empire," greatest and most visible of all the signs of Rome's alliance with the gods.[166] Although this restoration was carried out "at great expense," Augustus did not, he points out, inscribe his name on it.[167] Rome's collective pact with the gods was not Augustus's personal one. He was its mediator. He guaranteed the guarantee. Jupiter himself had given him a sign.

"On his Cantabrian expedition (26-25 B.C.) during a march by night," writes Suetonius, "a flash of lightning grazed his litter and struck the slave dead who was

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[163] Above, pp. 206-209 (Divus Julius) and 195-196 (Temple of Apollo Palatinus).

[164] Gros 1976a, pp. 31-35. The Circus Flaminius was where the spoils of war were displayed on the days preceding the triumphs that set out from there.

[165] Livy 1.10.4-7; 4.20.3-7; Dionysius of Halicarnassus *Antiquitates romanae* 2.34.4. Augustus *Res gestae* 19; Cf. *LTUR*, s.v. Iuppiter Feretrius, Aedes; Richardson 1992, s.v. Iuppiter Feretrius, Aedes. According Cornelius Nepos, who wrote in the early years of Augustus's reign, the restoration of the temple, which lacked a roof and was collapsing from age, was carried out at the urging of Cicero's (and Augustus's) learned friend Atticus (Nepos *Atticus* 20.3), and therefore must have taken place before Atticus's death in 32 B.C. Cf. Gagé 1930, pp. 141-142; Gros 1976a, p. 26.

[166] Tacitus *Historiae* 3.72: *pignus imperii*. Cf. Edwards 1996, p. 80 and above, Chapter 1, p. 36; Chapter 2, pp. 172-178.

[167] Augustus *Res gestae* 20: *Capitolium et Pompeium theatrum utrumque opus impensa grandi refeci sine ulla inscriptione nominis mei*. Of course the assertion itself was publicly posted as part of the testament inscribed on the two bronze pillars set up in front of Augustus's mausoleum, and in other parts of the Roman empire as well: above, Chapter 1, p. 115, n. 408; below, Chapter 4, p. 317.

carrying a torch before him."[168] There was more to this than a terrifying close call for a man who was inordinately fearful of lightning.[169] Lightning was among the most portentous – certainly the most dramatically direct – of the many celestial signs on whose proper interpretation good government depended. An entire department of the Etruscan science of divination was devoted to its exegesis, with instructions recorded in the *libri fulgurales* (lightning books) which served as a guide for the interpreters.[170] Lightning came of course from Jupiter, and was usually a sign of divine favour. If it struck a prince or a king without killing him, he would have illustrious descendants.[171] It promised unhoped-for honours to the powerful.[172] When, at the time of Rome's foundation, Romulus took the auspices to determine whether Jupiter approved of his being king of the new city, the affirmative reply was conveyed in a flash of lightning.[173]

Some years before Augustus's Cantabrian campaign and the event just described, lightning had struck a part of his house on the Palatine indicating, according to the soothsayers, Apollo's desire for a temple there.[174] Much earlier, before he was born, Augustus's world rule (so it was said) had been foretold when a lightning bolt struck the walls of Velitrae, his birthplace.[175] In Cantabria lightning all but struck Augustus himself.

The sign received due acknowledgement. A temple was vowed, built

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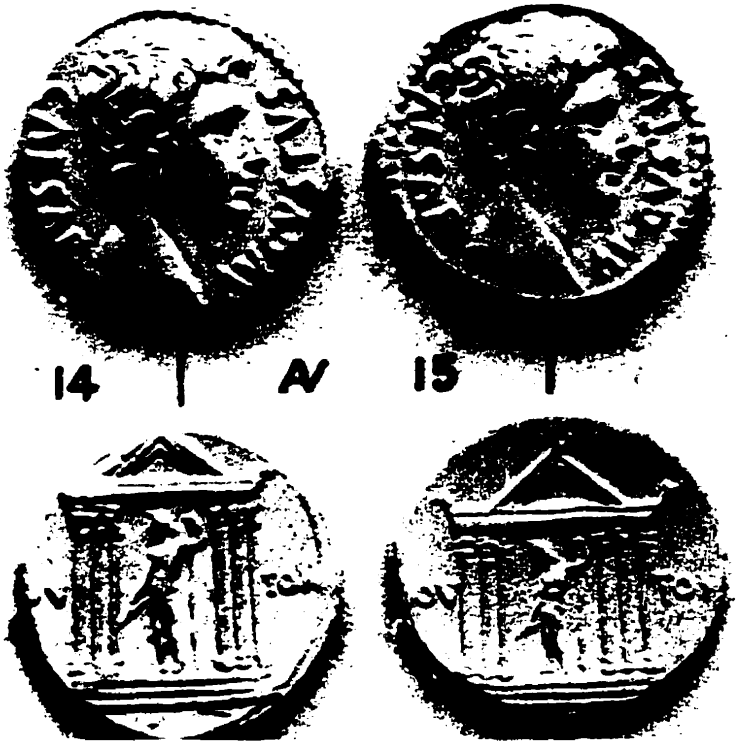
[168] Suetonius *Divus Augustus* 29.3. Cantabria was in northwestern Spain.
[169] Suetonius *Divus Augustus* 90. Since seals, allegedly, were never struck by lightning, (Pliny *Natural History* 2.55), Augustus carried a sealskin with him at all times as protection.
[170] Seneca *Natural Questions* 2.31-41, 47-51; Pliny *Natural History* 2.137-146. The texts both use Cicero's contemporary Caecina as a source and correspond on most major points. Cf. Dumézil 1987, pp. 624-635; Latte 1960, pp. 159-160; Thulin 1905 I; Weinstock 1951.
[171] Servius *Ad Aeneidem* 2.649. Cf. Dumézil 1987, p. 625.
[172] Festus 389L. Cf. Dumézil 1987, p. 625.
[173] Dionysius of Halicarnassus *Antiquitates romanae* 2.5.1.
[174] Suetonius *Divus Augustus* 29.3.
[175] Suetonius *Divus Augustus* 94.2: "In ancient days when a part of the wall of Velitrae had been struck by lightning, the prediction was made a citizen of that town would one day rule the world."

Fig. 26




Aureus and denarius of Augustus, ca. 17 B.C. Spanish mint. Obverse: head of Augustus; reverse: hexastyle Corinthian temple of Jupiter Tonans, with cult statue of Jupiter. Mattingly 1923, I #'s 362, 363; pl. 7.14-15.

(exceptionally, like the Temple of Apollo – another temple born as it were of a thunderbolt and intimately connected with the *princeps'* own person) of solid marble in *opus quadratum*, and dedicated four years later in 22 B.C.[176] This, the hexastyle Corinthian Temple of Jupiter Tonans (the Thunderer), was sited on the south-eastern brow of the Capitoline at the entrance to the *area Capitolina* (Fig. 26).[177] When people climbed to the Capitol, it was the first temple they encountered, before reaching the Temple of Jupiter Capitolinus. It was much frequented, especially by Augustus himself, but also by the general populace.[178] Suetonius says that Jupiter Capitolinus, thus relegated to second place, visited Augustus in a dream to complain about the loss of popularity. To this Augustus is reported to have replied that he had placed the Thunderer there to act as Jupiter Capitolinus' doorkeeper (*pro ianitore*) and afterwards hung bells, like those hung in doorways, on the temple pediment as confirmation.[179]

Augustus's dream is eloquent on the new politico-religious order. But far more eloquent in its day was the primary architectural *fact* that the dream elucidates. Of the dream one might justifiably ask if Augustus ever really had it, or if he did, was it really Jupiter speaking to him and so on. The temple itself – solid marble sign of a life spared, divinely favoured, and permanently anchored with squared stones at the point of access to the *area Capitolina* – was not open to this kind of sceptical questioning. It was

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[176] Solid marble Temple of Apollo: Virgil *Aeneid* 6.69 and Servius *Ad Aeneidem* 8.720; *Opus quadratum* Temple of Jupiter Tonans: Pliny *Natural History* 36.50. Cf. Gros 1976a pp. 73-74, 100.

[177] Hexastyle Corinthian: the reverse types of a number of Augustan coins (both *aurei* and *denarii*) minted around 19 B.C. show the temple with a cult statue of Jupiter, naked, holding a thunderbolt in his left hand and a sceptre in his right, and bearing, variously, the stamp IOV. TON. or IOVIS TONANTIS. The obverse type is a head of Augustus. Mattingly 1923 I, nos. 362-365, pl. 7.14, 15; Sutherland and Carson eds. 1984 I, nos. 59, 63-67, pl. 2. See also *LTUR* and Richardson 1992, s.v. Iuppiter Tonans.

[178] Suetonius *Divus Augustus* 91.2.

[179] Suetonius *Divus Augustus* 91.2; Dio Cassius 54.4.2. Dio, whose account is later, varies the story slightly, saying that there was a bell in the hand of the cult statue, not on the temple itself.

incontrovertibly *there*, and whether or not Augustus really dreamed the dream in question or, for that matter, was really almost struck dead in Cantabria, altered the temple's signified matter not one iota. Indeed the temple, in a sense, *made* the story true, for if it were not true, why would the temple have been built? In the experience of any Roman who climbed to the Capitol after 22 B.C., the Temple of Jupiter Tonans was, literally, the gateway to the precinct of Rome's chief deity where it occupied the mediating position between Romans and their "guarantee of empire." This, with the advent of the principate, was Augustus's own mediating position. But in the absence of architectural signifiers – that is to say, without this and other temples – his "gateway" position had no spatial reality, no palpable truth.[180] Without temples (paradigmatically, the Temple of Jupiter Tonans), Augustus *had*, in the strictest spatial sense of the term, no mediating position.

Vitruvius, along with Horace and Virgil (and of course the man for whom they all wrote), fully realised the degree to which temples were crucial in the new world order. Unlike Virgil, Horace and Augustus, however, Vitruvius was an architect. More than to stress the importance of temples and to praise their builder, his task was to set forth the principles governing how they were to be put together.

The centrality of temples in the climate of the early principate is mirrored in the weight (two out of ten books) and central importance Vitruvius gives them in *De*

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[180] The focus of this study, as I have repeatedly insisted, is the Augustan Vitruvius but it is nevertheless worth noting that a number of scholars dealing with later Vitruvii have shown that in the 15th century, for instance, Vitruvian man in his mediating capacity was given an overtly Christological exegesis (Sgarbi 1993, Tavernor in George Dodds and Robert Tavernor, eds., *Body and Building* (M.I.T. Press, forthcoming). Augustus's "gateway" position also (inevitably for a Christian) resonates with that of Jesus: "I am the gate. Anyone who enters through me will be safe: such a one will go in and out, and will find pasture (John 10.9)." Curiously enough, this verse was inscribed in Greek on the lintel of the high central imperial door in the inner narthex of Justinian's Hagia Sophia in the 6th century A.D., where it gave this, the door through which the emperor entered the great church, an architectural role that virtually duplicated the one played by the Temple of Jupiter Tonans in Augustan Rome.

*architectura*.[181] The previous chapters of this present study show that Vitruvius argued with rather greater subtlety than modern critics usually credit him with, and that both the manner and the matter of his argument are deeply coloured by the culture and context of their formulation. In this context, Vitruvius' alliance of architecture with *humanitas* in *De architectura*'s "Herculean" body made it concurrently the benchmark of civilisation, the means of conquest (Book 10) and the measurable index of Roman world-dominion.[182] Similarly, allowing the importance of the cultural matrix and the central role of *religio* in it, it is unlikely that Vitruvius' presentation of the principles governing temple-construction should themselves bear no relation to how temples performed in the space and climate of early imperial Rome. It is unlikely, in other words, that Vitruvius, a Roman writing at Rome for Rome's new ruler in ca. 25 B.C., should simply have acted as a not very sophisticated, neutral channel for outdated principles of Greek temple-building which appear in any case to have been neither correctly transmitted nor, as scholars have often pointed out, in fact applied.[183] Fundamental among these principles is the principle of *symmetria*, a notion so Greek (it would seem) that, as Pliny pointed out, the Romans did not even have a word for it.[184]

"The putting together of temples depends on symmetry," Vitruvius begins the first chapter of Book 3.

*Architects must grasp this principle thoroughly. It is produced from proportion,*

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[181] See Gros 1976a, pp. 15-52.
[182] See Chapter 2, above.
[183] Incorrect transmission: Coulton 1989; Wesenberg 1983, among others; not applied: Perrault 1683 onwards. Recently, Wilson Jones 1989 and Wilson Jones 2000.
[184] Pliny *Natural History* 34.65. The Latin *symmetria* is a transliteration of the Greek word. Pollitt, (1974, pp. 256-258) who catalogues far more citations from Vitruvius than from anyone else but includes the term in his Greek (not Latin) lexicon, assumes that all the authors he cites are referring to single, more or less constant, principle of ancient Greek aesthetics.

*which is called* analogia *in Greek. Proportion is the correspondence of members to one other and to the whole, within each work, measured by means of a fixed part: that is how symmetries are calculated. No temple can be coherently constructed unless it has symmetry and proportion. Unless the way it is put together conforms exactly to the principle relating the members of a well-shaped man* (hominis bene figurati).[185]

For Vitruvius, symmetry is the condition of coherence. It is the result of calculated relationships or proportions which, through measured correspondence (*commodulatio*) based on a fixed part (*rata pars*), bind each member of a work at once to every other member and to its overall configuration.[186] This general principle, initially introduced in the first book,[187] is of particular – apparently crucial – importance in the case of temples, judging from Vitruvius' obsessive insistence on it in the first chapter of Book 3, where he drives the point home in no fewer than four of the chapter's nine constitutive paragraphs.[188]

Coherence, as discussed in Chapter 1, is the primary requirement and defining characteristic of bodies. Of all bodies, from that of the cosmos and the Roman world, to that of building materials and the "perfect body" of *De architectura*, but especially of the man's body that is their common ground and universal, if not always entirely explicit, chief

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[185] Vitruvius 3.1.1: *Aedium compositio constat ex symmetria, cuius rationem diligentissime architecti tenere debent. Ea autem paritur a proportione, quae graece* analogia *dicitur. Proportio est ratae partis membrorum in omni opere totoque commodulatio, ex qua ratio efficitur symmetriarum. Namque non potest aedis ulla sine symmetria atque proportione rationem habere compositionis, nisi uti ad hominis bene figurati membrorum habuerit exactam rationem.*

[186] The principle is that of modular construction, as it is usually called today. It does not in fact appear to have been the method Greek and Roman architects used when they designed their buildings (Coulton 1989; Wilson Jones 1989, 2000).

[187] Vitruvius 1.2.2; 1.2.4 (cited below).

[188] Vitruvius 3.1.1; 3.1.3; 3.1.4; 3.1.9; cf. Gros, Vitruvius 3 (1990), pp. 57-61 and 65-66.

referent.[189] The binding agent of coherence, the glue of bodies as it were, is their *ratio*: the principle or calculation that governs how they are put together.[190] The man who is Vitruvius' referent for the symmetry on which he says the putting together of temples depends is particularly coherent – more of a body than most – thanks to the particularly concentrated degree of *ratio* present in the "canonic" proportions, which Vitruvius details (3.1.2) and which are usually taken to be based on the lost canon of the fifth-century B.C. Greek sculptor Polykleitos.[191] It is by imitating these proportions that painters and sculptors of ancient times won everlasting fame, Vitruvius says. The canon of Polykleitos had two complementary iterations: a written work and a statue that confirmed the "*logos*" of the text; a statue, according to Galen, that was also called "canon."[192] But Vitruvius is not referring to a statue. He is referring to a man – one who is well-shaped (*bene figuratus*). "Likewise," he continues, "the members of sacred dwellings ought to have a commensurability (*commensus*) that corresponds completely, in every detail and with

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[189] Vitruvius 3.1.1. (cited above); also 1.2.4: Likewise symmetry is the fitting concord between members of the work to each other and the correspondence of individual elements to the form of the whole figure by means of a fixed part. Just as in a man's body the symmetrical quality of eurythmy is achieved from the cubit, foot, palm, finger and other small parts, so too in works that have been brought to completion. *Item symmetria est ex ipsius operis membris conveniens consensus ex partibusque separatis ad universae figurae speciem ratae partis responsus. Uti in hominis corpore e cubito, pede, palmo, digito ceterisque particulis symmetros est eurythmiae qualitas, sic est in operum perfectionibus.*

[190] See above, Chapter 1, pp. 70-81.

[191] The literature on Polykleitos is vast. Among recent works, two collections of essays, Moon, ed., 1995 and *Polyklet* 1990 (exhibition catalogue), with references. Link with Vitruvius: Gros, Vitruvius 3 (1990), pp. 61-65; Raven 1951; Rykwert 1996, pp. 97-110. Gros suggests that that the Hellenistic sculptor Lysippus might also have been a source. See further below, Chapter 4, pp. 300-301.

[192] Galen *De placitis Hippocratis et Platonis* 5.3.15-16. Galen here reports Chrysippus' view that beauty lies in the "symmetry of . . . members (of the body), of finger to finger, obviously, and of all the fingers to the palm and wrist and of these to the forearm and the forearm to the arm and of every part to the whole, *as it is written in the Kanon of Polykleitos*" (my emphasis): *daktylou pros daktylon dêlonoti kai sympantôn autôn pros te metakarpion kai karpon kai toutôn pros pêchyn kai pêcheôs pros brachiona kai pantôn pros pantae*. The translation is Phillip de Lacy's. Cf. Galen *De temperamentis* 1.566 (Stewart 1978a, p. 125) and Pollitt 1974, pp. 14-15. The relationship of body parts to each other and to the configuration of the whole, said here to have been itemized in Polykleitos' Canon, is so close to Vitruvius' presentation of the principle of architectural symmetry that a Polykleitan source for the latter is more than probable.

perfect fitness to the entire magnitude of he whole."[193] There follows the paragraph on Vitruvian man already discussed, which is presented as geometrical proof of the coherence conferred by symmetry. For it goes without saying that Vitruvian man and the well-shaped man of canonic proportions are one and the same. Only a perfectly coherent body, shaped by symmetry, can be made to produce the circle and the square. And only such an ideally circumscribable man can, as the architect's template, carry coherence with him wherever he goes, so to speak: at Rome, sole mediator of divine will and, beyond it, universal model for the order on which the Roman world's own coherence depended.

Taken historically, Vitruvius' insistence on the identity of temple and man, whose defining condition is their mutual dependence on being "put together" symmetrically, is to be understood in this light. To what degree Vitruvius' lost sources made the precise identification of man and temple that Joseph Rykwert has defended as an anthropological constant is at least debatable.[194] In fact, Vitruvius does not report that the "ancients" made the identification at all. The way he puts it (twice), it is *because* a man's body is symmetrical that architects should follow ancient precepts about symmetrical building. In other words, Vitruvius introduces the man as the reason for following those precepts, not as part of the inherited tradition itself.[195] But even if Vitruvius was following precedent on

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[193] Vitruvius 3.1.3: *Similiter vero sacrarum aedium membra ad universam totius magnitudinis summam ex partibus singulis convenientissimum debent habere commensus responsum.*

[194] Rykwert 1996, *passim*..

[195] Vitruvius 3.1.4: Therefore if nature put together a man's body so that its members in their proportions correspond to the whole figure, the ancients were clearly right to decide that in works that have been brought to completion, the individual members should have an exact correspondence to the overall configuration. *Ergo si ita natura composuit corpus hominis, uti proportionibus membra ad summam figurationem eius respondeant, cum causa constituisse videntur antiqui ut etiam in operum perfctionibus singulorum membrorum ad universam figurae speciem heabeant commensus exactionem.* 3.1.9: Therefore if we agree that number is derived from the articulations of a man's body and that there is a fixed relation between the individual parts of his body and its overall configuration, it follows that we should esteem those who, in building the temples of the immortal gods, calculated their divisions so that,

the matter, the precedent, like so many Greek precedents, took on specifically Roman meaning through its incorporation into the Roman context.[196]

When Vitruvius completed his treatise, every single new temple in Rome was being built by the same man; a man who, in their absence, would have had no *real* position in the public places that were the spatial condition of *religio*, and who, consequently, would have had no *real* position in the new politico-religious order. A man, Augustus, whose countless portraits invariably presented him as particularly "well-shaped," which Suetonius reports he was.[197] "Birthdays" identical with that of their rebuilder were, in many cases, assigned to the temples Augustus restored.[198] When new temples appeared on the reverses of coins, his exquisite profile was, inseparably, their obverse type.[199] "*Quis locus est templis augustior?*" asks Ovid rhetorically, punning on Augustus's name: "what place is more august (or 'more Augustus') than temples?"[200] The identity of well-shaped man and temple – of Augustus and temple – was a given in Augustan Rome. Book 3, chapter 1 of *De architectura* is its theoretical ground. No Augustan reader of Vitruvius, certainly not his dedicatee, could have failed to be struck by the inescapable convergence of this given with the theory that showed it to be natural, universal and necessary.

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in proportion and symmetry, their individual members and the whole are in concord. *Ergo si convenit ex articulis hominis numerum inventum esse, etex membris separatis ad universam corporis speicim ratae partis commensus fieri responsum, reliquitur ut suspiciamus eos qui etiam aedes deorum inmortalium constitutentes ita membra operum ordinaverunt ut proportionibus et symmetriis separatae atque universae convenientes efficerentur eorum distributiones.*

[196] Cicero's *Laws*, for instance, is modeled on Plato's but their substance is entirely Roman.

[197] Suetonius *Divus Augustus* 79.1-2: His appearance was unusually handsome and exceedingly graceful (*forma fuit eximia et . . . venustissima*) at all periods of his life . . . . He was short of stature . . . but this was concealed by the fine proportion and symmetry of his figure (*commoditate et aequitate membrorum*).

[198] Above, pp. 222-223.

[199] As, for example, the coins with the Temple of Jupiter Tonans on them: Mattingly 1923 I, nos. 362-365, pl. 7.14, 15; Sutherland and Carson eds. 1984 I, nos. 59, 63-67, pl. 2 (above, p. 224a).

**Venus, *venustas***

It is not enough, for Vitruvius, that the bodies of temples *be* symmetrical and therefore coherent like the body of the man who is their model. Like their model who is "well-shaped," they must *appear* to be so. The built analogue for a man's well-shapedness, the *appearance* of symmetry, is what Vitruvius calls eurythmy: "the beautiful appearance (*venusta species*) and fitting aspect (*commodus aspectus*) of the parts once they have been put together;"[201] the utterly convincing, *visible* coherence of form that the architect must strive for by adjusting or "tempering" proportions so as to flatter the eye of the beholder.[202]

The emphasis here is on the relation between the built work and its public. In this, Vitruvius' stipulation of eurythmy as one of the things on which architecture "depends" once more allies his discipline to the art of the orator, whose reasoned speech is the bond of civil society.[203] But *ratio* alone has no power of persuation. In order to bring people together "into one place" a speech's *ratio* must be heard – and a built work's *ratio* (its *symmetria*), seen.[204] "It is in calming or kindling the minds of those who hear that the full

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[201] Ovid *Tristia* 2.287; cf. Edwards 1996, p. 24.
[202] Vitruvius 1.2.3: *Eurythmia est venusta species commodusque in compositionibus membrorum aspectus.* On eurythmy (*eurhythmia*, in Greek – literally, "well-shapedness"), Bek 1985; Pollitt 1974, pp. 169-181 and above, Chapter 1, pp. 87-88.
[203] Vitruvius 3.3.13: *Venustates enim persequitur visus, cuius si non blandimur voluptati proportione et modulorum adienctionibus uti quod fallitur temperatione adaugeatur, vastus et invenustus conspicientibus remittetur aspectus.* 6.2.5: . . . *cuius semel constituta fuerit magnitudo, sequatur eam proportionis ad decorum apparatio, uti non sit consideratibus aspectus eurythmiae dubius.* See also 6.3.11. On "tempering" and its relation to symmetry, above, Chapter 1, pp. 88.
[203] Vitruvius 1.2.1: *Architectura autem constat ex ordinatione . . . et ex dispositione . . . et eurythmia et symmetria et decore et distributione . . .* Rhetoric and *De architectura*: André 1987; Brown 1963; Callebat 1994; Gros 1989a, pp. 13-15; Novara 1983, pp. 287-290; Romano 1987, pp. 57-59, 68-75, and above, Chapter 2, pp. 169-181.
[204] *In unum locum*: Cicero *De inventione* 1.2, *De oratore* 1.33; Vitruvius 2.1.2 and above Chapter 2, pp. 169-172.

power and *ratio* of speaking are disclosed," wrote Cicero.[205] The ultimate proof of an orator's worth, he says elsehwere, is his *effect* on his audience: the degree to which his listeners are instructed, or given pleasure or their emotions stirred.[206] Plutarch, explicitly, makes *eurhythmia* the accord between the speaker and the hearer of a discourse, reminding one of the gold and amber chains that, in Lucian's story, tied the tongue of the Gallic Hercules to the ears of his willing followers.[207] It is the recognition of "well-shapedness" (*eurhythmia* in its literal sense) which vehicles the *ratio* of a speech and makes it persuasive that binds speaker to listener in the arena where built works, through analogous means, are to carry the same force of conviction.[208]

Eurythmy, *venusta species*, is the ultimate aim of symmetry in building. It is a quality, not a quantity.[209] In the end immeasurable, it outweighs quantitative, calculated symmetries as a guiding principle. As discussed in Chapter 1, qualities were understood as the condition for the appearance of bodies in the world.[210] Thus, unless they had qualitative visibility in *venustas* (beauty), symmetries had no earthly use in the public sphere where built works – the temples that belonged to *religio*, above all – operated.

When executing the works of architecture, writes Vitruvius in the most frequently-cited phrase of his entire treatise, you must take three things into account: *firmitas*

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[205] Cicero *De oratore* 1.17: *omnis vis ratioque dicendi in eorum, qui audiunt, mentibus, aut sedandis, aut exitandis expromenanda est.* Similarly Aristotle: "A statement (*logos*) is persuasive . . . because there is someone whom it persuades" (*Rhetoric* 1356b27-28).

[206] Cicero *Brutus* 185: *qualis vero sit orator ex eo quod is dicendo efficiet poterit intellegi . . . ut doceatur is apud quem dicetur, ut delectetur, ut moveatur vehementius.* Cf. Struever 1998, p. 151: "The connection of rhetoric and *aisthèsis* (sensation) is originary and strong."

[207] Plutarch *On Listening to Lectures*, *Moralia* 45 E. Cf. Callebat 1994, p. 40; Fleury, Vitruvius I (1990), pp. 112. Lucian *Heracles* (above Chapter 2, pp. 129-130).

[208] *Eurhythmia* as the "well-shapedness" of a speech: Isocrates *Letter to Philip* 27. Plato writes that a good speech should be put together like a well-shaped man, with all its parts "adapted to one another and to the whole." (*Phaedrus* 264c).

(strength), *utilitas* (use) and *venustas*.[211] "When *venustas* is taken into account appearance of a work is select and pleasing, and its members correspond with rightly calculated symmetries."[212] *Venustas*, visible coherence achieved through the judicious choice of correct proportions, is the special province of the architect. Magnificence in a work credits the builder; fine workmanship, the master craftsman, writes Vitruvius near the end of Book 6. "But when, through its proportions and symmetries, beauty gives a work authority, the glory is the architect's."[213] Laymen can appreciate beauty once it is already present. Only an architect knows in advance how to bring it about.[214]

*Pulchritudo* was another word for beauty in Latin, but Vitruvius never uses it, nor the related adjective *pulcher* (beautiful).[215] J.J. Pollitt has argued that in the aesthetic vocabulary of classical antiquity the Latin *pulchritudo* was equivalent to the Greek *to kallos* (invisible, ideal Platonic Beauty) whereas *venustas*, "more mundane in its associations . . . . (an) immediate sort of beauty which is known through simple sense perception," translated the Greek *charis*, (grace, charm) as Pliny the Elder attests.[216] For Vitruvius, the proof of *venustas* is the pleasure (*voluptas*) it gives,[217] which indeed anchors architectural beauty in the world of the senses. Such beauty is not necessarily "mundane"

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[209] Vitruvius 1.2.4: *eurythmiae qualitas* (n. 188, above, for the full citation). In fact, Vitruvius lists it before symmetry in Book 1, chapter 2, where he enumerates the principles on which architecture depends.
[210] On quality-quantity, Vitruvius 1.2.2 and above, Chapter 1., pp. 68-69.
[211] Vitruvius 1.2.2: *Haec autem ita fieri debent ut habeature ratio firmitas, utilitas, vensustatis.*
[212] Vitruvius 1.2.2: . . . *venustatis vero cum fuerit operis species grata et elegans membrorumque commensus iustas habeat symmetriarum ratiocinationes.*
[213] Vitruvius 6.8.9: *Cum vero venuste proportionibus et symmetriis (opus) habuerit auctoritatem, tunc fuerit [aria] gloria architecti.* The Fensterbusch text (Fensterbusch, Vitruvius 1964) followed here suppresses the problematic *aria*, an unknown word in Latin, whose inclusion may be due to faulty transcription.
[214] Vitruvius 6.8.10.
[215] Callebat et al. 1984.
[216] Pollitt 1974, p. 448; Pliny *Natural History* 35.79 (cited and translated Pollitt, p. 298).
[217] Vitruvius 3.3.13 (cited above, n. 201). Cicero also couples *venustas* with *voluptas* when writing of the beauty of a ship (*De oratore* 3.180).

or trivial but (like rhetoric) operating as it does in the world, it *is*, clearly, worldly: a beauty whose worldliness, allowing the pertinence of Pollitt's distinction, the total exclusion of otherworldly *pulchritudo* from the vocabulary of *De architectura* would appear to corroborate. But there is more to *venustas* than an aesthetic category and a translation of "*charis*."

To begin with one might recall, as Cicero reminds us, that *venustas* comes from "Venus."[218] And that, according to Varro, Venus (love) – like proportion and symmetry, as Vitruvius repeatedly defines them – is a force that binds.[219] Varro presents the birth of Venus herself from the sea foam in a fusion of fire and water as the mythical paradigm for the binding force at the origin of all life.[220] The origin of coherence, universal concord (*harmonia*) and community (*koinônia*), as Plutarch, citing Greek sources, would write in the second century A.D.[221] Of all appearing in the world, according to Lucretius, another of Vitruvius' much-admired sources, who, writing in the 50's B.C., invokes her as "the pleasure (*voluptas*) of gods and men" at the opening of his great poem of cosmic order, *On the Nature of Things*:

*Mother of Aeneas and his race* (Aeneadum genetrix) . . . *nurturing Venus, who beneath the smooth-moving heavenly signs fills with yourself the sea full-laden with*

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[218] Cicero *De natura deorum* 2.69.

[219] Varro *De lingua latina* 5.61-62. The work, as noted earlier, is named by Vitruvius at 9.pref.17. As usual, Varro presents etymological evidence as "proof" of matters that appear to have been generally accepted: *Therefore the conditions of procreation are two: fire and water. Thus these are used at the threshold in weddings, because there is union here, and fire is male, which the semen is in the other case, and the water is the female, because the embryo develops from her moisture, and the force that brings their* vinctio *"binding" is* Venus (et horum vinctionis vis Venus).

[220] Varro *De lingua latina* 5.63: *The poets, in that they says that the fiery seed fell from the Sky into the sea and Venus was born "from the foam masses," through the conjunction of fire and moisture, are indicating that the* vis, *"force" which they have is that of Venus. Those born of this* vis *have what is called* vita, *"life."*

[221] Plutarch *On the Face of the Moon* (Moralia 926c-927). Cf. Schilling 1982, pp. 197-198.

*ships, the earth that bears the crops, since through you every kind of living thing is conceived and rising up looks on the light of the sun. . . . Since . . . you alone govern the nature of things, since without you nothing comes forth into the shining borders of light, nothing joyous or lovely is made, you I crave as partner in writing (these) verses. . .*[222]

Despite the absence of any etymological link between the "aesthetic" quality of *charis* and Aphrodite, the seductive power of *charis* – grace, charm – belonged as much to the Greek goddess of love (traditionally accompanied by three *Charites* or Graces), as *venustas* did etymologically to the Roman Venus. The earliest known sources for the myth of Venus' birth from the sea which Varro evokes are, of course, Greek.[223] Lucretius' cosmic Venus can, likewise, be traced to Greek sources.[224]

But the Venus Lucretius invokes in the opening address of his poem is *Aeneadum genetrix*, mother of Aeneas' race: ancestress of all Romans. She, Aeneas' mother, had protected her son on his treacherous voyage to Italy, where he came from Troy after its fall to father a new race of heroes. That this was so had been common knowledge since the third century B.C. in the foundation legend that Virgil later made epic and Augustan in the *Aeneid*.[225] The Romans called the goddess they claimed as their *genetrix* "Venus," however, not "Aphrodite;" a "Venus" who, arguably, named the very essence of the correct relations with the gods that, if properly maintained, guaranteed Roman might.[226] It is in this that she might rightly be understood the "mother" and origin of Rome, for indeed

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[222] Lucretius *De rerum natura* 1.1-23. *De rerum natura* is mentioned by name at Vitruvius 9.pref.17.
[223] Hesiod *Theogony* 154-206, which dates from about 700 B.C., is the earliest.
[224] Schilling 1982, pp. 197-200.
[225] Schilling 1982, pp. 85-88; 234-254. The epithet *genetrix* first appears in Ennius' *Annales* (52 V) of ca. 200 B.C. (Weinstock 1971, p. 23).
[226] The following discussion of the Roman Venus draws, with some reservations, principally on Schilling 1982, which remains the only monograph devoted exclusively to the topic. Schilling tries to keep the religious and juridical or political separate which, as we have seen, is a misunderstanding.

the foundation legend naming Venus as the ancestress and divine source of Roman power became current in the century that saw the beginning of Rome's conquest of the Mediterranean world.[227]

"Venus" is also a common noun, *venus*, which means "charm:" a thing, fact or function which became personal in Venus, according to Robert Schilling, between the sixth and fifth centuries B.C.[228] In the religious sphere, Schilling has argued, Latin "*venus*" is to be understood less as an aesthetic quality of charm than as charm in sense of a magic formula or spell. The verb *venerari* ("venerate") is to exercise that charm – to "exercise *venus*." One did not "exercise *venus*" indiscriminately. Only gods were so venerated; in Virgil, for instance, exclusively so.[229] *In primis venerare deos*, "above all venerate the gods," he writes in the *Georgics*. Not "worship" the gods in any vague spiritual sense, but "perform the correct rites," for indeed Virgil continues, "and pay great Ceres her yearly rites (*annua sacra*)." Ceres' rites were not the same as those of Juno, say, or Minerva. In order to venerate or "exercise *venus* on" a god or a goddess, one had first of all to select, or "pick out" the right ritual, a procedure which Cicero, adducing etymological evidence, gives as a defining condition of true *religio*,

*Those . . . who carefully reviewed and so to speak retraced all the lore of ritual were called* religiosi, *from* relegere *(to retrace or re-read), like* elegans *from* eligere *(to select),* diligens *from* diligere *(to care for),* intellegens *from* intellegere *(to understand); for all these words contain the same sense of "picking out"* (legere) *that is present in*

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[227] Schilling 1982, p. 85.
[228] *Venus*/charm: Schilling 1982, pp. 31-32; personalisation: Schilling, pp. 84-86.
[229] Schilling 1982, pp. 37-38.

"*religious.*"[230]

Proper selection is also a condition of *venustas* in architecture, according to Vitruvius, where correct choice of the right proportional relationships yields the reward of pleasurable effect : "When *venustas* is taken into account appearance of a work is select (*elegans*) and pleasing (*grata*), and its members correspond with rightly calculated symmetries."[231]

If, in the religious sphere, a supplicant made the correct selection and properly performed the prescribed rite, he was rewarded with *venia*, another cognate of *venus*, which meant divine grace or favour.[232] Understood in this light, Venus becomes less personalised thing than a personalised *relationship*, standing as it does at the intersection of *venerari*, "to venerate" in the strict sense just described, and the grace or favour obtained thereby: the essence, as suggested earlier, of the mediating position that ensured Rome's special convenant with the gods and, reciprocally, her power. It is this that supplies the context for interpreting the dictator Sulla's claim of Venus *felix* (bringer of success or good fortune) as his special patroness in the early first century B.C.[233] Pompey, later on, made the same claim for Venus *victrix* (binger of victory), and crowned the vast theatre complex he built as a victory monument in the Campus Martius with a

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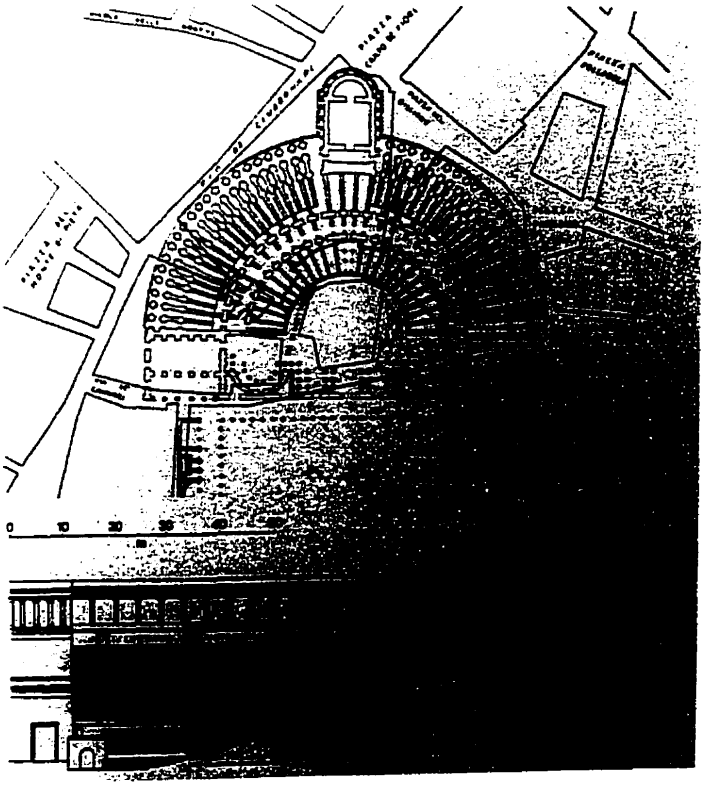
[230] Cicero *De natura deorum* 2.72. Another view has *religio* derived from *religare*, "to tie" or "to bind," but the source – the Christian apologist Lactantius of the third century A.D. – is rather late. Lactantius *Divinae institutiones* 4.28.12: "The term *religio* derives from the bond of piety, because God binds himself to man and constrains him through piety." *Nomen religionis a vinculo pietatis esse deductum, quod hominem sibi Deus religaverit et pietate constrinxerit* (as cited Sachot 1991, p. 365). On the whole question, Sachot 1991, pp. 364-367.

[231] Vitruvius 1.3.2: . . . *venustatis vero cum fuerit operis species grata et elegans membrorumque commensus iustas habeat symmetriarum ratiocinationes.*

[232] Schilling 1982, pp. 39-42.

[233] Beard, North and Price 1998, pp. 144-145; Schilling 1982, pp. 273-296.

Fig. 27



The Theatre of Pompey in the Campus Martius at Rome, dedicated in 55 B.C
Plan superimposed on modern street plan, and section, showing the Temple of Venus Victrix that crowned the cavea. After P. Gros.

temple dedicated to her in 55 B.C (Fig. 27).[234] Both Sulla and Pompey linked the patronage of Venus to possession of the augural function that, as discussed earlier, was the major axis of communication between gods and men.[235] So, to an even more marked degree, did Julius Caesar.[236]

The contest over who monopolised Venus was endemic in the power struggles of the mid first-century B.C. To Pompey's Venus *victrix*, Pompey's rival Julius Caesar replied with *his* champion, Venus *genetrix*: the mother of all Romans whom he claimed as his personal ancestress and genealogical protectrice, and who became, perforce, that of his adopted son Augustus. This direct line of descent, which underpins the whole of Virgil's *Aeneid*, distilled as it were in the blood of the Julians the essence of the power Venus (or *venus*) gave to Romans in general, making Caesar and Augustus, in whom it was thereby concentrated, naturally more Roman, religious and powerful than others. And so they were. Architectural proof lay in the Temple of Venus Genetrix which dominated the splendid new Forum Caesar built adjacent to the old Forum Romanum in the early 40's B.C. to outbid Pompey's Temple of Venus Victrix on the other side of the city.[237]

Further, if somewhat more contestable, evidence of Caesar's intimate connection with Venus lay in Caesar's own person: in his good looks (he was also particularly well-shaped, according to Suetonius) and especially in the "bloom of youth" he said he had

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[234] Pompey's theatre and the Temple of Venus Victrix: Aulus Gellius *Noctes atticae* 10.1.6-7; Pliny *Natural History* 8.20; Coarelli 1971-72; Gros 1987a; Hanson 1959, pp. 43-55; Richardson 1987; Sauron 1987.
[235] Schilling 1982, pp. 275, 280 (Sulla); p. 297 (Pompey). Importance of augury: above pp. 198-200.
[236] Schilling 1982, pp. 303-304.
[237] Venus Genetrix and the Forum Julium: Amici 1991; LTUR, Venus Genetrix, aedes, sv.; Weinstock 1971, pp. 80-87; Westall 1996.

received from his divine ancestress, whose image was carved on his seal ring.[238] This "bloom" or "flower" of youth (*flos aetatis*, in Latin) can also be virginity, a "bloom" which Cicero, in malicious reference to Caesar's claim, says Caesar had lost early in the company of King Nicomedes of Bithynia.[239] No literary record survives to affirm whether a similar claim was ever made for Augustus, either by himself or by others. But that Augustus – or at least his public persona – was meant to be understood as possessing such a "bloom" is inherent in the relentlessly youthful beauty that radiates from the countless portraits made of him, even those made when he was an old man (Fig. 28).

Beauty is an important attribute in the best kind of ruler according to Philodemus, who wrote his *The Good King According to Homer* in about 45 B.C. and dedicated it Lucius Calpurnius Piso, Caesar's father-in-law.[240] Beauty in Homeric kings inspired awe and allied them with the gods.[241] At the dawn of civilisation, writes Lucretius, Philodemus' near contemporary, when kings first founded cities, beauty had great power, and strength, esteem.[242] But, the discovery of money soon robbed these strong beautiful men of their honour, for no matter how beautiful a man's body, Lucretius laments, men

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[238] Dio Cassius 43.43.3: "bloom of youth:" *anthos ti hôras*. Cf. Weinstock 1971, pp. 18, 23-26. On Caesar's good looks, see especially Suetonius *Divus Julius* 45: "He is said to have been tall of stature with a fair complexion, shapely limbs (*teretibus membris*), a somewhat full face and keen black eyes . . ." See also Velleius Paterculus 2.41.3; Plutarch *Caesar* 17.2; Cicero *Brutus* 261.

[239] Suetonius *Divus Julius* 49: "Cicero indeed is not content with having written in sundry letters that Caesar was led by the king's (Nicomedes') attendants to the royal apartments, that he lay on a golden couch arrayed in purple, and that the bloom of youth (virginity) he had from Venus (*floremque aetatis a Venere orti*) was lost in Bithynia." Cf. Weinstock 1971, p. 18, who notes that Cicero's reference to the bloom of youth Caesar received from Venus is "so close to the wording of Dio (above, n. 238) that a common source, a direct quotation from Caesar, must be assumed.".

[240] Gigante 1995, chapter 4; Grimal 1966; Murray 1965. The charred fragments of this and other works by Philodemus, now in the archaeological museum in Naples, were discovered at the Villa of the Papyri at Herculaneum in the eighteenth century, a villa which may have belonged to Piso himself. Gigante (p. 68) calls the work a *speculum principis*: a "mirror for princes" or paradigm for a ruler.

[241] Philodemus *On the Good King According to Homer* cols. xix-xxi, as cited Murray 1965, p. 171. An edition of Philodemus' works had yet to be published.

Fig. 28

Marble bust of Augustus. 55 cm. high. from the amphitheatre at Fayum. sculpted between 4 and 14 A.D. when Augustus was in his late sixties or early seventies. Now in the Carlsberg Glyptothek. Copenhagen. Vierneisel and Zanker 1979. #53.

are more influenced by wealth.[243] In a kingship treatise of uncertain date, one Diotogenes advises that a king "wrap himself about with such decorum and pomp in his appearance . . . that he will put in order those who look upon him. . . . For to look upon the good king ought to affect the souls of those who see him no less than a flute or harmony."[244]

In 29 B.C. Augustus dedicated the Temple of Divus Julius in the Forum Romanum where, as discussed earlier, its position, orientation and cult statue (Divus Julius as augur) made the politico-religious world-ordering role of Rome and its new ruler material, spatial and real. The statue of Divus Julius was not the only artefact Augustus placed in the west-facing temple cella, however. In it he also placed a painting, dedicated to the new god, his father: Venus *Anadyomene*, Venus emerging from the sea, wringing the water from her hair, seized at the mythical moment that Varro evokes as the paradigm for the binding force he names "Venus."[245]

The painting had been painted in the late fourth century B.C. by Apelles, Alexander the Great's favourite portraitist, whom Pliny judged to have surpassed all the painters who came before or after.[246] Apelles' works were known for their ineffable quality of *charis*, for which Pliny, as noted earlier, gives *venustas* as a Latin equivalent.[247] His Venus *Anadyomene*, the most charismatic of his works, had hung in the Asclepion at Cos, famous for its medical school, until its transfer to Rome, for which Augustus

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[242] Lucretius *De rerum natura* 5.1110-1113: . . . *facies multum valuit viresque vigebant* (cf. Grimal 1966, p. 270).
[243] Lucretius *De rerum natura* 5.1114-1116: . . . *quod facile et validis et pulchris dempsit honorem: divitiorum enim sectam plerumque sequuntur quamlubet et fortes et pulchro corpore creti.*
[244] Diotogenes in Stobaeus 4.7.62, as cited and translated Chesnut 1978, p. 1317. The treatise is either Hellenistic or imperial Roman of (probably) the second century A.D. (see Chesnut 1978).
[245] Venus *Anadyomene* in the Temple of Divus Julius: Pliny *Natural History* 35.91; Strabo 14.2.19. Binding power of Venus: Varro *De lingua latina* 5.63 (above, n. 220 for the text of the citation).
[246] Pliny *Natural History* 35.79. On Apelles in general: 35.79-98.
[247] Pliny *Natural History* 35.79.

compensated the Coans with a remission of 100 talents in tribute.[248]

This Venus was by all accounts – and the accounts are many – one of the most beautiful paintings in the world.[249] The earliest surviving description dates from the third century B.C. and sets the tone for the rest.

*Apelles having seen Cypris* (Aphrodite), *the giver of marriage blessing, just escaped from her mother's bosom and still wet with bubbling foam, figured her in most delightful loveliness, not painted but alive. With beautiful grace she wrings out her hair with her fingertips, beautifully calm love flashes from her eyes, and her breasts, the heralds of her prime, are firm as quinces.*[250]

Obviously a work of considerable seductive power, this Venus – the "bloom of youth" personified, meltingly lovely in her newborn grace.[251] If Apelles had never painted her, writes Ovid, she would still be lying at the bottom of the sea, invisible, unknown and undesired.[252] And if Augustus had not brought her to Rome, she would have remained in the Asclepion at Cos with no visible connection to Roman dynasts who were now the mediators of *religio*.

That her relocation was meant to reaffirm Caesar's divine descent is obvious.[253] But why this particular painting? The cult statue Caesar commissioned for the apse in the cella of the Temple of Venus Genetrix made the same point, but was modestly draped in a long belted tunic and mantle. It had a Cupid (Venus's child, Eros or Amor) on its shoulder

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[248] Strabo 14.2.19.
[249] For ancient descriptions, see Overbeck 1959, nos. 1847-1866 and the commentary on Pliny *Natural History* 35.91 in Sellers, ed., 1896, pp. 127.
[250] Leonidas of Tarentum, in *The Greek Anthology* 5, no. 182 (Overbeck 1959, no. 1852). See further *The Greek Anthology* 5, nos. 178-181.
[251] This, of course, to the male observer. What women thought of the painting is not recorded.
[252] Ovid *Ars amatoria* 3.389-402, in the context, interestingly enough, of a rumination on the signifying power of various Augustan monuments.

and set the matronly precedent for future official Roman representations.[254] There was nothing matronly about the *Anadyomene*.

As discussed earlier, the west-facing Temple of Divus Julius sat squarely on the line that divided the world and the solar year into two equal parts, in mimetic sympathy with yearly course of the sun. The temple made the dawn of the new era heralded by Augustus's triple triumph of 29 B.C. a cosmic dawn. If, following Vitruvius' exegesis of west-facing temples, Caesar's statue holding its augural *lituus* is to be imagined as surging up out of the East along with the rising sun, his so appearing collapses – in the mind, if not in reality – with the emergence in the temple cella of the incomparably beautiful newborn Venus rising from the sea at the world's daybreak.

In 44 B.C., not long after Caesar's assassination, during the games Augustus held in honour of Venus Genetrix, a comet, the *sidus iulium*, had appeared to announce Caesar's apotheosis.[255] This star was figured on the head of posthumous portraits, on coins, and also in the pediment of the new temple building.[256] Here, validated by the painting, its significance expanded to include the planet Venus: "Lucifer," as she was called when she appeared in the morning: "bringer of light," the star that announces the dawn.[257] In the Temple of Divus Julius, the binding force of augury that ordered the

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[253] Strabo 14.2.19: "Augustus dedicated to his father the female founder of his family."
[254] Schilling 1982, pp. 311-313 and notes. The statue was sculpted by the Greek sculptor Arcesilaus. On Hellenistic representations of Aphrodite and their Roman copies, Brinkerhoff 1978. My thanks to Jane Francis for the reference.
[255] Suetonius *Divus Julius* 88; Dio Cassius 45.7.1; Pliny *Natural History* 2.94.
[256] Star in pediment: Crawford *RRC*, 540.1-2
[257] Link between comet and the planet Venus: Schilling 1982, pp. 316-323; Weinstock 1971, pp. 370-384, especially pp. 377-378. Vitruvius points out (9.1.7) that Venus, the planet (*Veneris stella*), had two names: "after sunset, when she appears as the brightest star shining in the sky, she is called 'Vesperugo' (the evening star); but at other times, she rises to usher in the day; then her name is 'Lucifer' (the morning star)." *Post occasum eius apparens in caelo clarissimeque lucens Vesperugo vocitatur, aliis autem temporibus eum antecurrens et oriens ante lucem Lucifer appellatur*. See also Cicero *De natura*

world – the *ratio* of the "squaring" function that guaranteed Rome's pact with the gods – became, thanks to Apelles' Venus, plainly evident in the irresistible beauty of the cosmic, Roman and (here above all) Julian *genetrix*.

In architecture, temples especially, Vitruvius insists, judiciously-chosen proportions and symmetries bind each part to every other and to the whole, just as they do in the body of a well-shaped man.[258] Proportions and symmetries are the indispensable condition of coherence, as coherence is of bodies. *Venustas*, through the pleasure it gives, is evidence of such coherence, and great care must be taken to ensure its visibility, even to the point of bending "canonical" rules, for beauty, the *appearance* of proper proportional relationships (whether or not these are in fact measurably present) is paramount.[259] Does Vitruvius mean that giving pleasure is to be understood as the architect's final aim? Vitruvius is too earnest, too politically engaged, too Stoic in his way of thinking for the pleasure principle, fundamental in Epicurean dogma, to play such a determining role. But if it does not, what earthly use *is* beauty, beyond pleasure? How is Vitruvian *venustas* to be understood in the Augustan context?

For the Stoics, beauty's part in the order of things was to inspire love, and love – good-will, friendship and fellow-feeling more than erotic love (although erotic love might be friendship's initial impetus) – was the basis for civic concord and the root cause of cities.[260] So, for Romans, was augury and the correct performance of ritual that, as just

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*deorum* 2.53; Pliny *Natural History* 2.46; Manilius *Astronomica* 1.177-178. Cf. Soubiran, Vitruvius 9 (1969), pp. 92-93.

[258] Vitruvius 3.1.

[259] See, for example, Vitruvius 3.3.11; 3.3.13; 6.2.11.

[260] Zeno, 4th-century B.C. founder of the Stoic school, claimed in his now lost *Republic* that "Eros is a god who stands ready to help in furthering the safety of the city" (Athenaeus *Deipnosophistai* 561d; cf. Schofield 1991, p. 49). On the whole question of love and the Stoic city, Babut 1963; Shofield 1991, especially chapters 2 and 3.

discussed, appears to have been metonymic in the Roman Venus. So was architecture. In this context, the architectural beauty Vitruvius names *venustas* acquires crucial determinacy.

The Stoic theory never refers to rarefied ideal Beauty but always, explicitly, to *apparent* beauty, and, as often as not, to a visible or "appearing" beauty of a specific kind: that of adolescents, of beautiful young men – of "young men in bloom." Arius Didymus, the Alexandrian Stoic who, significantly, was Augustus's philosophical intimate for twenty years after the conquest of Egypt in 30 B.C., transmits the following definition: "Love is an attempt to make friends on account of visible beauty appearing (*dia kallos emphainomenon*) with young men in bloom (*neôn hôraiôn*)."[261] Later in the same work Arius writes, "it is clear that beauty when it appears (*to kallos, emphanes*) has by itself some attraction, and everybody feels naturally drawn towards beautiful people, even without any consideration of usefulness, and so beauty is seen to produce good will."[262]

Similarly, in Diogenes Laertius' doxography, we have, "Their (the Stoics') definition of love is an effort toward friendliness due to visible beauty appearing (*dia kallos emphainomenon*), its sole end being friendship, not bodily enjoyment. . . . and beauty they describe as the bloom or flower of virtue (*hôran anthos aretês*)."[263] Cicero, in a Latin version, says that "the Stoics . . . define love as the endeavour to form a friendship inspired by the appearance of beauty (*ex pulchritudinis specie*)," rendering the Greek

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[261] Arius Didymus in Stobaeus *Anthologium* II, p. 115.1-2: *ton de erôta epibolên einai philopoiias dia kallos emphainomenon neôn hôraiôn*. The translation is Schofield's (1991, pp. 29 and 112). Schofield has called this "the official school definition" (p. 29). See also Arius Didymus in Stobaeus II, p. 66.11-13 ("Love is neither desire nor is it for any morally bad thing, but it is an attempt to make friends on account of an appearance of beauty [*dia kallous emphasin*]" Schofield trans., p. 30); II, p. 91.15-16 ("Love is an attempt to make friends on account of visible beauty appearing [*dia kallos emphainomenon*]") On Arius Didymus, Hahm 1990; Kahn 1983; above Chapter 2, p. 137; below Chapter 4, pp. 259, 269-270.
[262] Arius Didymus, in Stobaeus *Anthologium* II, p. 123.7-12. Trans. Görgemanns 1983, p. 171.

*kallos* as *pulchritudo*, and corroborating what J.J. Pollitt has said about the equivalence of the two terms.[264]

For Vitruvius, the appearance of beauty in architecture is not *puchritudinis species*, but *venustatis species*.[265] It occurs when the temples and other buildings without which there are no cities are put together in the same way that nature puts together the bodies of well-shaped men.[266] At the time Vitruvius wrote, and increasingly in the years that followed, the general principle had (or was made to have) a concrete exemplar in the beauty of Augustus Caesar, direct descendent of Venus, whose appearance (*forma*), as Suetonius reports in written confirmation of the patent contention of innumerable images, was superlatively beautiful – *venustissima* at all periods of his life, with finely-proportioned, symmetrical limbs.[267] He was also short, sickly, weak, had bad teeth, limped and, of course, grew old.[268] This does not appear in the portraits.[269] Because, as Vitruvius writes in the architectural context, the eye is greedy for beauties (*venustates*), the pleasure it seeks must be flattered with suitable curative measures so that a building does not present viewers with an ungainly and graceless appearance (*vastus et invenustus aspectus*).[270] In architecture as in portraiture the *appearance* of beauty is the ultimate determinant. It was a sign of virtue and without it, the Stoics claimed, there was no love

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[263] Diogenes Laertius 7.130 (Loeb trans.) Cf. Schofield 1991, p. 29.
[264] Cicero *Tusculan Disputations* 4.72. Pollitt 1974, p. 448.
[265] For Vitruvius, *venustas* is invariably a question of appearance: 1.2.3; 1.3.2; 2.3.4; 3.3.6; 3.3.6; 3.3.11; 3.3.13; 3.5.11; 4.2.2; 4.3.1; 5.1.10; 6.3.11. It is worth noting that the highest concentration of occurrences (7 out of 12) is in the two books (3 and 4) on temples.
[266] Vitruvius 3.1. (see above).
[267] Suetonius *Divus Augustus* 79.1-2: His appearance was unusually handsome and exceedingly graceful (*forma fuit eximia et . . . venustissima*) at all periods of his life . . . . He was short of stature . . . but this was concealed by the fine proportion and symmetry of his figure (*commoditate et aequitate membrorum*).
[268] Suetonius *Divus Augustus* 79-83.
[269] Zanker 1988, pp. 98-100.

or friendship – nor any city.

*The person who says that love is "an attempt to make friends" simultaneously implies "with young men in bloom," even if he does not say so overtly, for no one loves old men and those who do not have the bloom of the prime of love.*[271]

**Corinthia**

Youth became permanent and perennially new in the representations of Augustus, who "bloomed" not only in sculpture and on coins, but also – less personally, at a larger scale (more symbolically, more powerfully) – in the beauty of Roman architecture. Particularly so in the phenomenon scholars have called "corinthianisation," which includes not only the increasing and eventually exclusive use of the Corinthian columnar order at Rome and throughout most of the Roman empire, but also the invasion of flat surfaces by flourishing scrolls of acanthus, the vegetation that is the hallmark of the Corinthian capital (Figs. 29, 30).[272] The highest concentration of "corinthianized" buildings appears among those linked, specifically, to the power of the imperial dynasty.[273] Vitruvius accounts for the Corinthian capital's origin as follows.

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[270] Vitruvius 3.3.13: *Venustates enim persequitur visus, cuius si non blandimur voluptati proportione et modulorum adiectionibus, uti quod fallitur temperatione adaugeantur, vasus et invenustus conspicientibus remittetur aspectus.*

[271] Sextus Empiricus *Adversus mathematicos* 7.239 (= *Pros dogmaticos* 1.239 in the Loeb edition). Cf. Schofield 1991, p. 114, whose translation I have followed.

[272] Gans 1992; Gros 1976a , pp. 197-242; Gros and Sauron 1988, p. 68; Onians 1988, pp. 41-58; Sauron 1988. Examples of acanthus flourishing on flat surfaces include the frieze of the Temples of Venus Genetrix at Rome; frieze of the Temple of Divus Julius at Rome; frieze of the Maison Carrée at Nîmes, and ornamental friezes on many temples dedicated to imperial cult in other parts of the Roman world (Hänlein-Schäfer 1985, plates). Especially noteworthy is the acanthus frieze on the lower half of the exterior of the screen wall of the Ara Pacis Augsutae, the altar of Augustan peace in the Campus Martius at Rome: see (most recently) Castriota 1995, pp. 58-73.

*This, so it is recorded, is how the capital was first invented. A virgin citizen of Corinth* (virgo civis Corinthia), *just ripe for marriage, succumbed to illness and died. After she was buried, her nurse filled a basket with things* (pocula, literally "small cups" or vessels) *that had delighted the virgin when she was alive, brought it to the tomb, and placed it on top. Then, so that the things in the basket would last longer in the open air, she covered it with a tile. As it happened, the basket was placed on the root of an acanthus plant. After a time, in the spring, due to the weight pressing down on the middle of it, the root put forth leaves and small stalks* (caulicoli) *which grew up around the sides of the basket. Because of the weight of the tile, the ends of the stalks were forced by necessity to curl back into volutes at the corners.*

*Then Callimachus, called "Catatexitechnos" by the Athenians because of the refinement and skill of his marble-carving, passed by the tomb, and noticed the basket and how tender the leaves growing up around it were. Delighted by the freshness of this new form, he used it as a model to make columns for the Corinthians, established their symmetries, and assigned the rules to be followed in finished works of the Corinthian order* (genus).[274]

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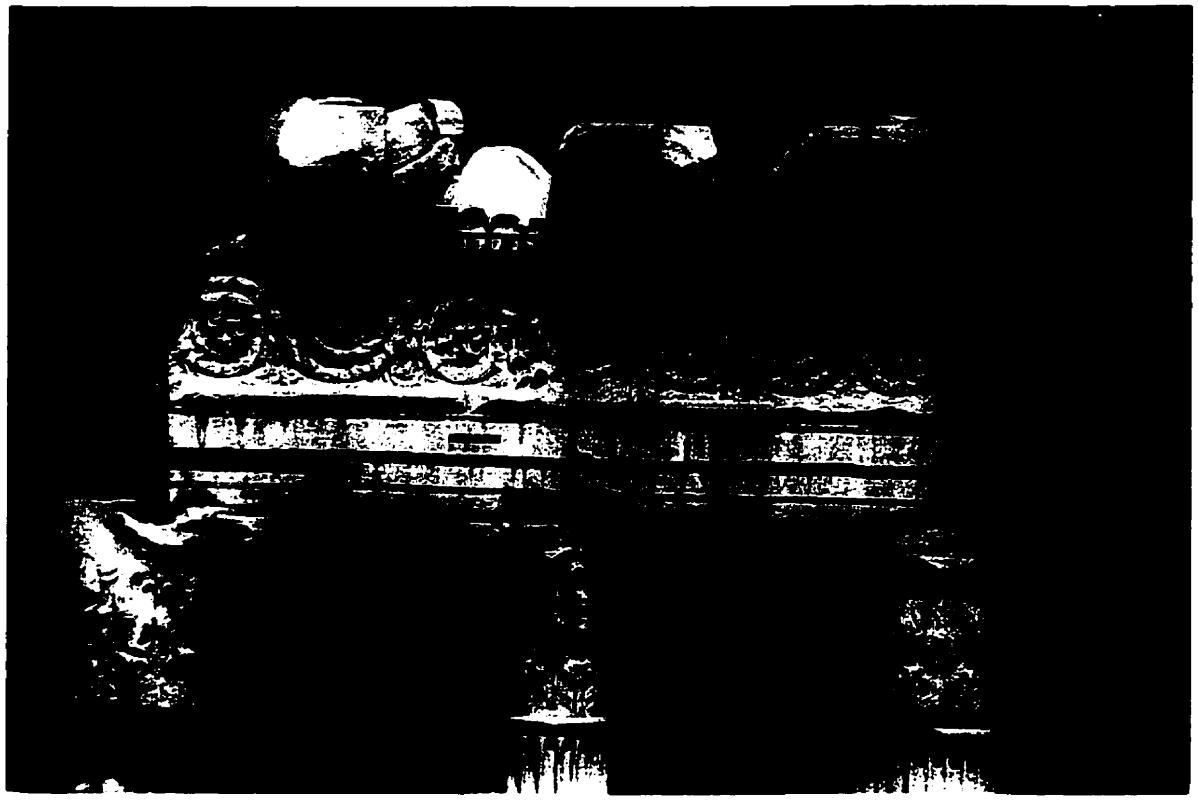
[273] Above, n. 271 and below, Chapter 4 pp. 316-318 on the Corinthian Temple of Augustus at Pisidian Antioch.

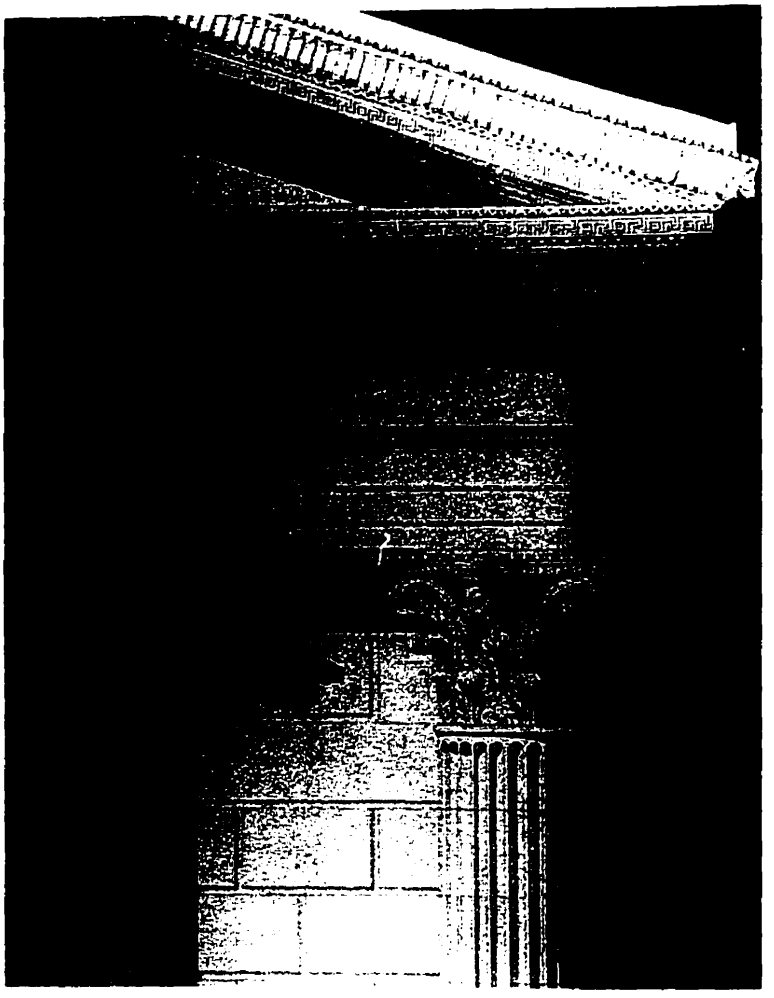
[274] Vitruvius 4.1.9-10: *Eius autem capituli prima inventio sic memoratur esse facta. Virgo civis Corinthia, iam matura nuptiis inplicata morbo decessit. Post sepulturam eius, quibus ea virgo poculis delectabatur, nutrix collecta et conposita in calatho pertulit ad monumentum et in summo conlocavit et, uti ea permanerent diutius sub divo, tegula texit. Is calathus fortuito supra acanthi radicem fuerat conlocatus. Interim pondere pressa radix acanthi media folia et cauliculos circum vernum tempus profudit, cuius cauliculi secundum calathi latera crescentes et ab angulis tegulae ponderis necessitate expressi flexuras in extremas partes volutarum facere sunt coacti. Tunc Callimachus, qui propter elegantiam et subtilitatem artis marmoreae ab Atheniensibus Catatexitechnos fuerat nominatus, praeteriens hoc monumentum adnimadvertit eum calathum et circa foliorum nascentum teneritatem, delectatusque genere et formae novitate ad id exemplar columnas apud Corinthios fecit symmeriasque constituit. Ex eo in operis perfectionibus Corinthii generis distribuit rationes.*

Fig. 29



**Above:** entablature fragment from the Temple of Venus Genetrix in the Forum Julium at Rome, dedicated 46 B.C. **Below:** frieze fragments from the Temple of Divus Julius in the Forum Romanum, dedicated 29 B.C. (Photos by author).

Fig. 30



Restored south-east angle of the Maison Carrée at Nîmes, a dynastic temple dedicated between 1 and 10 A.D. to the cult of Gaius and Lucius Caesar, Augustus's grandsons. After R. Amy (cf. Amy and Gros 1979, II pl. 17).

Although he presents his story as matter of record ("*sic memoratur*"), and although Greek sources have usually been assumed for it, Vitruvius' story is in fact unique in surviving literature. Vitruvius, moreover, is the earliest known source to give the name "Corinthian" to the foliate acanthus capital that would, in time, became ubiquitous as an emblem of Roman power.[275]

The origin of the Corinthian order has been the subject of considerable scholarly attention, complicated by the difficulty of reconciling various aspects Vitruvius' story with the historical and archaeological evidence.[276] One thing is fairly certain and that is that the *genus* Vitruvius calls Corinthian, did not, as Vitruvius says, originate in Corinth. Indeed even the acanthus that figures so crucially in the account – the floppy-leafed *acanthus mollis* (bearsfoot) is the one Vitruvius means, not the prickly *spinosus* variety – is unlikely to have grown in the area.[277] It grows like weeds at Rome, of course. The plant's funerary symbolism has been demonstrated by a number of scholars, but the evidence for this comes from Attica (mainly Athens), and southern Italy, not Corinth, which is not surprising if the plant did not grow there.[278] The earliest prototypes of the column capital, according to recent scholarship, were developed at Athens, not Corinth, in the second half

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[275] All other references are imperial Roman and later: Strabo 4.4.6; Pliny *Natural History* 34.13; Pausanias 8.45.4. Athenaeus' *Deipnosophistae* (5.205 c) of the late second century A.D. cites Callixenes of Rhodes (second century B.C.) as referring to the capitals of Ptolemy IV's floating palace as *korinthiourgeis*, but this means "of Corinthian work," and is more likely to refer to Corinthian craftsmanship (famed in antiquity) than to the form of the capital. Cf. Gros, Vitruvius 4 (1992), pp. 50-51; Roux 1961, pp. 359-362.

[276] For a review, Gros, Vitruvius 4 (1992), pp. 75-90, to which must be added Rykwert 1996, pp. 317-349, with references.

[277] Pliny *Natural History* 22.76 for the distinction between the two varieties; not native to the Corinthia: Baumann 1984, pp. 188-189; cf. Gros, Vitruvius 4 (1992), pp. 76-77.

[278] Homolle 1916; Roux 1961, p. 196; Rykwert 1996, pp. 321-327. See also Kempter 1934; Schauenburg 1957, pp. 198-204 (for the south Italian connection); cf. Gros, Vitruvius 4 (1992), p. 77.

of the fifth century B.C. – close to the time of the Athenian sculptor, Callimachus, whom Vitruvius names as the inventor of the *genus*.[279]

Subsequent developments, of which an abbreviated enumeration follows, are in no known instance linked to Corinth either.[280] The prototype long thought to be originary is the single Corinthian column in the cella of the late fifth or early 4th-century B.C. Temple of Apollo Epikourios at Bassae, in the mountains of Arcadia.[281] A later example, somewhat more familiar in appearance, is the interior order of the third-century B.C. tholos in the sanctuary of Asclepius at Epidaurus in the Argolid.[282] The so-called "normal" Corinthian capital[283]– unlike the ones at Bassae and Epidaurus just mentioned, it has *caulicoli*, small stalks, like the ones Vitruvius describes, from which the spiralling volutes emerge – first appeared on the propylon Ptolemy II Philadelphus built on the Aegean island of Samothrace in the early third century B.C., marking also its first use on the exterior of a building.[284] Closer to Vitruvius' own time are the Corinthian columns of the dipteral peristyle of Antiochus IV Epiphanes' colossal, 2nd-century B.C. Temple of Zeus Olympios at Athens, designed by a Roman architect, Cossutius, according to Vitruvius, who singles out the temple as the acme of architectural excellence.[285]

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[279] Mallwitz 1981, pp. 318-321 (capital used to support Phidias' colossal statue of Athena in the Parthenon); Pederson 1989 (capitals of the interior columns of the west room of the Parthenon); cf. Gros, Vitruvius 4 (1992), p. 79.

[280] For more detailed accounts, Gros 1976a, pp. 197-234; Lawrence 1983, *passim*; Roux 1961, pp. 359-380; Rykwert 1996, pp. 338-349.

[281] The temple was first excavated in the early 19th century. Shortly after, the Corinthian capital that was discovered there mysteriously disappeared, but not before it was recorded in the drawings of the British architect C.R. Cockerell who was part of the expedition. Beard and Henderson 1995, pp. 10-12; Cockerell 1860; Lawrence 1983, pp. 230-234; Roux 1961, pp. 362-367; Rykwert 1996, pp. 338-340.

[282] Lawrence 1983, pp. pp. 242-244; Roux 1961, pp. 367-369; Rykwert 1996, p. 343.

[283] So called by German scholars, because it is like the one Vitruvius describes, and is the recognizable model for the one that became ubiquitous in the Roman world. Bauer 1973; Heilmeyer 1970.

[284] Frazer ed. 1990, pp. 87, 91 and 171-189.

[285] Antiochus' temple was never finished. Begun as a Doric temple under the Peisistratids in the late 6th century B.C., the Temple of Zeus Olympios was not completed until the reign of Hadrian in the thirties of

In sum, there is little, if anything, in known evidence from the Greek past to connect the appearance of the new kind of column capital with the city Vitruvius names as its place of origin, either symbolically, historically or archaeologically. What of the Roman present?

Greek Corinth, a seaport strategically located on the isthmus that separates Attica from the Peloponnese, was one of the largest and wealthiest cities in Greece and also a notoriously extravagant and decadent one.[286] Its patron deity was Aphrodite Ourania *poliouchos*, heavenly "defender of the city," whose temple was located on the summit of Acrocorinth, high above the city.[287] Young women were dedicated to this Aphrodite as sacred prostitutes in a cult, apparently linked to the city's safety, that horrified Herodotus in the fifth century B.C.[288] Later in the same century Aristophanes used the verb *korinthiazomai*, "to corinthiate," as a vivid alternative for "fornicate."[289] Strabo reports that over a thousand prostitutes had been attached to Aphrodite's temple: a great attraction, apparently, to visiting ship captains, and another source of the city's wealth.[290] Greek Corinth, wallowing in the cognate vices of lust and luxury that Romans professed to abhor, must have typified what the Romans had in mind when they claimed that the Greeks had invented civilisation, but had lost it: an exemplar of the kind of decadence for

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the second century A.D. According to Pliny (*Natural History* 34.65), Sulla brought some its of columns to Rome for use in the restoration of the Roman Capitol at the beginning of the first century B.C. There had been an Augustan project for the temple's completion as a shrine dedicated to Augustus's *genius* (Suetonius *Divus Augustus* 60), which never came to fruition. Cossutius and the Temple of Zeus Olympios: Vitruvius 7.pref.15; cf. Liou et al., Vitruvius 7 (1995), pp. 74-77.

[286] Strabo 8.6.20. See also Salomon 1984, pp. 398-401; Williams 1986.

[287] Williams 1986. On the temple itself: Blegen et al. 1930.

[288] Herodotus 1.199, cf. Williams 1986 p. 20.

[289] Aistophanes *Frogs* 354.

[290] Strabo 8.6.20.

which Roman conquest in the Greek world – so went the argument in late republican Rome – was to be justified as a moral corrective.[291]

In146 B.C. Corinth was destroyed by the invading Roman general Leucius Mummius who razed the city, sold the Corinthian women and children into slavery and killed its male population.[292] The war booty Mummius brought to Rome for display in his triumph – works of art mainly – was fabulous. Strabo maintains that most of the best dedicatory offerings in Roman temples came from Corinth.[293] A temple dedicated to Hercules Victor was Mummius' victory monument.[294] Profit continued to be gained from the Corinth's destruction a century later through the sale to eager Roman buyers of grave goods known as *nekrocorinthia* – chiefly pottery and bronze ware – looted from Corinthian tombs.[295]

For over a hundred years the site of Corinth lay waste, an *ager publicus* (public land) of Rome, under Rome's administrative tutelage.[296] In 44 B.C., shortly before his

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[291] Roman obsession with morals: Edwards 1993, especially pp. 5-6 on luxury and lust as cognate vices. Conquest as a moral corrective: Woolf 1994, pp. 119-125, 1998, p. 71. See also Petrochilos 1974, pp. 35-53.

[292] Cicero *Ad familiares* 4.5.4; *Tusculan Disputations* 3.53; Pausanias 7.16.7-8; Plutarch *Caesar* 57.8; Polybius 39.2; Strabo 8.6.23; Velleius Paterculus 1.13.1. Cf. Wiseman 1979, pp. 491-495 who claims that the destruction was in fact less complete than was commonly believed. But that total destruction was *commonly believed* to have occurred is worth emphasizing. For an illuminating account of how the Romans sacked cities, Ziolkowski 1993, who discusses in particular the sack of Carthage by Scipio Aemilianus in 146 B.C., the same year Corinth was sacked.

[293] Livy *Periochae* 53; Strabo 8.6.23; Velleius Paterculus 13.1.4.

[294] *CIL* I².616=*CIL* 6.331=*ILLRP* 122: *L. Mummius L.f. cos ductu auspicio imperioque eius Achaia capta Corinto deleto Romam redieit triumphans. Ob hasce res bene gestas quod in bello voverat hanc aedem et signum Herculis Victoris imperator dedicat.* Cf. Ziolkowski 1988, who argues that, in spite of the inscription's find spot on the Caelian some distance from the Forum Boarian, the temple in question is the round temple which still stands on the bank of the Tiber. Coarelli 1988, pp. 185-186 disagrees on the grounds of chronology claiming that the temple's stylistic features give it a later date than the 140's B.C. of Mummius' dedication, and the matter remains unresolved. The temple is Corinthian, the earliest such temple in Rome. If Ziolkowski is right about its being Mummius' victory monument, this first use of the order at Rome was tied to Corinth's destruction which, as I argue below, is precisely the sense of Vitruvius' story about its origin.

[295] Strabo 8.6.23.

[296] Cicero *De lege agraria* 1.5. Cf. Wiseman 1979, p. 493.

assassination. Julius Caesar refounded the city as a Roman colony renamed *Colonia Laus Julia Corinthiensis* (the glory of Julius).[297] Duly squared and divided into "areas," the new city rebuilt under Augustus with a typical Roman monumental centre (forum, Capitol, Roman basilica, and so on) became a model of *romanitas* in the Greek East (Fig. 31).[298] Pierre Gros has noted a close correspondence between the basilica at the eastern end of the Forum and the description of the basilica Vitruvius claims he built at Fano in northern Italy with an *aedes augusti* (shrine of Augustus) in it.[299] The new west-facing Julian basilica also appears to have contained such an *aedes* which must have contained the famous statuary group of Augustus flanked by Gaius and Lucius Caesar, who were to have been his heirs, that was found there. North of the Forum, the east-facing archaic Greek Temple of Apollo was re-dedicated to the cult of the *gens Julia* (Julian dynasty) and re-oriented to the west in a rather forcible instantiation of Vitruvius' prescription on the matter.[300]

Vitruvius' early attachment to Caesar makes his knowledge of, and almost certain personal interest in, the rebirth of Aphrodite's city as Caesar's "glory" a given. Allowing this, and against the background of Rome's relations with Corinth, the aetiology of the order Vitruvius names Corinthian fairly begs for an allegorical reading. The Corinthian

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[297] Appian *Punica* 136; Dio Cassius 43.50.33. On the name and the epigraphic evidence for it, Broneer 1941; cf. Wiseman 1979, pp. 497–498. See also Hoskins Walbank 1996; Williams 1987.
[298] Centuriation of the site: Romano 1993. Rebuilding of Corinth: Gros 1990, pp. 50-52; Hoskins Walbank 1996; Torelli 1986, pp. 217-220; Ward-Perkins 1994, pp. 255-263; Williams 1987, 1993.
[299] Basilica at Fano: Vitruvius 5.1, cf. Gros 1990, p. 50. Gaius and Lucius died in 2 and 4 B.C. The group, now in the Corinth museum, dates from the late Augustan period. It is worth noting that Augustus, togate and *capite velato*, to denote his priestly role (the right hand is missing, but probably held a lituus), appears younger and is much better looking than the two nude youths who were his grandsons. See Vierneisel and Zanker 1979, p. 47.
[300] Hoskins Walbank 1996; Williams 1987, p. 32. Vitruvius 4.5.1.

virgin, *virgo civis* (*Corinthia*, is Corinth itself.[301] The illness (*morbus*, also "vice") to which she succumbs figures the city's decadence – the reason for her death, which is Corinth's destruction. Being "just ripe for marriage" put her at the peak of the sexual attraction that would have made her a choice victim of the rape that invariably accompanied a city's *direptio*: the procedure whereby a city was literally "torn to pieces" by Roman soldiers when they sacked it."[302] Rome is the dead city's "nurse" for a hundred years until her rebirth under Caesar whose "bloom" (or glory) flourishes in the acanthus plant, and testifies to his descent from the tutelary goddess of the city he brings back to life. Even the *pocula*, cups or vessels, former source of the virgin's delight, which the nurse piles into the basket she puts on the girl's tomb resonate singularly with the pottery and bronze *nekrocorinthia* dug out of Corinthian graves, for indeed, Corinth's "delight" in its lifetime, as one might say, had been the pottery and bronze for which the city had been famous. It is, admittedly, almost too neat to be true.

But then so is the exact correspondence between the story of the Corinthian virgin and the late form of the Corinthian capital that Vitruvius' aetiology matches with all too uncanny perfection. The aetiology has clearly been fashioned so as to account for every detail of the capital's current, approved form – in, for example, the Temple of Zeus Olympios that Vitruvius admires so much and that Suetonius says was to have been

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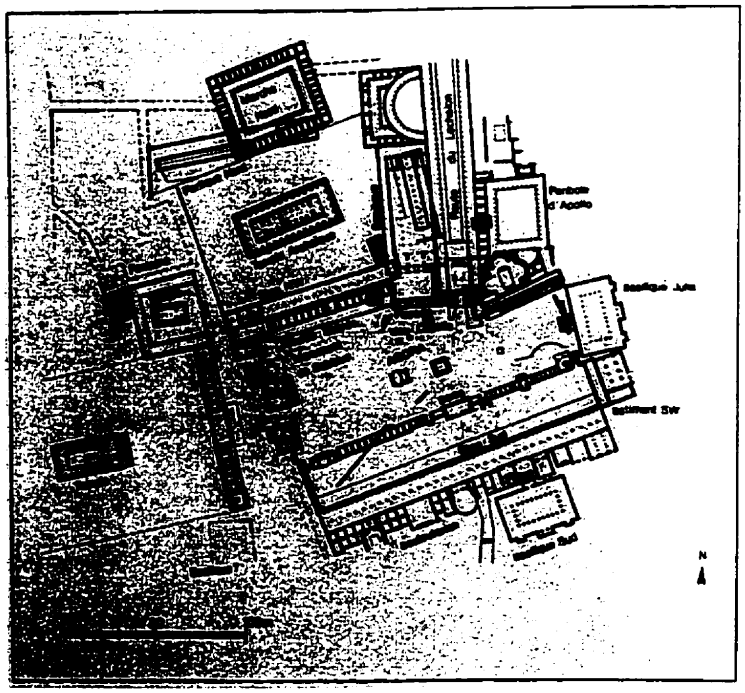
[301] There was in a famous Corinthian prostitute, Lais, whose grave was still an attraction in the second century A.D. (Pausanias 2.2.4). Antipator of Sidon (*The Greek Anthology* 7.218) immortalized her in an epitaph written in the first century B.C., after the city's destruction: "I contain her who in Love's company luxuriated in gold and purple. / more delicate than tender Cypris / Lais, citizen of sea-girt Corinth . . ." Lais, the beautiful dead courtesan, is an evocative metaphor for the ruined city and provides an anchor for Vitruvius' allegory of it, if indeed he knew about her, or knew the poem. Antipator's emphasis on her delicacy and tenderness, as well as his qualifying her as a "citizen of Corinth" suggests that Vitruvius may well have done. Cf. Engels 1990, p. 98.

[302] Ziolkowski 1993. "Rape" is, of course derived from *rapio*, which is the root of *direptio*.

Fig. 31




Plan of the monumental centre of Roman Corinth

completed as a temple dedicated to Augustus's *genius*.[303] By the same token, and in parallel, the recent history of Corinth supplies Vitruvius with another point of departure in an identifiable historical form, place and Roman meaning to which to assimilate, and by which to retrospectively explain, the resonant symbolism of death and rebirth already inherent in the (arguably) as yet unnamed acanthus-leaf capital. Once named and located, the Corinthian order was no longer just about Corinth, of course, but about Rome and her civilising mission. The city's rebirth, encapsuled by Vitruvius' story into a specific architectural form, could go on to herald the rebirth of the entire world. Generated by natural forces, the Corinthian order was the order of future renewal, not, like the venerable Doric and Ionic, an order of the past.

Vitruvius is brief on the proportions of the Corinthian order, allowing it only two paragraphs which deal exclusively with the design of the capital.[304] Much more detailed and extensive is his account of the Ionic, which covers base, shaft, capital and entablature, as does his account of the Doric.[305] Written sources on the latter, both orders of greater antiquity and, at the time, more widely used than the Corinthian, would have been more readily available to him, which may partially account for the imbalance.[306] But, if one reads Vitruvius carefully, this ostensible imbalance does not really diminish the Corinthian order's relative importance or contradict the implications of the powerful, prophetic aetiology he endows it with.

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[303] Vitruvius 7.pref.15; Suetonius *Divus Augustus* 60.
[304] Vitruvius 4.1.11-12.
[305] Ionic: Vitruvius 3.5.1-15; Doric: 4.3.1-10.
[306] For the Ionic order, and indeed much of Book 3, the late 2nd-century B.C. Hellenistic architect, Hermogenes of Alabanda, whom Vitruvius admires greatly: Vitruvius 3.2.6; 3.3.8; 3.3.9. On Hermogenes, Akurgal 1985, pp. 20-25; Gros 1978. Pythias, who designed the Ionic Temple of Athena at Priene is another. See 7.pref.12, where Vitruvius' other sources, including those on the Doric order, as well as an Arcesius on the Corinthian are listed. Cf. Liou et al., Vitruvius 7 (1995), pp. 62-69.

Corinthian columns have pride of place in the opening words of Book 4, where Vitruvius writes, "except for their capitals, Corinthian columns have all the same symmetries as Ionic ones . . ."[307] This means that everything he said about the Ionic columns in Book 3 is applicable to Corinthian ones, and leaves the reader beginning Book 4 with the distinct impression that Vitruvius has been leading up to the Corinthian order all along. It is because of the loftiness of their capitals, higher proportionally than those of the Ionic order, that Corinthian columns present a more slender appearance (Fig. 32).[308]

The lower part of the Corinthian column (its base and shaft) has Ionic proportions and is therefore, strictly speaking, Ionic. Vitruvius says that the Corinthian column does not, moreover, have an entablature proper to it either, but can be placed under either a Doric or an Ionic one.[309] He is mistaken here, for the Corinthian order did, in fact, end up having its own distinctive entablature, but he does not anticipate this – or does not want to.[310] The message he conveys through his odd assertion is that Corinthian columns, whose only distinctive feature is their capitals, are infinitely adaptable and therefore potentially ubiquitous: they can fit in anywhere.[311] So it was, concludes Vitruvius, that

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[307] Vitruvius 4.1.1: *Columnae corinthiae praeter capitula omnes symmetrias habent uti ionicae.*

[308] Vitruvius 4.1.1: *Igitur quod duae partes e crassitudine corinthiarum adiciuntur, efficiunt excelsitate speciem earum graciliorem.* The Ionic capital, according to Vitruvius, is a third of a column diameter high; the Corinthian a full diameter.

[309] Vitruvius 4.1.2.

[310] On Vitruvius' failure to recognize the development of a distinctive Corinthian entablature in the architecture of late republican Rome, Gros 1976a, pp. 197-234, especially pp. 200-201. According to Gros, the fully developed Roman Corinthian order, with its own proper entablature first appears in the Temple of Mars Ultor in the Forum of Augustus, begun around 25 B.C. and dedicated in 12 B.C. (pp. 229-234).

[311] In fact, being able to fit in anywhere – although not for the reason Vitruvius gives – makes the Corinthian order easier to use than the Doric or the Ionic. The Doric and the Ionic orders both present formal difficulties when it comes to turning corners: the Doric because of the triglyphs of its entablature; the Ionic because the capital is frontal. Since all four fronts of the Corinthian capital are identical, and since there are no triglyphs in that order's entablature, the Corinthian order presents no such difficulties. On the case of using the Corinthian order and the method of its design in Roman architecture, Wilson Jones 1989.

Fig. 32

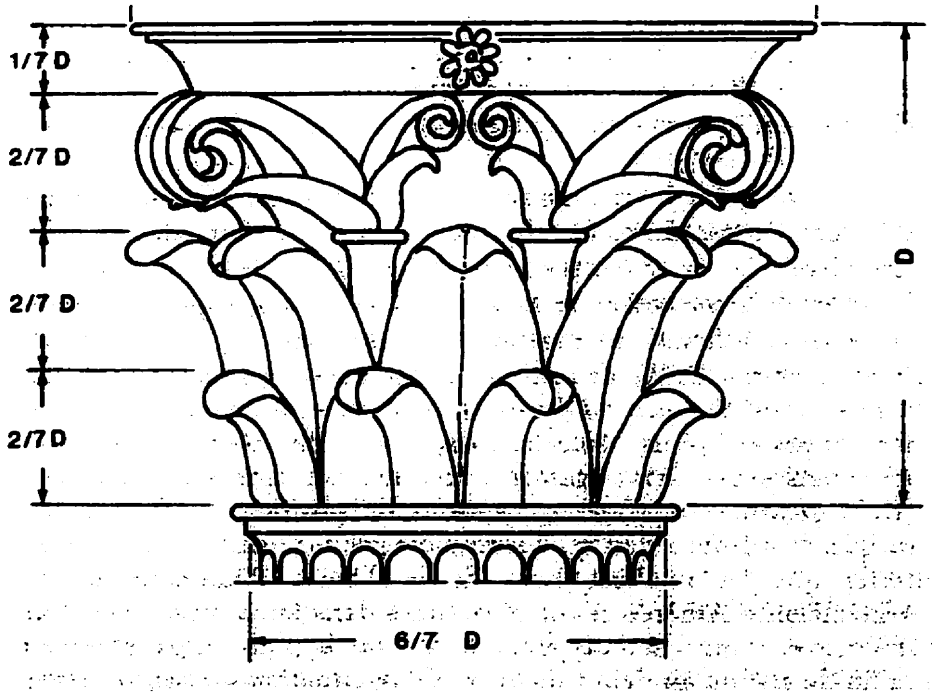
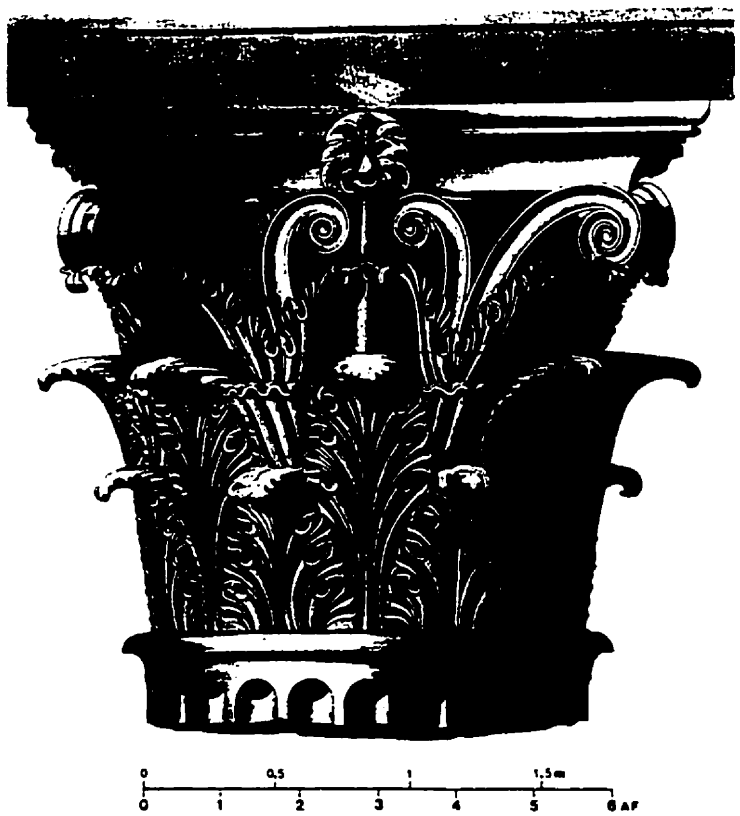



**Fig. 9. Le chapiteau corinthien selon Vitruve.**

**Above:** The Corinthian capital according to Vitruvius 4.1.11. After P. Gros.
**Below:** Corinthian capital of the Olympeion at Athens. After W. Dinsmoor.



"when the (Corinthian) capital had been put between them in built works, the two orders (Doric and Ionic) engendered a third one."[312]

As Vitruvius tells it, the Doric order is male, the Ionic, female.[313] The Corinthian capital that he says was inserted (*interposito*) between them is what joins them together.[314] Thus the Corinthian capital, emblem of a world reborn through Rome, is not only potentially ubiquitous. It is also at once the evidence and the agent of coherence. The built works in which the new order has thus been "engendered" (*procreatum*) can make this coherence ceaselessly fruitful, everywhere, for (taking Vitruvius at his word) each time a Corinthian capital is placed in a work, the Corinthian *genus* is born anew.[315]

"Venus," as noted earlier, was the name Varro gave to the binding force that joins fire to water, male to female; a force, he says, that is inherent in Victory as well, because when Victory overpowers, she also binds.[316] Like the newborn Venus rising from the sea, *venustas*, apparent beauty, is the visibility of this binding force and, as argued earlier, its perpetration through its power to inspire love. The Corinthian order, being young and slender, is capable of more beauty – can inspire more love – than the others. This its chief attraction.

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[312] Vitruvius 4.1.3: *Ita e generibus duobus capitulo interposito tertium genus in operibus est procreatum.* One might recall the use of "*korinthiazomai*" for "fornicate" (see above).

[313] Vitruvius 4.1.6-7. Cf. Rykwert 1996, pp. 171-316.

[314] Rykwert 1996, p. 317 has read Vitruvius 4.1.3 (cited above) as intimating that the Corinthian order is the child of the Doric and the Ionic.

[315] The symbolic fruitfulness of acanthus in the phenomenon known as Corinthianization is most spectacularly deployed, with specific references to Venus, in the frieze of the lower two thirds of the exterior of the screen wall of the Ara Paric Augusutae, conceerated in 9 B.C.: see Castriota 1995, pp. 58-73.

[316] Varro *De lingua latina* 5.61-62. *Therefore the conditions of procreation* (causa nascendi) *are two: fire and water. Thus these are used at the threshold in weddings, because there is union here, and fire is male, which the semen is in the other case, and the water is the female, because the embryo develops from her moisture, and the force that brings their* vinctio "*binding*" *is* Venus (et horum vinctionis vis Venus). *Hence the comic poet says, "Venus is his victress, do you see it?" not because Venus wishes* vincere, *to*

*The third kind, which is called Corinthian, imitates virginal slenderness, because virgins have more slender limbs due to their tender age, and thus can carry off more beautiful effects* (effectus venustiores) *in ornament.*[317]

The acanthus leaves that grow up in the spring around the basket on the dead virgin's tomb are, like the girl, also "tender" and "new."[318] Vitruvius says that this tenderness and newness is what inspired Callimachus to invent the new column capital in which the girl's virginity, a force of nature liberated by her necessary death, is thereby monmentalized. Transfigured by Vitruvius' story, the flower of the Corinthian virgin's youth could go on to bloom in the built works that, more than any statue or coin, made Augustus, the Roman world's Venus-born new ruler irresistably beautiful in ubiquitous, perennial rebirth.

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*conquer, but* vincire, *to bind. Victory herself is named from the fact that the overpowered* vinciuntur, *are bound.* See also above, p. 235.

[317] Vitruvius 4.1.8: *Tertium vero, quod corinthium dicitur, virginalis habet gracilitatis imitationem, quod virgines propter aetatis teneritatem graciliorihus membris figuratae effectus recipiunt in ornatu venustiores.*

[318] Vitruvius 4.1.10. See above, p. 248 for the full citation. Cf. 1.2.5, where the Corinthian order's youthful "tenderness" is also stressed.

**Chapter Four**

# THE BODY OF THE KING[1]

***Gnomonice.* The Statue of Augustus from Prima Porta. *Corpus imperii.***

Vitruvius was active during the years of almost unremitting civil strife that marked the transition from republic to empire – the transition from oligarchy to de-facto monarchy.[2] The previous chapters of this study have shown how, to a rather greater degree than has hitherto been allowed, *De architectura* is a *situated* work shaped in most major respects by its specific Roman context, particularly by the circumstances attending the triumphal period of Augustan renewal that followed the civil wars.

For Stoics, renewal (*renovatio*) was the world's cyclical rebirth through fire, the "seed" of all things, as Augustus's friend the Stoic philosopher Arius Didymus wrote – "a living being and a god."[3] In Vitruvius' chapter on the origin of building, fire assembles together the savage multitude "into one place" and makes them builders; men who "unlike other animals" walk upright, can contemplate "the magnificence of

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[1] For a vindication of the usage of the term "king," see above, Introduction, p. 13 n. 66 and p. 17 n. 75.
[2] See above, n. 1.
[3] Arius Didymus in Eusebius *Evangelicae praeparationis* 15.14; Cicero *De natura deorum* 2.118 (Balbus, the Stoic speaking): . . . *ignem, a quo rursum animante ac deo renovatio mundi fieret.* See Long 1986, pp. 154-155 and above, Chapter 2, p. 173.

the world and of the stars" and are uniquely endowed with hands and fingers."[4] Ten of them, to be precise: a revelation, as Vitruvius specifies later in Book 3, of the human body's perfection.[5] For Vitruvius, the power of fire to renew the world works through the hands and fingers of builders. Architecture is the proof of that power.

Augustan renewal did indeed mean rebuilding and rebuilding referred, almost unwaveringly, to the person of the princeps. Augustus's care for the fitness of the public buildings that, Vitruvius says, provide "eminent guarantees of the majesty of empire" was what prompted him "to set out . . . (his) writings on these matters" for the new ruler.[6] *Architectura*, the art above all of the geometrical footprint – the art that, Vitruvius claims, "demonstrates everything the other arts achieve" – was to be the passport to Roman ubiquity and, reciprocally, to the ubiquity of its new ruler.[7] *De architectura* is its 10-scroll perfect body.[8]

A passage in Dio Cassius' 3rd-century A.D. *Roman History* conveys the essence of this ubiquity and makes it concomitant with kingship. The context is an imagined debate, set in 29 B.C., about how Augustus, having as Vitruvius puts it "seized

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[4] Vitruvius 2.1.2: . . . *ab natura praemium praeter reliqua animalia, ut non proni set erecti ambularent mundique et astrorum magnificentiam aspicerent, item manibus et articulis quam vellent rem faciliter tractarent.*

[5] Vitruvius 3.1.5.

[6] Vitruvius 1.pref.2: *Cum vero adtenderem te non solum de vita communi omnium curam publicaeque rei constitutione habere, sed etiam de opportunitate publicorum aedificiorum ut civitas per te non solum provinciis esset aucta verum etiam ut maiestas imperii publicorum aedificiorum egregrias haberet auctoritates, non putavi praetemittendum quin primo quoque tempore de his rebus ea tibi ederem, ideo quod primum parenti tuo de eo fueram notus et eius virtutis studiosus.* For a discussion of this passage, see above Chapter 1, pp. 44–47.

[7] Vitruvius: The knowledge of the architect is furnished with many disciplines and various kinds of learning. Judiciously exercised, it demonstrates everything the other arts achieve. (*Architecti est scientia pluribus disciplinis et variis eruditionibus ornata cuius iudicio probantur omnia quae ab ceteris artibus perficiuntur opera*). For the grammatical justification of this reading, which departs slightly from conventional ones, see above, Chapter 1, p. 40, n. 100. Geometrical footprints: Chapter 2, pp. 161-166.

[8] Above, Chapter 1, pp. 48-68.

command of the world," is now to govern it.[9] Agrippa, Augustus's general, argues for a republican form of government. Maecenas, his close friend and advisor, pleads for monarchy but counsels against making images of the king or building temples to him, for, he says to Augustus, "if you are upright as a man and honourable as a ruler, the whole earth will be your sacred precinct (*temenos*), all cities your temples, and all men your statues, since within their thoughts you will ever be enshrined and glorified."[10] The prediction, written some 250 years after the time of Vitruvius, is a post factum prophesy. When Dio wrote, Augustus and his successors had already been enshrined everywhere for over two centuries. By then the Roman world had indeed become the emperor's *temenos*, but if his virtue had (or appeared to have had) made this so as Maecenas predicted it would, it was *because* of the cities that were built as his temples, and *because* of the images that were made to populate them. *Because* of the signifying power of architecture that gave the king's image, and so his virtue, real coordinates in space and time.[11]

When, in the first chapter of Book 3, Vitruvius stipulated that temples were to be built following the same *ratio* as nature follows when it builds the bodies of well-shaped men, the identity of temples and Augustus, their builder, was a historical

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[9] The debate is reported in Book 52 of Dio Cassius' *Roman History*. Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum.*

[10] Dio Cassius 52.35.5.

[11] The Roman colony of Arles in Gallia Narbonensis can be taken as a paradigmatic case in point. It was in a centrally-located sanctuary in the forum of Arles that the best-preserved marble copy of the *clipeus virtutis*, "shield of virtue," whose gold original had been conferred on Augustus by the Senate in January 27 B.C. along with his new name, was enshrined only a year later to acquire what Pierre Gros has called *une valeur fondatrice*: "*C'est autour de lui, ou plus exactement autour du monument dont il faisait partie que s'est installée la première place publique d'Arles*" (Gros 1987b, p. 436). There were four virtues inscribed on the shield, other copies of which were almost certainly enshrined elsewhere: *virtus, clementia, iustitia, pietas*. See further Wallace-Hadrill 1981.

given.[12] The given would have acquired rational necessity when the Augustan reader (as he inevitably would have done) identified this particular historical man, Augustus, with the Polykleitan man of perfect "canonic" proportions Vitruvius presents as the model of the symmetrical *ratio* that the temple-builder was to imitate.[13] *Ratio* – here, the overruling principle of *symmetria* – was the condition of coherence, as coherence was of bodies. It was not enough to imagine or declare something a body give it coherence. For the imagined body's coherence to transcend contingency, it had to have a *ratio*. Vitruvius who, in his second preface, presents his "knowledge and writings" – *architectura* and *De architectura* – as the double of Dinocrates' Herculean body (a body that in turn doubles the king's) presents his ten-book treatise as a rationalised body.[14]

During the Augustan principate, the Roman world, permeated by its ubiquitous ruler, became for the first time an imagined body.[15] To understand *De architectura* as that body's rationalisation – a rationalisation at once of the body of the Roman world (*corpus imperii*) and of the ruler who permeated it – is to understand that Vitruvius, in writing the "perfect" body of architecture, was concurrently writing the body of the king.[16]

Ernst Kantorowicz' *The King's Two Bodies* is the indispensable referent and point of departure here.[17] Kantorowicz showed that in the culture of the Christian

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[12] Above, Chapter 3, p. 47.
[13] On Polykleitos, below pp. 295-301.
[14] Vitruvius 2.pref.4: *scientia scriptaque*. See above, Chapter 2, pp. 153, 183-184.
[15] Béranger 1953, pp. 218-252; Kienast 1982b; Richardson 1991 and below pp. 305-333.
[16] Vitruvius 9. 8.15: *corpus emendatum architecturae*.
[17] Kantorowicz 1957. Kantorowicz also supplies the point of departure for Dupont's (1986) discussion, in the context of imperial funeral rites, of the "other," divinized, body of Roman emperors.

West the king had two bodies: a visible one, subject to imperfection, infirmity, old age and death and an invisible body politic that was eternal, ubiquitous and perfect.[18] The first was "natural" or real, the second a legal fiction. The first, worldly one was sustained and made continuous from generation to generation by the infusion of the second which was spiritual – a soul beyond time.

Within this interpretative framework, it is more than a little tempting to infer that the body Vitruvius claims he was writing is to be understood as the second, eternal one of the king's two bodies. His written or "angelic" body is, after all, a *book*.[19] Constituted by ten scrolls, and containing as it purportedly does "all the *rationes* of the discipline" of *architectura*, it is perfect.[20] Unlike Vitruvius himself, the book is neither old nor infirm.[21] Nor will it ever be. The bodies of Olympic athletes grow old and die as quickly as their short-lived glory, he writes in his ninth preface, but the opinions of writers like Cicero, Lucretius and Varro "their bodies absent, will flower in old age . . . and have greater authority than all those who are present."[22] Into this ever-youthful company Vitruvius hopes to insert both himself and *architectura*: the knowledge of the architect that, judiciously exercised, makes Rome, its civilisation and its king at once ubiquitous and ageless. But the Roman king's agelessness is not out of time, like the eternal soul that is the spiritual constituent of the second of Kantorowicz'

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[18] Kantorowicz 1957, pp. 3-7. Kantorowicz' book explores the notion from its first explicit formulations in the early middle ages to the 18th century.
[19] Above, Chapter 1.
[20] Vitruvius 1.pref.3: *namque in his voluminibus aperui omnes disciplinae rationes.*
[21] Vitruvius 2.pref.4.
[22] Vitruvius 9.pref.17: *Item plures post nostram memoriam nascentes cum Lucretio videbuntur velut coram de rerum natura disputare, de arte vero rhetorica cum Cicerone, multi posterorum cum Varrone conferent sermonem de lingua latina, non minus etiam plures philologi, cum Graecorum sapientibus multa deliberantes, secretos cum his videbuntur habere sermones; et ad summam,*

king's two bodies. Such timelessness would have been unimaginable in the Vitruvian context, where nature, with its inherent *ratio*, was the ally, not the enemy, of all perfection. Nature's perfection lay in the pattern (*ratio*) of its changes which, being cyclical, were the source of time itself. The body of architecture perfects and renders visible the body of a king made ageless (not timeless) through unending renewal *in* time. The first architectural body, presented as fundamentally and essentially *natural*, can only give the second kingly one its visible worldly identity by operating *within* time which is the generative agent of the world's perpetual rebirth.

Architecturally, the Roman kingly body operates in imitation of the *ratio* of a world that, in the ancient (particularly the Stoic) view, was perfect, whole and complete.[23] In this context, the mortal body of the king – the flesh-and-blood man named Augustus who limped, was sickly and had bad teeth – was not fully "natural" as the Stoics understood nature nor, in its imperfection, really "real."[24] His mortal body being irrelevant to the discourse, formed no part of it, and was therefore within its framework non-existent.

Granting the integrity of the early imperial context that generated *De architectura*, the body that Vitruvius deploys in his treatise cannot be deconstructed as a pretence, deliberately fabricated to mask a suspect and corrupt reality – or any kind of alternative reality, corrupt or not. If it is perfectly coherent with nature, the mask

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*sapientium scriptorum sententiae, corporibus absentibus vetustate florentes . . . maiores habent quam praesentium sunt auctoritates omnes.*

[23] Cicero *De natura deorum* 2.37-39 (Balbus, the Stoic speaking): *there is nothing besides the world* (mundus) *that has nothing wanting, but is fully equipped and complete and perfect* (perfectus) *in all its numbers and parts . . . . The world . . . since it embraces all things and since nothing exists which is not within it, is entirely perfect.*

[24] Augustus's physical flaws: Suetonius *Divus Augustus* 79-83 and above Chapter 3, pp. 246-247.

*becomes* reality. Paradoxically transparent because it is impenetrable (revealing all and hiding nothing) a perfect mask can never be construed as a misrepresentation. Being perfect, it *is* what it represents. Perfection – completeness, wholeness – is crucial because, if perfect, the representation is by definition unique and excludes all alternative realities as unimaginable. Imagined realities *un*founded in nature threaten the perfect coherence of such representations. This, and not a crusty conservative's inability to appreciate the currents of contemporary art, is what underlies (for instance) Vitruvius' celebrated invective in Book 7 against the depravities of what is now identified as late second style mural painting.[25] Images of things that "are not, were not, nor can be" are unnatural, subversive.[26] They are irrational. They endanger coherence.

That is why the body of architecture had to be written, as Vitruvius puts it, *emendatum*, "without a flaw:" to represent the king for whom he wrote it in a body as self-contained and single, as flawless and entirely natural as the world it would occupy and make perfectly Roman.

### *Gnomonice*

"Architecture itself has three parts, building, the construction of clocks (*gnomonice*) and mechanics," Vitruvius writes in Book 1.[27] Architecture's tripartite

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[25] Vitruvius 7.5.3-7. For commentary and references, Liou et al., Vitruvius 7 (1995), pp. 139-149.
[26] Vitruvius 7.5.4: *Haec autem nec sunt nec fieri possunt nec fuerunt.* Similarly, with respect to the necessity of grounding the ordering of the Doric entablature in the "reality" or "truth" of wood construction, Vitruvius 4.2.5: "Therefore they (the Greeks) thought that what cannot be done in reality could have no valid reason for being done in images. *Ita quod non potest in veritate fieri, id non putaverunt in imaginibus factum posse certam rationem habere.*"
[27] Vitruvius 1.3.1: *Partes ipsius architecturae sunt tres: aedificatio, gnomonice, machinatio.*

structure makes it complete and whole, as do the ten scrolls in which Vitruvius says he has laid out all its *rationes*.[28] The inclusion of building as a "part" of architecture needs no comment. Making mechanics, particularly the machinery of war, another of its constituents is concomittant with presenting *architectura* as a Herculean body which benefits the world through conquest, as discussed in Chapter 2 of this study. Futhermore, there is ample evidence that by the time Vitruvius wrote, mechanics had already long been entrenched as an integral part of an architect's expertise.[29] No such evidence exists when it comes to *gnomonice*.[30] Vitruvius is the first known author to make clock-construction a part of architecture, and his account of it is unique in surviving literature.[31] Even after Vitruvius, at the end of the first century A.D., when Pliny the Elder writes of Augustus's great sun clock in the Campus Martius, he calls Facundus Novius, the man he says devised it, a *mathematicus* not an *architectus*.[32]

Why, apart from inserting it as the structurally indispensable middle term of architecture's complete threefold rubric, does Vitruvius make clock construction one of its "parts?"

Generalities can readily be marshalled in his defense.[33] The *gnomon*, sundial pointer, is essentially the same tool as the architect's *norma*, set square. Both pointer and set-square are referred to by the Greek word *gnomon* (generically, any upright).

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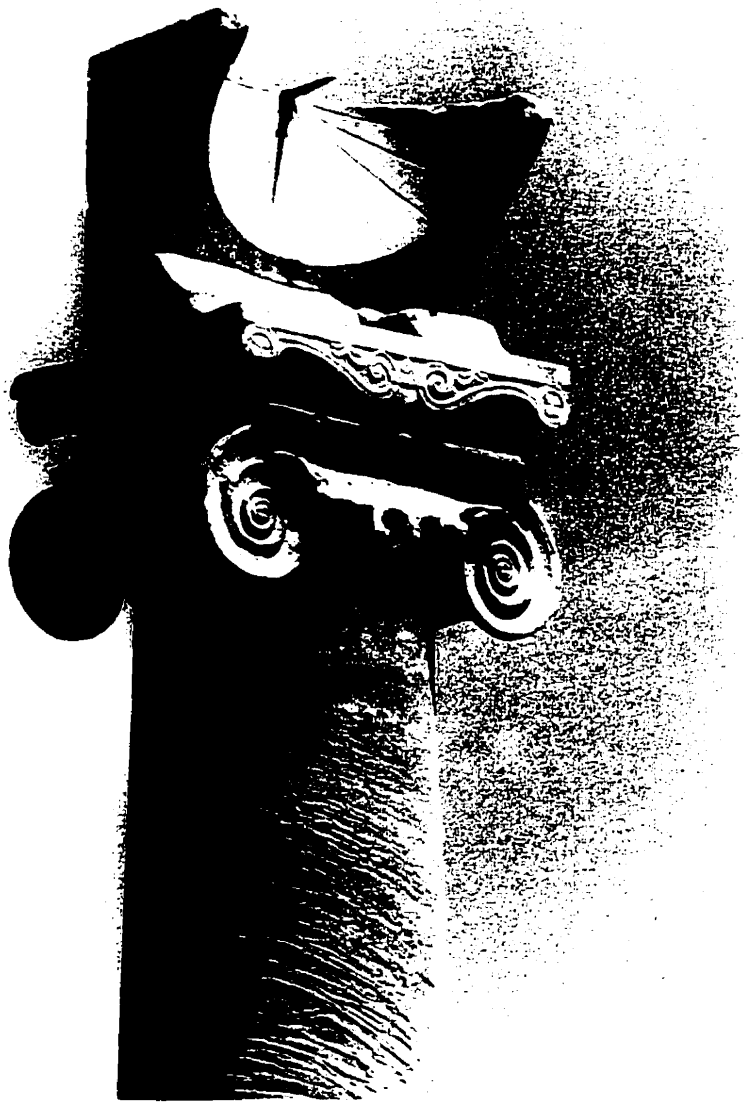
[28] Vitruvius I.pref.3: . . . *namque his voluminibus aperui omnes disciplinae rationes.*
[29] Fleury 1993, pp. 22-25 and Table 1, p. 17.
[30] Soubiran, Vitruvius 9 (1969), pp. ix-xi.
[31] Soubiran, Vitruvius 9 (1969), p. lxx. On ancient sundials in general, with a catalogue of surviving ones, Gibbs 1976.
[32] Pliny *Natural History* 36.72. On the Horologium Augusti, begun in 13 B.C., see further below, pp. 281-286.
[33] McEwen 1993, pp. 32-38.

Fig. 33



Conical sundial from Pompeii, now standing on an Ionic column in front of the Temple of Apollo. Gibbs 1976, cat. # 287. (Photo author).

from which the Latin *norma* derives.[34] Both, interchangeably, are agents of the "squaring" that establishes the 90-degree geometrical relation between verticals and horizontals without which there can be neither sundials nor cities nor buildings, nor yet the exclusively human upright posture that makes a man in his prime architecture's fundamental human referent.[35] Before the use of gnomons and sundials became widespread in the third centuty B.C., a man's shadow, along with the tables that recorded its varying length, provided a rough guide for chronometry in the Greek world.[36] "What," famously asked the Sphinx, "is that which has one voice and yet beomes four-footed and two footed and three-footed? . . . Oedipus found the solution, declaring that the riddle of the Sphinx referred to man. . ."[37] Architecture's ultimate referent, upright and two-footed at midday, is also the measure of time.

One can be less general than this. In the ninth preface that introduces his book on gnomonics, Vitruvius presents examples of the kind of learning he sees as paving the way for the spread of *humanitas*.[38] Pride of place is given to geometrical operations which involve precisely the kind of "squaring" that, it has been pointed out, was fundamental in centuriation, the process whereby Romans inscribed the order of the cosmos and of Rome onto its conquered territories.[39] Whether the operations of Roman land surveyors were founded in augural practice, as Varro attests, or in the

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[34] *LSJ*, s.v. *gnomon*; Lewis and Short, s.v. *norma*.
[35] Gnomons and sundials: Vitruvius 9 *passim*; gnomons and the laying out of cities: Vitruvius 1.6. Upright posture: Vitruvius 2.1.2. *non proni sed erecti ambularent mundique et astrorum magnificentiam aspicerent.*
[36] Kubitschek 1928, pp. 180-182; Neugebauer 1975, 2, pp. 736-738.
[37] Apollodorus *Bibliotheca* 3.5.8.
[38] Vitruvius 9.pref.2-14. See above, Chapter 2, pp. 157-158.
[39] Vitruvius 9.pref.3-7:.Doubling the square and the construction of 3-4-5 set squares. Clavel-Levêque 1992; Guillaumin 1994. The "squaring" of Corinth accompanied its refoundation as a Roman colony in 44 B.C. (above, Chapter 3, p. 253).

Greek learning Vitruvius claims to be a source of universal benefit, these practices depended on proper deployment of the *groma* – another cognate of "*gnomon*" – that was the chief tool of the Roman land-surveyor who was called a *gromaticus*.[40]

Evidence suggests a convergence of augury and Greek science, dating from the late Republic and early Empire, which made them subsequent partners, not mutually exclusive alternatives, in underwriting the "squaring" of the world. In earlier days, the practice and orientation of augurs appears to have been largely dependent on the place from which the auspices were taken. On the Capitol at Rome, says Varro, augurs traditionally faced south, and pronounced a ritual formula that was not the same as that pronounced elsewhere.[41] According to Livy, the augur who took the auspices for the inauguration of Numa, Rome's second king after Romulus, positioned himself on the citadel (*arx*) next to the Capitol, and faced not south, but east when he performed his ritual quartering of the sky.[42] Indeed, the way an augur faced appears to have been determined more by the direction of the best possible overall view (which would account for many possible variations in position) than with any strict alignment with the cardinal points.[43]

Variations tied to locality seem (at least in theory) to have disappeared in the imperial period. Land-surveyors, writes Frontinus in the late first century A.D., are to follow the practice of augurs and face west because, he says, that is the way the sun

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[40] Varro in Frontinus *De limitibus*. Thulin 1971, p. 10. Foundation in Greek science: Clavel-Levêque 1992, Guillaumin 1994. See especially Gargola 1995, pp. 41-50.
[41] Varro *De lingua latina* 7.7-10.
[42] Livy *Ab urbe condita* 1.18.6-7. On augury and ritual quartering of the sky, Gargola 1995, pp. 41-50; Rykwert 1988, pp. 45-47 and above, Chapter 3, pp. 197-198.
[43] Cicero *De legibus* 2.21; Polybius 6.26.

faces.[44] So, according to Vitruvius and to Frontinus who follows him, are temples, as discussed in Chapter 3 of this study.[45] Mimetic sympathy with the forward movement of the sun was not dictated by tradition or locality but by nature. It made the practice of augurs and surveyors everywhere uniform and, Frontinus writes, rendered "the constitution of limits identical throughout the whole world – *per totum orbem terrarum*."[46] He means the *Roman* world of course, whose order, explicitly tied to the movement of the sun, thus became not only ritually correct because divinely sanctioned through its grounding in augury but necessarily and universally so in graphic projection of sun's rule over the cosmos.

That the sun was *hēgemonikon* of the universe – its ruling principle – was the view of the Stoic Cleanthes whom Cicero calls "the Stoic of the older families."[47] Scipio Africanus, a celebrated member of one such "older family," describes a universe ruled by the sun which he calls the "lord, chief and ruler of the other lights, the mind and guiding principle of the cosmos" in the concluding book of Cicero's *De republica*.[48] Cleanthes' view that of the sun as *hēgemonikon* has its fullest surviving expression in a passage from Arius Didymus, Augustus's close friend and philosophical advisor from 30 to 10 B.C., who also, in the same work, transmits the key ideas about

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[44] Frontinus *De limitibus*, in Thulin 1971, pp. 10-11.
[45] Vitruvius 4.5.1; Frontinus *De limitibus*, in Thulin 1971, p. 11 and above, Chapter 3, pp. 201-206.
[46] Frontinus *De limitibus*, in Thulin 1971, p. 14: *et sic per totum orbem terrarum est unaquaqueque limitum constituo. . .*, and above, Chapter 3, p. 202.
[47] Cicero *Academica* 2.126: *Cleanthes, qui quasi maiorum est gentium Stoicus*. He means, presumably, the older *Roman* families: the *maiores* whose customs (*mores*) were the foundation of Roman commonwealth (*De republica* 5.1). If so, ancestral adherence to Cleanthes' views would have given them similar authoritative weight.
[48] Cicero *De republica* 6.17: *dux and princeps and moderator luminum reliquorum, mens mundi et temperatio*. Other Stoics thought the *hēgemonikon*, which governed the universe through its unifying soul, was the aether, or upper air; Posidonius thought it was the heaven (Diogenes Laertius 7.139). By the "heaven" (*ouranos*) Posidonius would have meant the sphere of the fixed stars which was the

beauty, love and the Stoic city discussed in the previous chapter of this study.[49]

*Cleanthes invoked the sun as the ruling principle of the universe* (hêgemonikon de tou kosmou) *because it is the largest of the stars, and because it makes provision for the most things to unite together into the whole, creating as it does the succession of hours in the day and of the seasons in the year.*[50]

When Cicero cites the same view in his *Academica*, the phrasing in Latin has Cleanthes hold that "the sun is lord and master of the world:" *solem dominari et rerum potiri putat.*[51] *Rerum potior* means to have "complete," or "supreme" mastery of.[52] Vitruvius uses the same verb, *potior*, when he addresses Augustus in his first preface: "When your divine mind and power, Imperator Caesar, were seizing command of the world . . ."[53] It reappears in opening of his second preface with reference to Alexander the Great: "When Alexander was mastering the world . . ."[54] In the first chapter of Book 6, Vitruvius says that the divine mind has given the city of the Roman people its geographically ideal position at the centre (the one most favoured by the "tempering" effects of the sun) so that it might "seize command of the world."[55] In Latin, the terms that express the sun's rule over the universe are the same as those that, for Vitruvius,

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outermost, all-encompassing one, of the nine spheres that constituted the ancient cosmos. See also Cicero *Academica* 2.126.

[49] Chapter 3, pp. 244-247. The work in question is his *Epitome*, an abridgment of mainly Stoic philosophy which survives only in fragmentary form: see Fortenbaugh, ed. 1983; Hahm 1990.

[50] Arius Didymus in Eusebius *Praeparatio Evangelicae* 15.15.7 (SVF I.499): *Hêgemonikon de tou kosmou Kleanthei men hêrese ton hêlion einai dia to megiston tôn astrôn hyparchein kai pleista symballesthai pros tên ton holôn diokêsin, hêmeran kai eniauton poiounta kai tas hallas hôras.* See also Diogenes Laertius 7.139; Censorinus 1.4; Aëtius 2.4.16 (the latter two as cited *SVF* I.499).

[51] Cicero *Academica* 2.126.

[52] Lewis and Short,s.v. *potior*, and above, Chapter 2, pp. 152-153.

[53] Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum*

[54] Vitruvius 2.pref.1: . . . *cum Alexander rerum potiretur* . . .

[55] Vitruvius 6.1.11: *Ita divina mens civitatem populi Romani egregia temperataque regione conlocavit, uti orbis terrarum imperii potiretur.*

express that of Rome and Augustus.[56]

The sun, according to Cleanthes, was the *hēgemonikon* of the universe because, Arius Didymus explains, it creates the succession of days and seasons, and "makes provision for the most things to unite together into the whole." None of the other four sources that report Cleanthes' view of the *hēgemonikon* give any such explanation, which raises the possibility that Arius may have been interpolating here.[57] If the cosmos, as the Stoics believed, was a body, the condition of its coherence, on this view, was the sun that created the pattern of time.[58]

"This book is on the principles of *gnomonice*," Vitruvius concludes his ninth preface. "In it I will explain how they were discovered from the sun's rays in the universe, by means of the shadows of gnomons, and how it is that they grow longer or shorter."[59] The shadow of the gnomon at the equinox which, as Vitruvius notes, varies in relative length from place to place, determines the configuration of the analemma, or "face" of a sundial.[60] An ancient sundial was not only a clock in the conventional modern sense of the word: it was also a calendar. "The shadow of the

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[56] See further Cicero *De natura deorum* 2.29: "I use the term 'ruling principle' (*principatum*) as the equivalent of the Greek *hēgemonikon*, meaning that part of anything which must and ought to have supremacy . . . that which contains the ruling principle of the whole of nature must also be the most excellent of all things and the most deserving of authority and sovereignty over all things (*omnium rerum potestate dominatuque*).

[57] The other four sources (Aëtius, Cicero, Censorinus, Diogenes Laertius: see above nn. 49 and 50) simply state Cleanthes' opinion that the sun is the world's *hēgemonikon* and leave it at that.

[58] Cicero (*De natura deorum* 2.29) defines the *hēgemonikon* as that which "holds the whole universe together and preserves it (*quae contineat mundum omnem eumque tueatur*)." On the body of the world, see above, Chapter 1, pp. 69-71.

[59] Vitruvius 9.pref.18: *in hoc de gnomonicis rationibus, quemadmodum de radiis solis in mundo sunt per umbras gnomonis inventae, quibusque rationibus dilatentur aut contrahantur explicabo.*

[60] Vitruvius 9.1.1. See also 9.6.1, where Vitruvius repeats the same key principle: "The tracings of analemmas are found from revolution of the universe, from the sun's movement in the opposite direction through the twelve signs (of the zodiac), and from the equinoctial shadows of gnomons." *Namque ex ea mundi versatione et contrario solis per signa cursu gnomonumque aequinoctialibus umbris, analemmatorum inveniuntur descriptiones.*

gnomon appearing on the lines (of the analemma) indicates the hours of the day and the seasons of the year," explains the inscription on a Greek sundial from Samothrace:[61] the same temporal order Arius Didymus, in almost identical terms, credits to the sun as the source of its cosmic hegemony. The sun *creates, makes* (*poieiô* is the Greek verb Arius Didymus uses) the succession of days and seasons, which the sun clock *indicates* or *signifies* (*semainei*, in the inscription just cited).

The sun's rays strike the mediating gnomon whose projected shadow transforms the temporal order into the spatial one of the analemma, giving the heavenly order and the hegemony of the sun spatial reality in palpable, measureable extent. In this, the proportional relationship between the shadow's and the gnomon's length at noon on the equinox (at Rome 8/9, at Athens ¾, at Rhodes 5/7, at Tarentum 9/11, at Alexandria 3/5) is the key determinant in the transformation of cosmic order into worldly reality,[62] a process which Vitruvius claims is *architectural*.

*The analemma is the pattern* (ratio) *sought from the course of the sun and revealed through observation of the shadow of the gnomon as it lengthens to the solstice. It is by means of architectural principles* (per rationes architectonicas) *and the tracings of the compass that the analemma discloses how the universe operates.*[63]

The universe – "the all-encompassing vessel of the whole natural order"[64] – revolves on its axis thanks to the power of nature that, according to Vitruvius, itself

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[61] *IG* XII 8.240: *tou gnômonos hê skia epiousa epi tas grammas sêmainei tas hôras tou eniautou kai hêmeras*.. Cf. Dunst and Buchner 1973, p. 129; Buchner 1976, p. 319; Gibbs 1976, no. 8008.
[62] Vitruvius 9.7.1-2.
[63] Vitruvius 9.1.1: *Analemma est ratio conquista solis cursu et umbrae crescentis ad brumam observatione inventa, e qua per rationes architectonicas circinique descriptiones est inventus effectus in mundo.*
[64] Vitruvius 9.2.2: *Mundus autem est omnium naturae rerum conceptio summa . . .*

operates architecturally.[65] Crediting the operation of the cosmic mechanism (one whose revolution is also said to generate the principles of machinery in Book 10)[66] to an architectural power which the earthly architect imitates is unlikely to have originated with Vitruvius. In Plato's *Timaeus*, a work which particularly fascinated late republican intellectuals,[67] a universe very much like the one Vitruvius describes in the first seven chapters of Book 9 is constructed by a *dêmiourgos*, a divine craftsman. Similarly, when Cicero presents the Stoic view of the universe in *De natura deorum*, its spokesman Balbus infers "the presence not merely of an inhabitant of this celestial and divine abode, but also of a ruler and governor (*rector et moderator*), the architect as it were of this mighty and monumental structure."[68]

But even if Plato's *dêmiourgos* can be taken as the precursor or model for Vitruvius' cosmic architect, and even if the translation of cosmic into earthly order through the projections of *gnomonice* was considered an architectural process before Vitruvius declared it to be one, no one before Vitruvius had made *gnomonice* part of a written "body of architecture," because no one before him had ever attempted to write such a body.[69] And, as the evidence explored in previous chapters has shown, this newly-assembled body, for all its ostensible reliance on Greek components, was quintessentially imperial and Roman.

Vitruvius supports the view of the sun as *hêgemonikon* – "lord, chief, and ruler"

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[65] Vitruvius 9.2.2.: *Id volvitur continenter circum terram atque mare per axis cardines extremos. Namque in his locis naturalis potestas ita architectata est . . . .*
[66] Vitruvius 10.1.2: "Now all machinery is brought forth from the nature of things and founded on the teaching a guidance of the revolution of the universe." *Omnis autem est machinatio rerum natura procreata ac praeptrice et magistra mundi versatione instituta.*
[67] Griffin 1994, p. 709.
[68] Cicero *De natura deorum* 2.90.
[69] Vitruvius 4.pref. and above. Introduction pp. 9-11.

of the universe.[70] The sun not only determines the lengths of the hours and the days as it travels through the twelve signs of the Zodiac.[71] Its light penetrates the entire universe, so that, contrary to the view of some people, none of the planets is ever invisible.[72] The progressions and retrogressions of the stars are also accounted for by the "mighty force of the sun," for just as plants and moisture rise towards its heat, so the sun attracts the stars that follow it and, "curbing and restraining those that run ahead, does not allow them to move forward, but makes them turn back toward itself."[73] Vitruvius' description projects the image of an expert charioteer in perfect control of his team – of a sun whose power, if it is to be a unifying force, *must* be uniformly attractive. The conventional ancient view, transmitted by the elder Pliny, is more complex.[74] It accounts for erratic planetary motion by having the sun sometimes attract and sometimes repel the other stars, depending on the direction from which they are struck by its rays. A sun that sometimes attracts and sometimes repels is neither a true *hēgemonikon* nor a good charioteer. Such a sun would make no proper provision

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[70] Cicero *De republica* 6.17: *dux et princeps et moderator*. See above.

[71] Vitruvius 9.3.1; 9.3.3: Ancient hours were shorter in the short days of winter, and longer during the summer. Each period between sunrise and sunset was divided into twelve, no matter what the season., with the length of days and hours (at Rome, for instance) varying from a fifteen-hour day which, divided into twelve, yielded hour-and-a-quarter long hours (modern time) at the summer solstice when the sun is in Cancer, to a nine-hour day of twelve 45-minute hours in midwinter, under Capricorn. Only at the equinoxes (under Aries and Libra) did the day consist of twelve 60-minute hours. Kubitschek 1928, pp. 182-183; cf. Soubiran, Vitruvius 9 (1969), p. 143. On ancient chronology in general, Samuel 1972.

[72] Vitruvius 9.1.11. Cf. Cicero *De republica* 6.17, where the sun "fills and reveals all things (in the universe) with its light;" similarly at *De natura deorum* 2.119, presented as part of Balbus' Stoic argument.

[73] Vitruvius 9.1.12: *ut etiam fructus e terra surgentes in altitudinem per calorem videmus, non minus aquae vapores a fontibus ad nubes per arcus excitari, eadem ratione solis impetus vehemens . . . insequentes stellas ad se perducit, et ante currentes veluti refrenando retinendoque non patitur progredi . . . sed ad se regredi.*

[74] Pliny *Natural History* 2.69-72. Cf. Soubiran, Vitruvius 9 (1969) pp. 106-107.

"for the most things to unite together into the whole."[75]

Vitruvius' unconventional explanation is generated by the assumption that the sun is a source of cosmic coherence. For only if it is, first and unequivocally, a unifying force in the celestial order can it become, as a consequence, a unifying force in the terrestrial one through the proportional mediation of *gnomonice*, which Vitruvius claims for his architectural body as the middle one of its three parts.

With the advent of the principate, access to the gods was channelled through Augustus Caesar who became its exclusive mediator.[76] He was chief holder of the augural power that, above all, guaranteed Roman success in the world; he was sole builder of the temples that were the principal signs of Rome's exclusive pact with the gods, and hence of her (and his) success; he gradually accumulated all the Roman priesthoods previously held by various changing members of the ruling republican élite; he held the exclusive right to triumph. A single channel of access to the gods meant that the power such access conferred was now concentrated in a single person, who thus became sole ruler.

In the late republic, *religio* was projected beyond the ineffability of ritual performance and into the realm of rational discourse, in a move that was part of the more general effort to reconcile Greek learning (*ratio*) with Roman tradition (the *mos maiorum*).[77] Cicero's *De divinatione* has been taken as an early case in point.[78] The tripartite theology of Varro's *Antiquitates rerum divinarum*, which Varro dedicated to

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[75] Arius Didymus in Eusebius *Praeparatio Evangelicae* 15.15.7 (*SVF* I.499). See above, p. 270 for the full citation.
[76] See above, Chapter 3, pp. 221-226.
[77] On the ineffability of ritual performance, Scheid 1993, p. 116 and above Chapter 3, p.200.

Julius Caesar as Pontifex Maximus, can be taken as another, with his "natural theology" – the second of its three parts – complementing the "civil theology" that was an account of the Roman gods and their traditional rites.[79] Natural theology was the special domain of philosophers, and concerned the universe (*mundus*): "the most important of all existing things."[80] Perhaps the most telling index of what one might, with Varro in mind, call the naturalisation of *religio* was the naturalisation of augury, principal guarantee of Roman power. Through its naturalisation, augural practice and the surveying procedures that were claimed to be grounded in it became an unvarying reflection of the sun's course in heavens. The power that had been guaranteed by the traditional Roman covenant with the gods was now jointly underwritten by the natural order, with the second – being rational and, as Varro would have it, concerned with the universe – naturally carrying more weight world-wide than the first. There could be no more explicit an expression of this naturalisation process than Vitruvius' enthusiastic, rather elaborate account of how and why Rome's world-dominion was the necessary concomitant of her naturally-determined central position under the sun.[81]

It was inevitable, in this context, that when Augustus became sole mediator of *religio* he should also have become sole mediator of the natural order with its solar

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[78] Beard 1986, who claims (p. 34) that "Cicero was the first, or among the first, fully to integrate Hellenizing philosophy with traditional Roman practice."

[79] On Varro's tripartite theology, see Boyancé 1955 and 1975; Cardauns 1976 and 1978 (*ANRW*, with bibliography); Lieberg 1973; Pépin 1956; and above Chapter 1, p. 60.

[80] Varro in Augustine *City of God* 6.5. On natural theology, St. Augustine cites Varro directly: *The second kind (natural theology) which I have pointed out is the one on which the philosophers have left a number of works, in which they discuss who the gods are: whether they came into being at a certain time, or have always existed: whether they derive their being from fire (the belief of Heraclitus) or from numbers (as Pythagoras thought) or from atoms (as Epicurus alleges). And there are other like questions all of which men's ears can more readily tolerate in the lecture room* (in schola) *than outside in the market place* (extra in foro).

[81] Vitruvius 6.1.3-11.

*hēgemonikon*, duplicating in this precisely the role Vitruvius assigns to the mediating gnomon, through whose shadow the sun's rule over the cosmos is projected onto the world.

The simultaneous grounding of Roman rule (specifically that of Caesar and Augustus) in both augury and in nature had an early architectural demonstration in Augustus's reign in the west-facing Temple of Divus Julius in the Forum Romanum, dedicated in 29 B.C. As discussed in Chapter 3, its mimetic sympathy with the rising run, on which Vitruvius' exegesis of west-facing temples has proven to be exceptionally enlightening, coupled the advent of the Augustan principate with the "birth" of the sun at the sunrise of the winter solstice under Capricorn, the sign that – possibly because it presided over his conception – was disseminated in literature and in imagery as Augustus's own.[82] The precisely-calculated orientation of the Temple of Divus Julius which thus confounded Roman civil *religio* at once with the order of the solar year and with the rule of the Julian dynasty could not have been possible without thorough understanding of that order and acknowledgement of solar hegemony over it.

Precise knowledge of a temporal order ruled by the sun had also been integral to Julius Caesar's reform in 46 B.C. of the Roman calendar, which until that time had

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[82] West-facing temples: Vitruvius 4.5.1 and above, Chapter 3, pp. 201-206. Augustus was born in on September 23rd, which made him a Libra, and linked his birth to the autumnal equinox, but Capricorn, the sun's birth sign and the sign under which Augustus would have been conceived, was just as frequent if not more so in the iconography of his principate. See Barton 1994, pp. 40-47; Dwyer 1973; Pollini 1993, pp. 280-282. Vitruvius 9.6.2 credits the method of "casting nativities" from the time of conception, rather than birth, to one Achinopolus, or (following Rose's emendation of the manuscripts) Athenodorus. See Soubiran, Vitruvius 9 (1969), pp. 203-204, who retains the "Achinopolus" of the manuscripts, and Corso and Romano, Vitruvius 1997, p. 1276, who adopt Rose's emendation. Not only was Augustus conceived under Capricorn; the moon was in Capricorn at the time of his birth in September (Pollini 1993, p. 281). See also Suetonius *Divus Augustus* 94.5.

been lunar, not solar.[83] It was from the Egyptians, according to Macrobius' *Saturnalia* of the fifth century A.D., that Caesar acquired this knowledge.[84] "Copying the Egyptians, who alone are privy to all divine matters," writes Macrobius, "(Caesar) endeavoured to arrange the year to conform to the duration of the course of the sun, which takes three hundred and sixty-five days and a quarter to complete."[85]

In the Julian calendar, which is the source of the modern calendar, months are entirely arbitrary units of time and bear no relation to the fluctuating phases of the moon that made the lunar calendars that preceded Caesar's reform so inconsistent.[86] The solar calendar, which obviated such fluctuations by the simple expedient of eliminating them from its calculations, was much more coherent. Eliminating lunar fluctuations from official calculations went hand in hand with the reordering of civic time (the fluctuating sequence of feast days, market days and so on) in which lunar time was imbricated along with the traditions (*mores maiorum*) that had hitherto shaped their observance.[87] The Egyptians, who since early pharaonic times had used a solar calendar of 365 days which indeed, as Macrobius attests, was the source for the new Roman one, maintained a lunar religious calendar in parallel with the solar civic one.[88] There was no parallel lunar calendar in the new Roman system. Only a single order of

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[83] Macrobius *Saturnalia* 1.13.1-5 on Numa's alleged institution of a lunar civil year of 354 days. On the republican calendar up to the time of Caesar's reform, Samuel 1972, pp. 159-170; on the Julian calendar, pp. 155-158.

[84] Macrobius *Saturnalia* 1.16.39; cf. Dio Cassius 43.26.2: "He got this improvement (i.e. the calendar reform) from his stay in Alexandria." Caesar was in Egypt in 48–47 B.C. (Dio Cassius 42.7–46).

[85] Macrobius *Saturnalia* 1.14.3: *Post hoc imitatus Aegyptios, solos divinarum rerum omnium conscios, ad numerum solis, qui diebus trecentis sexaginta quinque et quadrante cursum conficit, annum dirigere contendit.* The translation is by Percival Vaughan Davies. Cf. Pliny *Natural History* 18.211-212, who says he did this with the help of one Sosigenes, also mentioned as an astronomer at *Natural History* 2.39. Rawson (1985, p. 112) has identified Sosigenes as Alexandrian. On the calendar reform, see also Suetonius *Divus Julius* 40; Dio Cassius 43.26.1-3.

[86] Samuel 1972, pp. 12-18.

time ruled by the sun.

Stefan Weinstock has shown that the solar symbolism that had become integral to the imperial cult by the end of the first century A.D., "began under Caesar and for Caesar."[89] Far more fundamental in this than the adoption of solar attributes such as the radiate crowns formerly worn by the Hellenistic kings whose kingdoms were now part of the Roman *orbis* was the new calendar in which Caesar decreed that his victories be recorded along with his birthday and that, with the month of Quintilis renamed Julius (July), bound solar hegemony to that of Caesar.[90] Augustus carried on the good work, fine-tuning Caesar's reformed calendar to make it even more consistent, and commanding that "its entire arrangement be consigned by inscription to the eternal custody of a bronze tablet."[91] In 8 B.C. the month of Sextilis was renamed Augustus.[92] That was by no means all.

When Augustus conquered Egypt in August of 30 B.C., the last and richest of the Hellenistic kingdoms fell to Roman rule. In Egypt, the king, the sun and time itself had been bound together in a particularly intimate relationship from the time of the Old Kingdom pharaohs down to the Ptolemies whose rule ended with Augustus's conquest

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[87] Samuel 1972, p. 153.
[88] Samuel 1972, pp. 145-146.
[89] Weinstock 1971, pp. 381-384 (citation from p. 384).
[90] Hellenistic kings and radiate crowns: Weinstock 1971, pp. 381-382. Record of victories: Appian *Bellum civile* 2.106.442; birthday: Dio Cassius 44.4.4; 47.18.4. Change of Quintilis to Julius in 44 B.C.: Appian *Bellum civile* 2.106.44; Dio Cassius 44.5.2;4; Macrobius *Saturnalia* 1.12.34; Dio Cassius 45. (cf. Samuel 1972, p. 155; Weinstock 1970, pp. 197, 155-158).
[91] Macrobius *Saturnalia* 1.14.15: *et omnem hunc ordinem areae tabulae ad aeternam custodiam incisione mandavit.* The fine-tuning involved correcting the priests' error of intercalating a day every three years instead of every four (Macrobius 1.14.14).
[92] Censorinus 22.16; Macrobius *Saturnalia* 1.12.35; Dio Cassius 55.6; Suetonius *Divus Augustus* 31 (cf. Samuel 1972, p. 155).

and Cleopatra's, the last Ptolemy's, suicide.[93] The king's titles – formulaic epithets attached to his name that stressed the privileged relationship to the gods that was the source of his legitimacy and of his cosmocratic power to uphold the order of the world – were, with certain adjustments, almost immediately transferred to Augustus, whose name appeared enshrined in the pharaonic cartouche less than eight months after the conquest.[94] A colossal red granite statue of a pharaoh from the Temple of Amon at Karnak has been identified as a portrait of Augustus and assigned to the same early date.[95]

Heliopolis, the "city of the sun" north of the ancient Egyptian capital of Memphis, was the centre of the Egyptian solar cult where pharaohs had been dedicating obelisks to the sun's power, chief source of their own, since the third millennium B.C.[96] It was no doubt during his first and only visit to Egypt in 30 B.C. that Augustus decided to have two Heliopolitan obelisks sent to Rome, and two others to Alexandria.[97] One tends to forget, in view of the long subsequent history of their removal, that the displacement of obelisks was, at the time, a wholly novel undertaking: that their transportation began when the first Roman emperor "seized command of the

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[93] Divine kingship in Egypt (recently) Silverman 1991, especially pp. 58-87. On the Egyptian king's relation to time, Jordan 1998, p. 92.

[94] Grenier 1995, p. 3185 for the inscription on a stele at Philae, dated the 15th of April 29 B.C., where Augustus is named "the pharaoh Caesar" in hieroglyphs framed in a cartouche; pp. 3187-3191, for the titles. The foregoing would have been the result of priestly directives at the highest levels of Egyptian society. But the new king was acknowledged as such at the lowest levels as well: see Millar 1984, pp. 38-39.

[95] Strocka 1980.

[96] On Heliopolis (just north of modern Cairo), Lesko 1991, pp. 91-93. Dedication of obelisks at Heliopolis, Pliny *Natural History* 36.64-65. See also Habachi 1977, pp. 4-6; Iverson 1968-, I pp. 11-13.

[97] Pliny *Natural History* 36.69-71; Strabo 17.1.27: the two Roman obelisks were clearly no longer standing at the time of Strabo's stay in Egypt in the 20's B.C., and since Augustus only visited Egypt on the one occasion in 30 B.C. it is reasonable to conclude that the decision to remove both the Roman obelisks and the Alexandrian ones must have been taken at that time (cf. Grenier 1995, p. 3182).

world."[98]

The two obelisks Augustus had sent to Alexandria had been a pair, dedicated by the 15th-century B.C. pharaoh Thutmosis III to "his father the Rê-Harachte," and set up at the entrance to the sun god's temple.[99] At their new destination near the port of Alexandria, they were again set up as a pair, this time in front of the Temple of Caesar, and rededicated by Augustus to his deified father in 13/12 B.C.[100] Each of the two obelisks stood on the backs of four bronze crabs, no doubt because Julius Caesar, whose birthday was July 13th, was born when the sun was in Cancer, the crab.[101]

Of the two obelisks sent to Rome one, originally dedicated at Heliopolis by Ramses II in the 13th century B.C., was raised on the spina of the Circus Maximus in 9 B.C., where it faced the ancient Roman Temple of Sol that was integrated into the seats on the southwest side of the cavea.[102] Overlooking the Circus from the North, on the gable of the pediment of Apollo's gleaming new temple on the Palatine, Sol surged forward in his sun chariot, a victor's quadriga.[103] According to Tertullian's *De spectaculis* of about 200 A.D., the Circus itself was dedicated to Sol.[104] Each team,

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[98] On the removal and re-appropriation of obelisks over the centuries, Habachi 1977; Iversen 1968-. Vitruvius I.pref.1: *imperio potiretur orbis terrarum.*

[99] Habachi 1977, p. 165; Iversen 1968-, II pp. 90-91.

[100] Pliny *Natural History* 36.69, with Habachi 1977, pp. 164-167; Iversen 1968-, II pp. 91-92; Merriam 1883. One of the pair ("Cleopatra's needle") now stands on the Thames embankment in London, the other in Central Park in New York City.

[101] *Cancer* is "crab" in Latin. Two of these crabs are now in the Metropolitan Museum, New York. On the inscription on one of them, in which one Pontius is credited with having "architected" the work, Merriam 1883.

[102] Pliny *Natural History* 36.71, who confuses this obelisk with the one set up in the Campus Martius (see below). Richardson 1992, s.v. *Sol et Luna, Aedes.* The temple was almost always referred to simply as the Temple of Sol.

[103] Propertius *Elegies* 2.31.11. Augustus dedicated the Temple of Apollo in 28 B.C. For the association of Sol and Apollo in the Augustan period, Gagé 1955, pp. 629-637. Relation of Augustus's Palatine *domus* and the Temple of Apollo to the Circus Maximus, and its significance: Gros 1996d, pp. 238-239. See also Zanker 1983, pp. 32-33.

[104] Tertullian *De spectaculis* 8.

says Tertullian, raced around the spina as the representative of a different season over whose revolutions the obelisk presided, just as the sun presided over the courses of the stars in the charioteering vocabulary Vitruvius applied to the sun's cosmic hegemony.[105] On either side of the base of the Circus obelisk, duplicate inscriptions read, "Imperator Caesar, son of the god, Augustus, Pontifex Maximus . . . Egypt having yielded to the power of the Roman people, gave this gift to the sun."[106]

A pair of identical inscriptions was chiselled onto the base of the second obelisk Augustus had shipped to Rome.[107] This last and, for present purposes, most important of Augustus's Egyptian trophies, had been dedicated at Heliopolis by the 6th century B.C. pharaoh Psammetikos II. In 9 B.C., it was raised as the gnomon of Augustus's huge sun clock in the newly-developed Campus Martius, a clock that was both a calendar and an hour-indicator, and that was part of a far vaster complex which included the Ara Pacis Augustae (the altar of Augustan peace, dedicated the same year) to the East, and Augustus's mausoleum to the North (Figs. 34, 35, 36).[108] Edmund Buchner has argued that all three monuments were geometrically bound in an ideological narrative whose hero was Augustus and whose plot line was traced out by

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[105] Tertullian *De spectaculis* 8-9. Vitruvius 9.1.12. See above.

[106] *CIL* 6.701: IMP. CAESAR. DIVI. F. / AUGUSTUS / PONTIFEX. MAXIMUS. / IMP. XII. COS. XI. TRIB. POT. XIV / AEGVPTO. IN. POTESTATEM / POPULI. ROMANI. REDACTA / SOLI. DONUM. DEDIT. This obelisk is the one now in the Piazza del Popolo in Rome. See Iversen 1968-, I pp. 65-75. Cf. Augustus 27.1: *Aegyptum imperio populi Romani adieci* ("I added Egypt to the empire of the Roman people." Brunt and Moore, trans.).

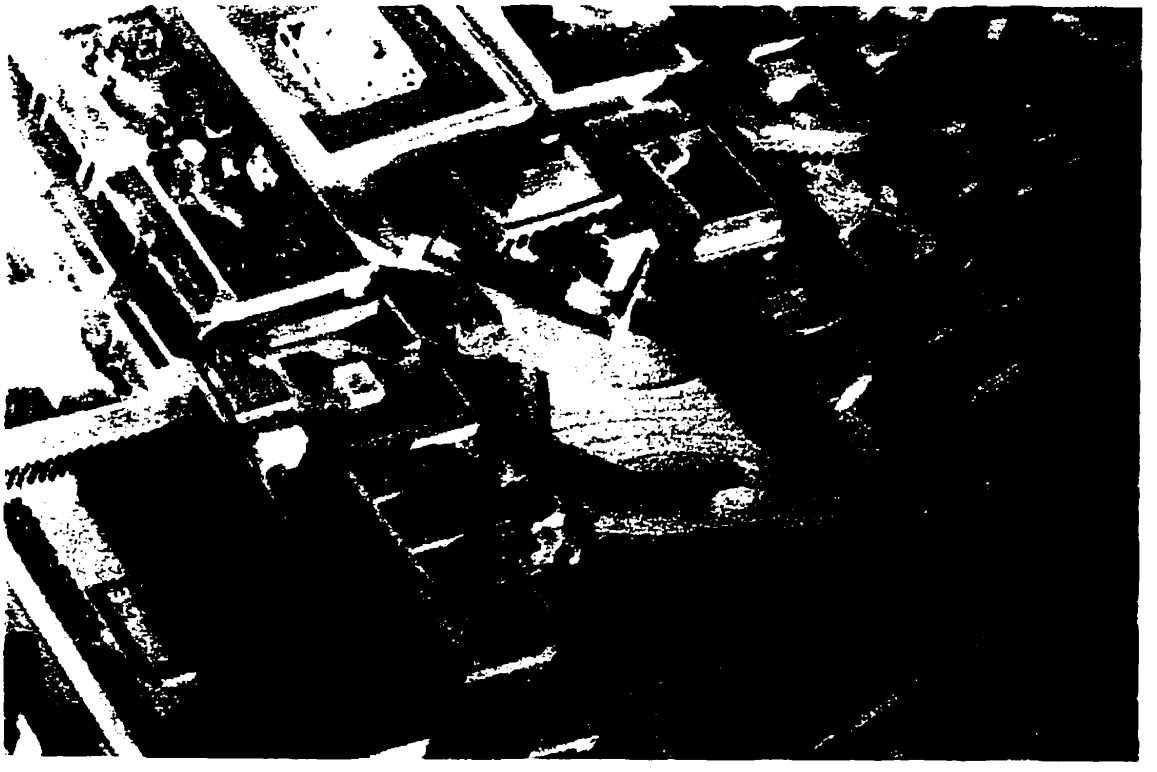
[107] *CIL* 6.702.

[108] Both an hour-indicator (*horologium*) and calendar (*solarium*): Buchner 1976. Buchner 1983, p. 499-500, judges the clock to have been half as big as St. Peter's square, and the whole complex, including the Ara Pacis and the mausoleum, twice as big. Buchner 1983 provides a convenient summary of Buchner 1982, a monograph which reprints Buchner 1976 and 1980. See also Buchner 1988. The gnomon-obelisk now stands in front of the Palazzo Montecitorio (the Italian parliament) where it was raised in 1792. See also Bandini 1750; Iversen 1968-, I pp. 142-160.

Fig. 34

Lower half of the gnomon-obelisk of Horologium Augusti in the Campus Martius, Rome, as drawn by James Stewart in 1749, shortly after its discovery. From Bandini 1750. Photo courtesy Le centre canadien d'architecture / Canadian Centre for Architecture.

Fig. 35



**Above:** The Campus Martius with the Horologium Augusti and the Ara Pacis Augustae to the left of it, both inaugurated in 9 B.C., as reconstructed by Italo Gismondi in his model of imperial Rome (1931-1961). **Below:** The Horologium and the Ara Pacis after E. Buchner.

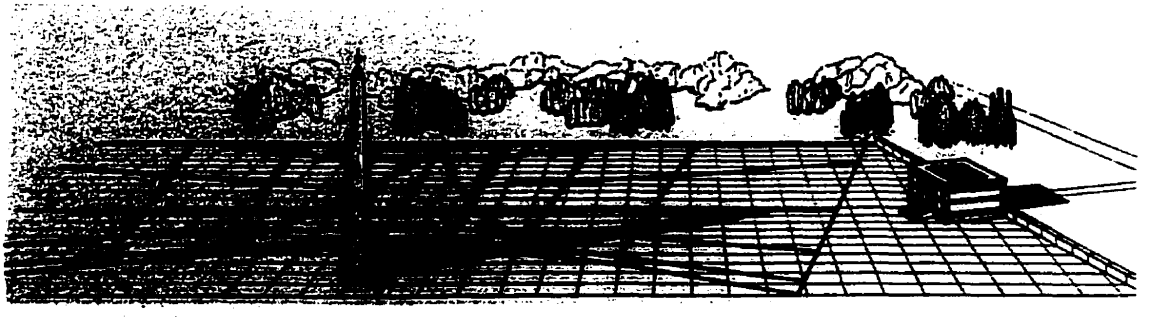
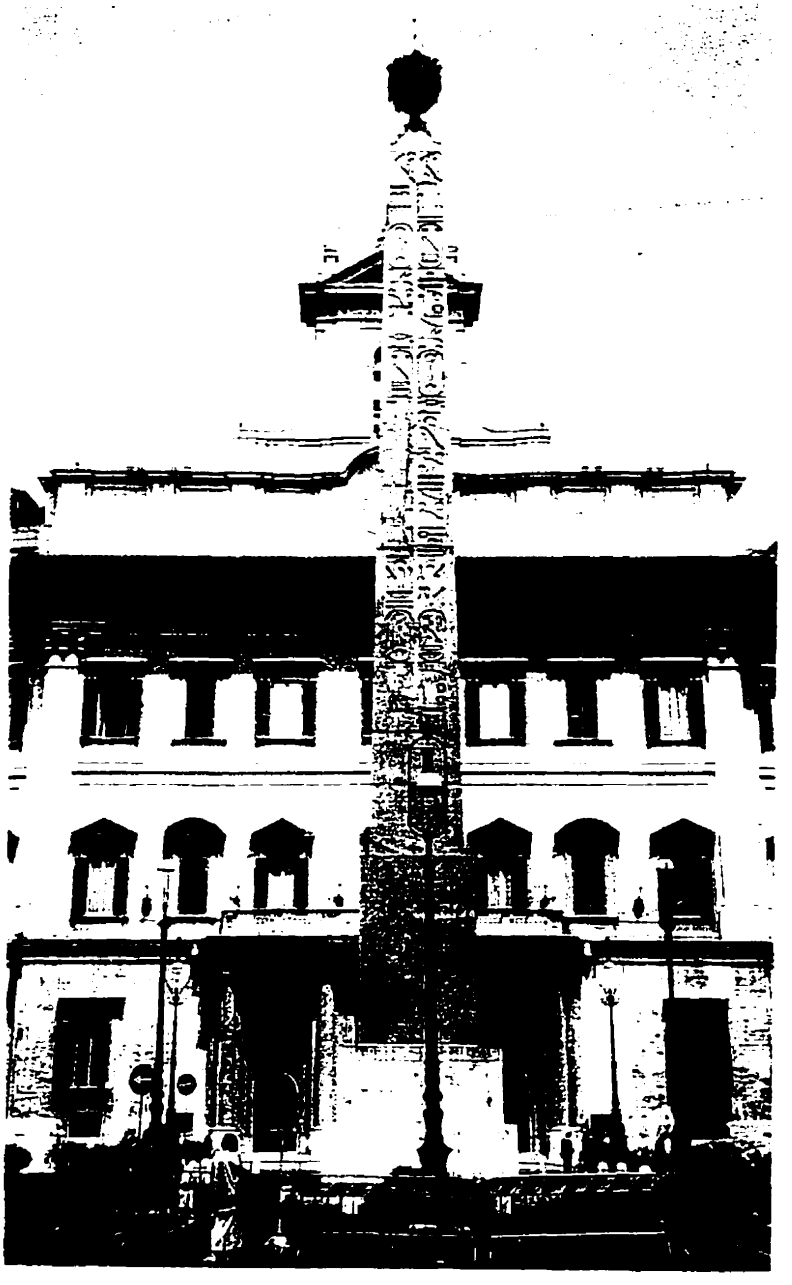


Fig. 36



The gnomon-obelisk from the Horologium Augusti. now in front of the Palazzo Montecitorio at Rome. (Photo author).

the movements the gnomon-oblelisk's shadow over the pavement of the analemma.[109] The geometrical relationships Buchner saw within this complex – that the obelisk-gnomon's shadow pointed directly at the Ara Pacis on Augustus's birthday, for instance – may not be as precise as he claims, depending as they do, among other things, on what has subsequently been pointed to as a somewhat arbitrary choice of site for the obelisk's original location.[110]

Whatever the differences of scholarly opinion on the matter, however, it is beyond dispute that the sun clock's meridian line began at northern edge of the analemma, whose northern, exterior limit was established by the length of the gnomon's midday shadow at the winter solstice,[111] which, as already noted, marked the "birth" of the sun under Capricorn, the sign Augustus repeatedly claimed as his own.[112] The interior endpoint of the meridian line closest to the gnomon was determined by the length of its short noonday shadow at midsummer, when the sun was in Cancer, Julius Caesar's birth sign. This meridian was crossed at right angles by a parallel – the equinoctial line.[113] The point of intersection would have been determined at noon on the equinox when, as Vitruvius points out, the shadow of the gnomon at Rome measured 8/9 of its height: the same key proportional relationship that would have determined the initial point of departure for setting up the whole configuration.[114] This occurred in March, of course, and also (more pertinently) on September 23rd,

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[109] Buchner 1982 and reviews by Gros (1984a) and Wallace-Hadrill ( 1985, pp. 246-247; 1987, pp. 224-227).
[110] Schutz 1990, who has questioned many of Buchner's conclusions. Gros also expressed some reservations in his generally favourable review (1984a).
[111] Pliny *Natural History* 36.72.
[112] Above, n. 81.
[113] On the geographical uses of gnomons and gnomonics, Strabo 2.5.4, 2.5.24. Ancient sundials in general, with a catalogue of surviving ones: Gibbs 1976.

Augustus's birthday. Rome, the geographical centre of the world, whose position Vitruvius claims as the natural source of its power, was precisely located by the crossing of this meridian and this parallel at a centre made congruent with the intersection in real lived space of the two astral plot lines of its ruler's solar being. A centre from which the world was "squared" by nature herself – and all, Vitruvius would claim, thanks to *architectura*.

Virtually concurrent with the inauguration of the sun clock and the dedication of the Ara Pacis nearby, was the adoption of Augustus's birthday as the beginning of the new year in the Roman province of Asia, a change that dovetailed perfectly with the time-reckoning practice adopted earlier in some Asian cities where, since Augustus's victory at Actium, the years were numbered from the new "era" that began in September 31 B.C., which was the date of that victory.[115] Paulus Fabius Maximus, the proconsul who proposed that new year's day be celebrated on Augustus's birthday, called it a day "equal to the beginning of the world," to which he said Augustus had given "a whole new appearance."[116] Both the proposal, greeted as the bearer of "good news" (*euangelia*), and its acceptance were inscribed in the public places of cities throughout the province.[117] At Rome, the new year began at the winter solstice, at the time of Augustus's conception when the sun was "born" in Capricorn. In Asia it began at the fall equinox with the birth of Augustus himself.

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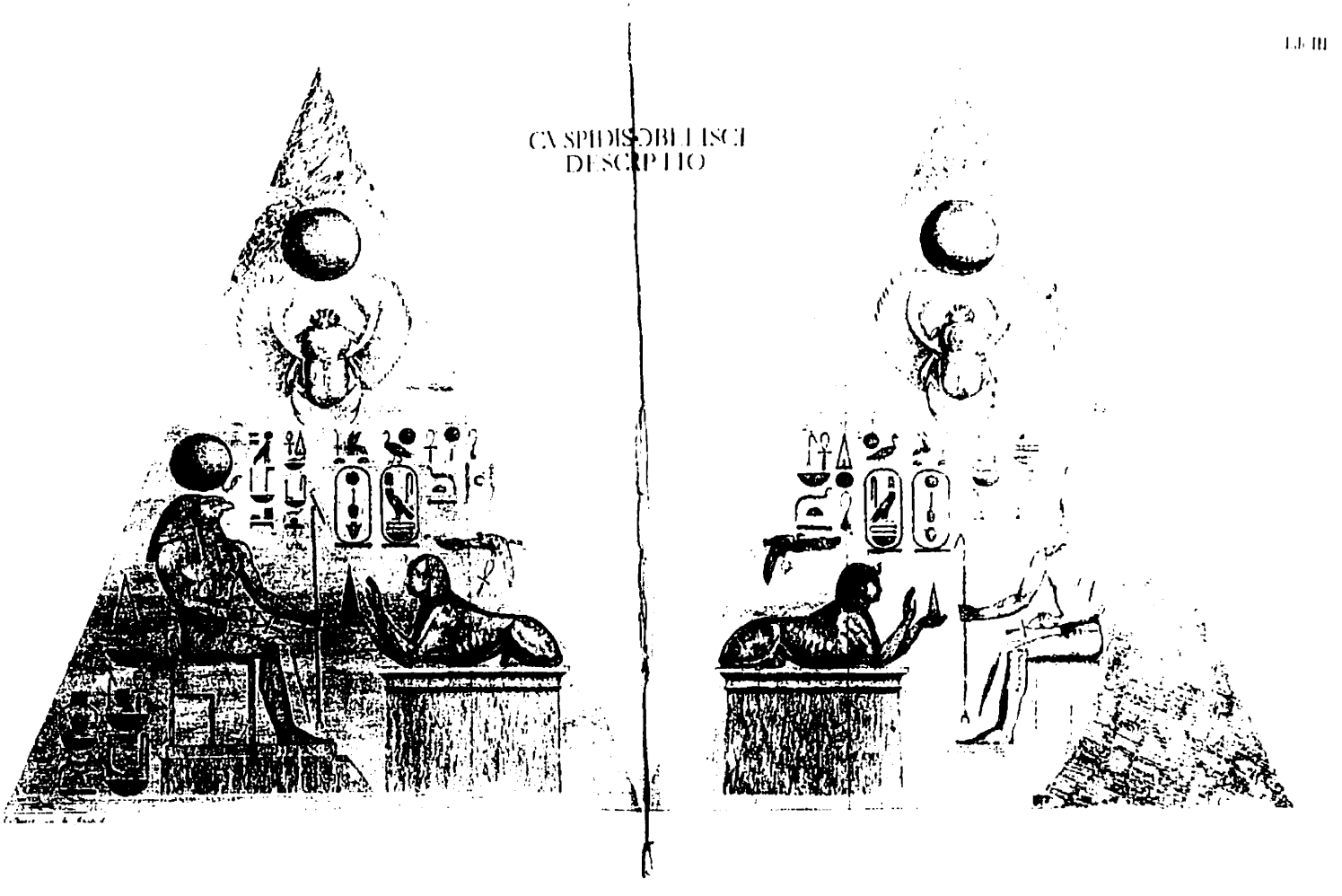
[114] Vitruvius 9.7.2.

[115] For the date of 9 B.C. for adoption of Augustus's birthday as the beginning of the New Year, Sherk 1969, pp. 335-336. On dating by the era of Actium, Magie 1950, p. 1289, n. 37. See also Price 1984, pp. 106-107.

[116] *OGIS* 458; Ehrenberg and Jones 1972, no. 98; Sherk 1969 pp. 328-337, with bibliography and commentary; Baund 1985, C29 (for a translation).

Fig. 37




Cusp of the gnomon-obelisk of the Horologium Augusti in the Campus Martius, Rome, as rendered by James Stewart in 1749. From Bandini 1750. Photo courtesy Le centre canadien d'architecture / Canadian Centre for Architecture.

Egyptian kings, writes Pliny, dedicated obelisks to the power of the sun (*Solis numen*), "of whose rays the obelisk is a sign in effigy."[118] What, one might ask, could be less like a sunbeam than a solid granite monolith weighing several hundred tons? Pliny does not say that the obelisk *represents* the sun's rays. He says the obelisk is their *argumentum*, their sign or "argument," in effigy, "for so its Egyptian name signifies."[119]

Every obelisk is topped by a four-sided pyramidal cusp usually referred to as a pyramidion (Fig. 37). Their large-scale counterparts, the pyramids themselves, were sometimes said to "devour their own shadows," for when the sun was at a certain altitude, the shadow of a pyramid's apex fell within the area of its base, making it uniquely shadowless among worldly phenomena.[120] With their shadows *inside* of them, pyramids contained time. Casting no shadow, they were timeless. A late source which credits Varro for the information says that "Dinochares" (or Dinocrates) once designed such a four-square, shadow-devouring pyramid.[121] The pyramidions of obelisks also ate their shadows, which made these monoliths traps for the sunbeams that disappeared into their pinnacles leaving no visible trace. Pliny refers to precisely this phenomenon when he says that the pinnacle of the obelisk Augustus brought to the Campus Martius for his sun clock "gathered its shadow into itself."[122]

Now this presented a problem, for the whole point of gnomons is that they *do*

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[117] Fragments of copies from five cities survive (Sherk, 1969, p. 328). The assembly of Asian cities not only accepted the proposed calendar change, but also decreed that Paulus Fabius Maximus be awarded a crown for having suggested such a unique way of honouring Augustus (Sherk p. 334).
[118] Pliny *Natural History* 36.64: *Radiorum eius argumentum in effigie est.* On signification, above Chapter 1, pp. 95-116.
[119] Pliny *Natural History* 36.64: *et ita significatur nomine Aegyptio.*
[120] Ausonius *Mosella* 313; Ammianus Marcellinus 22.15.29.
[121] Ausonius *Mosella* 313 and above, Chapter 2, p. 120.

leave traces – that they *tell* time, not entomb it. Obelisks were not meant to translate solar power as gnomons were, but to contain it. Pliny points out that, because of its shadow-eating cusp, the Campus Martius obelisk would have cast what he calls an "irregular" shadow: one that bore a false proportional relationship to the monolith's height, and would therefore have been useless for telling time.[123] Facundus Novius, the *mathematicus* who devised the sun clock, recognised the difficulty and fixed a golden globe to the top of it, taking his cue, Pliny reports, from how a man's head defines the shadow he casts.[124] Attaching a "head" to the pyramidal cusp, which thus became shoulders, restored the correct proportional relation between the monolith and its shadow by making it anthropomorphic, and transformed the obelisk from an effigy whose "argument" was the sun's rays into a gnomon that signified the unifying power of the man who was their mediator. "Imperator Caesar, son of the god, Augustus . . . . Egypt having yielded to the power of the Roman people, gave this gift to the sun."[125]

**The Prima Porta Statue of Augustus**

Vitruvius himself may not have anticipated the construction of the sun clock

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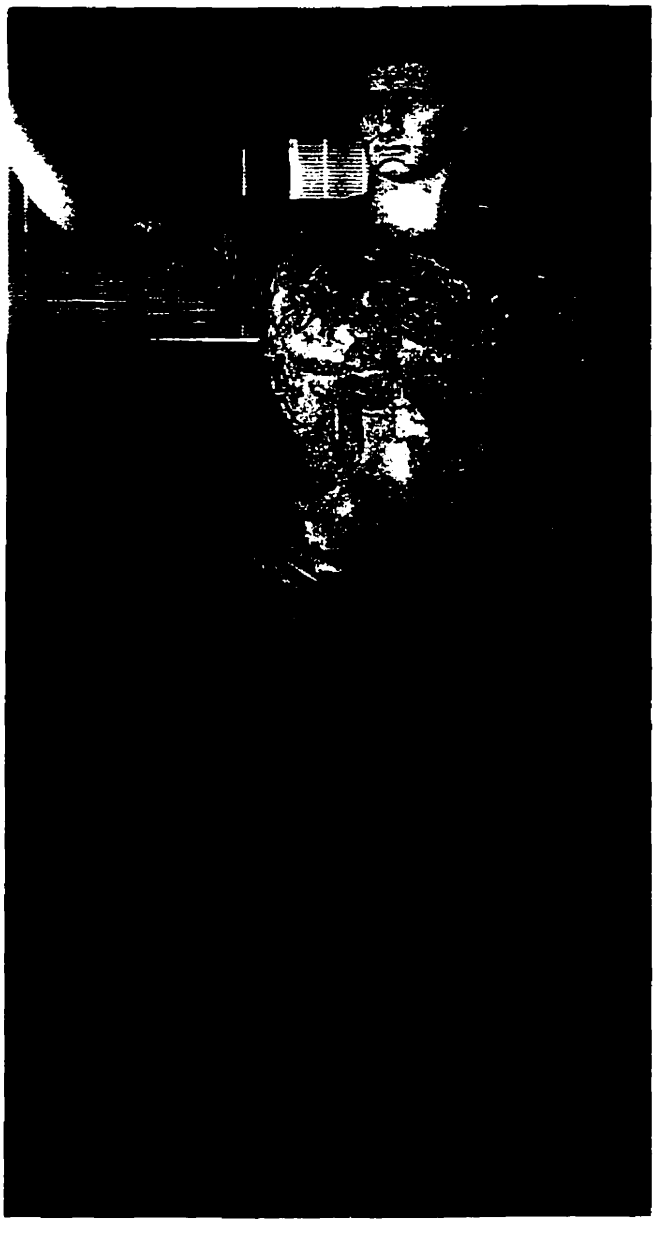
[122] Pliny *Natural History* 36.72: *vertice umbra colligeretur in se ipsam.*
[123] Pliny *Natural History* 36.72: *enormiter iaculante apice.* The adjective *enormis* derives from *norma*, a set-square or any squaring device. The initial "e" (*ex*) means "out of." The "ex-normous," or un-squared thing is out of line, "irregular." Lewis and Short, s.v. *enormis*. Regularity, Vitruvius would say, is demonstrated by architecture.
[124] Pliny *Natural History* 36.72: *ratione, ut ferunt, a capite hominis intellecta.* Buchner (1976, p. 330 and plate 110.2) claims that the gilded bronze ball in question is one of two now in the Palazzo dei Conservatori in Rome. The other is from the Vatican obelisk. See also Buchner 1988 and cat. no. 110 in Hofter et al. 1988.
[125] *CIL* 6.702. See above, n. 106 for the Latin.

Fig. 38



The statue of Augustus from Prima Porta. ca. 19 B.C.
Parian marble. h=2.04 M. Vatican Museums.
Braccio Nuovo. Inv. 2290. (Photo author).

which was inaugurated some fifteen years after the appearance of *De architectura*,[126] although the obelisk would already have been claimed as a trophy by then, and its intended avocation as a sundial pointer no doubt decided as well. But the difficulty of establishing demonstrable causal connections between Vitruvius and the sun clock in no way obviates their interconnectedness as constituents of the same cultural matrix. For if Vitruvius' ninth book, the only surviving work on *gnomonice*, has been indispensable in scholarly attempts to reconstruct the clock's physical appearance,[127] it is just as indispensable in any attempt to understand the clock's significance. And, perhaps more importantly, vice versa: the clock is key for grasping why Vitruvius made *gnomonice* the middle "part" of a written body of architecture that was meant to double the king's.

One of the best-preserved and best-known images of the latter survives in the Parian marble statue of Augustus, just over two metres high, found in 1863 in his wife Livia's villa at Prima Porta on the northern outskirts of Rome (Fig. 38).[128] Like the sun clock, it also post-dates Vitruvius, but by fewer years, if one accepts the current consensus that the statue (or, as many scholars believe, the bronze original of which it is a copy) was made shortly after 20 B.C.[129] Unlike the sun clock, the statue cannot,

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[126] On the dating of Vitruvius' treatise: above, Introduction, p.1.

[127] Buchner (1976, 1980, 1982, 1988) relies entirely on Vitruvius.

[128] Parian marble: Pollini and Herz 1992; findspot: Pollini 1987-88 (Cf. Kellum 1994, p. 223). The statue is now in the Vatican museums (Braccio Nuovo, Inv. 2290). When I examined it in May of 1998, the statue was temporarily in a laboratory for cleaning and study, where, thanks to the kind assistance of Dott. Paolo Liverani, I was able to make a thorough photographic survey of it. For a recent bibliography of work on the statue see the notes to Pollini 1995, and more recently still, Galinsky 1996, pp. 24-28.

[129] For a survey of opinions on the dating, Brommer 1980, who himself supports a date of 19 B.C., linking the bare feet of the statue to Augustus's initiation at Eleusis in that year (initiates at Eleusis went barefoot). Datings to after 14 A.D., the year of Augustus's death, rely heavily on these bare feet, reading them as a reference to Augustus's posthumous divinization. Pollini 1995, who favors a date of 20 B.C. or soon thereafter, notes (p. 280, n. 71) that Augustus was represented barefoot and in uniform in coin representations during his lifetime. See also Hölscher 1988 (17 B.C.); Zanker 1988, pp. 189-192 (soon after 20 B.C.).

obviously, be assigned directly to any one of Vitruvius' three parts of *architectura*. What the statue does provide (for the historian, not for Vitruvius who probably never saw it) is a something of a summation of all three parts together: a microcosm in patently human form of the written body Vitruvius presented to the king as a flawless argument meant to demonstrate, as in a mirror, the power of *architectura* to furnish the king's ubiquitous corporeal presence in the world to be renewed and rendered perfectly coherent thereby.

In the statue, as in *De architectura*, Augustus appears as *imperator*, an armed conqueror, with his general's *paludamentum* (military cloak), draped around his hips and over his left forearm.[130] The date of 20 B.C., taken by scholars as a *terminus post quem* for the statue, is based on the central image on the breastplate of the statue's figured cuirass, an image which refers, all agree, to the return in that year of the Roman standards captured by the Parthians in three humiliating defeats earlier in the century (Fig. 39).[131] Augustus, who considered recovery of the standards a great diplomatic victory,

*received them as if he had conquered the Parthian in war, for he took great pride in the achievement, declaring that he had recovered without a struggle what had formerly been lost in battle.*[132]

The famous cuirass on which the image appears figures an exceptionally well-muscled male torso, projected as the double of its wearer whom, one naturally assumes, it fits perfectly. Imbricated into the "flesh" of this cuirass, along with the

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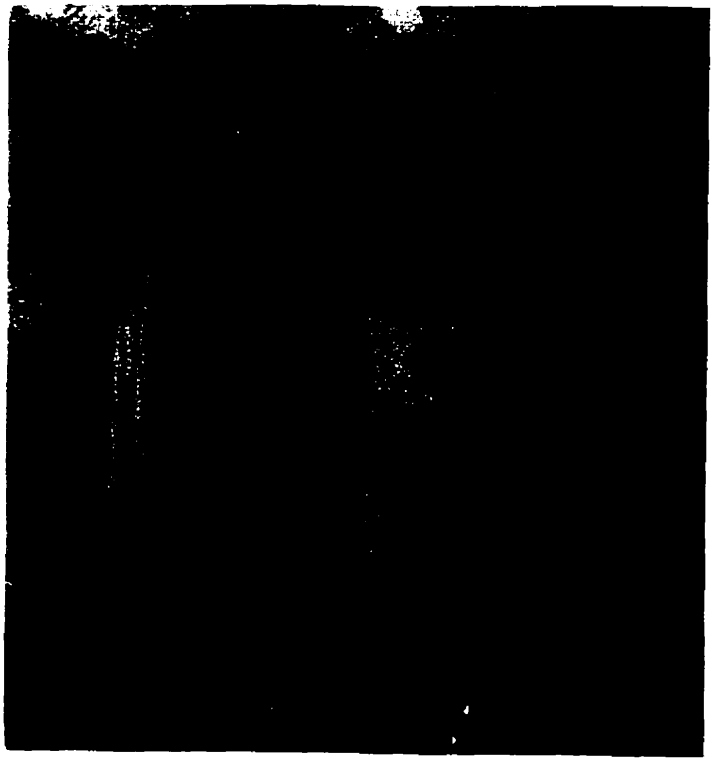
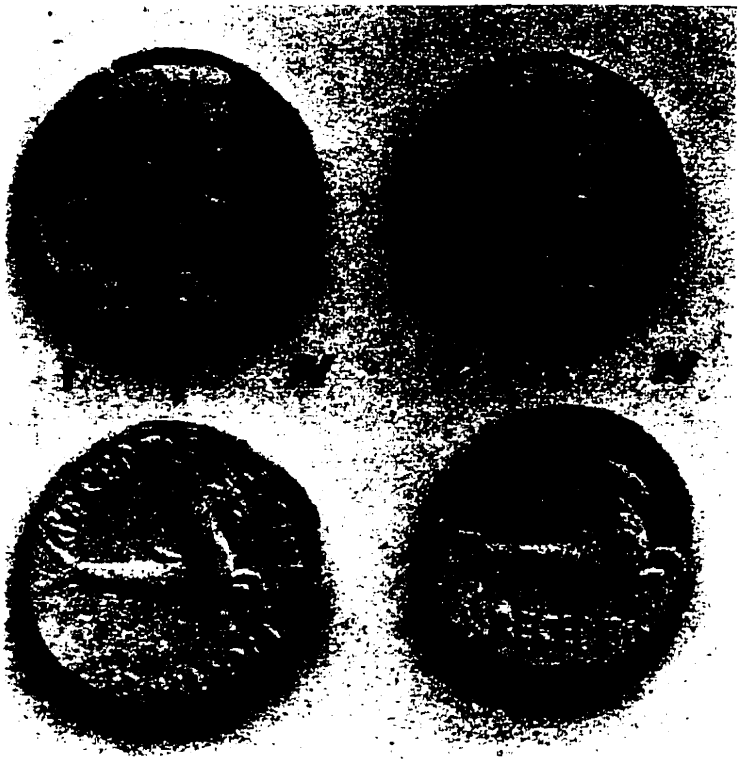
[130] Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar . . . .*
[131] That of Crassus in 53 B.C., of Saxa in 40 and of Antony in 36. Parthia was in Asia Minor, just east of the Euphrates.

Fig. 39



Parthian returning standard at the centre of the Prima Porta cuirass. (Photo author)



Two Augustan aurei of Asian mint, ca. 19 B.C. The obverses both have heads of Augustus. The reverse type on the left is a Capricorn with "*receptis signis parthicis*" ("standards recovered from the Parthians); on the right a Capricorn and "*signis receptis*." Mattingly 1923, I #'s 679, 680; pl. 17.1-2.

Fig. 40

The Prima Porta cuirass: upper torso. (Photo author).

image in question, is the entire natural order deployed in a highly charged cosmic-imperial narrative which – and this is the overriding point of the representation – owes its perfect coherence to the wearer's body into which it has been written.[133]

The Parthian who holds aloft the eagle-topped standard ostensibly being returned to the Roman, in fact pays no attention at all to the armed figure opposite him, identified by some as Tiberius, Augustus's stepson who was the delegated recipient of the recovered standards.[134] Instead, the Parthian's eyes are raised to the eagle that leads his, and the viewer's, gaze further upward, to the face of Sol who appears over Augustus's right breast, thus acknowledged as the true and rightful owner of the standard whose return entails a diagonal transfer from the lower left of Augustus's stomach to the upper right of his chest.

Sol has his right arm raised above his head to grasp the edge of the sky-canopy above – of which, clearly, the gesture makes him *hêgemon* – and rides in a sun chariot, the hub of whose wheel might almost be mistaken for Augustus's right nipple (Fig. 40). With his left hand, he guides his fiery team across the conqueror's bosom bringing perennial sunrise. It must be daybreak because on Augustus's left breast Venus, the morning star the Romans called Lucifer (bringer of light), runs ahead of Sol's four

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[132] Dio Cassius 54.8.2.

[133] A cosmic-imperial narrative, similar in many respects to that of the Prima Porta statue (although not imbricated into the king's body) is deployed in the Gemma Augustea, the famous late Augustan sardonyx cameo now in the Kunsthistorisches Museum in Vienna, on which see especially Pollini 1993, with references. See above, Fig. 18, p. 176a.

[134] Tiberius sent to recover the standards: Suetonius *Tiberius* 9.1; Florus *Epitome* 2.34.63; Dio Cassius 54.8.1. Cf. Brilliant 1963, p. 66 who, with other scholars, identifies the figure on the cuirass as Tiberius and argues further that his appearance there contributes to evidence for dating the statue after Augustus's death.

onrushing horses carrying a torch.[135] She is born aloft by Aurora the dawn who, winged like a Victory, sprinkles morning dew from a pitcher. The conditions of procreation, wrote Varro, are two,

*fire and water. Thus these are used at the threshold in weddings, because there is union here, and fire is male . . . and the water is the female . . . and the force that brings their* vinctio *"binding" is* Venus. *Hence the comic poet says, "Venus is his victress, do you see it?" not because Venus wishes* vincere, *to conquer, but* vincire, *to bind. Victory herself is named from the fact that the overpowered* vinciuntur, *are bound.*[136]

Bound indeed is the overpowered nation figured in the dejected person seated near Augustus's armpit under the curve of his left breast, just below the procreative fire and water carried in tandem by torch-bearing Venus and the dew-dispensing dawn (Fig. 41, right). The sun will rise there first in its circular trajectory around the *imperator*'s torso, so the nation represented by this figure must be an eastern one – like Parthia, whose barbarian representative is located on the same left side of his body. Always moving forward, Sol will eventually circle around to rise over the West on Augustus's right side, where another overpowered nation is "bound" to his rib cage in symmetrical dejection behind the armed (western) Roman (Fig. 41, left).[137] "East and West

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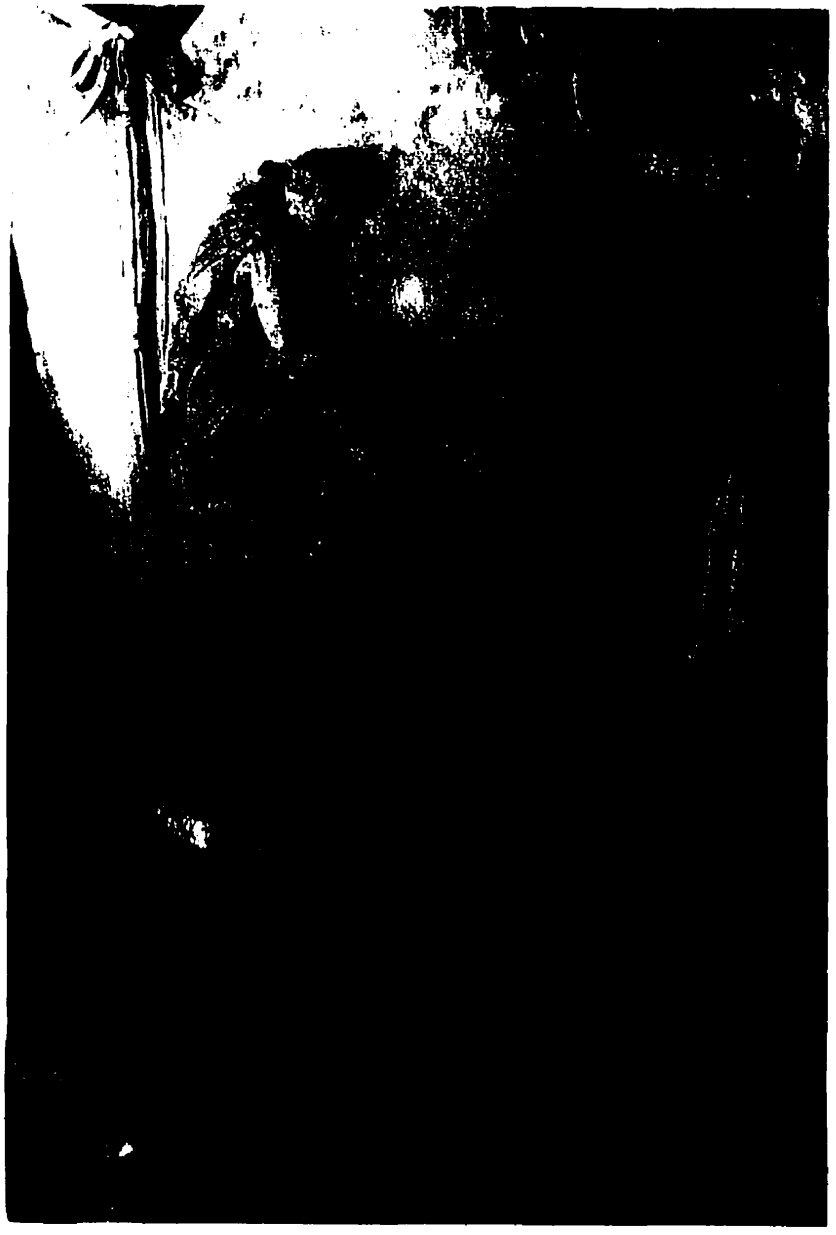
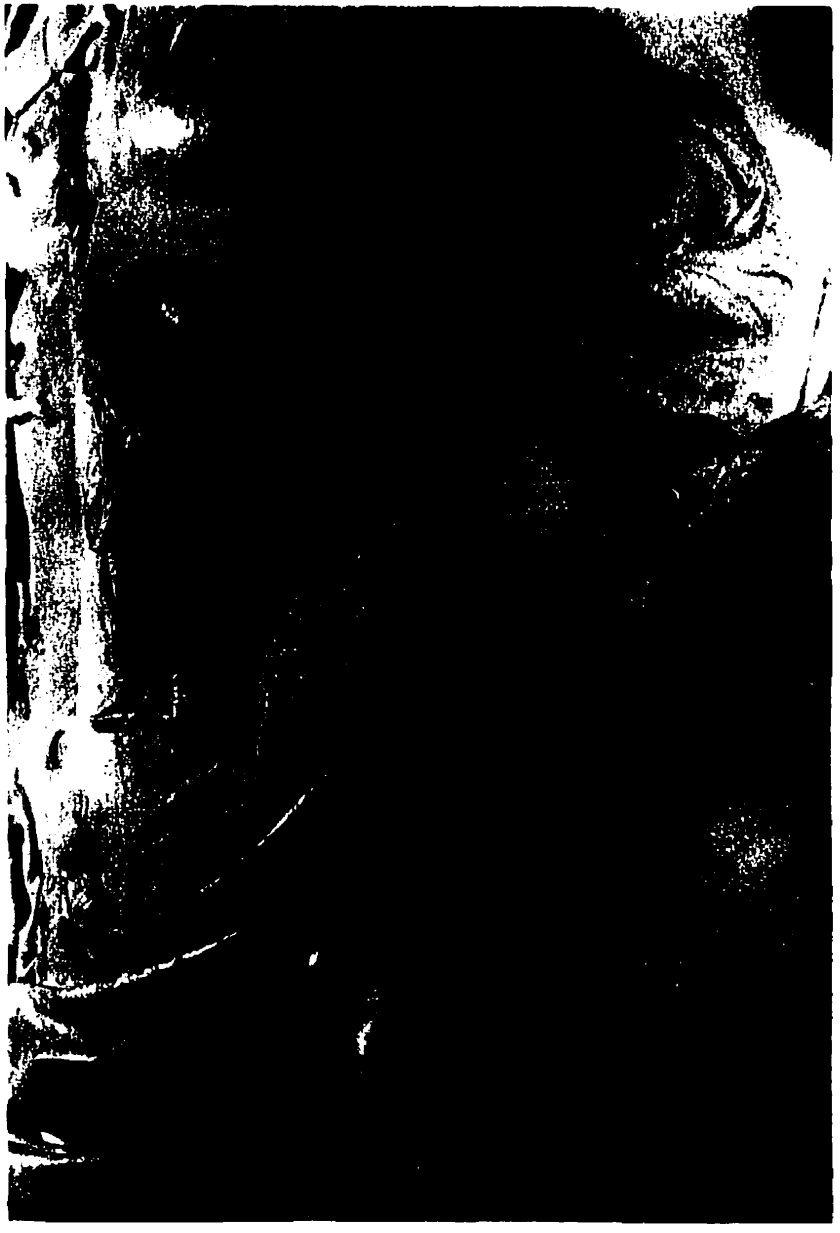
[135] Vitruvius 9.1.7: "after sunset, when (Venus) appears as the brightest star shining in the sky, she is called 'Vesperugo' (the evening star); but at other times, she rises to usher in the day; then her name is 'Lucifer' (the morning star)." *Post occasum eius apparens in caelo clarissimeque lucens Vesperugo vocitatur, aliis autem temporibus eum antecurrens et oriens ante lucem Lucifer appellatur.* See also Cicero *De natura deorum* 2.53; Pliny *Natural History* 2.46; Manilius *Astronomica* 1.177-178. Cf. Soubiran, Vitruvius 9 (1969), pp. 92-93, and above, Chapter 3, pp. 243-244.

[136] Varro *De lingua latina* 5.61-62. See above, Chapter 3, p. 235.

[137] The identification of the figure below the *imperator*'s left breast as an eastern Celt from the recently-annexed province of Galatia (rather than, as has been more usual, a western Gaul) follows Hölscher 1988, who is, on the other hand, in agreement with other interpreters when he identifies the

Fig. 41





**Left:** Right side of the Prima Porta cuirass, with subjected Spaniard,above, and Apollo riding a griffin, below. **Right:** Left side of the Prima Porta Cuirass with subjected Galatian (above) and Diana on her stag (below). (Photos by author).

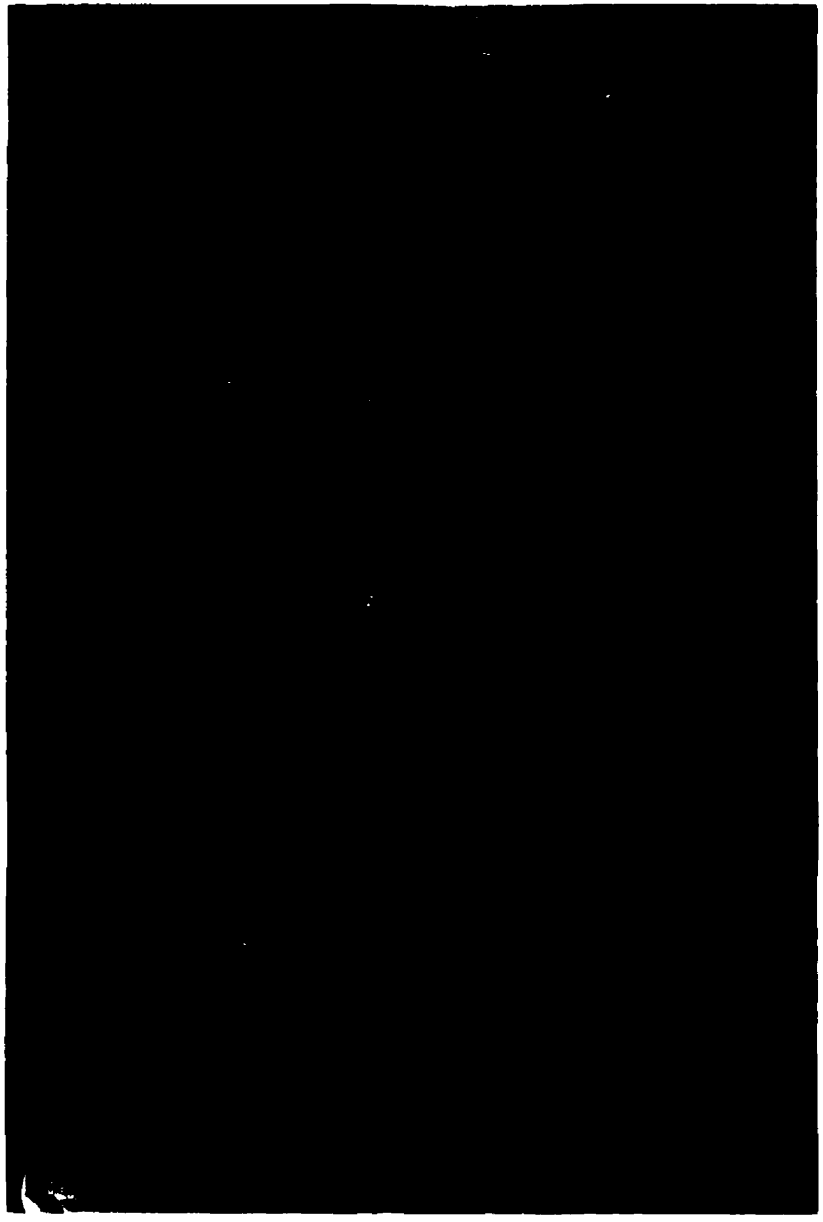
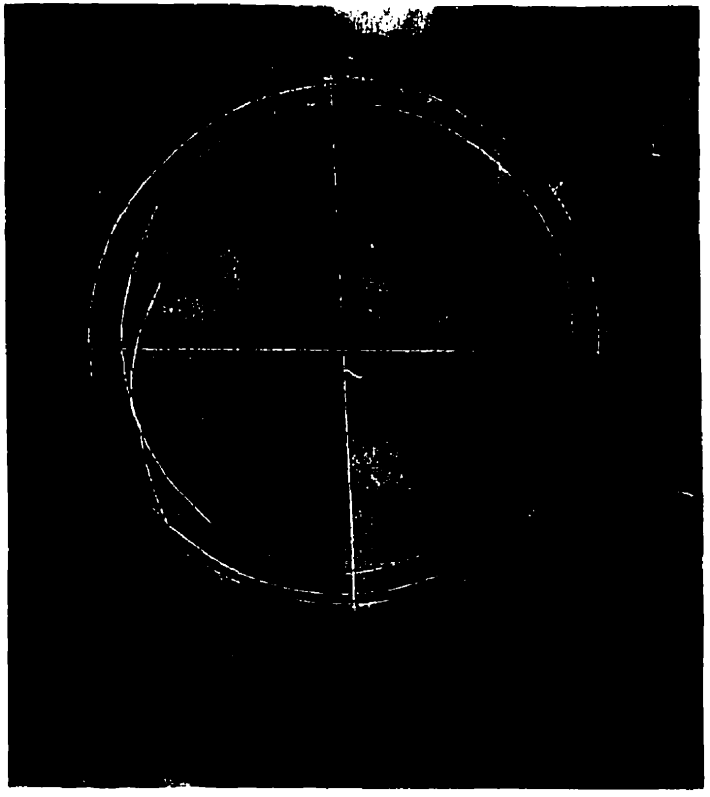


Fig. 42



Breastplate of the Prima Porta cuirass, "squared."

together" was a fairly common way of referring to the whole world.[138] The princeps' body is the condition of its totality

Below Augustus's navel, emerging from the twisted folds of the *paludamentum* that bulge out thickly over his genitals, is the female figure of Earth with two small babies, a cornucopia and other attributes of fecundity (Fig. 42).[139] On his right hip Apollo, Augustus's champion at Actium, rides a griffin – a beast, half lion half eagle, which was another solar emblem – and carries his lyre, source of civilizing harmony.[140] Riding a stag on Augustus's left hip is Apollo's twin Diana, goddess of the moon and of the wild lands that her brother and his lyre will jointly tame and bring to solar order.[141]

Viewed frontally, which is how the statue was meant to be viewed, the images on the cuirass are governed by a strict geometry which, like the world itself, is generated by the wearer's body – a body from which both the images and the geometry itself are made indissociable. In the "heaven" of Augustus's upper chest under the sheltering canopy held by the sky-god Caelus, Sol – as noted – is in motion, rushing forward with his celestial precursors around the stationary world below (Augustus's stomach) in the circular orbit described by the images carved in relief around the edge of the cuirass. "Squaring" this circle, joining heaven to earth, and East to West in the flesh that generates their geometrical footprint, a vertical and a horizontal intersect at

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right-hand, western figure as Hispania. Fittschen 1976, p. 206 also took the nation represented by the figure under the left breast as eastern – Armenia, in his case. For a review of the iconology, Pollini 1978, pp. 8-74.

[138] Cicero *De natura deorum* 2.164; Varro in Augustine *City of God* 7.8; Pliny the Younger *Panegyricus* 32.

[139] Very much in the spirit of the "Tellus Mater" of the large relief to the left of the west-facing entrance of the Ara Pacis Augustae.

[140] Apollo on griffin: *LIMC* II.1, pp. 229-230.

right angles.

Anatomically, there is usually an interruption between the *linea alba* or median line of a well-muscled man's stomach and the line between his breasts. Here, where the first, (the *linea alba*) appears to extend upwards to join the second (the line between the breasts) in an unbroken vertical, the usual interruption disappears. Also usually discontinuous is the horizontal line under the breasts that here joins East to West in unbroken flesh – a bodily contour which East and West in turn render at once geographical and cosmic. The pectoral triangle that, even here, would if one could see it interrupt both these contour lines has been filled with the eagle at the tip of the surrendered Roman standard: precisely-located agent of their (the lines') and the world's continuity at the still point of the revolving cosmos in the middle of Augustus's chest.

Augustus, writes Suetonius, received his new name from Roman Senate in January of 27 B.C. "on the ground that (Augustus) was not merely a new title but a more honourable one (than Romulus), inasmuch as both sacred places and those in which anything is consecrated by augural rites are called *augusta* . . ."[142] The "squared" torso of the Prima Porta Augustus is just such a place – the same that generated Vitruvian man.[143]

The diplomatic victory celebrated by the image at the centre of the cuirass is – as a bloodless, ostensibly negotiated victory – a victory of the *logos* or *ratio* that,

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[141] Artemis/Diana: *LIMC* II.1. s.v.
[142] Suetonius *Divus Augustus* 7.2.
[143] Above, Chapter 3, pp. 193-213.

according to Stoic theory, was the condition of coherence in bodies and in the world.[144] One rather suspects that that is why so much was made of the event.[145] It was a victory not only of speech over brute force but of speech (*logos*) made one, as in the statue, with the binding force of the cosmic *logos* whose agent here is the Roman eagle lodged above Augustus's sternum. The eagle belonged to Jupiter who, as king of the gods to whom the "squaring" augural power referred, was the emblem of Roman might above all others. It was in the chest, where the statue locates this eagle, that Stoics located a man's *hēgemonikon*, identified in Latin as the *mens* or intelligence that ruled his soul, which soul this intelligence dispersed as unifying currents of warm breath throughout his body.[146] Varro, citing Ennius, said that the human mind (*mens humana*) was fire taken from the sun.[147] In about 50 A.D. the Stoic, Seneca, hopefully admonished Nero with "the gentleness that comes from your spirit will spread little by little through the whole great body of the empire (*per omne immane imperii corpus*), joining all things in the shape of your likeness."[148] Before Seneca, there was the Prima Porta statue.[149]

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[144] The way Dio Cassius (54.8.1) tells it, Phraates, the Parthian king, returned the standards through fear of a Roman invasion.

[145] Coins (both *aurei* and *denarii*), stamped with the legend *signis receptis* ("standards recovered"), were issued in celebration of the event all over the Roman world: in the East (Mattingly 1968, #'s 17, 46, 47, 48), in the West (Mattingly #'s 256, 302, 303, 304, 305), and at Rome itself (Mattingly #'s 98, 99, 100). Dio Cassius 54.8.2: "In honour of his success he (Augustus) commanded that sacrifices be decreed and likewise a temple to Mars Ultor on the Capitol, in imitation of that of Jupiter Feretrius, in which to dedicate the standards, and he himself carried out both decrees. Moreover he rode into the city on horseback (in an *ovatio*) and was honoured with a triumphal arch."

[146] Chrysippus, *SVF* 2.911 (cf. Lapidge 1978, pp. 168-169); Cicero *De natura deorum* 2.29 (*hēgemonikon* in men is *mens*). See also Long 1986, pp. 171-172.

[147] Varro *De lingua latina* 5.59.

[148] Seneca *De clementia* 2.2.1: *Tradetur ista animi tui mansuetudo diffundeturque paulatim per omne immane imperii corpus, et cuncta in similitudinem tuam formabuntur.* Cf. Kienast 1982b, p. 11.

[149] Fragments of works on kingship by three Pythagorean authors of uncertain date survive in the fifth-century A.D. anthology of Stobaeus (*Anthologium* 4.7). The authors (Diotogenes, Sthenidas and Ecphantus – all apparently pseudonymous) share a common understanding of divine rulership where

Monarchy, as argued earlier, was inevitably synchronous with channelling access to the gods through a single person, which was how Augustus could be in effect a king.[150] It was also the most natural form of government, a notion late republican intellectuals, particularly Cicero, had already been giving serious thought to during the last years of the republic.[151] In the first chapter of Cicero's *De republica*, the younger Scipio argues for monarchy as a reflection at once of the divine order where Jupiter reigns "with a nod," of a natural order ruled by a divine mind, and of wise men ruled by the "kingly power" (*regale imperium*) of reason within themselves.[152]

All of this is deployed not only in the cuirass of the Prima Porta statue, but also by Vitruvius: "When your divine mind and power, Imperator Caesar, were seizing command of the world . . . and all subjected peoples awaited your nod . . ."[153] This, the opening address of his first preface, is not affixed as an extraneous appendage to the rest of the treatise any more than the Prima Porta cuirass is affixed as an extraneous appendage to the body wearing it. The cuirass is the *appearance* of the king's body in the world as a mask which (while remaining, overtly, a mask) is made so entirely continuous both with its wearer and with the natural order it represents as to render unaskable any questions about realities behind it. With no chinks in his armour, the

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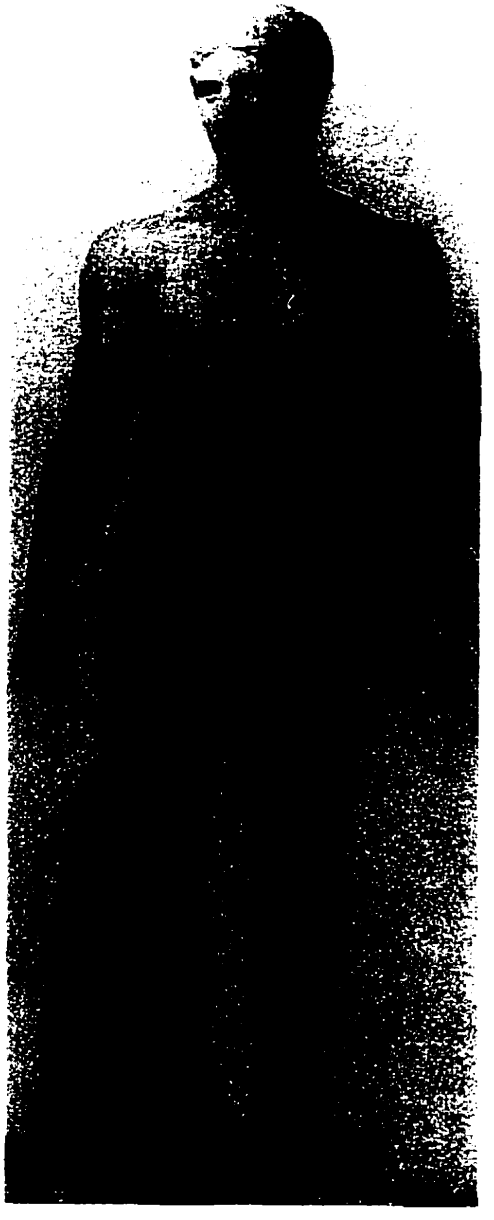
the king as *logos empsychos*, the animate or living *logos*, ruled on earth as God rules the heavens. Scholars make the three authors in question either Hellenistic, placing them in the third century B.C., or imperial Roman, with a date in the second century A.D. See Chesnut 1978 (a good summary); Delatte 1942; Dvornik 1966, chapters 5 and 8; Goodenough 1928. Whether the kingship theory predates or postdates Augustan ideology, its resonance with the rhetoric of the Prima Porta Augustus is unmistakable. Ecphantus even writes of the "light of majesty" in which legitimate kings are bathed, comparing them to eagles who, according to legend, were the only animals who could look straight into the sun without blinking (Stobaeus *Anthologium* 4.7.64, cf. Chesnut 1978, p. 1319), recalling in this the relation between Sol and the eagle of the Prima Porta cuirass.

[150] Above, Chapter 3, pp. 220-222.

[151] Béranger 1953, pp. 246-248; Chesnut 1978, pp. 1326-1329; Grimal 1979.

[152] Cicero *De republica* 1.56-60.

Fig. 43



**Left:** The Doryphoros, marble copy of a statue by the 5th-century B.C. Greek sculptor Polykleitos, h.=1.96 m., now in the Minneapolis Institute of Arts. **Right:** The Doryphoros from the Samnite Palaestra at Pompeii, now in Naples (Museo Nazionale 6011), h.=2.00 m.

king had only one body

The wearer of the cuirass extends his right arm, his hand raised almost to the level of his head. The hand, of whose fingers all but the ring finger are restored, may originally have held some object such as a spear or a branch of laurel.[154] Alternatively, it may have held nothing and have been raised in the gesture of *adlocutio*, or public address.[155] This last is by far the likeliest option, and not just because, as John Pollini has recently established, the tendons on the back of the hand are represented in a way that precludes its ever having grasped anything.[156]

The cuirass celebrates the return of the standards as a negotiated settlement, and represents the alleged diplomatic victory as the operation of the cosmic *logos* in historical time. The body of Augustus is entirely continuous with the cuirass. So, with its narrative, is the authoritative gesture of his raised right hand. The power of speech was man's privileged channel of communication with the *logos* of the Stoic universe.[157] It was, according to Cicero, speech-as-*ratio* that gave great orators the power to lead people out of their savage ways and gather them together "into one place."[158] Therein, argues Vitruvius, lies the power of architecture.[159] The place, here, is the body of the king to whose flanks the humiliated peoples of East and West cling abjectly – the *gentes omnes subactae* of Vitruvius' first preface, drawn to the circumference of the

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[153] Vitruvius 1.pref.1: *Cum divina tua mens et numen, Imperator Caesar, imperio potiretur orbis terrarum . . . et gentes omnes subactae tuum spectarent nutum.*
[154] Pollini 1995, pp. 265-266. Ingholt 1969, who places the bronze original of the marble statue in the sanctuary of Athena at Pergamon, gives him a spear, as does Simon 1986, p. 56. Kahler 1959, pp. 12-13 gave him a laurel branch.
[155] Brilliant 1963, p. 67; Galinsky 1996, p. 24; Pollini 1995, pp. 265-266, with n. 24, p. 277.
[156] Pollini 1995, p. 266.
[157] See above, Chapter 1, pp. 80-81.
[158] Cicero *De inventione* 1.2, *De oratore* 1.32-33. See above, Chapter 2, pp. 169-170.
[159] Vitruvius 2.1 and above, Chapter 2, pp. 170-181.

Roman *orbis* by the power of the cosmic-imperial Word.[160]

The Prima Porta statue is generally thought to have had a classical Greek model in the so-called Doryphoros – the "spear-carrier" that was the fifth-century B.C. Greek sculptor Polykleitos' most famous work, and of which a number of Roman copies survive (Fig. 43).[161] Both the Prima Porta statue and the two best surviving copies of the Doryphoros measure almost exactly the same height of two metres;[162] both have the same, typically contrappostal or "chiastic" Polykleitan stance, with the subject, whose weight is carried on his forward right leg, perfectly balanced between motion and stasis.[163] Similarities have also been noted in the heads, in the self-controlled, impassive, "classical" beauty of the features, in the arrangement of the hair. Both statues, as well as can be judged, have the same proportions, to the degree at least that they both *look* very similarly proportioned.[164]

There are also a number of significant variations, notably in the position of the arms.[165] The most obvious difference of all is that whereas the Doryphoros is nude, the Augustus from Prima Porta is clothed, dressed as a military commander. The

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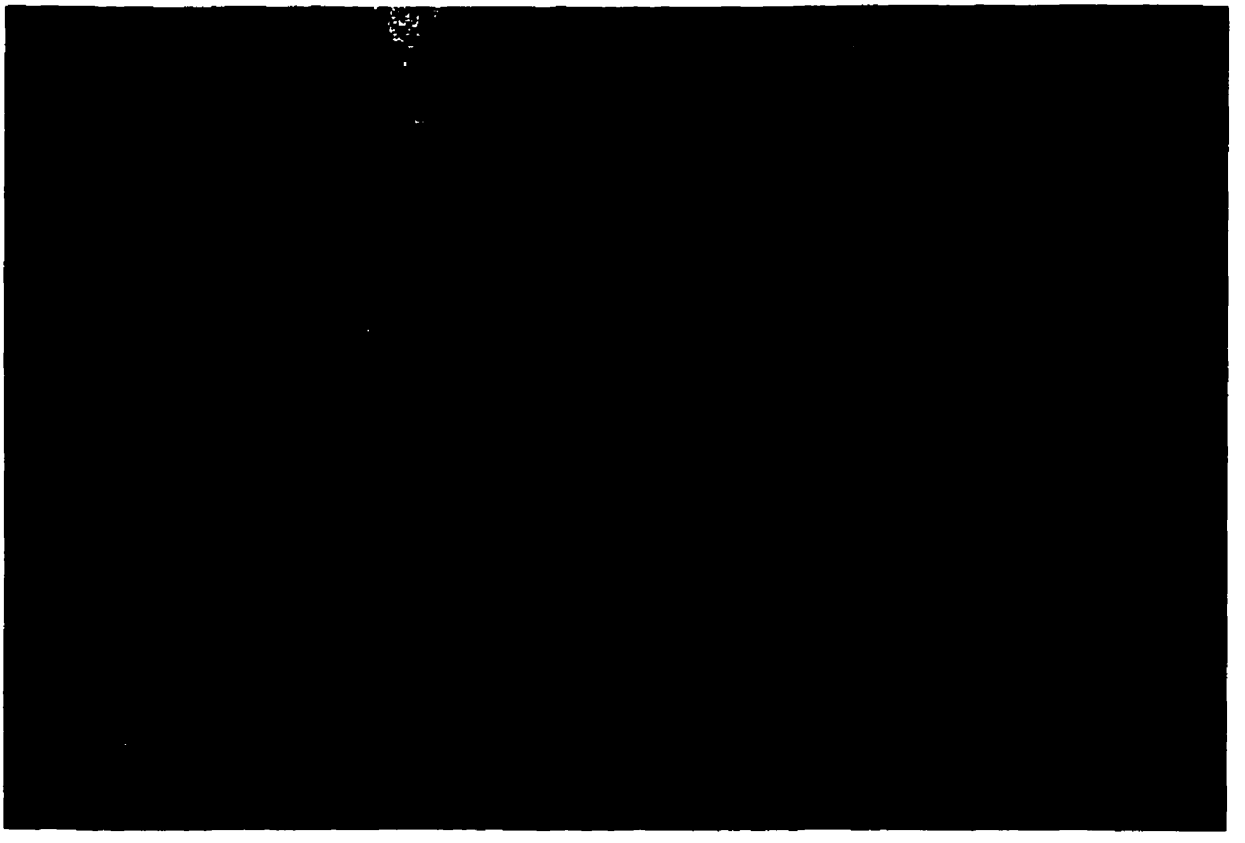
[160] Vitruvius 1.pref.1. See also Virgil *Aeneid* 8.722-729 and above, Chapter 2, p. 176.
[161] On the Doryphoros as model, most recently Lahusen 1990; Galinsky 1996, pp. 24-27; and especially Pollini 1995, with references to earlier literature (contra: Meyer 1995, p. 144, n. 44). Of the two copies of the Doryphoros considered to be the best, one, from the Samnite Palaestra at Pompeii, is now in Naples (Museo Nazionale 6011). The other, whose provenance is uncertain, is judged to be of even higher quality than the Naples statue and is now in the Minneapolis Institute of Arts (Meyer 1995; Hallett 1995). The recent acquisition of the latter occasioned the detailed studies published in Moon, ed. 1995. In general, see also Lorenz 1972; *Polyklet* 1990.
[162] See n. 161, above. Within less than a centimetre of each other – Naples Doryphoros: 2.00 m.; Minneapolis Doryphoros: 1.96 m.; Prima Porta statue: 2.04 m. (Meyer 1995, p. 73, 86; Pollini 1995, p. 366).
[163] Pollini 1995, p. 266.
[164] On the proportions of the Doryphoros: Berger 1990; Tobin 1975. On the difficulty of establishing such proportions, Stewart 1978a. There are no similar studies of the Prima Porta statue. Pollini 1995, p. 266 notes that the head-to-body ratio of the Doryphoros is 1:7, of the Prima Porta Augustus, 1:7.5.
[165] Pollini 1995 has taken these variations as revealing the significant ways in which Doryphoric model has been deliberately transformed by the dictates of imperial Roman rhetoric.

Fig. 44



Rear of Prima Porta cuirass: trophy. (Photo author).

musculature of his cuirass, presented as the mask and double of the *imperator's* own, reproduces (nearly) that of the torso of the Polykleitan statue, whose contours, principally those of the stomach muscles, have been attenuated just enough to enhance the legibility of the intersection in the Roman eagle of the vertical and the horizontal discussed earlier.

Andrew Stewart has called the "highly-contrived articulation" of the Doryphoros' torso "one of the most characteristic hallmarks of the Polykleitan style," following precedent in labelling it (fortuitously, but with no reference to the Prima Porta statue) its *cuirasse esthétique*.[166] The sculptor of the Prima Porta statue was by no means the first artist to take Polykleitos as his model. Other classical sculptors had done so before, making the torsos of their statues display the same monumental aesthetic "*cuirasse*."[167] But such statues, like the Doryphoros, are nude: they were made to imitate the ideal *in the flesh*, not to *wear* it as a piece of clothing. Augustus's cuirass fits him perfectly, but he can still in principle take it off. As a piece of clothing, it defines his appearance, his role Roman *imperator* as mediating "wearer" of the Greek ideal. It is almost as if to stress the self-conscious deliberation with which the Polykleitan armour has been *put on* – almost, indeed, as if to confirm the very nature of that armour – that, on the back of the cuirass where few if any would have seen it, the statue's sculptor has carved a trophy: another, much smaller cuirass, emptied of its vanquished owner, and mounted like a scarecrow (as Romans did their trophies) on a

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[166] Stewart 1995, pp. 252-253, citing Hallett 1986, p. 82.

[167] Stewart 1995 cites, for instance, the appropriation of the Polykleitan *cuirasse esthétique* by the sculptors of the bronze Riace warriors (from 5th-century B.C. Magna Graecia) and by Kresilas, the alleged sculptor of the 5th-century B.C. Diomedes best known through the copy found at Cumae, now

cross-shaped tree trunk (Fig. 44). The flesh of the Doryphoros has been made part of the king's mask. Why?

Rightly or wrongly, Romans thought that the Doryphoros was the statue Polykleitos made "to confirm in action," as Galen put it in the second century A.D., the "*logos*" of a written work that for the first time, he says, "gave all the explanations of the symmetries of the body," calling the statue "Canon," just like the book.[168] Pliny, who explicitly identifies the Doryphoros with the famous Canon statue, asserts that Polykleitos alone among men was "judged to have fashioned the art itself in a single work."[169] The essence of the *ars* so fashioned in the work whose lineaments, according to Pliny, artists followed as one might a law (*veluti a lege*), is the precise commensurability (*symmetria*) of all the parts with one another: of "finger, obviously, to finger, of all the fingers to palm and wrist, of these to forearm, of forearm to upper arm, and of all to all."[170] In donning the flesh of the Doryphoros, Augustus put on the Canon and with it, the symmetrical correspondences that endowed his body (the world) with perfect coherence: measurable confirmation at once of the binding force of the cosmic *logos* deployed on his chest and of the binding force of the *ratio*-as-speech

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in the Naples Archaeological Museum. That Polykleitos was especially known for his muscled torsos is echoed in the *Rhetorica ad Herennium* 4.9: "*pectus Polycletium*." Cf. Pollini 1995, p. 277.

[168] The Doryphoros as "Canon:" Pliny *Natural History* 34.55 (see below); Cicero *Brutus* 70; Quintilian 5.12.21. Cf. Leftwich 1995, p. 50 n.1; Rykwert 1996, pp. 104-110. Gros, Vitruvius 3 (1990), p. 64: "Le 'Canon' de Polyclète que Pline considère à tort comme une statue distincte du Doryphore. . ." Galen *De placitis Hippocratis et Platonis* 5.3.26: *pasas gar ekdidaxas hêmas en ekeinôi tôi syngrammati tas symmetrias tou sômatos ho Polykleitos ergôi ton logon ebabaiôse dêmiourgêtas andrianta kata ta tou logou prostagmata kai kalesas dê kai auton ton andrianta kathaper, kai to syngramma, kanona.* Cf. Galen *De temperamentis* 1.566, and Stewart 1978a, pp. 124-125, where these and other sources on the Canon are cited, with translations.

[169] Pliny *Natural History* 34.55: *solusque hominum artem ipsam fecisse artis opere iudicatur.*

[170] Pliny *Natural History* 34.55. Galen *De pacitis Hippocratis et Platonis* 5.3.15: *daktylou pros daktylon dêlonoti kai sympantôn autôn pros te metakarpion kai karpon kai toutôn pros pêchyn kai pêcheôs pros brachiona kai pantôn pros pantae*. The translation is Phillip de Lacy's. Cf. Galen *De temperamentis* 1.566 (Stewart 1978a, p. 125) and Pollitt 1974, pp. 14-15.

latent in the rhetorical gesture of his raised right hand.[171]

Symmetrical correspondences, carefully selected from "many numbers," are the source, interchangeably, of excellence (*to eu*) and beauty (*to kalos*).[172] "Quite perfect," is how Cicero judged the beauty of Polykleitos' statues."[173] Varro who, Pliny reports, attributed to Polykleitos the discovery of making statues throw their weight on one leg in the famous "chiastic" pose, called them *quadrata* and "almost all made on one model."[174] The epithet *quadrata* is usually taken as pejorative: "squarish" or "blocklike;" "heavy, tedious and repetitive" being the interpolated subtext.[175] One might recall, however, that it was also Varro who elsewhere said that Rome was first *quadrata* "so that it might be placed in equilibrium."[176] Bearing this in mind, one is led to suspect that the squaredness Varro attributes to Polykleitos' works, while referring to their blocklike appearance, referred equally to the equilibrium of the contrappostal stance that, weighted by the solidity of blocklike appearance, rendered visible the harmonious balance of carefully-selected "canonic" symmetries to give them the beauty Cicero considered entirely perfect.

This "squared" perfection was also, traditionally, moral – "*tetragônos*" as the poet Simonides wrote of the good man in the fifth century B.C., "foursquare in hands

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[171] At the end of the first century A.D., Quintilian (5.12.21) singled out the Doryphoros (who, in fact, represents an athlete an/or warrior – perhaps Achilles [Pliny *Natural History* 34.18]) as a model for public speakers. Galinsky 1996, pp. 24-25, interprets this as pointing to Quintilian's reading the Doryphoros *through* the Prima Porta statue, of which it is assumed there were countless copies. See also Pollini 1995, pp. 267-273.

[172] Philo Mechanicus iv 1.49.20; Galen *De placitis Hippocratis et Platonis* 5.3.15; Plutarch *Moralia* 45c. Cf. Stewart 1976, pp. 175-176; 1978a, pp. 124-125 (for the citations).

[173] Cicero *Brutus* 70: *pulchiora etiam Polycliti (signa) et plane perfecta.*

[174] Pliny *Natural History* 34.56. See also *Natural History* 34.65, where Pliny writes that Lysippus also cultivated symmetry, but "altered the square builds (*quadratas staturas*) used by the older sculptors" – one assumes Pliny means Polykleitos and his imitators.

[175] Hurwit 1995, p. 12; Stewart 1978b, p. 167.

and feet and mind, fashioned without a flaw."[177] To attempt to disentangle Simonides' moral squaredness from the squared or blocklike appearance Varro assigns to the works of Polykleitos by assuming the first to be metaphorical and the second purely descriptive as scholars sometimes do, is an anachronistic (not to mention futile) endeavour.[178] Simonides' good man is squared not only in mind, but also in hands and in feet. The one is, or rather was, unimaginable without the other. And Simonides and Polykleitos belonged to the same Greek century of whose civilising ideal Augustus appointed himself the self-conscious mediator when he put on his Polykleitan armour. "They say," wrote Diogenes Laertius of the Stoics, "that the perfect good (*to teleion agathon*) is beautiful (*kalon*) from its having all the numbers according to nature, or because of perfect *symmetria*."[179]

The squaredness of Rome and of the Doryphoros are, in equal measure, the squaredness of the Augustus from Prima Porta, in whose body both Rome and the entire world-city are "placed in equilibrium." Indeed, it has been noted that Roman statue is somewhat more solidly planted than the Greek one.[180] Just as rightly-calculated symmetries generate beauty in the squared, perfectly balanced body of the statue, so its beauty in turn generates the binding power of love, even as the Stoics said it should.[181] Riding on a dolphin, behind the calf of Augustus's right leg, a small

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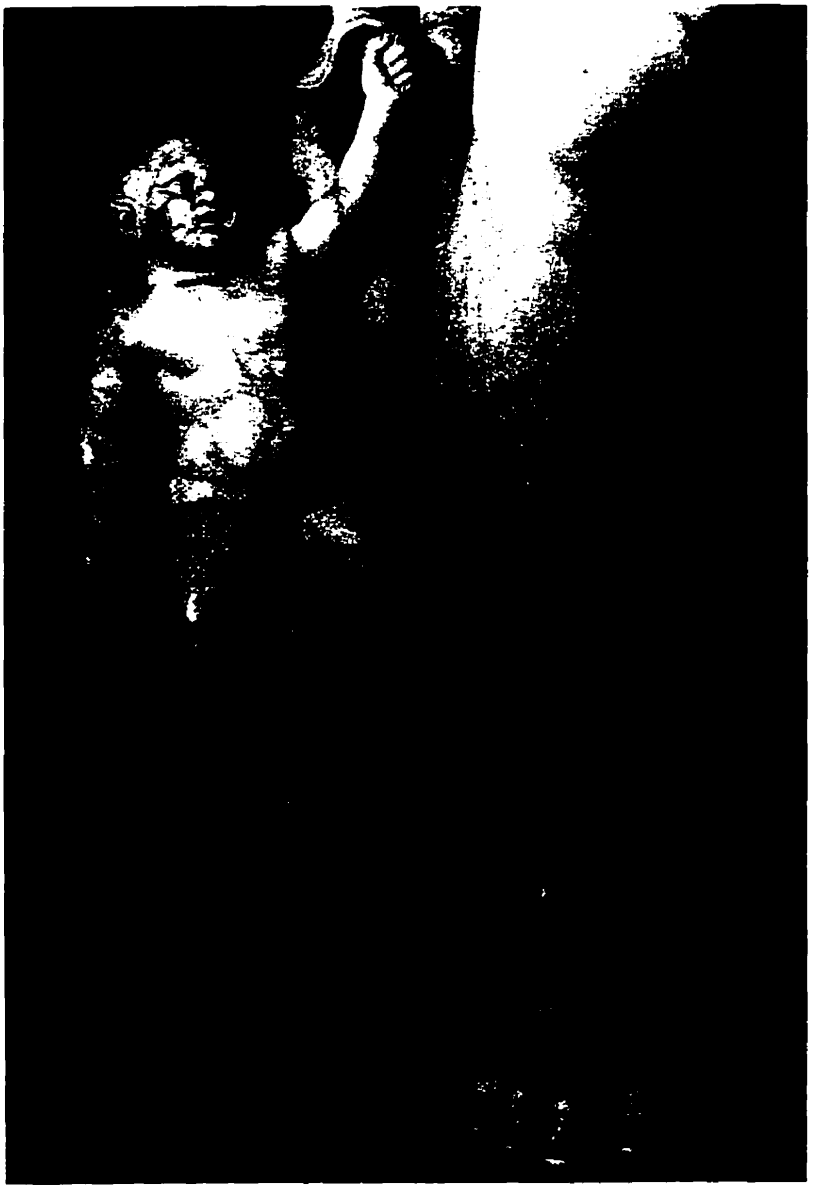
[177] Varro in Solinus 1.18: *dictaque primum est Roma quadrata, quod ad aequilibrium foret posita* (see above, Chapter 3, p. 193).
[178] Simonides in Plato *Protagoras* 339a: *chersin te kai posi kai noôi tetragônon aneu psogou tetugmenon*. Cf. Ferri 1940; Pollitt 1974, pp. 247-248; Stewart 1978b, p. 167.
[178] Hurwit 1995, p. 12, for instance, tries to distinguish metaphorical from descriptive squaredness.
[179] Diogenes Laertius 7.100: *Kalon de legousi to teleion agathon para to pantas apechein tous epizêtoumenous arithmous hypo tês physeôs symmetron*. Cf. Long 1996, p. 211, whose translation I have followed.
[180] Pollini 1995, p. 266.
[181] Above, Chapter 3, pp. 244-247.

Fig. 45



Amor behind the right calf of the Prima Porta Augustus.
(Photo author).

winged Amor reaches up to the hem of the general's *paludamentum* (Fig. 45). Or perhaps he is reaching to the tiny trophy-armour carved onto the back of the cuirass, which would just about fit him: the Amor (son of Venus, the Julian dynasty's divine ancestress) represented here is also, almost certainly, Gaius, Augustus's first grandson and future heir whose birth was celebrated the same year as the Parthians' return of the captured standards.[182] In this Stoic world city, where every referent is at once universal and historically specific, the Venus-born power of love is dynastic. It belongs to the king whose perfect body generates it.

Vitruvius was *writing* the body of architecture, not sculpting it – a perfect *corpus* he describes as *emendatum* the end of Book 9: "flawless." But then Polykleitos himself, at least according to Galen, *wrote* his Canon before he fashioned it in the statue he also called "Canon."[183] The passages discussed in the previous chapter of this study – the ones from Book 3, chapter 1, on proportion and symmetry – do not refer explicitly to any canon, written or sculpted, although in Book 1 Vitruvius notes that an architect, even if he neither is nor can be a sculptor like Myron or Polykleitos, should not be ignorant of the *rationes* of modelling.[184] He again lists Polykleitos along with Myron, Phidias and Lysippus as examples of artists who benefited from recognition during their lifetime and undying fame after their death.[185] It is nevertheless beyond

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[182] Dio Cassius 54.8.5. Gaius represented in the Amor of the Prima Porta statue: Simon 1986, pp. 55-56. Gaius and his younger brother Lucius (sons of Augustus's daughter Julia and of Agrippa, who had been responsible for Augustus's naval victories – hence the dolphin) were adopted as the princeps' heirs three years later in 17 B.C.

[183] Galen *De placits Hippocratis et Platonis* 5.3.26. See above, pp. 296-297 and n. 167.

[184] Vitruvius 1.1.13: *Non enim debet nec potest esse architectus . . . plastes quemadmodum Myron seu Polyclitus, sed rationis plasticae non ignarus . . .*

[185] Vitruvius 3.pref.2: *Maxime autem id adimadvertere possumus ab antiquis statuariis et pictoribus, quod ex his qui dignitatis notas et commendationis gratiam habuerunt, aeterna memoria ad posteritatem sunt permanentes, uti Myron, Polycletus, Phidias, Lysippus . . .*

question that there *is* a canon (and very probably that of Polykleitos) behind the well-shaped man whose commensurate proportions, Vitruvius says, "famous ancient painters and sculptors adopted, and so attained great, unlimited praise" – the same man whom Vitruvius encircles and then "squares" as geometrical proof of his overall commensurability.[186] This man – like the Prima Porta statue, and indeed like "Vitruvian" architecture – is informed by Greek precedents, but his proper subject is itself no more Greek than the Augustus wearing the Polykleitan armour is. Like the subject of the Prima Porta statue, the "squared" man at the centre of *De architectura* is Roman.

It is this man (a *man*, not a Greek statue) whom Vitruvius cites as the reason for following ancient precepts about commensurability in building, where carefully-chosen symmetries in turn generate *venustas*. There is no evidence – in Vitruvius or elsewhere – that the authorities Vitruvius refers to as "ancients" themselves ever invoked well-shaped men as the reason why architects should adhere to symmetrical principles.[187] There *is* evidence, however, that the ancients did so in defence of adherence to what one might call "symmetrical" principles in public speaking – the art of the orator, of whose persuasive *ratio* Vitruvius would make architecture the world-

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[186] Relation to the Canon: Gros, Vitruvius 3 (1990), pp. 64-65; Raven 1951; Rykwert 1996, pp. 97-110, among others. Vitruvius 3.1.2: *Reliqua quoque membra suas habent commensus proportiones, quibus etiam antiqui pictores statuarii nobiles usi magnas et infinitas laudes sunt adsecuti.* On Vitruvian man, 3.1.3 and above, Chapter 3, pp. 186-213.

[187] It is almost invariably assumed that they did, with the missing evidence attributed to Vitruvius' lost sources. But, as noted above (Chapter 3, p. 230), Vitruvius twice (3.1.4 and 3.1.9) stresses that *because* a man's body is symmetrical, architects should follow ancient precepts about symmetrical building: he introduces the man as justification for following those precepts, not as part of the inherited tradition.

wide demonstration or "proof," as discussed above in Chapter 2 of this study.[188] That a good speech should be put together like a well-shaped man, with all its parts "adapted to one another and to the whole," as Plato put it in the *Phaedrus*, was a notion Vitruvius' readers, Roman aristocrats trained in rhetoric, would have been entirely familiar with.[189] They may not have understood that (or how) the "the putting together of temples depends on symmetry," but once Vitruvius presented his well-shaped man as its justification, not only would the importance of architectural symmetry have acquired the force of obvious truth.[190] So too, thus allied to rhetoric through the man of commensurate parts, would the importance of architecture itself.

As familiar to Vitruvius' readers as the imagined body of a symmetrical speech, just as much of an acknowledged ideal, and not unrelated to it, was commensurability in the *corpus rei publicae*, the body of the Roman commonwealth, which Cicero made a favourite trope, and Caesar loftily dismissed as a fiction.[191] Unity in the body politic depended on cooperation between its members. In a fable related independently by two of Vitruvius' contemporaries, Dionysius of Halicarnassus and Livy, the senator Menenius Agrippa allegorises the members of the Roman commonwealth as different body parts, all mutually interdependent in their common project of keeping the body alive and well: a fable with particular point at this historical juncture, in the wake of

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[188] Plato *Phaedrus* 264c: "Every discourse ought to be living creature, having a body of its own and a head and feet; there should be a middle, beginning and end, adapted to one another and to the whole." Cicero *De oratore* 3.171-172; *Orator* 149; *De officiis* 1.98. Quintilian's referent (5.12.21) is not just any well-shaped man – it is the Doryphoros itself. Cf. Callebat 1994, pp. 43-44; Gros, Vitruvius 3 (1990), pp. 55-56; Pollini 1995, p. 270.

[189] Plato *Phaedrus* 264c: see above.

[190] Vitruvius 3.1.1: *Aedium compositio constat ex symmetria. . .*

[191] Cicero *De inventione* 2.168; *Pro Murena* 51; *Philippics* 8.15; *De officiis* 1.85, 3.22, 3.32. Caesar, cited Suetonius *Divus Julius* 77. See above, Chapter 1, pp. 78-79.

the civil wars.[192] In the unfamiliar trope of well-shaped man as the ground for architectural symmetry, Vitruvius' readers would have also recognised this other, already familiar one, and with it, another powerful argument for architecture's importance. Except of course that Vitruvius' well-shaped man now had a referent that was at once more personal and more universal than Cicero ever entailed in his "*corpus rei publicae*."

The measurements the Greeks, and until relatively recently most peoples, used for building were of course body-based, and indeed usually related proportionally, as they are (more or less) in the body itself.[193] But this does necessarily lead to the conclusion that *because* men's bodies are commensurable buildings should be so. The causal connection itself may just conceivably be Vitruvius' own – the stress laid on it as *the* justifying principle for having all the parts of buildings (particularly temples) relate to one another proportionally almost certainly is. And, allowing that the context in which *De architectura* was written ("When your divine mind and power, Imperator Caesar were seizing command of the word . . . .") is the same as the one that produced the Prima Porta Augustus, one is led to conclude that Vitruvius' insistence has to do not only with the precedents already mentioned, but even more precisely, with the Imperator Caesar who, as civiliser, "wears" the canon, and whose speech mediates its cohesive *logos*. To relate the symmetrical principles that the ancients handed down for

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[192] Dionysius of Halicarnassus *Antiquitates romanae* 6.86; Livy *Ab urbe condita* 2.32. Cf. Nestle 1926-27, who establishes the independence of the two versions (pp. 350-351).

[193] Four fingers=one palm, four palms=one foot – or, proportionally, finger is to palm as palm is to foot: mathematically, 1:4::4:16 (cf. Vitruvius 3.1.8). On ancient metrology in general see Fernie 1978, Hecht 1979 and the relevant chapters in Fernie 1996. On ancient metrological reliefs which illustrate the bodily basis for ancient measurement, see Fernie 1981; Dekolakou-Sideris 1990; Ben-Menahem and Hecht 1985; Wesenberg 1975-76. Cf. Rykwert 1996, pp. 99-100 and *passim*. Most recently, on the Salamis relief, Wilson Jones, *AJA*, forthcoming.

building to the symmetrical principles governing how nature puts together a man, and to cite the latter as the reason for adhering to the former is to ally architecture with the same imperial project.

The "numbers" of human measurement – finger, palm, foot, cubit – were "arranged," as Vitruvius puts it, "into the perfect number which the Greeks call *teleon*:"[194] the number ten, that, as discussed at some length in the first chapter of this study, is at once the "number" of the human body and the number of scrolls in which Vitruvius, very deliberately, deploys his "perfect body of architecture."[195] This number – four expanded to ten through pebbles or points laid out in the Pythagorean tetractys (. + . . + . . . + . . . .) – was, as Pythagoreans held, the "organising idea of cosmic events," "the circle and limit of all the numbers," the container and content of time itself.[196] In the Pythagorean way of thinking, four, the number of cosmic order, *was* ten.[197] Squared, four produces sixteen – the number Vitruvius says is Roman and "supremely perfect."[198]

J.E. Raven pointed out nearly 50 years ago that there is evidence that Pythagoreans coupled the perfect nature of the decad with the Canon itself.[199] Vitruvius, whose argument moves sequentially from well-shaped man to Vitruvian man to the arrangement of human "numbers" into the *teleon*, makes the same connection, as

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[194] Vitruvius 3.1.5: *Nec minus mensurarum rationes, quae in omnibus operibus videntur necessariae esse, ex corporis membris collegerunt, uti digitum, palmum, pedem, cubitum, et eas distribuerunt in perfectum numerum, quem Graeci* teleon *dicunt.*
[195] See above, Chapter 1, pp. 48-68.
[196] Aristotle *Metaphysics* 986a8; Iamblichus *Theologumena arithmeticae* 82.12; John Lydus *De mensibus* 1.15, 3.4, and above, Chapter 1, pp. 55-58.
[197] Lucian *Vitarum auctio* 4: "what you think is four is ten, a perfect triangle and our oath" (i.e. the Pythagoreans' "oath," which was the tetractys).
[198] *Perfectissimum*: Vitruvius 3.1.8, and above, Chapter 1, pp. 62-64.
[199] Raven 1951, p. 151.

Raven noted. Following this line of reasoning, a statue like the Prima Porta Augustus whose perfect beauty would have led to the assumption that it was canonic (even if, measurably, it may not have been) would, concomitantly, have represented the *teleon* in action: organiser of cosmic events, container and content of time, and so on – just as illustrated on the *imperator*'s cuirass.[200]

The *teleon* contained in the Prima Porta Augustus has the world cohere in a single body, one that, unlike that of its model the Doryphoros, has a specific historical identity.[201] The *teleon* Vitruvius contains in *De architectura*, which he allies to the same historical person, also makes it a body. This body, like all bodies, coheres through *rationes* – the same that Cicero claimed were the prerequisite for the formation of any *ars* (geometry, oratory, grammar etc.) in order to cement fragmentary knowledge, formerly "diffuse and all in pieces," and bind it together.[202] Unlike the *rationes* that bind the other arts, however, or those that bind other bodies, the *rationes* that bind architecture at once into an art and into the historically specific body of *De architectura* have, as Vitruvius presents them, the unique potential for (as it were) laying the king – or rather his mask – out over the contours of the imperial landscape, and by so doing to palpably bind "all to all" in a lived world of spatial extent. In *De architectura* the world-body the Prima Porta statue presents as an image is a real geographical possibility.

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[200] On the difficulty of extrapolating a Canon from a statue – or even of establishing that any given statue is canonic, Stewart 1978a. The Prima Porta statue's resemblance to the Doryphoros would have been more than enough to persuade any viewer familiar with both statues that the portrait of the princeps was indeed "canonic."

[201] The Doryphoros is not a portrait (see above, n. 170).

[202] Cicero *De oratore* 1.188: *quae rem dissolutam divulsamque conglutinaret, et ratione quadam constringeret.* Compare Vitruvius 4.pref. Cf. Gros 1989a, p. 15; Novara 1983, pp. 287-290.

**Corpus imperii**

The year the Parthians returned the captured standards in the event that was made the focus of the Prima Porta cuirass was also marked by the birth of Gaius, Augustus's first grandson and successor, who is arguably represented in the winged Amor at the feet of the statue, as already noted.[203] The same year Augustus was chosen *curator viarum*, and put in charge of all the highways in the vicinity of Rome.[204] In this capacity, he set up the so-called *miliarium aureum*, the golden milestone at the north-west end of the Forum Romanum near the Temple of Saturn, where it marked the point of convergence of the main roads that led to the city, and commemorated the curatorship of the princeps in whose person they thus ideally converged.[205]

The notion of what we call the Roman empire – a spatial unit with a centre, Rome, and a clearly marked limit or periphery – first took shape under Augustus Caesar, through whom, as through golden milestone and the Prima Porta statue, all expressions of unity were initially formulated. There was, Dietmar Kienast has pointed out, no preconceived idea of a fixed, geographical empire.[206] It did not exist prior to, or independently of, Augustus, with virtually no expressions concerning "the" empire

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[203] Dio Cassius 54.8.5. (above, p. 299 and n. 181).
[204] Dio Cassius 54.8.4.
[205] *LTUR*, s.v. *Miliarium aureum*, with references. There appears to be no evidence to support the tradition that the milestone recorded the names of the most important cities in the Roman world and their distances from Rome.
[206] Kienast 1982a, pp. 415–417.

during the Augustan period that do not refer to the emperor himself.[207]

Ovid is the first to use the phrase "*corpus imperii*," the body of empire, in his *Tristia*, the series of poems he wrote from exile on the Black Sea around 10 A.D. near the end of Augustus's reign. Its appearance, an instructive case in point, concludes a panegyric Ovid opens with an address to Augustus, now over 70, as "*imperii princeps*" (prince or originator of empire) on whom, he says, the world depends, to whom Parthians – still, thirty years later – return standards, and whose youthful vigour is renewed in the German conquests of his son and current heir, Tiberius.[208] Although vaster now than ever, Ovid writes, there are no shaky (no loosely-connected) members in the *corpus imperii*, the body of empire.[209] How could there be if it is, truly, a body?

By the time Florus wrote his epitome of Roman history in the second century A.D., the phrase *corpus imperii* that first surfaced in Ovid as a poetic invention had become something of a cliché.[210] Florus writes that at the end of the civil wars,

*the chief power passed to Octavius Caesar Augustus, who by his wisdom and skill set in order the body of empire, which was all overturned and thrown into confusion and would certainly never have been able to attain coherence and harmony unless it were ruled by the nod of a single protector: its soul, as it were, and its mind.*[211]

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[207] Kienast 1982a, p. 418; 1982b. See also Béranger 1953, pp. 218-252.
[208] Ovid *Tristia* 2.213-230. Lucius and Gaius Caesar, Augustus's grandsons, were his heirs until their deaths in 2 and 4 A.D. respectively. After this, Augustus adopted Tiberius, his wife Livia's son by a previous marriage.
[209] Ovid *Tristia* 2.231-232: *denique, ut in tanto, quantum non extitit umquam corpore pars nulla est, quae labet, imperii* (cf. Kienast 1982b, p. 5; Richardson 1991, p. 7). See also *Fasti* 4.857-863.
[210] For citations: Béranger 1953, pp. 218-252; Kienast 1982b.
[211] Florus *Epitome* 2.14.5-6: . . . *ad Octavium Caesarem Augustum summa rerum redit, qui sapientia sua atque sollertia perculsum undique ac perturbatum ordinavit imperii corpus, quod haud dubie*

So what was *imperium* before acquired spatial extent and (as Florus phrases it in terms that are so uncannily close to those of Vitruvius' first preface) perfect coherence in the *corpus* ruled by the nod, the soul and the mind of Augustus?

Until the time of Augustus the Latin word *imperium* meant the legally-vested power of command, confirmed by Jupiter through the taking of auspices. The power was, in equal and indissoluble parts, religious and political, and conferred on magistrates when they entered office.[212] Magistrates were elected by the people, but they received *imperium* from Jupiter.[213] Since they were elected for periods usually limited to a year, no one person ever held *imperium* for very long. This was true both of city magistrates and of pro magistrates who governed in their provinces, with *provincia* understood more as the "official duty, office, business or charge" of those who exercised *imperium* there, than territorially, as geographical "provinces" independent of that command.[214] It was also true of military commanders in the field. *Imperium*, the right of command, did not exist objectively or independently of the person who temporarily held it and could belong to as many or as few people as circumstances dictated. A proconsul might for instance have *imperium* in Asia, but Asia was the *provincia* of his *imperium*, not *imperium* itself. Romans in the late Republic told themselves that they ruled the world, but the Roman *orbis* they claimed to rule was itself not an *imperium*.[215] Even in Virgil, the "*imperium sine fine*" he has

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*numquam coire et consentire potuisset, nisi unius praesidiis nutu quasi anima et mente regeretur.* Cf. Béranger 1953, p. 228.

[212] Combès 1966; Kienast 1961, 1982b; Lintott 1981 and especially Richardson 1991, with references. On the indissolubility of politics and religion, above, Chapter 3, pp. 214-221.

[213] Richardson 1991, p. 4.

[214] Lewis and Short, s.v. *provincia*, for which the original meaning still held in the first century B.C. Cf. Levick 1967, p. 21.

[215] Vasaly 1993, p. 134.

Jupiter promise the Roman people in the *Aeneid* is temporally "without limit" – a power endlessly renewed – not a spatial entity.[216] Because *imperium* had no body, before Augustus took the name *Imperator* there was, as common usage now normally designates it, no Roman "empire."

Indeed, before Augustus adopted it as a *praenomen* in 29 B.C., "*Imperator*" had not been a name at all, attached permanently to any single person.[217] The man designated by the common noun *imperator* was a military commander, who exercised *imperium* in the field.[218] If, after a major victory, his troops acclaimed him "*Imperator*," he could carry the title only until after the celebration of his triumph, after which he had to relinquish it.[219] The role of military commander (*imperator*) was not exclusive, nor the acclamation, *Imperator*, permanent. In the name Imperator Caesar Augustus, it became both. "Regarded as a personal name," wrote Sir Ronald Syme, " 'Imp.' is exorbitant, far outdistancing any predecessor or competitor . . . 'Imp.' is a name of power, precise yet mystical, a monopolisation of the glory of the *triumphator* . . ."[220] This is the name by which Vitruvius chooses to address the man for whom he wrote *De architectura*.[221]

Renewed yearly in different elected officials, *imperium* was, like the title

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[216] Virgil *Aeneid* 1.279.
[217] Dio Cassius 52.41.3, Suetonius *Divus Julius* 76, cf. Syme 1958, p. 176, who says he was already using the name in 38 B.C. See also Combès 1966.
[218] Vitruvius (2.9.15) provides an excellent example in his account of how the fire-resistant properties of larchwood were discovered. When Caesar was campaigning in the Alps, he commanded (*imperavisset*) the local municipalities to furnish supplies. When the natives refused to comply with Caesar's command (*imperium*), the commander (*imperator*) ordered his own troops to perform the task, which of course they did, and built a siege tower out of the local wood that proved to be fire-resistant.
[219] On the acclamation, Kienast 1961, pp. 403–404. Cf. Combès 1966, p. 2.
[220] Syme 1958, p. 182. See also Gagé 1933: "*L'empire romain est une monarchie militaire . . . l'empire se résume en un* Imperator *chef des armées*" (p. 1).

*imperator*, entirely time-dependent until Augustus became *the* single and permanent *Imperator* in whom *imperium* was perpetually renewed. When the *locus* of *imperium* became the body of the *Imperator* who ruled the world, its localisation transformed a hitherto temporal phenomenon into a body of power whose objective reality was at once spatial and – as in the Prima Porta statue – "canonically" measurable. It is no accident that, coincident with these developments, was the completion of Agrippa's famous map, which Augustus displayed in the Porticus Vipsania of the Campus Martius in order, as Pliny writes "to set the world before the eyes of the City."[222]

It is within this context that one must understand Vitruvius' presentation of architecture as the agent above all others in the spatialization of *imperium* which, given its *locus* in the man he acclaims as Imperator, is identical with the project of shaping the world in the king's own image. "When I realised," he writes to Augustus in his first preface,

*that you had care not only for the common life of all men and for the security of the commonwealth but also for the fitness of public buildings that even as, through you, the city* (civitas) *was increased with provinces, so public buildings were to provide eminent guarantees for the majesty of empire* (maiestas imperii) *I decided not to hesitate and took the first opportunity to set out for you my writings on these matters, for it was concerning this that I was known to your father (Caesar) and this is what first attached me to his might. And when . . . your father's* imperium *was conveyed into your power, my enduring attachment to his memory likewise brought*

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[221] See above, Chapter 1, pp. 44–45.
[222] Pliny *Natural History* 3.17 and above, Chapter 1, pp. 25-27.

*your favour with it.*[223]

Vitruvius presents Augustus's conquests not as a territorial expansion but as an increase in the *provinciae*, the "provinces," of the Roman *civitas*, a phrasing which puts less emphasis on increase in the size of an "empire" than on collective power accrued – a power now located in the Imperator explicitly addressed as the agent of that increase. Buildings are the "eminent guarantees," the evidence and proof, of the majesty of *imperium* so increased.[224] They localise *imperium* and make it spatial. They also, as Vitruvius tells it, localise the achievements of Imperator Caesar.[225] *De architectura* – the ten scrolls that delineate the complete body of architecture – is Vitruvius' single schema or diagram for situating both.[226] It is a body less usefully understood as an exhaustive set of specific instructions (it is not) than as an overall mnemonic figure meant to supply the diagrammatic frame for giving *imperium* the world-scale locus

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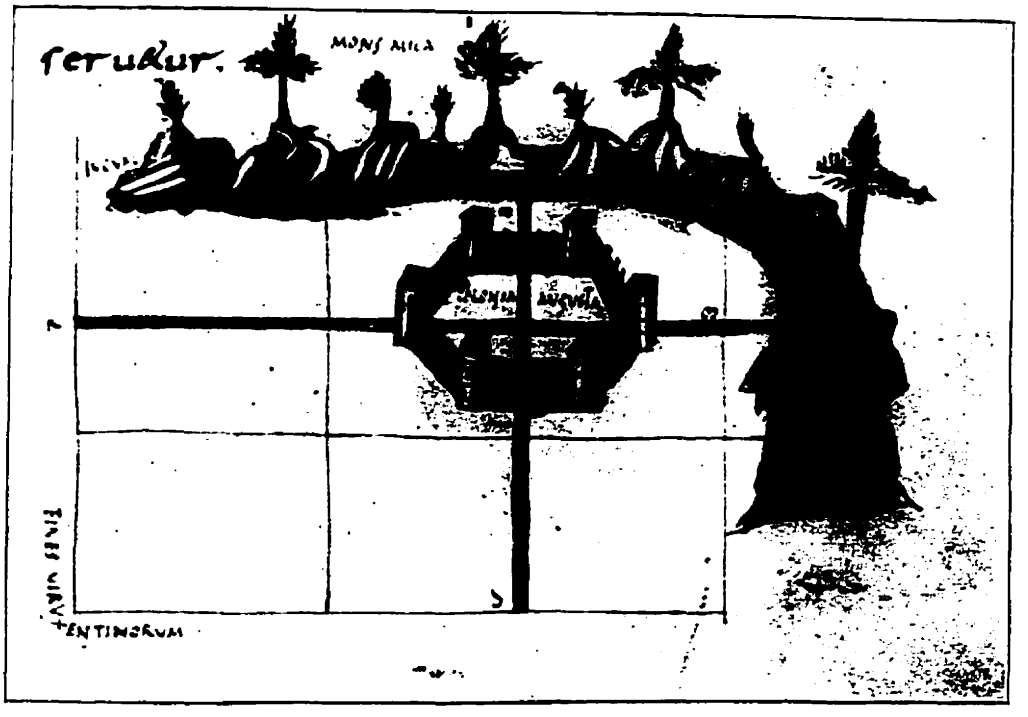
[223] Vitruvius 1.pref.2: *Cum vero adtenderem te non solum de vita communi omnium curam publicaeque rei constitutione habere, sed etiam de opportunitate publicorum aedificiorum ut civitas per te non solum provinciis esset aucta verum etiam ut maiestas imperii publicorum aedificiorum egregias haberet auctoritates, non putavi praetemittendum quin primo quoque tempore de his rebus ea tibi ederem, ideo quod primum parenti tuo de eo fueram notus et eius virtutis studiosus. Cum . . . imperium parentis in tuam potestatem transtulisset, idem studium meum in eius memoria permanens in te contulit favorem.*

[224] See also Suetonius *Divus Augustus* 28.3, on Augustan building in Rome (the famous brick-to-marble passage): *Urbem neque pro maiestate imperii ornatum . . .* On *auctoritates* as "guarantees," above, Chapter 1, pp. 44–46..

[225] Vitruvius 1.pref.3: because I noticed how much you had built, were now building, and would build in the future – both public and private buildings in keeping with the greatness of your achievements so that these might be transmitted to the memory of posterity and abide in its care. I have delineated complete and detailed rules so that by considering them you yourself can take account both of what finished works are like and of how future ones will be: for in these scrolls I have laid out all the principles of the discipline. *quod animadverti multa te aedificavisse et nunc aedificare, reliquo quoque tempore et publicorum et privatorum aedificiorum pro amplitudine rerum gestarum ut posteris memoriae traderentur curam habiturum, conscripsi praescriptiones terminatas ut eas adtendens et ante facta et futura qualia sint opera per te posses nota habere; namque his voluminibus aperui omnes disciplinae rationes.*

[226] Vitruvius 1.pref.2-3, cited above.

Fig. 46




"*Colonia augusta.*" Image from the 9th-century A.D. Codex Palatinus of the *Corpus Agrimensorum* (Vatican lat. 1564) illustrating Hyginus Gromaticus' *Constitutio limitum*. After C.O.Thulin (Cf. Thulin 1971, p. 145 and fig 96).

Ovid and others called *corpus imperii* – what we now call the Roman "empire."[227]

The phenomenon of world-wide Roman colonisation that began as a trickle under Caesar swelled to an unprecedented and never-to-be repeated tidal wave under Augustus. By his own account, he founded twenty-eight new cities in Italy itself; others in Gaul (both the Narbonensis and the "three Gauls," recently conquered by Caesar), in Spain, Africa, Mauritania, Sicily, Corsica, Sardinia, Macedonia, Achaea, Asia.[228] There was more to this than the provision of land for the more than 100,000 veterans he demobilised after his victory at Actium.[229] "Colonies," explains the miscellanist Aulus Gellius in the second century A.D.,

*do not come into citizenship from without, nor grow from roots of their own but are as if transplanted from the (Roman)* civitas *and have all the laws and institutions of the Roman people, not those of their own choice. This condition, although more subject to control and less free, is nevertheless thought to be preferable and superior because of the greatness and majesty of the Roman people* (propter amplitudinem maiestatemque populi Romani) *of which those colonies appear rather as small effigies and, as it were, images.*[230]

Colonies are images not of Rome, but of Roman majesty and greatness:

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[227] Ovid *Tristia* 2.232 (see above). On the mnemonic dimension of *De architectura*, Chapter 1, pp. 109-116.

[228] Augustus *Res gestae* 28: "I founded colonies of soldiers in Africa, Sicily, Macedonia, both Spanish provinces, Achaea, Asia, Syria, Gallia Narbonensis and Pisidia. Italy too has twenty-eight colonies founded by my authority, which were densely populated in my lifetime." *Colonias in Africa, Sicilia, Macedonia, utraque Hispania, Achaia, Asia, Syria, Gallia Narbonensi, Pisidia militum deduxi. Italia autem XXVIII colonias quae vivo me celeberrimae et frequentissimae fuerunt mea auctoritate deductas habet.* Brunt and Moore, trans. See also Suetonius *Divus Augustus* 46; Kienast 1982a pp. 336-365 and pp. 391-406 where the colonies founded these places are listed; Fear 1996; Millar 1984, p. 50; Woolf 1998.

[229] Augustus *Res gestae* 28 (see above); Kienast 1982a, p. 399.

[230] Aulus Gellius *Noctes atticae* 16.13.8-9. Cf. Fear 1996, p. 63.

precisely the terms Vitruvius uses with respect to Augustan building activity in the passages just cited. Founded by illustrious men like Caesar and Augustus, for the sake of "increasing" the Roman commonwealth (*augendae rei publicae causa*, as Hyginus Gromaticus writes), their creation everywhere followed an identifiable pattern (Fig. 46).[231]

Greg Woolf has recently documented the case of Gaul, whose urbanisation under Augustus followed Caesar's conquest of it in the 50's B.C. – the latter, it is worth recalling, with Vitruvius' active participation.[232] Cities, the measurable index of *humanitas*, were also the measurable evidence of the conquest in whose wake their foundation followed, and this, as a systematic enterprise, dating from early Augustan period.[233] Their creation in Gaul began with the choice of site, which changed from the hills where Gauls had built the forts that had characterised traditional settlement patterns for more than five centuries, down to the neighbouring plains.[234] Next came the organisation of urban space: the limitation of its perimeter, and the "squaring" of the territory so limited in an operation whose laborious execution through the large-scale earth removal entailed by levelling and terracing appears to have been more than compensated by the evidence of coherence so established.[235]

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[231] Hyginus Gromaticus *Constitutio limitum*, in Thulin 1971, pp. 140-141.
[232] Woolf 1998, pp. 106-168. Vitruvius' attachment to Caesar: 1.pref.2 (cited above, p. 310 and n. 222). Vitruvius' detailed descriptions of incidents both at the beginning of the Gallic wars (2.9.15: Caesar's construction of a siege tower while campaigning in the Alps, probably in 59-58 B.C.; cf. Corso and Romano, Vitruvius 1997, pp. 215-216), and after they ended (10.16.11-12: the siege of Marseilles in 49 B.C.; cf. Callebat and Fleury, Vitruvius 10 [1986], pp. 289-293) point to an attachment that must have covered the intervening ten-year period.
[233] Urbanisation and *humanitas*: Woolf 1998, pp. 106-113 and above, Chapter 2, pp. 178-183.
[234] Woolf 1998, pp. 114-115.
[235] Goudineau 1980, p. 267, stresses "*la volonté de cohérence*" as the driving force behind the imposition of grids, whose large module could not be applied to a topographically varied landscape which hence required leveling. Coherence needed a flat surface. Cf. Woolf 1998, pp. 116-120.

The building of the monumental centre followed. Significantly, although there is evidence for the foundation of (a very few) colonies in Gaul before the Augustan period, none exists for the construction of any urban monument before 30 B.C.[236] The exact sequence and details of their building varied, but the general pattern did not: a forum complex (enclosed, continuous, coherent) that included temples, a basilica, a *macellum*, or monumental market; bath buildings and theatres. Rarely amphitheatres, whose initial appearance in Gaul at the end of the first century A.D. considerably post-dates the Augustan period – an interesting delay, in view of Vitruvius' failure to discuss them.[237]

After the city had been gridded out, and its monumental centre at least located, Gallic city builders turned to the construction of their own residences. At first, those who settled around the recently-cleared *fora* of the sparsely-populated, newly-squared cities lived in houses built of wattle and daub – a quick and easy, but highly impermanent, building technique Vitruvius condemns as a public calamity and wishes never have been invented[238] – one he includes in the discussion of primitive huts with which he begins Book 2.[239] Within a generation, and only after the monumental centre had been built, the Gauls, or at least those who could afford to, mended their ways, and built aristocratic *domus* with tiled roofs, mosaic floors, and walls of *opus*

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[236] The case of St-Bernard-de-Comminges (ancient Lugudunum Convenarum, in the southwest corner of France) one of the very few Gallic cities that does not lie under a modern town, has been taken as paradigmatic. The colony was founded by Pompey in 70 B.C., but there is no trace of any urban structure datable before 30 B.C. Woolf 1998, p. 120-122, with references. On the urbanization of Gaul as Augustan in inception, see also Aupert and Sablayrolles 1992, especially pp. 284-286; Goudineau 1991; Gros 1987b, 1991b; Le Glay 1991.
[237] Woolf 1998, p. 122.
[238] Woolf 1998, p. 124; Vitruvius 2.8.20.
[239] Vitruvius 2.1.3-4.

*caementicum*, whose smooth-plastered interior surfaces were painted with murals.[240] The progress of civilisation Vitruvius describes in his primitive hut chapter concludes with his now sedentary hut-builders constructing, no longer huts, but houses (*domus*) with foundations, stone walls, tiled roofs, and learning to grace their lives with the pleasures of refinement.[241]

The order of operations in the urbanisation of Gaul (choice of site, organisation, public buildings, private buildings, finishes) is precisely the order of the first seven books of *De architectura*. Available evidence leaves little room to doubt that the same general order obtained in the urbanisation of the Iberian peninsula, for instance, or in other areas of Augustan colonisation, at least in the western provinces.[242] In spite of many variations in their size and shape, archaeologists have little difficulty in identifying the vestiges of any Roman town, temple or house as indeed Roman.

Some towns were built in previously uninhabited locations. Others, like the peregrine colony of Conimbriga in Lusitania for example, over existing towns.[243] All, in recognisable conformity with the civilisers' schema, left little or no trace of the many heterogeneous cultures so effaced; all, through their newly-acquired coherence (each with each, and all to all), "increased" the *corpus* of Roman *imperium* and testified to its greatness and majesty. And if adherence to the schema was eager and willing, the persuasive force of the testimony and the majesty of the *imperium* to which it testified

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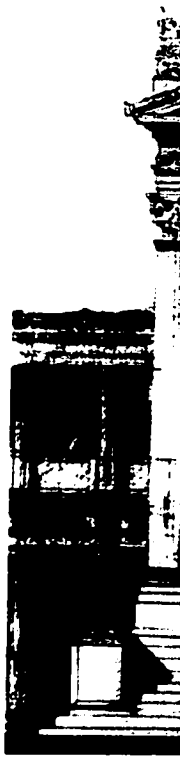
[240] Woolf 1998, pp. 123-124; wall-paintings: pp. 203-204.
[241] Vitruvius 2.1.7.
[242] Among recent studies, Alarcão and Etienne 1976, 1979; Etienne 1996; Fear 1996; Fishwick 1987-92; Mierse 1990. Cf. Tacitus *Agricola* 21 and above, Chapter 2, pp. 181-182.
[243] On Conimbriga, Alarcão and Etienne 1979, who claim the initial layout of the Augustan city follows Vitruvius. Cf. Kienast 1982a, p. 405.

Fig. 47

Plan of Pisidian Antioch in Galatia.
After Mitchell and Waelkens.



Reconstructed facade of the Temple
of Augustus at Pisidian Antioch after
Frederick J. Woodbridge, Jr.
(Cf. Robinson 1926-27).

increased proportionally.[244]

These cities also, invariably, testified to the greatness of the Imperator who was their centre and origin: in the temples dedicated his cult which were sometimes the first monumental building to be erected in a new city, in his statues, in the coins that bore his image, in the (Latin) inscriptions that recorded his deeds, in their very names: Augustodonum (Autun), Augusta Emerita (Merida), Augusta Raurica (Augst), Augusta Suessionum (Soissons) . . .[245]

Systematic urbanisation like that carried out in the western provinces was not undertaken in the Greek East where, Romans acknowledged, civilisation had been invented, but where, they also claimed, civilisation was now in a sorry state of decline.[246] Roman architectural activity in the East – again there is little or none that dates from before the time of Augustus – while it included the foundation of colonies, was less a question of creation *ex* (barbarian) *nihilo*, than a question of renewal and reform. In the preface to Book 9, Vitruvius concludes his vindication of the importance of "commentaries" (the works of Plato and Pythagoras, among others – a vindication whereby he obviously means to vindicate the importance of his own writings) by stressing that these are not only useful to all peoples (*omnes gentes*) but directed, also, *ad mores corrigendos*, to the "correction" of *mores* or customs.[247] Judiciously exercised by Roman civilisers, architecture, the art of the geometrical

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[244] Vitruvius 2.8.12; Tacitus *Agricola* 21 (above, Chapter 2, pp. 181-182). Etienne 1958, pp. 75-80; Fishwick 1996, p. 184; Woolf 1998, pp. 124-125.
[245] Etienne 1958, 1996; Fishwick 1987-92 1996; Gros 1987b, 1991b; Le Glay 1991; Mierse 1990, pp. 322-324. Ten Gallic cites had "*Augusta*" attached to their names (Goudineau et al., 1980, p. 99).
[246] Cicero *Ad Quintum fratrem* 1.1.27. Woolf 1994, pp. 119-124 and above, Chapter 2, p. 167.
[247] Vitruvius 9.pref. 15. On "*omnes gentes*," above, Chapter 2, pp. 156-160. For a different assessment of *ad mores corrigendos* and the ethical dimension of architecture in Vitruvius, Romano 1987, pp. 143-171.

footprint, was also a moral corrective.[248]

Caesar's refoundation of Corinth, Achaean port-city of legendary decadence, the "squaring" of its territory, and its rebuilding under Augustus, reads like a paradigm of corrective renewal.[249] Corinth, as discussed earlier, is where Vitruvius situates the birth of the Corinthian capital in an aetiology whose entire point is renewal.[250] The first city Augustus himself founded in Greece was Nikopolis, "city of victory," built on the site of his camp at Actium, in order, says Suetonius, "to extend the fame of his victory and perpetuate its memory" and where, according to Dio Cassius, on the spot where he had had his tent, he built a temple to Apollo "on a foundation of squared stones."[251] Populated with Greek colonists relocated from surrounding centres, Nikopolis was to have replaced Athens as the new centre of the Greek world.[252]

Perhaps the most pointedly revealing among Augustan colonies in Greek Asia Minor was was Antioch in Pisidia, refounded as the Latin-speaking city of Antioch Caesarea in 25 B.C. as an outpost of *romanitas* in the hills of the newly-annexed province of Galatia (Fig. 47, top).[253] The monumental focus of the city, dominating it from the highest point at its eastern edge, was the richly-ornamented, west-facing, tetrastyle Corinthian Temple of Augustus (Fig. 47, bottom). It was situated at the centre of the deep, rock-cut hemicycle that extended the east side of the enclosed, nearly square temple precinct, whose plan closely resembles that of the Forum of

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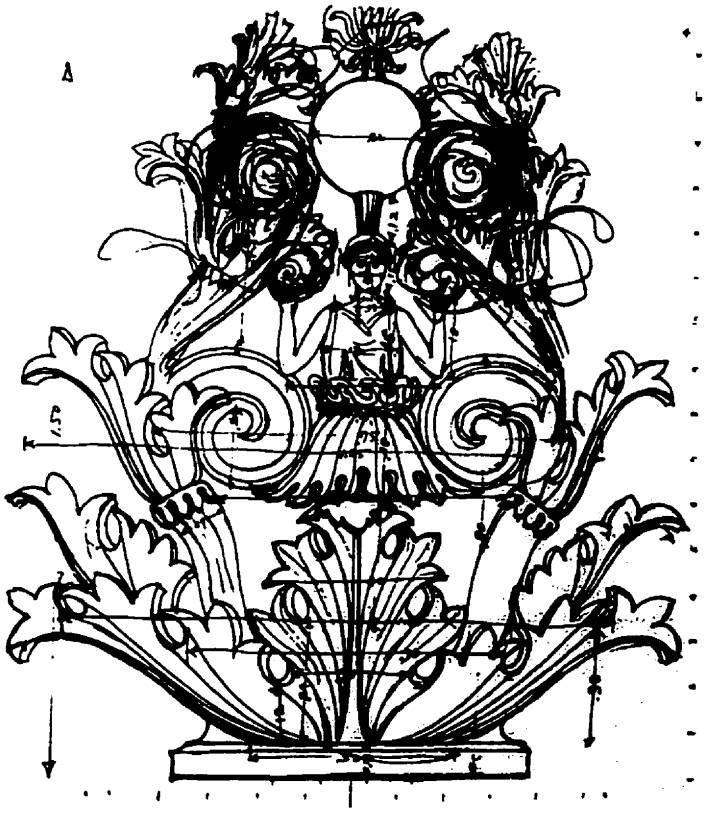
[248] Vitruvius 6.pref. and above, Chapter 2, pp. 161-166.
[249] Above, Chapter 3, pp. 251-254..
[250] Vitruvius 4.1.9-10 and above, Chapter 3, pp. 247-258.
[251] Suetonius *Divus Augustus* 18.2 (compare Vitruvius 1.pref.3: above n. 224); Dio Cassius 51.1.3.
[252] Kienast 1982a, p. 373, with nn. 25, 26 for sources.
[253] On Pisidian Antioch, most recently Mitchell and Waelkens 1998.

Fig. 48



Acroterion from the west pediment of the Temple of Augustus at Antioch in Pisidia. As drawn by Frederick J. Woodbridge, Jr. (left – cf. Mitchell and Waelkens 1998, p. 139) and surviving fragment (below – cf. Robinson 1926-27, figs. 29 and 30).

Fig. 49

Frieze fragment from the Temple of Divus Julius in the Forum Romanum.
After E. Simon.

Augustus at Rome, dedicated the same year of 2 B.C.[254] The entrance to the temple precinct was through a triumphal gate on which, after his death, Augustus's *Res gestae*, his achievements, were inscribed in Latin.[255]

A spiraling acanthus "*Rankenfries*," virtually identical to those of contemporary temples of the imperial cult in other parts of the Roman world, ornamented the upper part of the temple's cella wall.[256] Large acanthus-leaf acroteria appeared on the gable ends and on peak of the west pediment. The lush vegetation of the central acroterion (a sizeable fragment of it survives), sculpted in marble and measuring over a metre and a half high, grows up around and nearly engulfs the small legless female figure at its centre (Fig. 48). Her draped torso emerges from an acanthus-leaf skirt – leafage which, reciprocally, the lower part of her body appears to generate along with the rest of the foliage that surrounds her. She wears a basket-like headdress (a *calathos*) on which a large sun disk is balanced, rather like a host in a monstrance.[257] At dawn, when the sun rose behind the west-facing Temple of Augustus, the sun's own rays

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[254] Mitchell and Waelkens 1998, pp. 113-141. The dedicatory inscription on the gate to the temple precinct is dated to 2/1 B.C. (Mitchell and Waelkens, pp. 147 and 167) which means the temple was probably built earlier. Dominant position of temple: Mitchell and Waelkens, p. 164 and the contour map on p. 92.

[255] They were inscribed on the interior walls of the central archway of this gate and also in two other known locations, both in Galatia: one, in both Greek and Latin in the pronaos of Ionic pseudodipteral Temple Roma and Augustus at Ankara, built in about 20 B.C., and another, in Greek, on the base of a dynastic statuary group in Apollonia which represented the imperial family. On the Antiochan inscription, Ramsay and von Premerstein 1927. Cf. Güven 1998; Elsner 1996; Mitchell and Waelkens 1998, pp. 147-150 and 163.

[256] Frieze on Antioch temple: Mitchell and Waelkens 1998, pp. 123-127. Similar friezes appear on the Corinthian Temple of Roma and Augustus at Pola in northern Italy and on the Maison Carrée at Nîmes, also Corinthian, which was dedicated to Augustus's heirs, Gaius and Lucius Caesar. Temple at Pola: Zanker 1988, pp. 312-313; Maison Carrée: Amy and Gros 1979. For other examples, see Hänlein-Schäfer 1985.

[257] Robinson 1926-27, p. 17, figs. 29and 30; cf. Mitchell and Waelkens 1998, p. 171 and fig. 26.

would have haloed the stone sun disk in the acroterion with its radiance.[258]

To a reader of Vitruvius, the image in the acroterion – the girl, the basket, the acanthus that grows up around it – appears almost as an iconic transcription of his story about the origin of the Corinthian capital.[259] Vitruvius does not mention the sun in his aetiology, but he does say that the acanthus sprouted in the spring, and it goes without saying that sunlight made it sprout. In Book 9 Vitruvius himself presents the sun's attractive power to draw plants upward towards itself as an argument for its cosmic hegemony.[260]

Imagining the acroterion figure backlit at sunrise, one also inevitably recalls why it is, Vitruvius says, temples ought to face west. So that

*people undertaking vows will gaze at once upon the temple, on the sun rising in the eastern sky, and on the images themselves that also seem to rise in the east and gaze in turn upon those praying . . .* [261]

In the Roman East, when the sun rose over Antioch Caesarea it rose over Temple of Augustus, just as at Rome, when it rose over the Forum Romanum, it rose over the west-facing Temple of Divus Julius; or again, just as when, in the West, it rose over Tarraco (Tarragona) in Spain, it rose over another west-facing Temple of

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[258] On the sun disk in Augustan iconography (notably on the late Augustan sardonyx cameo known as the Gemma Augustea, now in the Kunsthistorisches Museum, Vienna) see Pollini 1993, pp. 280-282.

[259] Vitruvius 4.1.9 and above, Chapter 3, pp. 247-258. A generically similar (although not quite as literal) kind of figure – a winged young woman with lush acanthus foliage spiraling out from under her skirt – appeared on the frieze of the Temple of Divus Julius at Rome, whose westward orientation appears to have been exactly duplicated in the Antioch temple. See Fig. 49, p. 318b.

[260] Vitruvius 9.1.12: *ut etiam fructus e terra surgentes in altitudinem per calorem videmus, non minus aquae vapores a fontibus ad nubes per arcus excitari, eadem ratione solis impetus vehemens . . . insequentes stellas ad se perducit, et ante currentes veluti refrenando retinendoque non patitur progredi . . . sed ad se regredi.* See above, p. 274 and n. 72.

[261] Vitruvius 4.5.1: *uti qui adierint ad aram immolantes aut sacrificia facientes spectent ad partem caeli orientis et simulacrum quod erit in aede, et ita vota suscipientes contueantur aedem et orientem*

Augustus – one that, accordng to Tacitus, "gave an example to all the provinces."[262] When the sun rose on the chest of the statue of Augustus from Prima Porta, it rose over the whole Roman world, binding East and West together in the body of the king.[263] Together, temples like the ones just mentioned made the rhetoric of the statue a palpable matter of fact.

Even Greek cities that were not new foundations, or refoundations, acclaimed Augustus as *ktistès*, "founder." Tralles, in Lydia, for instance, which he had rebuilt after an earthquake in 26 B.C., and also major urban centres such as Ephesus and Athens, whose civic centres, like the those of most cities in the Greek East, underwent extensive construction or reconstruction initiated, once again, in the early Augustan principate.[264]

There is, in the conventional modern sense, no single identifiable master plan or standard blueprint to be extrapolated from these centres. Recent and ongoing archaeological research points, nevertheless, through anaolgous resemblances, to

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*caelum ipsaque simulacra videantur exorientia contueri supplicantes et sacrificantes* . . . See above, Chapter 3, pp. 203-209.

[262] The temple at Tarraco. Tacitus, *Annals* 1.78: *datum in omnes provincias exemplum.* The temple was built in 15 A.D., just after the death of Augustus. Cf. Hänlein-Schäfer 1985 A 56 and plate 61a, which locates the temple at the eastern edge of the city. Plans of Pisidian Antioch strongly suggest that the temple there, which faced west northwest like the Temple of Divus Julius at Rome, was, like that temple, oriented in mimetic sympathy with the dawn of the winter solstice and the "birth" of the sun in Capricorn, Augustus's birth sign. For plans, see Mitchell and Waelkens, fig. 18; Robinson 1926-27, fig. 2. Sculptural reliefs on the propylon of the temple precinct included an image of Capricorn (Mitchell and Waelkens, plate 115; Robinson, fig. 54). On the Temple of Divus Julius, above Chapter 3, pp. 203-209. Other west-facing dynastic monuments include, for example, both the Julian Basilica and the dynastic temple of the *gens Julia* (formerly the archaic east-facing Temple of Apollo, but now turned around (above, Chapter 3, pp. 253, 254a) at Corinth; and, in Asia Minor, the temple of Roma and Augustus and Ankara; the Temple of Roma and Augustus at Pessinus in Phrygia, and the Sebasteion in Carian Aphrodisias. Cf. Mitchell and Waelkens 1998, p. 159. The enclosure of the Ara Pacis Augustae in the Campus Martius at Rome had a west-facing main entrance, while the altar itself faced East, in accordance with Vitruvius' dual prescription on the matter: that temples face West and altars look eastward towards the rising sun (4.5.1; 4.9.1).

[263] East and West together: above, p. 290.

certain diagrammatic criteria whose formal instantiation could, and did, vary greatly. These, loosely, are enclosure or limit, axiality – the "squaring" that was *Roma quadrata*'s ubiquitous schematic replication – and a hierarchisation of spaces dominated by the princeps and/or his family whose dynastic presence was the nexus of the spatial coherence that was the overriding aim of such interventions and for which enclosure and "squaring," either independently or together, served as the formal means.[265] The upper, or "state" agora at Ephesus, developed on Hellenistic foundations in the Augustan period, is an important early example – one in which Pierre Gros has deciphered an organisational schema of relations with analogical or semantic (rather than strictly formal) equivalents not only in Greek East, but all over the Roman world.[266] These, as Gros and others have noted, are the same semantic relations that govern the forum and basilica at the Augustan veteran colony of Julia Fanestris (Fano) in northern Italy, whose building Vitruvius claims to have been charged with and which he describes in some detail in the first chapter of Book 5, his book on "the arrangement of public places."[267]

In Athens, the "squaring" of the agora, where before Augustus virtually no building had ever stood at right angles to another, and where, even in Hellenistic times, the central space had never been encroached upon, was early and dramatic (Fig. 50,

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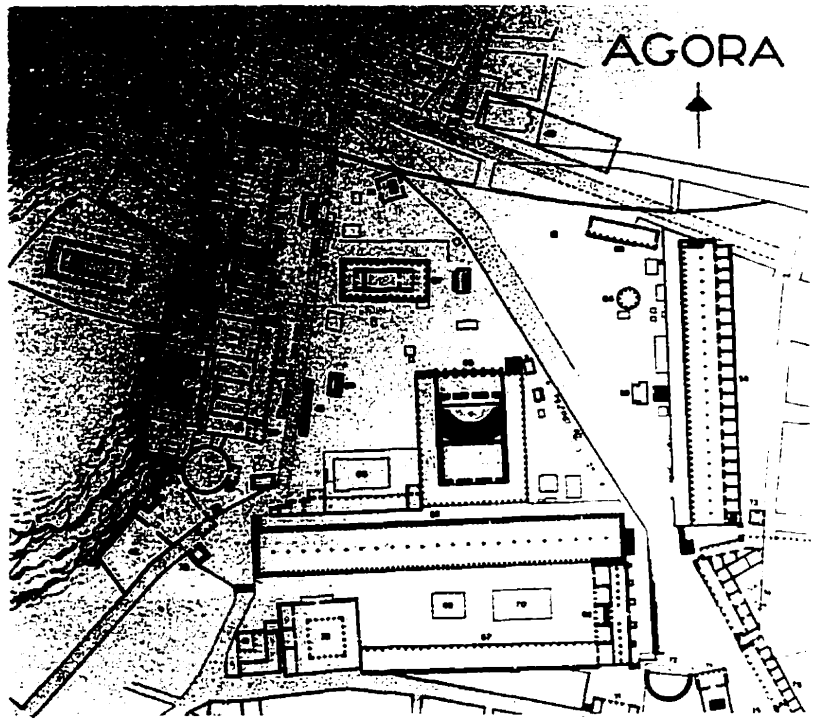
[264] Kienast 1982a, p. 355.

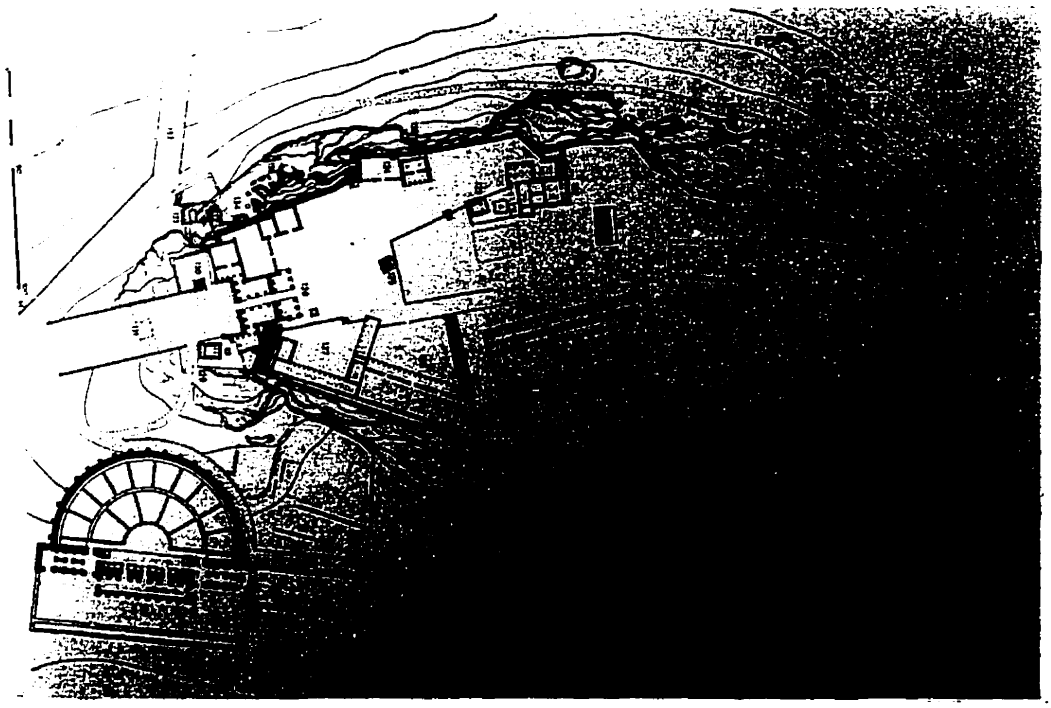
[265] Gros and Sauron 1988, pp. 66-67; Gros 1991b, 1996c; Lyttleton 1987; Price 1984, pp. 135-162. On *Roma quadrata*, above, Chapter 3, pp. 193-200.

[266] Gros 1991b, pp. 127-129: "*Plus que la typologie, c'est la sémantique, qui doit ici retenir notre attention. . . . Ces concordances relèvent davantage de l'analogie que de la similitude. . . . elles concernent plutôt un mode d'organisation et de hiérarchisation des structures, un choix spécifique des édifices, et plus encore un type de relation entre ces édifices.*" For a bibliography to date, p. 129, n. 3. See also Gros 1996c and especially Price 1984, pp. 135-162 (on the upper agora at Ephesus, pp. 137-140).

Fig. 50




**Right:** The Athenian agora in the 2nd century A.D., after J. Travlos. #65 is the Odeon of Agrippa; #67 the Temple of Ares.
**Below:** The Athenian acropolis in the 2nd century A.D. after J. Travlos. The monopteral Temple of Augustus and Roma is #119 on the plan.



top).[268] Fronted with a portico of Corinthian columns, the massive Odeon of Agrippa, built on a north-south axis at right angles to the middle stoa, and inaugurated in 15 B.C., penetrated the space to occupy over a third of the area west of the Panathenaic way.[269] A few years later, a fifth-century B.C. Doric temple of Ares, (Mars, from whom Romans claimed descent through Romulus), was moved from a site thirteen kilometres away, and re-erected on an east-west axis in the north-west sector of the Agora.[270] At the 90-degree intersection of the two invasively "corrective" lines introduced by the relocated temple and the huge new theatre building, stood Ares' altar, dedicated to Gaius Caesar (the "new Ares" who was Agrippa's son and Augustus's grandson and heir – also the Amor at the feet of the Prima Porta Augustus) in a spatialization of *imperium* that gave the Agora something it had never had before: a geometrical centre.[271] One whose dynastic referent related it at once to Rome and to all other analogous centres. Each to each, and all to all.

Far less intrusive, but in keeping with the same schema was the erection in about 20 B.C. of the circular monopteros shrine on the Athenian acropolis, dedicated "to the Goddess Roma and Augustus Caesar by the people of Athens (Fig. 50, bottom)," a monument which some scholars now maintain was built in commemoration of the Parthians' return of the standards that was also, as discussed

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[267] Vitruvius 5.pref.5: *hoc libro publicorum locorum expediam dispositiones*. Forum and basilica: Vitruvius 5.1. David 1983; Gros 1984b; 1990, pp. 47-62; 1991b; 1996c, pp. 116; Price 1984, p. 143.
[268] On Augustan interventions in the Athenian agora in general: Gros and Sauron 1988, pp. 66-67; Gros 1991b, pp. 129-131.
[269] Roddaz 1984, pp. 435-439; Thompson 1950. The Odeon measured 43.2 x 52.3 metres on plan (Thompson, p. 32).
[270] McAllister 1959; Thompson 1962.
[271] Gaius Caesar as a new Ares: *IG* II$^2$, 3250; Gros 1991b, p. 131. Gaius Caesar and the Amor of the Prima Porta statue: above, pp. 299-300, 300a.

earlier, celebrated on the cuirass of the Prima Porta Augustus.[272] It should be stressed that this intervention was the Athenians' own initiative – one whose parallel in countless similar local initiatives, Simon Price has argued, was the means whereby Greeks represented Roman power to themselves in terms they could understand.[273] The terms the Athenians chose for its representation in the Temple of Roma and Augustus on the Acropolis are worth reviewing.

Just under twenty-five metres from the east front of the Parthenon, and located precisely on its east-west axis – an axiality that here, as in the Agora, is without precedent – the monopteral temple, built of pentelic marble, consisted of a ring of nine Ionic columns (one thinks of nine muses) on a two-stepped circular crepis.[274] Less precise, but close enough to appear deliberate, is its north-south axial relation with the Theatre of Dionysos on the south slope of the Acropolis below.[275] The Temple of Roma and Augustus is sited at the intersection (nearly ninety degrees) of these two axes which, in determining its position, would have involved a conceptual flattening out of considerable – to say the least – vertical accidents of topography. It would, in other words, have entailed imagining the Acropolis strictly in plan, with only two dimensions, instead of its rather obvious three. Flat, one might recall, is how Vitruvius imagined

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[272] Inscription on epistyle (*IG* II², 3173): *Ho dêmos Theai Rhômei kai Sebastôi Kaisari* . . . On the Athenian Temple of Roma and Augustus in general: Binder 1969; Hoff 1996, pp. 185-194; Hurwit 1999, pp. 279-280 and 317; Travlos 1971, p. 494. Vitruvius (4.8.1) introduces his account of circular temples with a discussion of monopteroi. Dedicated in 19 B.C. in commemoration of the Parthians' return of the standards: Hoff 1996, pp. 92-93; Hurwit 1999, p. 279.

[273] Price 1984.

[274] The nine columns of the Augustan monopteros are without precedent or sequel in the circular temples of classical antiquity (Binder 1969, p. 193), leading one to suspect that their number had some specific point. Two-stepped crepis: Hoff 1996, p. 188, who differs with previous studies which give it three.

the man he circles and then squares in the first chapter of Book 3.[276] Urbanisation in the western Roman provinces was carried out in fairly strict conformity with a similar two-dimensional view.[277] Coherence, for the Romans, appears to have been imaginable chiefly in terms of planar surfaces. The siting of the Temple of Roma and Augustus, which shows that the Athenians understood, and could if necessary adapt to, this kind of two-dimensional imagining, gave the south-east terrace of the Acropolis a new geometric and dynastic centrality.[278] A very few years later, the relation of the Temple of Roma and Augustus to the Theatre of Dionysos and to the Parthenon – its relation to theatre and temple – was to be precisely duplicated in the central position given to the altar dedicated to Gaius Caesar in the Agora.

Inside the ring of the nine columns of the monopteros on the Acropolis and, since there was no cella, visible from all directions, cult statues of Roma and Augustus probably faced east, towards the wider intercolumniation between the two columns on that side. Although the temple was circular – twenty-five Attic feet in diameter at the top of the stylobate – it was built on a square foundation, into which a geison block from the Erechtheion was integrated. The Erechtheion, late fifth-century B.C. temple of Athena Polias, also supplied the model for the new temple's Ionic order.

The temple itself, the "squaring" that made it the focus of two of Athens' most important public monuments, and the circle-in-square geometry of its plan all belonged

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[275] The axial relation to the Theatre of Dionysos does not appear to have been previously noted, although the more obvious one to the Parthenon is stressed by all scholars who have dealt with the Temple Roma and Augustus (n. 272 above).
[276] Above, Chapter 3, p. 187.
[277] Goudineau 1980, p. 267; Woolf 1998, pp. 116-120. See above, p. 234.
[278] Polybius' (6.42) comparison of the very different approaches Greeks and Romans took when they laid out their military camps is instructive in this respect.

to Roma and Augustus for whom the shrine was built. Its materials, including especially its refined ornamental expression, are Greek, with direct references to the Erechtheion, the temple that above all other Athenian temples, was a reliquary of the entire Athenian past whose civilising torch, as the Athenians here publicly affirmed, had now passed to Rome.[279] When the sun rose in the East to illuminate Phidias' colossal gold-and-ivory statue of Athena in the cella of the Parthenon, it now rose over the Temple of Roma and Augustus.[280]

The enterprise is all too easily dismissed as servile flattery.[281] One might, less loftily, appreciate how perceptively, realistically and even elegantly it expresses precisely what Romans would have wanted to hear in language they would have clearly understood: a graceful acknowledgement by the Athenians, who (as it turned out) had wrongly backed Mark Antony's losing side during the civil wars, that they stood "corrected."[282] One must above all appreciate that the Temple of Roma and Augustus inserted the Athenian acropolis into the world-wide network of public places that made Roman *imperium* a *corpus* congruent with the king's. It is absurd, given the circumstances, to imagine wishfully that the Athenians might not have wanted to be part of that victorious imperial body or to censure adherence to it as sycophancy. If

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[279] On the Erechtheion, most recently Hurwit 1999, pp. 200-209 and 316, who stresses its reliquary status.

[280] Korres 1994, p. 140 says that at a height of about 10 metres and a distance of some 25 metres from the front of the Parthenon, the monopteros would have been too low to prevent the light of the rising sun from entering the cella of the former (cf. Hurwit 1999, p. 279).

[281] Price 1984 is a first and very important counterargument to this kind of dismissal.

[282] Antony and Athens: Plutarch *Antony* 23.2-3; 33.4; Dio Cassius 48.39.2. According to Dio (50.15.2), the Athenians had placed statues of Antony and Cleopatra on the Acropolis which, he says, were prophetically "hurled down into the theatre" by thunderbolts on the eve of Actium. Since Dio can only mean the Theatre of Dionysos (there was no other theatre near the Acropolis at the time), the statues in question must have stood on the same southeastern terrace overlooking it as those of Roma

coherence was to be sustained, what alternative was there?

Of particular interest here is the Athenians' early grasp of recognisably appropriate means for signifying their adherence. What it signals is schematic knowledge that seems to have been common both to Roman benefactors like Agrippa, builder of the Odeon in the Agora, and to Pammenes, the Athenian "priest of the Goddess Roma and Augustus the Saviour" under whose auspices the Temple of Roma and Augustus on the Acropolis was built.[283] Architectural knowledge that was as familiar, apparently, to the Roman veterans who built Pisidian Antioch, as it was to ambitious Gauls who co-operated in the urbanisation of the western provinces or to Britons building *fora*, *templa* and *theatra* in the newly-conquered hinterland.[284] Marked by an overriding concern for coherence and continuity, this is the same knowledge that permeated Augustus's transformation of Rome from brick to marble in keeping, as Suetonius reports, with the "majesty of *imperium*" – a boast to which Dio Cassius gives the weight of famous last words.[285] "I leave stony-skinned the Rome of earth I received as an inheritance," Dio has Augustus say on his deathbed. "In this," glosses Dio, "he was not exactly referring to the manner of building itself, but to the

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and Augustus that later replaced them. On Athens' troubled relations with Augustus in the first years of his principate, Hoff 1989.

[283] Pammenes: *IG* II², 3173.

[284] Pisidian Antioch: above, pp. 316-319. Urbanisation of Gaul: pp. 312-315. Building in Britain: Tacitus *Agricola* 21, and above, Chapter 2, pp. 181-182.

[285] "*Sans solution de continuité*" – "with no break in continuity" – is the phrase Pierre Gros (1976a) uses repeatedly to describe Augustus's urban projects in Rome: his reconstruction of the Circus Flaminius (pp. 81-84), his transformation of the Forum Romanum (pp. 85-92) and his building of the Forum of Augustus (pp. 92-95), for instance. Suetonius *Divus Augustus* 28.3: *Urbem neque pro maiestate imperii ornatam . . . excoluit adeo, ut iure sit gloriatus marmoream se relinquere, quam latericiam accepisset.*

strength of his rule (*archē*)."[286] Had Dio been writing in Latin, he would have used the word *imperium*.

To encase *imperium* in a stony skin as permanent and impermeable as that of the cuirassed statue of Augustus from Prima Porta. That, ultimately, is the point of assembling and ordering the knowledge Vitruvius calls *architectura* into a complete *corpus*.[287] *De architectura*. The perfect body of empire.

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[286] Dio Cassius 56.30.3-4: *Telos ephē hoti "tēn Rhōmēn gēinēn paralabōn lithinēn hymin kataleipō." Touto men oun ou pros to tōn oikodomēmatōn autēs akribes alla pros to tēs archēs ischyron enedeixato.*

[287] Vitruvius 4.pref.1. Compare Florus *Epitome* 2.14.5-6 (cited above p. 307 and n. 210) who writes of Augustus as having "set in order the body of empire" which until then had been "all overturned and thrown into confusion."

# CONCLUSION

Augustus's deathbed pronouncement on the stony skin of Roman *imperium* was, apparently, not quite his final word.[1] According to Suetonius, the dying Augustus asked for a mirror, "had his hair combed and falling jaws set straight,"[2] and then, as Dio Cassius also reports, requested applause the way jesters do before leaving the stage at end of a farce. Thus, adds Dio disapprovingly, "did he sum up in a single assessment the whole of men's lives."[3] The freedom to make such assessments – to briefly let slip his mask and declare life a comedy – was the prerogative of a dying man. *Architectura*, the judiciously exercised knowledge of the architect, operated in the land of the living.

The evidence explored in the concluding chapter of this study leaves little room to doubt that there was a fit between the body of *De architectura* and the as-built body of Roman *imperium* that masked the ancient world to constitute its "stony skin" of unchallengeable reality. This is not apparent at a small scale: in, for instance, the details of molding profiles, the proportions of column orders, or the architectural fantasies of late second style mural paintings that Vitruvius so strenuously objected to.[4] The person who compares such practices to the *rationes* of *De architectura* is bound to find its author out of step. Vitruvius was looking at a rather larger picture and so, to do him justice, should his readers.

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[1] Dio Cassius 56.30.3-4: see above Chapter 4, pp. 327-328.
[2] Suetonius *Divus Augustus* 99.1.
[3] Dio Cassius 56.30.4: *kroton de dê tina par' autôn homoiôs tois gelôtopoiois, hôs kai epi mimon tinos teleutêi, aitêsas kai pampanu panta ton tôn anthrôpôn bion dieskôpse.*
[4] Vitruvius 7.5.3-7.

This raises two issues I would like to address briefly by way of conclusion. The first concerns the apparent exclusivity of the Roman world's architectural "mask." The second, the nature and implications of what I have called the fit between *De architectura* and the *corpus* of Roman *imperium*.

To begin with the mask. If Romans could eventually perceive the entire world as the princeps' *temenos* (to recall the post-factum prophesy of Dio Cassius' fictitious debate) it was, as intimated earlier, because of architecture.[5] Not architecture in the modern sense that, conventionally at least, limits its referents to building. It was, rather, because of the tripartite whole of Vitruvian *architectura* – building, clocks and machines – that *imperium* could appear as a *corpus* ruled by the nod, the soul and the mind of its ruler.[6]

This world-body was of course a Roman perception. It did not include territories inhabited by Chinese or Russians, or indeed those inhabited by any people living beyond the limits of Roman political and military control; peoples who, reciprocally, would certainly never have described the world (their worlds) as Roman.[7] For Romans, as for

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[5] Dio Cassius 52.35.5 (Maecenas addressing Augustus): "if you are upright as a man and honourable as a ruler, the whole earth will be your sacred precinct (*temenos*), all cities your temples, and all men your statues, since within their thoughts you will ever be enshrined and glorified." See above, Chapter 4, p.261.

[6] Florus *Epitome* 2.14.5-6: the chief power passed to Octavius Caesar Augustus, who by his wisdom and skill set in order the body of empire, which was all overturned and thrown into confusion and would certainly never have been able to attain coherence and harmony unless it were ruled by the nod of a single protector: its soul, as it were, and its mind . . . *ad Octavium Caesarem Augustum summa rerum redit, qui sapientia sua atque sollertia perculsum undique ac perturbatum ordinavit imperii corpus, quod haud dubie numquam coire et consentire potuisset, nisi unius praesidiis nutu quasi anima et mente regeretur* (see above, Chapter 4 p. 307). Cf. Vitruvius 1.pref.1 and 4.pref.1.

[7] Woolf 1998, p. 18: "It was a peculiarity of Roman imperial culture that it was so closely linked to the fact of empire that it never extended beyond the limits of the territory under Roman political and military control."

Vitruvius, "*omnes gentes*" (all peoples) were *omnes gentes subactae* – "all *subjected* peoples."[8]

Nor, within the confines of the empire, would peasants, bandits, slaves or even, arguably, women have necessarily qualified themselves as adherants of Roman *imperium*, living as they did in marginal worlds incommensurate with its foursquare, kingly body.[9] My point here is that the "body of empire" was not only limited by the extent of Roman conquest. Within its extent, *corpus* of *imperium* was almost entirely constituted by the network of cities newly built or rebuilt in the wake of that conquest, where citizens (usually male) gathered in *fora*, sacrificed before *templa*, were entertained in *theatra* and lived in keeping with imperial solar time.[10] The *corpus* of *imperium* was constituted by the body of architecture whose naturally-grounded *rationes*, as delineated in *De architectura*, were in turn to forge the bonds of its lasting coherence.

For the *corpus* of *architecura* was, likewise, shaped by the body of empire. Vitruvius' text circles the world on several occasions, but it never oversteps the boundaries of its specifically Augustan limits.[11] Even Britain remains unmentioned, although Caesar, and very possibly Vitruvius with him, campaigned there in 55 B.C.[12] But Caesar's British campaign was unsuccessful and Rome would only annex the

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[8] Vitruvius 1.pref.1.

[9] On the limits of Romanization, Gordon 1990c; MacMullen 1990; Woolf 1998, pp. 135-169.

[10] On the imperial role of a sundial donated by a Roman citizen to the town of Igaeditani in Lusitania in 16 B.C., Etienne 1992. In general, above Chapter 4.

[11] For instance: Vitruvius 2.1.4-5 (catalogue of primitive huts); 6.1.1 (the necessity of adapting architecture to local climate); 8.3 (encomium on water); 9.1.1 and 9.7.1 (varying lengths of the equinoctial shadows of gnomons).

[12] Vitruvius' attachment to Caesar: 1.pref.2. Vitruvius' detailed descriptions of incidents both at the beginning of the Gallic wars (2.9.15: Caesar's construction of a siege tower while campaigning in the Alps, probably in 59-58 B.C.; cf. Corso and Romano, Vitruvius 1997, pp. 215-216), and after they ended (10.16.11-12: the siege of Marseilles in 49 B.C.; cf. Callebat and Fleury, Vitruvius 10 [1986], pp.

province 88 years later. Vitruvius' "complete delineation" of all the *rationes* of his discipline is a body circumscribed by the extent of conquest, whose "proof" he means architecture to be.[13] As the summation of learning, the discipline he calls a *summum templum* makes it as much a guarantee of empire as the great Temple of Jupiter high on the Capitol at Rome, "highest temple" of the city and of the world.[14]

It goes without saying that a modern historian can no longer comfortably take the world on such unwaveringly Romanocentic terms.[15] For moderns there are many worlds, and indeed the trend in much current schoarship has been to bypass master narratives and focus instead on the on the fragmentary, the subversive, the marginal, the feminine. But if, as I hope I have shown, the "body of architecture" Vitruvius wrote – a master narrative if ever there was one – was as much shaped by Romanocentricity, as was itself meant to create and maintain the shape of it, what is a modern historian to make of *architectura* so circumscribed? To what extent did (does) Vitruvius originary delineation of it make the discipline itself a master narrative of master races? If architecture's fundamental role is to make humans at home in the world, Vitruvius' narrative raises the question, in what world? And on whose terms? Similarly, if architecture is a body, a careful reader of Vitruvius is bound, now, to ask whose.

This leads me to the question of "fit" and its implications. In order to perceive

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289-293) point to an attachment that must have covered the intervening ten-year period, which would have included the time of the abortive invasion of Britain in 55.

[13] Vitruvius 1.pref.3: I have delineated complete and detailed rules so that by considering them you yourself can take account both of what finished works are like and of how future ones will be; for in these scrolls I have laid out all the principles of the discipline. . . *conscripsi praescriptiones terminatas ut eas adtendens et ante facta et futura qualia sint opera per te posses nota habere: namque his voluminibus aperui omnes disciplinae rationes.* Cf. 1.1.1 (cited below).

[14] *Summum templum architecturae*: Vitruvius 1.1.11; Temple of Jupiter as *pignus imperii*: Tacitus *Historiae* 3.72. See above, Chapter 1, pp. 35-37; Chapter 2, pp. 175-177.

[15] The *locus classicus* in *De architectura* is Vitruvius 6.1.4-11.

the fit between Vitruvius' book and the Augustan empire, one must, on the one hand, consider the *whole* of *De architectura* and, on the other, the *whole* of the as-built Roman world. It is a panoramic vision, certainly – not unlike the world-dominant Roman view, in fact.

The book, written for Augustus Caesar, and declared to be a body, is *about* architecture, which Vitruvius says is a whole consisting of three parts: building, *gnomonice*, and machines that include engines of war.[16] What we call the Roman empire, also declared to be a body, was brought into being during the reign of Augustus *by* architecture: buildings, gnomonics, and machines. Viewed as wholes, each of these bodies, that of the book (*corpus architecturae*) and that of the world (*corpus imperii*), emerges as a tightly-knit assembly of interrelated parts, made coherent through their common referent in the body of the king.

To show that, or exactly how, the Vitruvian diagram or schema might have been used by Augustan architects and builders could easily provide matter for another dissertation. But my point has not been to claim the existence of direct causal links between *De architectura* and the emergence of the Roman world-body during the early Empire. Indeed, as I have already suggested, if chains of causes there are, they lead as much from the emergence of the Roman world-body to *De architectura* as in the other direction.[17]

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[16] Vitruvius 1.3.1: *Partes ipsius architecturae sunt tres: aedificatio, gnomonice, machinatio.*

[17] Clearly intimated at Vitruvius 1.pref.2: When I realized that you had care not only for the common life of all men and for the security of the commonwealth but also for the fitness of public buildings – that even as, through you, the city was increased with provinces, so public buildings were to provide eminent guarantees for the majesty of empire – I decided not to hesitate and took the first opportunity to set out for you my writings on these matters, for it was concerning this that I was known to your father (Caesar) and this is what first attached me to his might. *Cum vero adtenderem te non solum de vita communi*

To reconstruct the precise role Vitruvius' text played in determining the order of Roman architectural operations, then, has not been my aim. Rather, I see the synchronicity of textual diagram and spatial reality less as evidence of the former's implementation than as an indispensable schema for understanding that spatial reality. The architectural reality of Roman *imperium*, in turn and reciprocally, provides the frame for assessing what Vitruvius meant to say in "writing the body of architecture."

Whether or not Vitruvius' contemporaries, his dedicatee in particular, saw the potential for this mutually entailing fit between the book-body and the emergent world-body must remain speculation, although it is obvious to me that Vitruvius intended them to and seems more than probable that many, especially Augustus, did. But the perception of the fit, shaped as it is by hindsight, is above all a historical perception, whose potential, likewise, is principally of historical value.

If, and on what terms, Vitruvius' medieval and renaissance followers read his book as a diagram of the world, and if they did, of *what* world they saw it as a diagram, suggests fertile ground for further study. So is the relation between the eventual superfluity of European kings and the virtually simulaneous degradation of the "body of architecture" that accompanied Vitruvius' loss of authority in the 18th century. To reread Vitruvius, then, is to ask again what exactly his later followers and detractors read – or thought they were reading.

In sum (and if I have perceived it correctly) the fit between the Vitruvian body of

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*omnium curam publicaeque rei constitutione habere, sed etiam de opportunitate publicorum aedificiorum ut civitas per te non solum provinciis esset aucta verum etiam ut maiestas imperii publicorum aedificiorum egregias haberet auctoritates, non putavi praetemittendum quin primo quoque tempore de his rebus ea tibi ederem, ideo quod primum parenti tuo de eo fueram notus et eius virtutis studiosus.*

architecture and the Augustan body of empire leads to the the inevitable conclusion that architecture first acquired precise delineation as a discipline – as *the* discipline, the one that "demonstrates everything the other arts achieve" – in mutual interdependence with the imperial project of fashioning the world as a single Roman body.[18] The Roman world, as we now see it, was neither single or complete. Nor, as critics have often pointed out, is *De architectura*. Both the book and the Roman world were, on the modern view, deliberate artifices: fictions, literally: things made. The study of culture, as of the discipline Vitruvius defends as *his*, the dominant culture's ultimate authorisation, is in the end the study of such fictions. Less for the purpose of "unmasking" them than to try to understand what they mean. In the land of the living.

[18] Vitruvius 1.1.1: The knowledge of the architect is furnished with many disciplines and various kinds of learning. Judiciously exercised, it demonstrates everything the other arts achieve. *Architecti est scientia pluribus disciplinis et variis eruditionibus ornata cuius iudicio probantur omnia quae ab ceteris artibus perficiuntur opera.* For a grammatical justification of my slightly unconventional translation, see above, Chapter 1, p. 40, n. 100.

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## *ABBREVIATIONS*


| | |
|---|---|
| AJA | *American Journal of Archaeology* |
| ANRW | *Aufsteig und Niedergang der römischen Welt*. 1972-. |
| BAGB | *Bulletin de l'association Guillaume Bude*. |
| BCH | *Bulletin de correspondence hellénique*. |
| BMCRE | *British Museum Catalogue of Coins of the Roman Empire*. 1923-. |
| CAH | *Cambridge Ancient History*. 2nd edn. 1961-. |
| CIL | *Corpus Inscriptionum Latinarum*. 1863- |
| Crawford RRC | M.H. Crawford. *Roman Republican Coinage*. 1974. |
| CRAI | *Comptes rendus de l'Academie des inscriptions et belles-lettres*. |
| FGH | F. Jacoby. *Fragmente der griechischen Historiker*. 1923-. |
| IG | *Inscriptiones Graecae*. 1873-. |
| ILLRP | A. Degrassi. *Inscriptiones Latinae Liberae Rei Publicae*. 1963-65. |
| ILS | H. Dessau. *Inscriptiones Latinae Selectae*. 1892-1916. |
| JDAI | *Jahrbuch des deutschen archäologichen Instituts*. |
| JHS | *Journal of Hellenic Studies*. |
| JRA | *Journal of Roman Archaeology*. |
| JRS | *Journal of Roman Studies*. |
| JSAH | *Journal of the Society of Architectural Historians*. |
| Lewis and Short | Charleton T. Lewis and Charles Short. *A Latin Dictionary*. 1962. |
| LIMC | *Lexicon Iconographicum Mythologiae Classicae*. 1981-. |
| LSJ | Liddell and Scott. *Greek-English Lexicon*. 9th edn., revised by H. Stuart Jones (1925–40). Suppl. by E.A. Barber and others (1968). |
| LTUR | Eva Margareta Steinby, ed., *Lexicon Topographicum Urbis Romae*. 1993-. |
| MDAI | *Mitteilungen des deutschen archäologischen Instituts*. (A): *Athenische Abteilung*. (R): *Römische Abteilung*. |

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| MEFRA | *Mélanges d'archéologie et d'histoire de l'Ecole française de Rome.* |
| OCD | Simon Hornblower and Antony Spawforth, eds., *The Oxford Classical Dictionary*. 3rd edn. 1996. |
| PBSR | *Papers of the British School at Rome.* |
| PCPhS | *Proceedings of the Cambridge Philological Society.* |
| RA | *Revue archéologique.* |
| RE | A. Pauly, G. Wissowa and W. Kroll, *Realencyclopädie der klassischen Altertumswissenschaft*. 1893-. |
| REA | *Revue des études anciennes.* |
| REG | *Revue des études grecques.* |
| REL | *Revue des études latines.* |
| RhM | *Rheinisches Museum für Philologie.* |
| RPh | *Revue de philologie.* |
| SVF | Hans Friedrich August von Arnim, *Stoicorum Veterum Fragmenta*. 1903-24. |
| TAPhA | *Transactions of the American Philological Association.* |
| TLL | *Thesaurus Linguae Latinae*. 1900-. |

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# INDEX OF ILLUSTRATIONS