

# REAL REVIEW

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REAL REVIEW  
What it means to live today

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This is a review of a two-thousand year old book, Vitruvius's *De Architectura* (30–15 BC). Architects will probably have heard about this text before, it is normally introduced in their history lectures as the oldest surviving treatise on architecture. Most people associate *De Architectura* with its study of the three orders of classic temple architecture, and they learn about it in parallel with the major architectural constructions of ancient Greece and Rome. Due to our idealisation of structures like the Parthenon, the Roman forum, the Temple of Diana at Ephesus, the Pantheon, and so on, we would reasonably assume that *De Architectura* is the textual equivalent: platonically beautiful, restrained, logical and precise.

As the oldest extant architectural treatise from antiquity, *De architectura* is also a foundational artefact in the development of the discipline's discourse – and architectural theory, a field that has expanded enormously in its own right. Today, some of the most urgent critiques and discussions about architecture come from within theory, and focus on subjects such as: the lack of diversity in architecture; decolonialism; collaboration with the military; the problematics of authorship; contemporary labour practices (and violations); abstract math and algorithmic design; bodily othering; digital tooling; the autonomy of open-source design; the impact of rendering, representation and image-making; the mediocrity of popular architects; the relevance of exhibitions and installations; the obscure language of architects; and even their conspicuous way of dressing and managing their personal aesthetic or "brand".

In most cases, the practitioners who raise these subjects in text or speech probably believe they are pushing theory to unexplored frontiers – that they are forcing the discipline to confront social, political, or philosophical dimensions that were never fully acknowledged as part of the domain of architecture.

This belief rests on the assumption that there is an outside to architecture proper, that these topics became urgent in the shadows and blind spots of architecture theory, and that their relevance to architecture today is intertwined with the changing position of the architectural professional. In other words, the less they are called upon in the execution of building design and construction (due to subcontracting, BIM, algorithmic design, and prefabrication), the more they can devote themselves to acting on behalf of society – either at large

(in the case of housing, urban space, or climate change) or with specific sub-sections (other architects, the cultural sector, the hi-tech industry, or marginalised groups). In so doing, they expand the territory of architectural theory, while leaving the core of architectural practice more or less intact.

This view reflects one of the first ideas encountered in architecture school: that architecture encompasses every other field, and is the first and most important activity of the human species. Such a foundational myth compensates for the inexplicably trivial position of the architect in reality – financially, technically, and politically. At least this inflated sense of self-importance is based on an argument that formal architecture is the essence of building. The view that architectural theory is being radically transformed to take on the aforementioned urgent subjects is just factually incorrect. On the contrary, all of these subjects were directly or indirectly explored over 2,000 years ago by Vitruvius in the ten books of *De Architectura*. (One would have to conclude that almost no one actually reads it.) They also feature uncanny similarities and precedents for the problems of contemporary architectural texts, including rambling structure, loose editing, capricious analogies, apocryphal anecdotes, cavalier appropriation of knowledge from other disciplines, digression into esoteric topics, and a purportedly objective, depersonalised narrative voice or universalising perspective (in spite of narrow lived experience) and, usually, privilege of one form or another.

Take Book IV, which Vitruvius dedicates to the design of private houses. He begins with a meditation on his indebtedness to his parents for his education, and claims that ancient architects would only pass on their knowledge to their relatives or social peers, so that only architects from good families would be entrusted with important commissions. This system was a practical solution to a matter of social principle and etiquette: it would be uncouth for an architect to actively pursue clients, and they should rather wait for clients to approach them. However, Vitruvius viewed the most popular and successful architects of his time with derision, claiming they no longer valued education or experience. Therefore, he argued that people should build their own houses – their inexperience and lack of education would at least incur no fee.

He then moves onto the dwelling and its adaptive variations to different climates around the world. Instead of giving some examples or guidelines for site-sensitive building,



however, he raises the analogy of the variations between different national populations according to the latitude where they live. Not only does this parameter affect their height, skin and hair colour and amount of blood – he argues – it also determines whether they are more frightened of fevers or swords, and whether they are crafty towards or courageous dimwits. Vitruvius also provides a precise diagram of celestial geometry to show how vocal pitch decreases from the equator towards the polar regions. Finally, Vitruvius deems Rome “the truly perfect territory, situated under the middle of the heaven, and having on each side the entire extent of the world and its countries”, which he takes as proof that “the divine intelligence” placed the Roman civilisation there so that it would “acquire the right to command the whole world.” The rest of the chapter is occupied with details of a few types of Roman and Greek villas.

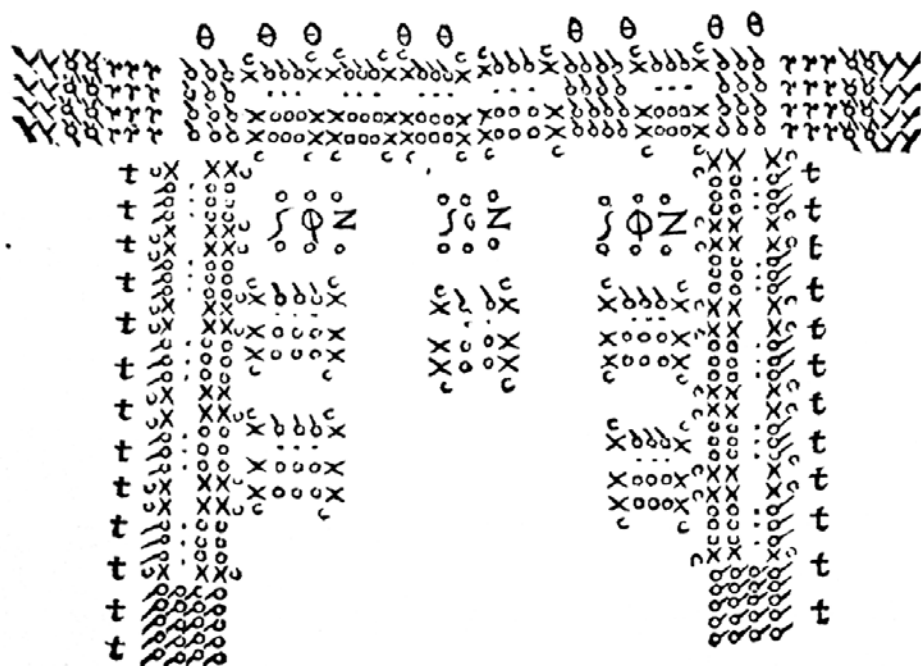
This excerpt is revealing in a rich variety of ways. First, it demonstrates the presence of racism, biological essentialism, ethnocentrism, and imperialism in the very origins of architecture theory. Second, it refers to a distorted, ethnocentric cartography to naturalise colonial hegemony. Third, it reserves the right to study architecture to people from good families, themselves already related to established architects, and of independent financial means such that they are absolved of the need to make a living by their labour. Fourth, it offers a negative opinion of popular architects, proposing that it would be better to design your home yourself. And all this in a section that is ostensibly about climate-appropriate housing!

What Vitruvius actually does here, under the guise of an abstract idea of good design, is mobilise theoretical discourse to achieve the exact opposite.

He supports the elitism of the profession, but when he dismisses the successful architects of his time as unenlightened, he advocates not for expansion of education to more diverse groups, but for the expansion of building to non-architects – but then provides only expensive Italian or Greek designs for them to execute. Furthermore, his rationalisation of global Roman conquest makes no caveat for contextual adaptation of colonial constructions (which bears out, at the very least, in the archetypal *cardo-decumanus* road layout common to Roman settlements across Europe, the Middle East, and North Africa).

The history of colonialism within architectural history, moreover, is disarmed and subsumed within a Western-centric chronology of architectural style. *De Architectura* and the classic architecture it describes rely both on material longevity and multiple cycles of reification during the Renaissance, the neoclassical period, modernism, postmodernism, and the neotraditional movement. Each time it returns to fashion, its original decline is mourned as the loss of architecture’s most illustrious movement. The link between the collapse of the Roman Empire as a hegemonic colonial power and the evolution away from classical architecture is hardly made.

It is quite jarring, for example, to read in Book I that the Caryatides represent the married women of Caryae, who were abducted by the Greeks (after they killed their husbands) and forced into slavery, their load-bearing role as statues intended to remind the public of the burden they would carry for the rest of their lives for defying Greek rule. Vitruvius gives this as an example of the duty of architects to know the historical context for aesthetic references, so they can explain them to others. He has no moral qualms about the historical event itself, or its materialisation in



an architectural detail. Ironically, most scholars have deemed this story an invention, yet this dehumanising passage continues to be published without clarification.

If this anecdote gives us reason to doubt our narrator's factual consistency, then we may find many more instances that contradict his self-characterisation as intellectual, selfless, and objective. For example, in his disparaging reference to architects who actively seek work for their own profit, he insists that "for my part, Caesar, I have never been eager to make money by my art" (planting in antiquity the seed for today's controversy around unpaid labour in studios celebrated for their avant-garde, non-commercial designs). But in the preface's dedication to Caesar, he mentions the rewards he received for supplying and repairing "ballistae, scorpiones, and other artillery" for the emperor's operations. "Owing to this favour," he graciously acknowledges, "I need have no fear of want to the end of my life". This is still the dream scenario for any high-minded architect or architectural theorist today, even

if Vitruvius never explains why it is ethical to be paid to design weapons, but not to design buildings.

As in any text from antiquity, *De Architectura* is strewn with more light-hearted, amusing claims and idiosyncratic opinions that do not necessarily impinge on its theoretical merit. One is Vitruvius's claim that architects should know philosophy to maintain a good reputation, and understand physics, enabling them to study complex phenomena such as the conducting of water. This is also a perfectly serviceable explanation for why, some 2,000 years later, the emergent formations of slime moulds or flocking birds became popular models for avant-garde generative architecture. Mathematical modelling, based on opaque and unrelated philosophical references to rhizomes, crowd intelligence, and topology are all the rage. Whether the philosophy really improved the designer's understanding of physics, or vice versa, or whether either one had any enduring effect on the reputations of the architects who introduced them to the theoretical discourse, is another matter...

Later, Vitruvius introduces the last chapter by explaining that to avoid public shame architects must not go over budget, especially in the production of public shows that involve complex machines for spectacle and cannot be delayed, and therefore he will give an account of various machines. Reasoning that architects are familiar with common machines for manufacture, he decides to focus on types that are rarely encountered (and quickly moves onto machines for warfare). Again, this is oddly applicable to the present day, where in public shows, architects are inexplicably drawn to creating intricate interactive installations that, though quite unrecognisable as inhabitable space, are intended to contribute to architecture theory discourse. To clarify: complex natural phenomena or elaborate machines are perfectly legitimate elements of architecture theory. What is significant, however, is that their link to the discipline is neither coincidental nor purely logical, and certainly not new; and that Vitruvius mentions both examples as key to the architect's reputation in particular, more than to architecture theory per se.

If readers know any passage from *De Architectura*, it is most likely the one about the Doric, Ionic, and Corinthian orders and their dimensions, proportions, and details. Vitruvius is unequivocal in his valorisation of geometry: it is the source of the architect's professional power, particularly in its capacity to form detailed visions of what has not yet been built. Accordingly, geometry is involved in most of the elements of architecture—order, symmetry, proportion, arrangement, and so on—and though Vitruvius claims that the architect must be familiar with so many disciplines that they cannot become expert in any, he mentions as an exception those genius architects who become pure mathematicians.

The central paradox in *De architectura* is that, despite its repeated praise of mathematics, geometry, and proportion as the architect's key to good design, it is intensely preoccupied with the distorted vision of reality produced by the human eye. Vitruvius claims that the eye is always in search of beauty, that its desire for pleasure must be gratified the further it moves, and that it must see through a thicker mass of air the higher it goes. He thus offers a plethora of techniques for ocular deception: column shafts must be altered to compensate for the proportion of empty space between them, and the corner columns must be thickened even more, in order to appear equally thick; the column width must taper towards the top, but also swell

in the centre, in order to appear straight-sided; the floor must swell slightly at the centre in order to appear flat; the members above the column capitals should incline forward in order to appear perpendicular, and so on.

Vitruvius's geometrical hypocrisy reminds us that, for all the words and ink and HTML dedicated to the discussion of digital technology and the new possibilities it unlocks for architecture, the most significant innovation it has offered is less about the built environment and more about hyper-realistic rendering. For all the invocation of algorithmic optimisation, parametric design, fluid mechanics and complex curvature (which all predate the computer as elements of architectural design), what people seem most enchanted by are computer simulations of what our eyes would see, but which our actual eyes can no longer distinguish from reality. Compared to the computer processing power used for renderings, the share devoted to complex design geometry is infinitesimal. And in the real world, renderings offer little utility to anyone – but enormous financial value to real estate developers and grandstanding politicians. We can both recognise that architectural theory has always privileged the eye, and question the consequences or limitations of that bias, using two millennia of accumulated evidence.

*De Architectura* is emblematic of a culture of architecture theory that purports to speak for the entirety of the human species, while acknowledging only a thin swath of human construction and a small minority of individuals across space and time. Contemporary architecture theory cannot describe this condition as if it were a newly discovered point deep within architecture's innocent but flawed unconscious. The problem cannot be isolated and healed; it is endemic. The history of architecture is a history of violence, exploitation, environmental destruction, pollution, subjugation and erasure of the poor, and ostracisation of the non-ideal body. The theory of architecture is a theory that sanctions these conditions and, if we feel uneasy, offers whimsical thought puzzles to keep our minds entertained. If we want change in architecture, we need to begin by changing what we define as its history and theory, and how they foster an understanding of the discipline, passed from generation to generation, that maintains a culture of complicity in perpetuity. If we refer to *De Architectura* as the progenitor of architectural discourse, we should at least read it – and at the very least read it critically.