

Vitruvius' Audience

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Abstract

In the preface to his chapters on public buildings,¹ (5.1.1) Vitruvius explains that "Architectural writing is not like the writings of history or poetry," whose audience is swept along by the narrative. He writes that he promises to write in a way that his reader's minds are not confused, expressing "[i]n a few, crystal-clear sentences, the density of the prose." He thinks it best to "write in short volumes in order best to reach the minds of my readers."² If an audience can be said to be embodied, then Vitruvius' audience is singularly Emperor Caesar (Octavian), to whom the author addresses De architectura libri decem. However, there are several other audiences with differing 'horizons' that become apparent, enabling what Hans Georg Gadamer calls a "fusion of horizons"³ leading to productive understanding. One horizon might be Octavian's, another that of the text, another one from more specific groups of educated Romans that Vitruvius addresses. Another is that of the 'prejudices' brought by the reader, in both the positive and negative sense of that word. This paper attempts to fathom the audience for Vitruvius, all educated by his Stoic verities.

Imperator

In his *Ten Books*, Vitruvius establishes his credentials by introducing himself as being with others in charge of the catapults and other war machines under Julius Caesar for which he has received a stipend, one supported by Octavian's sister, Octavia. His motivation for writing is stated baldly as being about fame. Vitruvius confesses that he is really writing a monument for himself: "Thus up to this point little fame has followed upon my work, yet I hope that once these volumes are published I will be known to future generations."⁴ He is fortunate to have written at a time when there was a strong appetite for architecture of both private and public buildings, and his text has endured. Private architecture became public statements on the hills around the centre of Rome from the late Republic: there were a series of villas of the wealthy, with famous, or to some infamous villas by Lucullus, Pompey, and Caesar. Further afield were the villas known to us from Pliny writing later in the first century of Laurentum, Tusculum, Tivoli and

Lavinium. More distant, Statius writes of villas in the Campania whose focus was the ‘three seas’ around Naples. Rome itself was the site of competitive building programs of public architecture by rival political factions during Vitruvius’ lifetime, and included extensive works such as the rebuilding of temples by Octavian, Pompey, Caesar, Agrippa and Marc Antony.⁵ Strabo tells us that the Campus Martius was a favoured site, with the natural environment around it affording “a spectacle which one can scarcely draw away from.” He notes that “Pompey, the Deified Caesar, Augustus, his sons and friends, wife and sister, have outdone all others in their zeal for building, and in the expense occurred.”⁶

While it is to “Imperator Caesar” and possibly to Augustus’ sister and family that Vitruvius addresses his text,⁷ writing about c.30–20 BCE,⁸ his wider audience is problematic, because of the lack of contemporary literary reference to his books. He does not appear to have been known by other writers in his own time. The earliest reference is from Frontinus, writing at the end of the first century, claiming that Vitruvius later worked on the plumbing and aqueducts for Rome. This was possibly if Vitruvius was a staff architect for the *cura aquarum* under Marcus Vipsanius Agrippa.⁹ From the *Ten Books* we know that Vitruvius was raised in Campania, and many of the examples he draws are from his knowledge of the region, and from the richness of its architecture. He refers to Rome as “The City”, to the Adriatic coast as “the other side” of Italy, and it is likely that he was born and raised around the Bay of Naples or Formia, cities with origins as Greek colonies.¹⁰ It is therefore not unreasonable to support Frank Granger’s speculation that Vitruvius’s first language was Greek, or what he terms “old African Latin,”¹¹ especially given the later critique of his text by Alberti, who wrote in the 1450’s:

For I am grieved that so many of such brilliant writers had been destroyed by the hostility of time and man, and that almost the sole survivor from this vast shipwreck is Vitruvius, an author of unquestioned experience, though one whose writings have been so corrupted by time that there are many omissions and shortcomings. What he handed down was in any case not refined, and his speech such that the Latins might think that he wanted to appear a Greek, while the Greeks would think that he babbled Latin. However, his very text is evidence that he wrote neither Latin or Greek, so that as far as we are concerned he might just as well not have written at all, rather than write something that we cannot understand.¹²

Educare

In his first book, Vitruvius pleads for forgiveness if his work has not been “composed according to the rules of literary style.” He hopes to prove himself “possessed of the greatest authority – not only for those who intend to build, but also for all learned men.”¹³ This use of a purportedly uneducated Latin is set against Vitruvius’ demands that the architect be highly educated, and in a rare autobiographical moment, Vitruvius thanks his parents for their support of his own education.¹⁴ The awkwardness of the Latin also must be set against the structure of Vitruvius’ work, with the flourish given to the prefaces to each book. Rowland observes after Nylander that the language of the prefaces and excursus is that of the rhetoricians, and so in a higher style than that of the technical sections, which is more “prosaic.”¹⁵ The prefaces are imbued with rhetorical asides, stories that were akin to the commonplaces of the orator, to sweeten the speech for the hearers, or in this case, to tempt us to graze on through the technical meat that Vitruvius offers up to his audience. The influence of rhetoric is evident in Vitruvius’ use of language, and would stem naturally from the education he describes in Book 6, the *encyclios disciplina*, what Cicero calls the *artes liberales*. It is further evident in his statement from 9.Preface¹⁷ that he had read Cicero on the art of rhetoric, and Varro on the Latin language.¹⁶

Vitruvius’ affirmation of his education also suggests one of the potential audiences for his books, that addressing the professional education of architects following their studies in grammar and other primary studies from the age of six or seven to the age of about twelve to fifteen. At around that age an educated male would start wearing the sign of adulthood, the *toga virilis*. The second part of the education of the elite would be studies in grammar, more developed arithmetic, and literature, and the third stage would often be conducted by a *rhetor*, enabling participation in public life in the oratory of the courts. The third part for some was more focused on discipline studies, such as medicine and architecture. Some wealthy Romans, such as Cicero, rounded their education off with specialised foreign study in Athens, Rhodes or Marseille (in antiquity, Massalia, from Greek, *Μασσαλία*). Vitruvius’ account of Greek antiquities would also appeal to this clientele. Two of the central themes in Vitruvius text converge on education, one from technical know-how, and one addressing mastery of philosophical and theoretical knowledge. As Rowland observes, given the diversity of practice of architecture in Vitruvius’ Rome, his *Ten Books* are really about how architecture *ought* to be practised.¹⁷

For Vitruvius educational virtue begins with speech, which he inextricably links to architecture in his account of the primitive hut, where human beings “happening upon words” come together around fire.¹⁸ Through the connection of speech to divine order, appropriate social relations are established. Vitruvius here borrows from the rhetoricians: he takes observations from Cicero about the origins of society in speech,¹⁹ and as for rhetoric, he weaves them into his own story of the origins of human society and of architecture. Vitruvius uses the myth of origins of human communities to suggest that the two distinctive characteristics of human beings that set them apart from the rest of the natural world are tools and speech.²⁰ These represent a unique and fundamental connection between hand and brain. The use of tools carries with it its own education, for in the act of their use tools teach the mind what they will do and will not do. To work with tools carries with it a social act, a working with others than demands speech. According to Vitruvius human communities and their dwellings originate through tools and through effective speech, or oratory. Speech is the vehicle of power, such that speech has a creative or magical force, honoured in ritual, in song, and in poetry. The distinction between tools and speech, or between hand and mind, is also the basis for the distinction between practice and theory in the *Ten Books on Architecture*. Power is represented by architecture as the embodiment of speech.

Architecture, rhetoric and eloquence

Forever after, architectural meaning is conceived as a rhetorical art, whose excellence is judged in terms of eloquence. Vitruvius reliance on the rhetoric is testimony to his understanding of architecture as being fundamentally about eloquence. Is it possible that through the practice of architecture we grow in virtue to be fully formed human beings? Quintilian argues that through eloquence we understand ourselves and the world around us: “Nay, even the principles which should guide our life, however fair they may be by nature, yet have greater power to mould the mind to virtue, when the beauty of things is illuminated by the splendor of eloquence.”²¹ In Book III of his *Institutio oratoria*, Quintilian observes that the same argument was used by Cicero in *de Inventione*. The power of speech and of eloquence is seen by writers on rhetoric as that which most characterizes human beings and human society. Quintilian makes an argument from origins distinguishing humanity from beasts because of human powers of speech. Without oratory, human communities would not exist:

Never in my opinion would the founders of cities have induced their unsettled multitudes to form communities had they not moved them by the magic of

their eloquence: never without the highest gifts of oratory would the great legislators have constrained mankind to submit themselves to the yoke of law.²²

The stories borrowed either from Varro or Cicero Vitruvius retells as the story of origins of human dwelling. Architectural order for subsequent architects and architectural theorists is forever afterwards set in the mode of a creation narrative, where that which is most authentic as the *telos* of the work is set in a story about origins. The right or good end of a work, its *endzeit*, is embodied in its *urzeit*. The classical is only ever given currency because of its relation to the primitive.

sapientum

Vitruvius' audience was inevitably an elite for whom he theorises theory and practice itself. This pairing is a central dialectical theme in Vitruvius' handbook that invokes another conversation between universal and particular, a ready commonplace for a school of rhetoric. This is evident in Vitruvius advice that the universal rules embodied in the Orders are applied with sympathy for the individual qualities of a site and its topography, and with cognisance of the materials that were ready to hand, the proposed building's budget and function. He is also concerned for the rhetorical structure of the setting, including the distance of the audience from the work. Vitruvius effectively draws on rhetorical forms of *invention*, and gives what a renaissance generation of authors would call 'licence' to the architect.²³ Similarly Cicero wrote in *De oratore*, "Good speech demands constant departure from rule."²⁴ The stress on a responsive architecture was a singular aspect of Vitruvius' text adopted wholeheartedly by renaissance authors, such as Serlio, where in his 1537 first-published *Fourth Book, the General Rules of Architecture*, in a dialectic of particular and universal he embraces Vitruvius' principle of responsible adjustment to particular circumstances.²⁵

To his educated audience, as for Cicero in *De oratore*, Vitruvius stresses the importance of imagination. Education informs the imagination necessary for the architectural flexibility required to cope with different conditions. He illustrates his point with a story of the Socratic philosopher Aristippus of Cyrene, who was shipwrecked with companions. Seeing some geometric diagrams in the sand, he said to his comrades; "Let us hope for the best, I see human footprints."²⁶ He finds himself in Rhodes, and begins teaching in the gymnasium, where he is rewarded with food and clothing sufficient for himself and his companions. When they wish to return home he tells them to report that "children should

be furnished with the sort of possessions and travel money that can survive a shipwreck in one piece.”²⁷ Vitruvius makes further reference to Theophrastus, who taught that people should be well educated rather than rely on money: “an educated person is the only one who is never a stranger in a foreign land, nor at a loss for friends even when bereft of household and intimates. Rather, he is a citizen in every country, and may look down without fear on the difficult turns of fortune.”²⁸ This imagery is also found in Epicurian writings, such as Lucretius’ *De Rerum Natura* (1–4. 7–14) from c. 94–95BCE), read by Vitruvius,²⁹ and where from “the serene temple of the mind”, *sapientum templa serena* (8), the wise look down with calm over the soul in a storm-tossed boat, floating in a sea of error, subject to the too-ing and fro-ing of ones passions and desires. This sentiment is found in Statius’ *Silvae* II.2.129–32, where the villa owner Pollius looks down from his *speculatrix*, his high look-out, over the sea of passion and error with an Epicurean calm.³⁰ Vitruvius had referred to Epicurus in the first chapter of his book (1.1.3), and here introduces Epicurus in the preface to Book 6 on private buildings, a philosopher who says that “fortune grants very little to wise men, but what she does grant are those gifts that are greatest and most necessary, namely to be governed by the contrivances of mind and imagination.”³¹ Vitruvius further warms to his thesis that fortune can take away the gifts of life, but that knowledge informed by intelligence endures, always remaining steadfast. However, in spite of Vitruvius’ Epicurean declaration that “true wealth is to want for nothing,”³² we are left with a strong sense of Vitruvius’ anxiety for his material wellbeing, again in Book 6 addressing Caesar in the affirmation of his life of modest means.³³

Freedom from the reliance on material fortune was a commonplace of the Roman schools of philosophy dominated by both Stoics and Epicureans at the time Vitruvius was writing. Rowland notes that Cicero, writing ten years earlier, uses much the same language in his *De Officiis* (On Duty) as Vitruvius to describe greatness of heart, the rejection of avarice, and the benefits of study.³⁴ Vitruvius also stresses that the architect should not go out seeking commissions, “making the rounds canvassing favour”.³⁵ Rather, he presumably waits at home for a client to call, which suggests an architect with such status sufficient to own a house with a reception room. In the preface to Book 6, in his rejection of ill-informed or avaricious architects, he praises the *patres familiarum* who would courageously become their own architect:

I cannot but praise the heads of households, who trusting in their own reading, build for themselves in the belief that, if they must entrust a

commission to amateurs, they themselves are more worthy of the expenditure, which will be in accord with their own wishes rather than those of others.

In suggesting this rejection of those who falsely act as an architect without appropriate skill and education, in heads of households Vitruvius finds another audience for his books:

This is why I thought I should record the body of architecture and its governing principles as thoroughly as I can, thinking that this will be no unwelcome gift for all the nations. ³⁶

omnibus gentibus

The expression that Vitruvius uses in the above quotation, “the body of architecture,” has been engagingly explored by Indra Kagis McEwen, in her book *Vitruvius, Writing the Body of Architecture*. She sees in his desire to bring together into a corpus the scattered fragments of previous authors, (now lost to us), as being crucial to understanding Vitruvius’ intentions.³⁷ His audience is “all peoples”, *omnibus gentibus*. This universalism would appeal to the Stoic members of his audience, whose adoption for the first time of a universal brotherhood for all human beings, *omnes gentes*, is attributed to the Stoic teacher Zeno.³⁸ The origins of the doctrine have also been attributed to Diogenes the Cynic, who described himself as a “citizen of the universe.”³⁹ Zeno would probably have not approved of the Roman habit of seeing those barbarians outside of the whole world ruled by Rome as being outside of humanity as well. Vitruvius sees Rome, and Octavian’s triumph, as being but a reflection of the “divine mind,” the *divina mens* – the fortuitous placement of Rome at the centre of the cosmos:

With the prudent counsel she smites the barbarian’s strength, her strong hand does the same to the southerners’ scheming. Thus the divine intelligence established the state of the Roman People as an outstanding and balanced region – so that it could take command over the earthly orb.⁴⁰

Such divine apologia would not have escaped the notice of Vitruvius’ Emperor patron. By 29BCE, Augustus had become the ‘sole builder’ of Rome’s public architecture, a task once the property of that other probable audience for Vitruvius ten books, the *aedificantes*. Since the time of the Republic these were the magistrates responsible for

maintaining and building public works. It has been suggested that Vitruvius books were written in response to these administrative changes, providing a kind of ‘brief’ for the architecture of a new era.⁴¹

Natural theology

Behind Vitruvius’ divine courtesy is a Roman version of ‘natural theology’. This was the term used by Varro’s in his *Antiquitates rerum divinarum*, now lost, but quoted by Augustine of Hippo in his *City of God*.⁴² Varro locates both Stoic and Pythagorean thought under the rubric of “natural theology”. Of great importance to our understanding of Vitruvius, especially in regard to *symmetria* and number, is the background provided by Pythagorean philosophy. Stoic thought is connected by Vitruvius to Pythagorean understandings of natural order, articulated through a symbolic use of number, and through musical correspondence. In Book 2.2 Vitruvius tells his readers that he will speak of natural materials, and introduces them by a recounting of natural bodies coming harmoniously into order, mentioning Heraclitus, Democritus, Epicurus, and Pythagorus. The number ten was especially significant for Pythagorean notions of completeness, to which Vitruvius’ schema for his ten books appears indebted. Vitruvius in Book 3.1 also tells us of the importance of the number six, and in the intermixing of six and ten he leads us to another apparent perfect number, 16. Vitruvius then relates these numbers to currency, to money, as somehow participating in the divine ordering of human affairs through number. In his own day, for the first time, a living caesar’s head was minted on the face of the bronze *denarius*. Money is a form of measure, of *ratio*. He concludes with the number 16 being the measure of the human foot, before relating these ‘principles’ to the design of temples:

Therefore it is agreed that from the limbs of the human body number was discovered, and also the fact that a correspondence of dimension exists among individual elements and the appearance of the entire body in each of its parts, then it is left for us to recognise that the ancients, who also established the houses of the immortal gods, ordered the elements of those works so that, in both their shape and their symmetries, fitting dimensions of separate elements and of the work as a whole might be created.⁴³

Vitruvius’ connection of money, measure and order echoes the development of philosophy in a culture that became used to the substitutory power of coinage, that is, the way that currency acts as a sign of another thing.⁴⁴ As in our own time, rationality has a

political and social edge. A striking use of Stoic theory in Vitruvius books concerns the important place of the *logos*, or *ratio* in Vitruvius' Latin. He demands skill in *ratiocinatio*, the educated architect participating in the divine and rational order of things through speech (*ratio*). It is for this reason that Vitruvius privileges writing over drawing in his introduction to what is necessary for an architect.⁴⁵ The interpretation of *ratio* has a debt to the history of the *logos* in Stoic thought that has its origins in a culture beginning to use money. Raoul Mortley, has observed the origins of the *logos* in economic transactions:

Dictionaries show that “logos” develops a technical use in economic contexts, where it means “account,” “reckoning” or “calculation”, and it is the idea that logos lists, or gives an account of the elements in a situation, which should be retained when one is considering the central meaning of the term. As an account rendered itemizes all the elements of a given financial transaction, so logos lists the elements of a matter in their proper and coherent order. Coherence, together with listing, are the prime elements in the idea of the logos [. . .]⁴⁶

Pythagorean number theory similarly is dependent upon the interpretation of number as analogous signs. The historian George Thompson has observed that the philosophical and musical terms *harmonía*, and *homónoia* (Latin *concordia*), meaning the union of opposites – of the many into one that were used by the Pythagoreans – were social and political terms, describing social relations between classes.⁴⁷ Vitruvius use of *ratio* to articulate his body of architecture, especially from Pythagorean and Stoic origins, indicate an educated audience receptive to a conservative interpretation of cosmic order guaranteed by Octavian.

Order, the rendering of shadows

So how does Vitruvius articulate order? His notion of convention is mediated by a Nature mythologised. The narrative of the origins of the three columns is exemplary in this regard, all those Ionic and Corinthian maidens, which Vitruvius calls the *genera*, or ‘types’. Later in the Renaissance, after Alberti, the *genera* become known as ‘The Orders’, and by association have been attributed to Vitruvius’ descriptions of Doric, the Ionic and the Corinthian style and detailing.⁴⁸ The exploration of origins of the *genera* reinforces their relation to the measure of the human body and to the masculine or feminine attributes associated with the gods, and the embodiment of these qualities

within the wood and stone of the architecture. Thus, what comes to appearance in the work (*visae sunt*) is appropriate order or convention in mimetic harmony with Vitruvius' universe. Mimetic principles also lead in turn to appropriate construction details and ornament, as described in Book IV, 2 5, where a narrative of construction of roof beams shows their realisation in stone as the image (*imago*) of wooden detailing, and in Book IV, 2, 5-6, a truthful way of doing things (*ratio veritatis*) based in the laws of nature. For the architect to work against these conventions through inappropriate invention is thus for Vitruvius a sacrilege, an offence against Nature. Vitruvius also argues that architecture should be mimetic of nature in its structure, the upper tiers of a building being like "tapering trees", *arboris teretibus*, their columns getting slimmer as they get higher.⁴⁹ In Book 6 he further suggests that architecture should be responsive to natural conditions, that "whatever Nature exaggerates will have to be restored by art".⁵⁰ He writes: "These things should also be perceived and considered in Nature, and observed as well in the limbs and bodies of human populations".⁵¹ The imitation of nature has pathological consequences: sickness and pestilence is more likely to flourish if concordance is not achieved. The appropriate harmony of the site and building and the purpose to which it is put leads to good health and the increased dignity (*dignitas*) of the god.⁵²

What these narratives also establishes for subsequent architectural theory is several of its most recurring and insistent themes: the foremost is the impetus for a return to origins as the source of authority. The construction of architectural judgement becomes dependent on narrative, and the reliance on an harmonious measured order is mediated by the story of concordance with the human body. Especially important for the interpreters of Vitruvius in the renaissance is the maintenance of the Greek fondness of the dialectical opposition between *nomos* and *phusis*. In this opposition, architectural discourse is shaped as a dialectical too-ing and fro-ing between culture and nature. Vitruvius' develops principles: firstly *ordinatio*, which concerns the proportioning or arrangement of parts, is dependent on *symmetria*, or order based in a modulus and its qualities as an organising measure.⁵³ Secondly, corresponding also to arrangement in rhetoric, is *dispositio*,⁵⁴ The further division of *symmetria*, *eurythmia* and *decor* are produced from *ordinato*, *dispositio* and *distributio*.⁵⁵ Essential to the setting out, through the use of rule and compass, is the ground plan, the *ichnographia*, the elevation "*erecta frontis imago*," and the *scaenographia*, or the layered rendering of shadows on which the image of the elevation depends, and where the parts are brought into "agreement," the making of a centred order.⁵⁶

To follow this categorisation, Vitruvius audience would have been familiar with rhetoric, for he mines the divisions of rhetoric to develop a language appropriate to architecture. He asserts that *ordinatio* and *symmetria*, *dispositio*, or arrangement, are dependent on the first of the rhetorical arts, *inventio*. Here the skill and knowledge (*cogitio*) of the architect is most important. Appropriate invention obeys natural laws, and shares with literature the requirement of *veritas*. This is the moral of the tale told by Vitruvius about Aristophanes of Byzantium.⁵⁷ While superficially a story about plagiarism amongst competing poets, of whom only one, Aristophanes, having produced not popular but authentic work is the true poet. Vitruvius third concern is for *eurythmia*, the harmonious appearance of the work, as in a graceful dance.⁵⁸ In the ordered system of the author of *Ad Herennium* and of Quintilian, this would equate with the ordering of style. *Symmetria*, untranslated from the Greek, is not the bilateral symmetry of modern times: Vitruvius claimed it as a vital force of order essential for the beautiful appearance of architecture: “*symmetros est eurythmiae qualitas.*”⁵⁹

The fifth and sixth principles concern the ‘delivery’ of architecture dependent upon appropriate decorum, or *decor*. These categories principally refer to the siting and appropriate ordering of a building in its particular context.⁶⁰ The last principle is *distributio*, concerns the choice of materials and an appropriately ordered economy. It is intimately bound to *decor*, which permits some invention on the part of the architect, and whose central concern is the appropriateness of the appearance (*aspectus*) and the form of the work with its use (*usus*) in a social context. As for rhetoricians in the creation from disparate parts of a unified speech, so for Vitruvius the unity of the form and the content of a building becomes a question of good order.⁶¹

A Stoic audience . . .

We have seen that Vitruvius’ audience is educated and diverse, and that this reliance on Stoic notions of order are likely to be a mirror held up to Octavian. The emperor was for two decades close to Arius Didymus, a Stoic from Alexandria,⁶² who appears to have maintained the role of a tutor or ‘court philosopher.’ Vitruvius’ Stoicism is informed by the *symmetries* of *decorum*, mediated by a late Republican virtue of austerity. It is from this lens that we can understand Vitruvius’ denunciation of the representations of fantasy architecture seen in Pompeii, a travesty against the order found in nature, representing things that cannot exist.⁶³ In Book VII, Morgan translates the chapter heading as “The Decadence of Fresco Painting”.⁶⁴ Pleasure and beauty for its own sake, *venustas*, is

never the aim of architecture. Indra Kagis McEwen can argue that Vitruvius would never make an Epicurean: “he is far too earnest, too politically engaged.”⁶⁵

Vitruvius dependence on Stoic philosophy has an ironic edge, because its founder Zeno, if Diogenes Laërtius is to be believed, questions the kind of civic order promoted by Vitruvius. Zeno had distinctly unhierarchical attitudes to the city and its monuments, declaring that neither temples, nor courts of law, nor gymnasia should be erected in the city. He also wanted a democracy without distinctions caused by wealth, advocating the abolition of money.⁶⁶ Instead, he thought that knucklebones should be used as coins. Malcolm Schofield writes: “Coinage was a metaphor for all conventions: all were to be disregarded or flouted, since they stand in the way of the life according to nature and shackle our freedom.”⁶⁷ It seems that the universe itself is the only true city, or for Zeno, reflecting the views of his teacher Crates, the universe fits into the philosopher’s knapsack.⁶⁸ Closer to Vitruvius is Cicero, who in *De natura deorum*, Book II.3 gives an account of Stoic theology of the cosmic city: “In the first place the universe itself was created for the sake of gods and men. For the universe is as it were the common home of gods and men, or the city that belongs to both.”⁶⁹ Vitruvius aspires to be just such as citizen, but instead finds himself living in the suburbs of his Imperator’s Rome.

Endnotes

¹ Vitruvius, *Ten Books on Architecture*, Pref. Book 5.1.1. Trans. Ingrid D. Rowland (Cambridge, Cambridge University Press, 1991), 63.

² Vitruvius, *Ten Books on Architecture*, Pref. Book 5.2 and 5.5. Trans. Ingrid D. Rowland, 63.

³ Hans-Georg Gadamer, *Truth and Method*. German Orig. 1960 Trans. Joel Weinsheimer and Donald G. Marshall (New York, Crossroad 2nd ed. 1990), 398.

⁴ Vitruvius, Book 6.Pref.4.

⁵ Rowland, 8, cites D. Favro, *Image of Augustan Rome* (Cambridge 1996).

⁶ Strabo, Geography 5.3.8, trans. H. L. Jones (London, 1938). See also Rowland, Vitruvius, 10.

⁷ Vitruvius, 1.Pref.1–2.

⁸ One key date used as a reference by scholars is the year 27BCE, when the senate conferred the title ‘Augustus’ on Octavian. For example, Frank Granger, *Vitruvius on Architecture*, London, 1931, vol. 1, p. xiv. It is implied that Vitruvius wrote before this date, because he does not use the honorific, but this is contested.

⁹ *Testimony of Frontinus*, See Vitruvius, *Ten Books on Architecture*, 6.Pref.3. Trans. Rowland. f.n. 41, 6.

¹⁰ See introductory comments, Vitruvius, *Ten Books on Architecture*, Rowland. 2.

¹¹ Frank Granger, *Vitruvius on Architecture*, London, 1931, Book 1, xviii., and Granger, ‘Notes and Discussions,’ *Classical Philology*, vol. 30 (1935), 339. For discussion, see Andrew Hutson, *Vitruvius and his ambitions for De architectura libri decem*, Master of Architecture Thesis, (University of Melbourne, Faculty of Architecture, Planning and Building, June 2000), 56–57.

¹² Alberti, trans. J. Rykwert, R. Tavernor and N. Leach. *Leon Battista Alberti, On the Art of Building in Ten Books*, (Cambridge Massachusetts, MIT Press, 1988), 154.

¹³ Vitruvius, Book 1.1.18.

¹⁴ Vitruvius, Book 6.Pref.4.

- ¹⁵ Vitruvius, *Ten Books on Architecture*, Trans. Rowland. See introduction, 1.
- ¹⁶ Vitruvius, *Ten Books on Architecture*, Trans. Rowland. See introduction, 7–8. f.n. 60.
- ¹⁷ Vitruvius, *Ten Books on Architecture*, Trans. Rowland. See introduction, 14b.
- ¹⁸ Vitruvius Book 2.1.1. Similarly in a much later interpretation, Daniele Barbaro in his commentary considered that speech was the over-riding principle of the *trivium*, and measure the dominant principle governing the *quadrivium*. See Carol Herselle Krinsky, “Introduction” to Cesare Cesariano’s (Como, 1521) *Vitruvius De architectura*, Reproduction, (Munich, Wilhelm Fink, 1969).
- ¹⁹ Cicero, *de Inventione* 1.2. Quintilian’s later version: *Institutio oratoria*, 2.16.9.
- ²⁰ Vitruvius Book 2.1.1–6.
- ²¹ Quintilian, *Institutio oratoria*, Book II, xvi, 9-10, Translation by H. E. Butler, (London, William Heinemann, New York, G P. Putnam’s Sons, Loeb edition, 1921), 320-322.
- ²² Cicero, *de Inventione* i.2; Quintilian, *Institutio oratoria*, Book III, ii, 4, (Loeb edition, 1921) 382.
- ²³ Vitruvius, 5.1.1; 5.1.4; 5.6.7; 6.1.1; 6.2.1-2; 6.6.5; 10.16.1-2.
- ²⁴ Cicero, *De oratore* (Bonner 206) Rowland fn. 93, p.15.
- ²⁵ Vitruvius’ views are further called into question by Serlio in Book 4 of the *General Rules of Architecture* on an excursus on Peruzzi.
- ²⁶ Vitruvius, Book 6. Pref. 1.
- ²⁷ Vitruvius, Book 6. Pref. 1.
- ²⁸ Vitruvius, Book 6. Pref. 2.
- ²⁹ Vitruvius, *Ten Books on Architecture*, Trans. Rowland. Commentary, 138.
- ³⁰ Statius, *Silvae* II.2, 138–42. Trans D. R Shackleton Bailey, Loeb edition, 2003, 132 – 135.
- ³¹ Vitruvius, *Ten Books on Architecture*, 6.Pref.3. Trans. Rowland, 75.
- ³² Vitruvius, Book 8. Pref. 4.
- ³³ Vitruvius, Book 6. Pref. 5.
- ³⁴ Vitruvius, *Ten Books on Architecture*, Trans. Rowland. Commentary, 136. See also page 13, f.n. 81: Cicero’s *De Officiis* is the first known use of the neologism from the Greek, ‘*architectura*,,’ twenty years before Vitruvius.
- ³⁵ Vitruvius, Book 3.Pref.3.
- ³⁶ Vitruvius, Book 6. Pref. 4.
- ³⁷ Indra Kagis McEwen, *Vitruvius, Writing the Body of Architecture* (Cambridge, Mass, MIT Press, 2003), 7.
- ³⁸ Cited by Plutarch, *The Virtue of Alexander*, (*Moralia*, 329a). Translated from the Greek by Several Hands. Corrected and Revised by William W. Goodwin, with an Introduction by Ralph Waldo Emerson. 5 Volumes. (Boston: Little, Brown, and Co., 1878). Vol. 1. 6.. Available http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Ftitle=1211&chapter=91562&layout=html&Itemid=27, Accessed 2 April, 2011.
- ³⁹ For discussion see Malcolm Schofield, *The Stoic idea of the city*, (Cambridge, Cambridge University Press, 1991), Appendix H, 141–145.
My country is not one tower, one roof,
But the whole earth is a citadel and home
Ready for us to spend our life in.
(*DL*. vi 98)
- ⁴⁰ Vitruvius Book 6.1.11. Similarly, Strabo. *The Geography of Strabo*, Trans. Horace Leonard Jones, (London, Loeb Edition, 1917–1933) 2.5.26.
- ⁴¹ By Pierre Gros, who proposes that *De architectura* was written as a kind of brief. Pierre Gros, 1994. “*Munus non ingratum*: le traité vitruvien et la notion de service”. *Le projet de Vitruve*, 75–90. Rome. For discussion, see McEwen, *Vitruvius Writing the Body of Architecture*, 141.
- ⁴² Augustine, *City of God*, 6.5, See also Cicero, *De natura deorum*, McEwen, *Vitruvius Writing the Body of Architecture*, p. 49.
- ⁴³ Vitruvius, Book 3.1.9. See also McEwen, *Vitruvius Writing the Body of Architecture*, 49–53.
- ⁴⁴ See also, Stephen Frith, “Mistaking your Thoughts for Ideas: Theory and Practice, and the Currency of Architecture,” in *Architecture Theory Review* vol. 8, no 2 (2003); Stephen Frith, “A Primitive exchange: on rhetoric and architectural symbol” in *ARQ: Architectural Research Quarterly* vol 8, no 1 (2004), 39–45.
- ⁴⁵ Vitruvius Book 1.1.4. Writing, drawing, then geometry, optics, and arithmetic.
- ⁴⁶ Raoul Mortley, *From Word to Silence*. 2 vols, (Bonn, Peter Hanstein, 1986), 13. Mortley relies on G.E.R. Lloyd, *Polarity and Analogy*, (Cambridge, 1966).

⁴⁷ George Thomson, *Studies in Ancient Greek Society*, Vol. II, *The First Philosophers* (London, Lawrence and Wishart, 1955) p. 265. See also Alfred Sohn-Rethel, *Intellectual and Manual Labour, A Critique of Epistemology*, (London, Macmillan Press, 1978)

⁴⁸ See I.D.Rowland, "Raphael, Angelo Colocci, and the Genesis of the Architectural Orders," *Art Bulletin* 76 (1994), pp. 81-104, where the development of 16th and 17th century science demanded rigorous adherence to a single 'system' of order, not seen in Vitruvius' account of the *genera*. See also H.-W. Kruft, *A History of Architectural Theory: From Vitruvius to the Present*, [1985] Translated by Ronald Taylor, Elsie Callander, and Antony Wood, (Princeton, Princeton Architectural Press, 1994), 24.

⁴⁹ Vitruvius, *Ten Books on Architecture*, 5,13. Trans. Rowland, 64.

⁵⁰ Vitruvius, Book 6.1.2.

⁵¹ Vitruvius, Book 6.1.3.

⁵² Vitruvius, Book 1.2.7.

⁵³ Vitruvius, Book 1.2; 2; 1.15ff.

⁵⁴ Vitruvius, Book 1.20ff.

⁵⁵ On how *symmetria*, *eurythmia* and *decor* are produced from *ordinato*, *dispositio* and *distributio*. see Robert Scranton, "Vitruvius' Art of Architecture," *Hesperia* 43 (4) (1974), 494-9. See Alina Payne, *The Architectural Treatise in the Italian Renaissance, Architectural Invention, Ornament, and Literary Culture*, (Cambridge, Cambridge University Press, 1999), f.n. 8, 36.

⁵⁶ Vitruvius, *Item scaeonographia est frontis et laterum abscedentium ad circumque centrum omnium linearum responsus*. (1.3ff)

⁵⁷ Vitruvius, Book VII, pref.

⁵⁸ Vitruvius, 1.2.3, 1.10ff; *Eurythmia est venusta species commodusque*.

⁵⁹ Vitruvius 1.3.2: "That of attractiveness will be upheld when the appearance of the work is pleasing and elegant, and the proportions of its elements have properly developed principles of symmetry." Trans. Rowland, 26. See also Vitruvius 1.2.4.

⁶⁰ *Decor autem est emendatus operis aspectus probatis rebus compositi cum autoritate*. (5, 1.25ff)

⁶¹ On Vitruvius' principle of unity of form and use in Renaissance treatises, see Payne, *The Architectural Treatise in the Italian Renaissance*, 41: "[...] most importantly for Renaissance readers, Vitruvius proposes *imitatio* as a device through which semantic coherence is achieved."

⁶² See Cicero, *De natura deorum*, 2.118, and Arius Didymus in Eusebius' *Evangelicae praeparationis* 15.14, See McEwen, *Vitruvius, Writing the Body of Architecture*, 226.

⁶³ Vitruvius, 7.5.1– 8.

⁶⁴ Vitruvius, *The Ten Books of Architecture*, Translated by Morris Hicky Morgan, (New York, Dover, 1960), ix; 210.

⁶⁵ Indra McEwen, *Vitruvius, Writing the Body of Architecture*, 210.

⁶⁶ Diogenes Laërtius, vii. 32-3. Edited H. S. Long for the Oxford Classical Texts, 2 vols., (Oxford, 1964).

⁶⁷ Malcolm Schofield, *The Stoic idea of the city*, (Cambridge, Cambridge University Press, 1991), 13. Note that in Plato's *Republic*, the guardians are not to use money. Plato, *Republic*, 371 B, 416 E – 417 B.

⁶⁸ See Crates, Fragment 6, from K. Gutzwiller, *Guide to Hellenistic Literature* (London, Blackwells, 2007), 136. See also Stephen Frith, (2009). 'The Absent Centre of Utopia: Fair and fruitful, filthy all about' in Julia Gatley, ed. *Cultural Crossroads*, Society of Architectural Historians of Australia and New Zealand (SAHANZ) Conference, Auckland, New Zealand.

⁶⁹ Translation by Schofield, *The Stoic idea of the city*, 65.