REVIEW

Reviews Summer 2020

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Becoming the Architect of St. Peter's: Michelangelo as a Designer, Builder and Entrepreneur

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William E. Wallace, *Michelangelo, God's Architect: The Story of His Final Years and Greatest Masterpiece*, Princeton and Oxford: Princeton University Press, 328 pages, 2019, 9780691195490

After Michelangelo was appointed architect of the new basilica of St. Peter's in Rome, members of the so-called setta Sangallesca - the group of architects associated with the renowned workshop of Antonio da Sangallo the Younger — wondered, 'Was he even an architect?' (76). Just several months earlier, in August 1546, Antonio da Sangallo the Younger had died, leaving vacant the post of chief architect of the basilica. Michelangelo was over seventy years old when Pope Paul III asked him to take over the project, one of the most challenging of his long and legendary career. Michelangelo, God's Architect, tells this story, detailing the final two decades of the artist's life and the struggles he faced, both personally and professionally, as he neared death. In this well-written, informative book, William Wallace casts light on this often-overlooked period of Michelangelo's life, revealing his mindset as a man and an artist (Figure 1).

Wallace is one of the foremost authorities on Michelangelo and has published extensively on his production of painting, sculpture and architecture and his 'genius as entrepreneur' (Wallace 1994). With this new research, in his eighth book on the artist, Wallace masterfully synthesizes what aging meant for a genius like Michelangelo, shedding light on his incredible ability, despite (or thanks to) his old age, to deal with an intricate web of relationships, intrigues, power struggles and monumental egos. In advanced old age, the celebrated artist could not carve or paint as he once had; but he could draw, design, direct, deal, argue and negotiate. With this skill set, Michelangelo reinvented himself as an architect, working without using his hands, piloting the completion of St. Peter's and many other Roman building projects, including those for the Capitoline Hill, the Palazzo Farnese, the church of Santa Maria degli Angeli, the church of San Giovanni dei Fiorentini, the Cappella Sforza and the Porta Pia.

With St. Peter's Basilica Michelangelo inherited a worksite with a long and complicated history, dating back to 1452 when Pope Nicholas V commissioned Bernardo Rossellino to begin reconstruction of the 4th-century basilica-form church that marked the burial place of Saint Peter. The project was advanced under the papacy of Giuliano della Rovere (1503–1513), whose chosen name of Julius II evoked the legacy of the Roman emperor Julius Caesar. The pope entrusted the construction of St. Peter's Basilica to the most celebrated architect of the time, Donato Bramante. In the same period, he commissioned Michelangelo to design and build his mausoleum, which was to be placed in the new church. Although it would still be four decades until he assumed the role of architect of St. Peter's, by the time the first

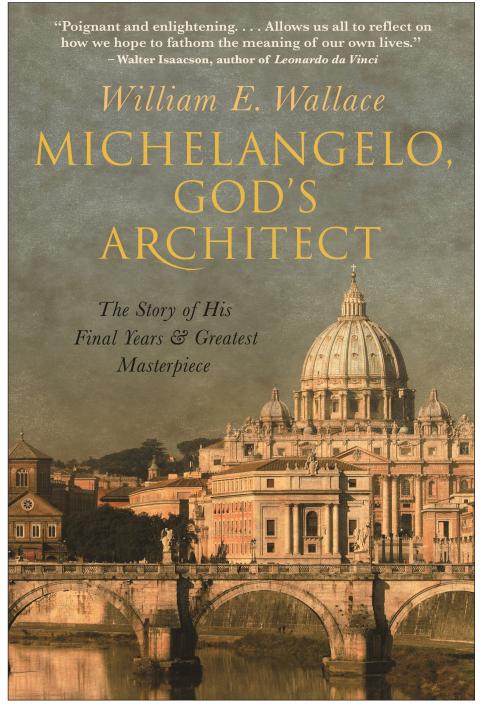


Figure 1: Cover of William E. Wallace, *Michelangelo, God's Architect: The Story of His Final Years and Greatest Master- piece.* Photo credit: Princeton University Press.

stone for the new basilica was laid on 18 April 1506, Michelangelo had already connected with the monumental project.

In the period after Bramante's death in 1514 and before Michelangelo assumed the role of architect of St. Peter's, the new basilica continued to take shape under a series of notable architects, including Raphael, Fra Giovanni Giocondo, Giuliano da Sangallo, Antonio da Sangallo the Elder, Baldassarre Peruzzi, Andrea Sansovino and Antonio da Sangallo the Younger. Wallace's book focuses on Michelangelo's dedication to the project, from 1546 to his death in 1564, and his untiring efforts to finish a work that, in his mind, would save him for eternity.

The artist believed that he was 'put there by God' (220). Michelangelo's efforts focused on the structural problems in the basilica's design. On the interior, this involved reverting to Bramante's centralized plan and buttressing the crossing pillars. On the exterior, the work involved the elimination of the tortuous ambulatory built by Antonio da Sangallo, and the design and construction of the drum of the colossal dome. The new basilica of St. Peter was to feature a central nave and a transept of equal length, and so the plan of the church was to have four arms of equal measure, forming a Greek cross. At the center of this cross would be an ample empty space above which the immense dome would rise.

But Wallace's book is not solely about St. Peter's. Wallace gives us a comprehensive background of Michelangelo's life in Rome. The author is meticulous in describing the artist's relationships with friends, colleagues, helpers and patrons. He has the ability and sensibility to describe the old artist familiarly and intimately; we see a Michelangelo who is human, old, sick, but considered by his contemporaries 'divine'. This is evident in Wallace's vivid description of the devotion of Urbino, Michelangelo's beloved assistant. So attached was Michelangelo to his longtime helper that when Urbino fell severely ill, the artist purchased several medications, including expensive golden lozenges. But nothing worked, Urbino died on 3 January 1556, Michelangelo was devastated, according to Wallace; this was for him the 'saddest of all deaths' (150).

Wallace rightly focuses on Michelangelo's relationship with Pope Paul III (1534–1549). According to the author, the pope was the 'artist's greatest patron' (56). They were friends; both shared the same cultural background. They were devout Christians, and they were about the same advanced age. It was in part due to these reasons that, despite Michelangelo's reluctance, Paul appointed him as the chief architect of St. Peter's. But this was Michelangelo's fate; his career was full of commissions that he did not wish.

Michelangelo was also favored by the pope for his extensive experience. Since his early career, Michelangelo had demonstrated the abilities of an experienced engineer. In 1506 Sultan Bayezid II asked him to design a bridge across the Golden Horn, while in 1508, he built a massive and innovative scaffolding for the painting of the Sistine Ceiling. Prior to working on St. Peter's, Michelangelo had also led hundreds of workers in notable building projects in Florence, including the Basilica of San Lorenzo and the city's fortifications. During these projects, he used to draw templates of architectural elements (capitals, bases, etc.) for his assistants, who would translate his ideas into stone. Nevertheless, Michelangelo always maintained an intimacy with the physical components of the work. Even at an advanced age, he could still carve molding. For this reason, he gained the respect of the workers. They perceived Michelangelo as a capable leader but also as one of them. Michelangelo's experience as a sculptor also prepared him for the enormous undertaking of St. Peter's in another respect. Michelangelo believed that 'the parts of architecture are derived from the parts of man' (186). His intense study of the human form thus laid the foundations for his ability to realize buildings.

When Michelangelo assumed control of St. Peter's, the worksite was a 'mess' and he was in 'intense dismay' (68, 70). Thanks to Wallace's research, we learn of the artist's talents as a manager. For example, Michelangelo understood the importance of having water on the worksite, for both construction needs and for the workers. It was in part due to this need that he added helical ramps to the colossal external piers of St. Peter's. The ramps permitted donkeys, who are not afraid of heights, to safely transport materials, water and food throughout the worksite. Michelangelo learned of the system from Filippo Brunelleschi, the 'father' of Renaissance architecture and

the builder of the immense dome of Santa Maria del Fiore in Florence.

This book answers the big question, posed by the setta Sangallesca, about Michelangelo's qualifications as an architect. In fact, according to Wallace, 'St. Peter's is Michelangelo's greatest achievement. He devoted more time, effort, and expertise to this than to any other project of his career'. Not only did he recognize 'the brilliance of Bramante's initial conception' and correct 'its engineering deficiencies, thereby reinvesting the church with exterior and interior clarity', but '[h]e had the courage and vision to remove much intervening construction, which demanded enormous faith on the part of both the artist and a succession of papal patrons' (239).

Indeed, he was an architect, and one of the greatest. 'His prodigious creativity operated through others' (240); he was God's Architect. Wallace has devoted his scholarly talent to Michelangelo's art and life; he is undoubtedly one of the most respected and distinguished experts of the great artist. Luckily, he doesn't overwhelm the reader with his outstanding knowledge on the subject, but instead, as usual, his style is brilliant and sometimes even funny (a rarity for art and architectural historians).

Models and Architecture's Longue Durée

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Matthew Mindrup. *The Architectural Model: Histories of the Miniature and the Prototype, the Exemplar and the Muse.* Cambridge, MA, and London: The MIT Press, 326 pages, 2019, ISBN 9780262042758

Among the tools used by architects, the scale model has received surprisingly little scholarly attention. In relation to architectural drawings especially, where the study of projection methods has shown how these representations distort what they represent and are thus laden with values, the comparably opaque, ambiguous, value-laden qualities of scale models still need to be disclosed (Gomez and Pelletier 2000). Either scholars discuss the scale model in a classically historical manner, detailing the uses of these objects in distinct epochs, or they take a more theoretical, design-oriented approach, with the intent to show how the making of scale models relates to architectural creation (Frommel and Tassin 2015; Moon 2005). Yet both views arguably remain oblivious to the multiple meanings of scale models within architectural history and theory, including their relationship to architectural thinking, their constitutive role in design, their use as a tool of communication and presence in architecture (and art) exhibitions, and their articulation of historically shifting ideas about the practice and the discipline of architecture.

A long overdue synthesis of the fragmented scholarship on the topic and a correction of commonplace assumptions about these objects, Matthew Mindrup's

The Architectural Model: Histories of the Miniature and the Prototype, the Exemplar and the Muse examines the manifold uses and roles of the architectural model (Figure 2). Born, as the author states, from two decades of collecting material on the historical and contemporary uses of models, the book aims to demonstrate that 'far from a mirror of reality, the architectural model is also a lamp that illuminates an architect's understanding about the experience and design of existing and to-be-constructed architecture' (206). This quality of the model is laid out across six chapters, which place into a sequence cases ranging from the 13th century until the present, with excursions leading to the ancient worlds of the pre-Hellenics, Egyptians, Greeks and Romans. Scale models are shown to play very

divergent roles: spiritual, mnemonic and didactic representations of existing structures; objects instituting play and imagination (as in doll houses, architectural *pièces montées* or the early 19th-century *Konditorei*); descriptive instruments to communicate a design to the client or the public; design tools conveying pre-existing ideas and materially feeding into the process of architectural creation; and, finally, allegorical or analogical objects, as in the more contrived uses of the scale model by Peter Eisenman, Daniel Libeskind and Steven Holl. Both the selection of the cases and the organization of the chapters are driven by the author's ambition to trace these themes as they simultaneously endure and evolve over time. For example, the first chapter, 'Models of Existing Structures',

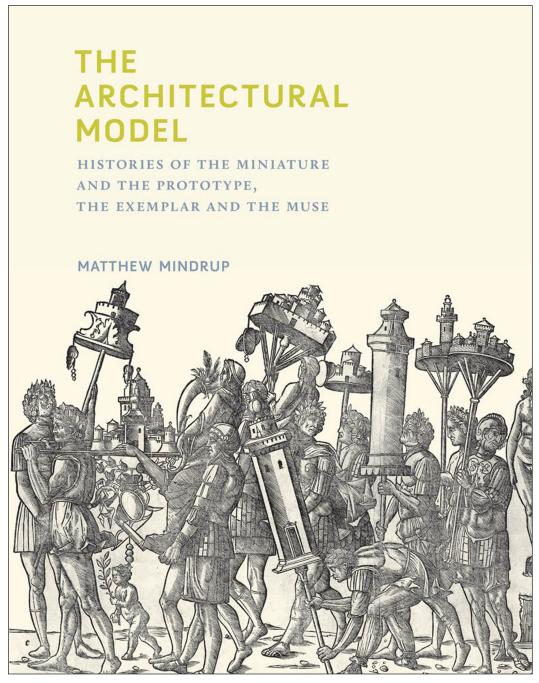


Figure 2: Cover of *The Architectural Model: Histories of the Miniature and the Prototype, the Exemplar and the Muse.* Photo credit: The MIT Press.

discusses antique votive models and models demonstrating imperial possession in Rome, early Christian donor models and mockups of revered Christian structures, 13th-century copies of church towers, 16th-century city and engineering models, and finally, Sir John Soane's collection of fragments and models of classical and Neolithic architecture. Legitimizing this sweeping stock of material is Mindrup's claim that at least one history of the scale model is marked by its function as a historically transfiguring sign of structures and buildings, idealized types and exemplars, patronage and authorship.

This comparative perspective, at its best moments, offers insight into the longue durée of architecture. This type of insight is proffered especially in chapters 4 and 5, which focus on the longstanding predilection of architects for 'sketch models', and on the uses and implications of modeling materials, respectively. Chapter 4 starts with the 'plain and simple' model famously advocated by Leon Battista Alberti. Alberti's professed suspicion that detailed and decorated models demonstrate 'the skill of the one that fabricated the model' and not 'the ingenuity of him who conceived the idea', has informed, Mindrup argues, the unadorned, often single-material models produced in 16th- and 17th-century Germany, France and England, by architects such as Philibert de l'Orme and Sir Henry Wotton. In the 20th century, Hans and Wassili Luckhardt and various architects from the Vkhutemas school unwittingly followed Alberti's credo when they relied on the malleability of clay and plasticine to turn models into an indexical and material imprint of architectural ideas. Similarly, the cardboard and clay models made by Mies van der Rohe, Le Corbusier, Oswald Mathias Ungers and Rob Krier, and the blue Styrofoam objects crafted by architecture firms like MVRDV, OMA, and Herzog and de Meuron, display an ongoing favoring of unadorned 'sketch models' and plain volumetric studies. Countering this legacy, the author charts another history in chapter 5, 'Modeling Material as Medium'. He discusses different materials used in distinct historical episodes: Brunelleschi's turnips, Michelangelo's clay pieces and Borromini's red wax objects, cork and plaster models, the cardboard, glass, and acrylic models of modernism, and the blue Styrofoam of the present day. In doing so, Mindrup offers ample 'evidence that since antiquity, architects have also relied upon their architectural modeling materials to act as an informant and source of inspiration for new design ideas in architecture' (157). Both chapters, especially when read in tandem, indeed make intelligible manifold and conflicting histories.

Yet the comparative approach can also frustrate the reader. Especially when the discrepancies between cases far outweigh correspondences, the ambition to write a historical survey gets in the way of a more nuanced, fine-grained analysis of the relation between models and the architectural practice and thinking of their time. Chapter 2, for example, describes how scale models prompt an experience 'bracketing' preconceptions of empirical reality, thus inciting reverie and play. Here, the author relies heavily on the phenomenology of the imagination in the writings of Edmund Husserl, Maurice Merleau-Ponty and Gaston Bachelard, as well as its socio-psychological variants in the

work of Susan Stewart and Kendall L. Walton. Yet when, in just a handful of pages, the book leaps from Hermann Finsterlin's Stilspiel (1921) to Aldo Rossi's Teatrino scientifico (1978), and from Soane's house-cum-museum to Le Corbusier's collection of stones, crab shells and other objects à réaction poétique, the ground for comparison becomes obscure. After all, how does Finsterlin's Stilspiel, a re-uptake of the debates about architectural style and edification of the early 19th century, connect to Teatrino scientifico, which critiques authorship and scientific objectivity? How does Soane's collection, which speaks to a conception of architecture as revisiting idealized tradition, join with Le Corbusier's stones and shells that are informed, so it seems, by a Surrealist curiosity for the inanimate, the toy and objective chance? Unfortunately, the theorization is too general and the historicization too coarse to clear up the variants of reverie and play at work in these examples.

Driven by the conviction that the uses of scale models both persevere and develop over time, and that these uses can be illuminated by expanding the discussion to other objects and concepts — souvenirs, toys, prototypes, cathexis, hylomorphism, animism - The Architectural Model opens up a plethora of aspects of scale models. While the book does not quite paint a 'complete picture of the evolution of scale models in theory and practice' (5), it does unpack different uses of models from antiquity to the present, all in the aim of writing plural histories and developing an interpretative framework for grasping each of these applications at once. Paradoxically, however, this very approach leaves little room for a detailed discussion of the scale model as what Mindrup calls a 'cultural object', that is, as something made, used, presented, collected, disseminated and received in a distinct place and time. After all, a comprehension of the model as a cultural object would require a discussion of its long-standing, if awkward, relation to craft and to sculpture, and of its role in the postwar surge of architecture exhibitions and museums, aspects now under- or unexamined in the book. Despite the earnestness with which the author engages each of his 150-odd cases, in the end he forgoes the dialectics of the Benjaminian collector: someone who explodes the continuum of history precisely by guarding the cultural 'fate' or background of the collected objects.

Objects, Ontologies: Orienting Architects

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Joseph Bedford, ed. *Is There an Object-Oriented Architecture? Engaging Graham Harman.* London and New York: Bloomsbury Academic, 194 pages, 2020, ISBN 9781350133457

Betteridge's law of headlines states that 'any headline that ends in a question mark can be answered by the word *no*' (Betteridge 2009). Could this law be extended to book

titles? Luckily it is not an issue for the volume at hand because neither architecture nor philosophy deals in definitive answers (**Figure 3**). Is There an Object-Oriented Architecture? does not set out to answer the question of its title, but rather to place readers in the middle of an important disciplinary conversation. Object-oriented ontology has been one of the most prominent movements in philosophy in the past decade, and architects have certainly taken notice. 'Object-oriented architecture' is not, however, an established term — what it means is up for debate. This book is structured around a series of responses by architectural theorists to the work of Graham Harman, instigator and proponent of object-oriented

ontology. Weighing in are Adam Sharr, Lorens Holm, Jonathan Hale, Peg Rawes, Patrick Lynch and Peter Carl. The result is admirably dialogical. Essay-length engagements with Harman's thinking are followed by interviews with their authors, and these interviews are interspersed with responses by Harman. An essay, an interview, and an afterword by Harman bookend the proceedings. To top it off, an introduction by the volume's editor, Joseph Bedford, contextualizes the whole affair.

The drama of the book derives from a seemingly innocuous term: the object. Precisely what an object is (its ontology) is actually quite difficult to sort out. A central contention of many threads of philosophical inquiry since

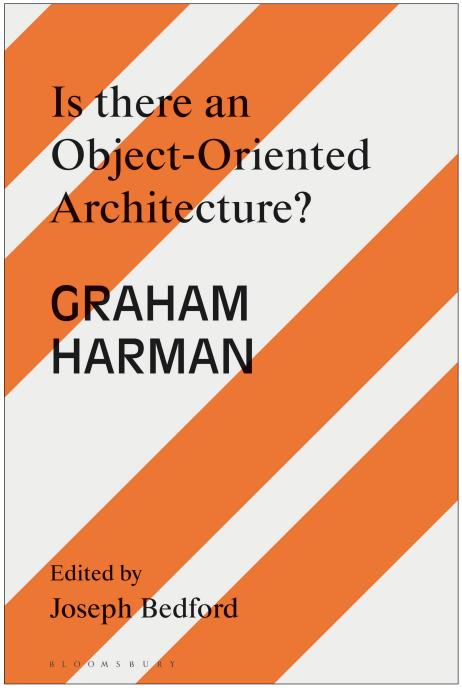


Figure 3: Cover of *Is There an Object-Oriented Architecture? Engaging Graham Harman.* Photo credit: Bloomsbury Academic.

Immanuel Kant has been that the world is divided into subjects and objects, and that there is nothing much to say about objects or 'objective reality' apart from what our (subjective) senses and concepts allow us to understand (Bryant 2014). For decades, this subjectivism (also known as 'social constructionism') has loomed large in the humanities. Realism has more recently had a resurgence (think here of Bruno Latour). Climate change has reminded everyone that things 'out there' in the world have a force of their own, regardless of what we think of them. Architecture, meanwhile, has its own long traditions of making and appreciating objects, from Bauhaus teapots to building typologies. What is the old-fashioned modernist chestnut 'architecture is the play of forms under the light' (Le Corbusier) if not object-oriented? So it is clear that, yes, architecture is 'object-oriented' in various ways. This is, however, a low bar. The subject of objects is both vague and evocative. Harman first borrowed the term from computer science (15). Object-oriented programming refers loosely to a type of programming language and a style or method of coding that involves reusable, self-contained 'objects' of one sort or another. In philosophy, not all those who are object-oriented draw extensively on Martin Heidegger, as Harman does. More broadly, 'thing theory' across the humanities draws on an eclectic and even contradictory range of sources. Latour, for instance, is similar to Harman in that both stress that objects are 'actants' just as humans are, but Harman distances himself from Latour's focus on the relationships between things at the expense of the qualities of things themselves. Philosophically speaking, Heidegger is put in conversation with starkly opposing figures like Alfred Whitehead and Gilles Deleuze. Similarly, and adding to the ambiguity, those in architecture who have made extensive use of Heidegger's phenomenology have often privileged human experience — and so we find a raft of subjective. poetic thinkers right alongside the object-oriented newcomers. Amidst this conceptual chaos, the various authors in the volume sometimes end up talking past one another. This is not a bad thing — on the contrary, it makes for an exciting read.

A central assertion of Harman's object-oriented ontology is that objects have qualities that are 'withdrawn' from human perception. This notion found immediate resonance with architects at the 2013 conference in London, organized by the Architecture Exchange, from which the book stems. In the years since then, when Harman was appointed Distinguished Professor of Philosophy at the Southern California Institute of Architecture (SCI-Arc) in Los Angeles, aspects of his thinking have been taken up by a generation of architects there. As Harman humbly acknowledges, object-orientation is an 'intellectual model' destined to have a limited duration in architecture (he hesitates to call it a 'fashion') (182). Architects are not philosophers.

The book's focus on Harman may be somewhat misleading, in fact. Although his ideas are indeed a main subject throughout, the directions offered by the other writers may prove more valuable to architects. This can be chalked up to the different modes of writing involved

— in particular, to the difference between *philosophy* and theory. Harman's is philosophical writing par excellence: precisely and abstractly probing concepts and their limits. As he reminds us, philosophy means 'love of wisdom' it has little to do with utility. In a debate that plays out episodically in the volume, for example, Harman insists that space is an object because it is both individual and determinate (78); ontologically, the case is closed. A chair is also an object, and so is a person, a marriage of two people, or any grouping (such as 'all the ships, crewmen, documents that compose the Dutch East India Company' (2)). Ontology thrives on brain-twisting abstractions and quirky thought experiments. Harman understands this is quite different from architectural theory when he says repeatedly that it is not the philosopher's place to 'legislate to the designer, who has very different problems to tackle' (124). The other writers in the volume - all of whom teach in architecture schools — float ideas more in keeping with the disciplinary norms of architecture. All are certainly 'engaging Graham Harman', as the volume's subtitle has it, but they also illuminate a constellation of ideas that are themselves valuable.

It is no surprise that none of the volume's authors are content to ride Harman's coattails: most have been thinking through Heidegger's philosophy throughout their careers. Bedford's thorough introduction brings readers up to speed on Harman's career as a philosopher and his engagement with architecture. Adam Sharr is perhaps closest to Harman's sensibility in the way he describes how architects work with a universe of canonical projects. Capturing the sparks that fly between projects is a key method of the contemporary discipline, he says — especially, as Bedford points out, in this 'post-digital moment' of mining precedents rather than seeking to generate novel forms. Jonathan Hale engages closely with Heidegger's tool analysis. He questions the efficacy of a philosophy that focuses on how objects withdraw from human experience, shifting instead to another major phenomenologist, Maurice Merleau-Ponty, who 'deals with bodily awareness and intentionality in a better way' (107). Patrick Lynch and Peter Carl mobilize traditional Heideggerian concerns against Harman, suggesting that object-orientation misses the ethical importance of worldmaking. As a group, these thinkers seem attuned to the practical needs of architects, emphasizing buildings and human inhabitation against a more abstract sense of objects.

The two remaining writers, Lorens Holm and Peg Rawes, move within other philosophical universes. Holm not only begins with subjects and space (using the familiar example of Renaissance perspective), but he also recasts key terms such as 'real' and 'sensual' in Lacanian terminology. Objects become 'objects of desire' and ontology is finally replaced by epistemology (74). The result is a fascinating philosophical inquiry using machinery quite different from Harman's. Rawes likewise explores a quite different set of concerns. Where Harman turns to abstract objects, Rawes insists on being complexly situated in order to create a 'richer, more complex, cultural, social, political, economic and material understandings of architecture' (111). The implication is clear: talking only about objects

impoverishes our approach to pressing concerns. If we have important things to deal with — an ecological crisis, racism, sexism — why limit ourselves?

What this book offers is to help readers calibrate their own approach to objects. It is not, however, a standalone guide to this intellectual terrain; readers should look elsewhere to understand the larger field of object theory in the arts, material studies, and phenomenology. The most enlightening aspect of the book, surprisingly, has to do with ethics and intellectual politics. What are the values we should emphasize? Which philosophy can bring us toward them? The question of the title becomes much less pithy: Is object-oriented ontology the right way to go for architects? Harman himself shies away from political philosophy, saying that that he is not in a hurry to get there (127). Object-oriented ontology could generously be construed as a path to coming to terms with climate catastrophe (this is the path taken by Timothy Morton), but other thinkers offer a more direct route. This ends up being the most intriguing question: What are the ethics of object-oriented architecture?

At one point, Harman mentions that Sharr's book on Heidegger's hut is 'a lovely volume with which to spend an evening' (53). In these past weeks of involuntary hermitude, Bedford's book has likewise been nice to have around. Dipping in and out feels something like the way a blockbuster symposium reverberates around an architecture school for a long time afterward, subtly shifting the terms of discussion. As pandemic lockdown continues, many will welcome this book's atmosphere of lively intellectual debate.

Wren's Eastern Fragments

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Vaughan Hart, *Christopher Wren: In Search of Eastern Antiquity*, London: Yale University Press, 232 pages, 2020, ISBN 9781913107079

The multifaceted career of Christopher Wren (1632–1723) is one of the most extraordinary chapters in the history of European architecture. Arguably 'the greatest English architect,' Wren stood out even among his contemporaries (Pevsner, Fleming and Honour 1999: 626). He was a mathematical prodigy, professor of astronomy at Oxford by age 25, surveyor general of the King's Works at age 37, and knight at forty-one. Wren was also a founding member and later president of the Royal Society, the learned academy of natural philosophers which became one of the centers of the 17th-century scientific revolution, and which had a marked impact on his own intellectual formation. Finally, Wren played a decisive political role in the Restoration of the Stuart monarchy and was one of the leading protagonists in the rebuilding of London following the Great Fire of 1666. Before he died at the exceptional age of 90, Christopher Wren had assembled an unprecedented portfolio nearing one hundred architectural projects, including that for St. Paul's Cathedral.

In keeping with Wren's massive persona, the scholarship on him is likewise overwhelming. Since his historiographical canonization at the beginning of the 20th century (the Revivalist 'Wrenaissance'), aspects of his career have been the object of an array of important biographies, anthologies, and critical studies, dedicated to both Wren as architect and Wren as public intellectual. Among these is the multivolume The Wren Society (1924–1943), along with John Summerson's seminal article 'The Tyranny of Intellect' (1937, reprinted as 'The Mind of Wren'), Margaret Whinney's Wren (1971), Kerry Downes' The Architecture of Wren (1982), Jim Bennett's The Mathematical Science of Christopher Wren (1983), Lisa Jardine's On a Grander Scale: The Outstanding Life of Christopher Wren (2003), and Anthony Geraghty's The Architectural Drawings of Sir Christopher Wren at All Souls College (2008).

Significantly, the scholarship from the 1980s onward has increasingly expanded to examine Wren's attitudes beyond architecture per se, in an effort to both clarify his unique design approaches and to better position architecture as a system of knowledge within Wren's intellectual and social milieu. Indeed, in considering Wren's rather atypical architectural career, a crucial challenge is to understand the way in which architecture itself was conceptualized and deployed through the diverse investigative practices of English empiricism. Vaughan Hart's book Christopher Wren: In Search of Eastern Antiquity (Figure 4) offers new insight into this facet of the architect by tracing a substantial component of Wren's architectural activity that involved his study and adoption of Eastern sources. Wren's interest in antiquarianism and architectural models from the Orient is well known, but Hart's is the first comprehensive study dedicated to unfolding this complex constellation of architectural references (Hunter 1971a; Hunter 1971b; Soo 1989; Walker 2017).

Hart locates Wren's sources on the architecture of the East in his scattered discursive and theoretical works and his considerable design output. In fact, the book's major ambition is not only to map the Eastern references to which Wren was exposed, but also to highlight their presence in built form. The book is structured along four thematic chapters, each dealing with a specific – yet inevitably fluid - component of Wren's architecture. The first, 'Classical Orders and Lanterns', discusses Wren's study of the classical orders, especially the Tyrian order of the Phoenicians, and their use in design, particularly for church steeples. The second chapter, 'Gothic Churches and Towers', traces Wren's Eastern interpretation of the Gothic as a 'Saracen Mode' and his subsequent use of this language, for instance in the remodeling of Westminster Abbey or at Tom Tower in Oxford. The chapter 'Greek Crosses and Domes' examines Wren's adoption of domed structures, for example in the design of St. Paul's Cathedral, as a structural form with early Christian origins that also carries conspicuous associations with Eastern churches, like the Holy Sepulchre and Hagia Sophia. In the final chapter, 'Monumental Columns and Colonnades', Hart investigates Wren's interest in columnar structures, like those of

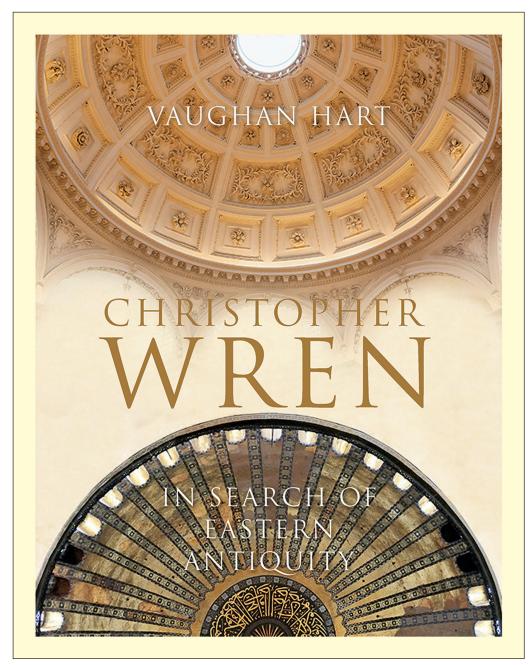


Figure 4: Cover of *Christopher Wren: In Search of Eastern Antiquity*. Photo Credit: Paul Mellon Centre for Studies in British Art.

Palmyra or Persepolis, and particularly their adoption on an urban scale, as in his post-fire plan, the Monument to the Great Fire, or Greenwich Hospital.

Hart introduces Wren's architectural activities in the context of the Royal Society, and specifically within the group's interests in oriental studies and antiquarianism. In fact, all the material on Eastern architecture that Wren came in contact with was indirect, and his only recorded journey outside of England was to Paris, where he spent eight months between 1665 and 1666. It was then with secondary sources, largely accessed through the circle of the Royal Society, that Wren came to know the form, structure, size, proportion, use and location of architectural models from the East. Hart attentively traces this fragmentary material, condensing a vast quantity of information on the history of trades, early archaeology and Levant

studies, which was transmitted through a complicated network of informal conversations, letters, travelogues, books, diaries, lectures, minutes of Royal Society meetings and articles of the society's monthly journal, *Philosophical Transactions*.

It was primarily through this myriad of connections and references, largely divorced from any sort of formalized architectural discourse, that Wren built his Eastern lexicon. As pointed out by Stephen Shapin (1995), Daniel Carey (1997) and Anne Hultzsch (2014), among others, this aspect already constitutes a fundamental territory of investigation, as the verbal and visual technologies adopted to collect and transmit remote knowledge, including buildings, was a key problem in their admissibility and use. Such concern, however, is largely absent from Hart's discussion. Instead, after mapping how Wren gained

access to the architecture of the East, and the sources with which he was fluent, Hart proceeds to observe how he translated this into his design practice. Here the reader encounters well-known examples of Wren's architecture, such as the Gothic Tom Tower and St. Mary Aldermary, as well as less obvious connections. For example, the domes of St. Stephen Walbrook and St. Martin Ludgate - adopting cross-squares and octagonal Greek-cross systems — are associated with Byzantine and Ottoman prototypes. While the examples and visual analyses of these discussions are unquestionably the most original part of the book, this material is also inevitably the most speculative. Hart's conclusions frequently assume source material that cannot be explicitly traced. However, the argument is both plausible and believable thanks to Hart's detailed account on the sources for these models, as well as his emphasis on their larger political and religious significance.

In fact, one of the book's most profound contributions concerns the meaning of architecture and the degree to which it can be translated. Pivoting between Wren's study of Eastern architecture and his adoption of these forms in English design, Hart illuminates the historical, religious and cultural questions that arise from the reconciliation of formal and cultural models with foreign environments. In Wren's case, the Anglican, Stuart, post-Restoration and post-1666 context in which he operated was determinative. All the more problematic then is his treatment of the specific architectural vocabulary of the East in order to establish forms of national identity (Soo 2012). For instance, the colonnaded and domed structures he favored are traced to Jerusalem, Constantinople and the Eastern regions of the Roman Empire, as opposed to closer but more contentious Catholic models. Similarly, Wren justified his use of the unpopular and 'barbarous' Gothic by charting its origins to the Holy Land as an imported 'Saracen' style, thus perpetuating a sort of post hoc fallacy typical in processes of nation-building.

In mapping the complex system of cultural interpretation, adaptation and use that underlay Wren's formal appropriation of Eastern models, Hart also sheds light on the architect's substantially circumstantial approach to style and design, which was mediated by issues of context and largely informed by his empirical mindset. In fact, Wren often simultaneously adopted and used formal references derived from disparate geographical and historical contexts, for example in the long colonnades of the Greenwich Hospital, where Hart relates the overall design to Eastern models like Palmyra, but whose structurally efficient doubled columns also carry French undertones. This approach was not uncommon, as demonstrated for instance by the case of Nicholas Hawksmoor, pupil of Wren and another subject of Hart's scholarship (2002). Hart's book then successfully contributes to systematizing Wren's empirical design method within a wide crossnational and cross-temporal network of architectural referencing. Wren's contingent political and religious translation of Eastern architecture ultimately cements Tafuri's image of an architectural 'chemist', manipulating languages and forms as bottles and phials in a laboratory, as an endless combinatory experiment (1968: 140–142).

Designing Works in Sangallo's 'Circle'

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Maria Beltramini and Cristina Conti, eds. *Antonio da Sangallo il Giovane: Architettura e decorazione da Leone X a Paolo III.* Milan: Officina libraria, 183 pages, 2018, ISBN 978-88-3367-012-6

During his lifetime, the architect Antonio da Sangallo the Younger (1484-1546) was also a carpenter, surveyor, engineer, contractor, urbanist, entrepreneur, devotee of the antique and director of a Sangallo architectural 'firm' that included multiple family members. His enormous output had an astonishingly broad typological range. In addition to his lifelong involvement at St. Peter's Basilica, Antonio designed other works with religious, residential, military, urbanistic and celebratory programs. Understandably, this vast range and volume has created research difficulties. These are compounded by scarce documentation for many modified or unbuilt works, which are mostly or only known from the drawings produced by Antonio or others in the so-called setta Sangallesca. Antonio helmed that broader 'circle' of architects, sculptors, painters, builders and artisans for thirty years. Yet his exact role in the creation of most of its products remains opaque, even though many specific studies of Antonio's designs have appeared piecemeal over the past six decades, and two comprehensive surveys provide bedrock facts about his architecture. Gustavo Giovannoni's two-volume opus (Giovannoni 1959) examines the built work as well as related drawings and projects. Currently, a magisterial, three-volume catalogue of the Uffizi's architectural drawings of Antonio da Sangallo and his circle, conceived and edited by Christoph Luitpold Frommel, nears completion but still lacks the crucial final volume on palaces (Frommel and Adams 1994, 2000, -). These two indispensable surveys, which inevitably imposed boundaries and organizing strategies, gave precedence to building type in order to clarify chronology and authorship. Unfortunately, those choices have obstructed other avenues of inquiry, and have allowed the study of Antonio as maestro of a complex business to lag.

The volume Antonio da Sangallo il Giovane: Architettura e decorazione da Leone X a Paolo III responds to that situation (Figure 5). Its contents — fourteen individual essays on architectural and art history - result from years of crossdisciplinary inquiries pursued by a core group of faculty and students at Roman university campuses, supported by a broader Italian and international array of scholars. In June 2017, Maria Beltramini drew them all together for a 'Study Day' in Rome. The delivered papers are here revised, rearranged, augmented and published in a volume that provides a rich and coherent view of Antonio's entire 'circle' and its members' diverse activities. The book's essays, which address an audience already familiar with Antonio subjects and documents, are grounded in primary-source evidence - archival texts, treatises and commentaries, drawings and built fabric. To probe deeply,



Figure 5: Cover of *Antonio da Sangallo il Giovane: Architettura e decorazione da Leone X a Paolo III.* Photo Credit: Officina libraria.

Antonio's smaller endeavors are considered, because they best reveal how and why he deployed others in the performance of different tasks, at the various stages of these designs.

The individual essays are organized sequentially: the first and last essays address the shape and basic themes of Antonio's life, while the second and third essays pursue topics of general import, followed by case studies. In the initial essay, Barbara Agosti reminds us that many of Antonio's contemporaries expressed both envy and appreciation of his business skills. She peoples the three phases in Antonio's successful career — largely determined by papal reigns — with Antonio's artistic colleagues, including his early favorite, the painter Perino del Vaga, who after 1537 became a trusted business partner who recommended and supervised other artists and decorators. In

the topical essays, Serena Quagliaroli reports on the technical development of stucco and its use and stylistic variations between 1500 and 1560; then Anna Maria Riccomini analyzes Antonio's lifelong antiquarian interests. She convincingly identifies specific ancient objects collected by the architect and describes their display in his via Giulia home. Antonio's acquisitiveness and his Vitruvian studies were primarily driven by genuine interest, modified by hereditary pressures and concerns about status.

The ten case studies are arranged chronologically. They investigate Antonio's interactions with his subordinate collaborators and subcontractors, and question how they worked either hierarchically under Antonio, or in tandem with him or others. And although Antonio certainly always led the teams, his exact procedures varied substantially from job to job. In some cases, Antonio

dominated the design throughout multidisciplinary projects. A perhaps prototypical situation demonstrates how, in such cases, Antonio used both direct control and delegated authority throughout one project: the tiny, temporary Santissimo Sacramento chapel in the nave of Old St. Peter's, demolished in 1605. Antonio Labacco carved its wooden doors, previously known only from their depiction in an inaccurate drawing made from memory (BAV A 64 ter, f. 22r), a muddy fresco and Antonio's few, preliminary, partial sketches. Valentina Balzarotti proves that Labacco's recently rediscovered doors remain exactly as built, and that they were designed by Antonio the architect and their erection supervised by Perino the painter. By comparing the actual doors with Antonio's design sketches, Balzarotti renders a persuasive composite version of the chapel design as it was originally built. She describes Antonio's design through the eyes of a kneeling 16th-century supplicant who, although dazzled by candlelight refracted from the doors' 332 brass nailheads, could glimpse Donatello's tabernacle through one of the perfectly positioned oval openings in the door leaves. In similar fashion, the architect may have asked his chosen painters to echo an architectural strategy at the palazzo Baldassini, Antonio's first independent commission. In two linked essays, the palace's architecture and frescoes are shown to share a single overriding attitude toward structure and adornment, ground and figure. With impressive clarity, Francesco Benelli explains Antonio's understanding of Vitruvian theory and describes how the architecture's compressed elements recapitulate an ideal palace on the small, narrow site. Silvia Ginzburg then uses keen connoisseurship to assign the palace's frescoes to Perino and Polidoro da Caravaggio, and to bring their dates forward to pre-1518. This buttresses the argument that the paintings reprise the spatial illusions found in Antonio's architectural design.

Two essays demonstrate how Antonio sometimes relaxed his control over a design by giving responsibilities to other Sangallo associates. Examining the church of Santa Maria di Monte Moro, Paul Davies convincingly identifies two distinct construction phases and several associated architects who played subordinate roles. His meticulous study of details strongly suggests that this exemplifies one version of Antonio's usual workshop practices during the 1530s and 1540s. Dario Donetti, in a stunning report on the tomb of Piero di Lorenzo de' Medici in the rebuilt Montecassino abbey church, reconsiders Antonio's involvement. Attributing the architectural designs to Antonio, but the three large statues to Francesco da Sangallo, Giuliano's son, Donetti explains why Antonio chose this cousin for this mid-1530s job. In a penetrating analysis, Donetti accepts parallels previously drawn between Antonio's triumphal arch scheme at Montecassino and his contemporaneous Medici papal tombs in Rome; Donetti also emphasizes resemblances between the project for the Piero de' Medici tomb and the design by Giuliano da Sangallo for the façade of San Lorenzo in Florence.

More case studies round out the volume. Two find evidence that architectural works should be re-attributed to

Antonio rather than to others in his circle. David Hemsoll reconsiders the competing designs submitted in 1515 for San Lorenzo's façade and suggests valid reasons for connecting the Albertina drawing AZRom 808a with Antonio da Sangallo the Younger's design. Maurizio Ricci attributes the initial 1540 design for Angelo Ferretti's palace in Ancona to Antonio, rather than Pellegrino Tibaldi, whose involvement must have been later, and limited to the palace's frescoes. A scrupulous reading of physical, programmatic and urbanistic evidence lets Ricci reconstruct Antonio's design as it was built between 1541 and 1543. Three other essays focus on the decorative arts, and although it is less clear how Antonio steered those artists, the investigations turn up new information and challenge previous analyses of the architecture, frescoes and stuccoes in Rome's Serra and Cesi chapels (by Cristina Conti and Federica Kappler respectively), and in San Giovanni Decollato's oratory (by Michela Corso). To conclude the volume, Beltramini reiterates the book's themes through an overview of Antonio's religious projects. She then adds her ideas about Antonio's intentions by analyzing several unbuilt main altar designs and his planned use of multiple media. Antonio made the entire church spiritually and spatially coherent by manipulating elements at every scale, designing everything from the presbytery's walls and axial views, to the altar's baldachin and the mensa's ornaments.

Quality pervades this volume. The texts are meticulously written and edited, while a unified index of names facilitates the reader's own efforts at crossing boundaries to find, for example, the frequent but widely scattered references to Perino del Vaga. Lengthy endnotes provide informative details plus indispensable references to past, current and forthcoming publications, while thick paper enhances the many large, crisply reproduced images. However, numerous citations of Antonio's works and architectural drawings make handy access to Frommel's published catalogue volumes (Frommel and Adams 1994, 2000) almost a necessity.

In the long history of Antonio research, the current moment of change is emphasized by the recent loss of the great historian Christof Thoenes, to whom this book is dedicated. Soon, too, the final volume of *The Architectural Drawings* will be published, completing that survey. In contrast, the book reviewed here models future possibilities. Its cross-disciplinary approach, which looks up and down the production hierarchies in specific projects, demonstrates how Antonio's designs can be fruitfully re-assessed, and his entire career re-evaluated.

Competing Interests

The authors have no competing interests to declare.

References

Becoming the Architect of St. Peter's: Michelangelo as a Designer, Builder and Entrepreneur

Wallace, WE. 1994. *Michelangelo at San Lorenzo: The Genius as Entrepreneur*. Cambridge and New York: Cambridge University Press.

Models and Architecture's Longue Durée

- **Perez-Gomez, A** and **Pelletier, L.** 2000. *Architectural Representation and the Perspective Hinge*. Cambridge, MA: The MIT Press.
- **Frommel, S** and **Tassin, R.** (eds.). 2015. *Les maquettes d'architecture: Fonction et évolution d'un instrument de conception et de réalisation*. Paris/Rome: Picard/Campisano Editore.
- **Moon, K.** 2005. *Modeling Messages: The Architect and the Model.* New York: The Monacelli Press.

Objects, Ontologies: Orienting Architects

- **Betteridge, I.** 2009. TechCrunch: Irresponsible Journalism. *Technovia.co.uk*. Available at https://web.archive.org/web/20090226202006/http://www.technovia.co.uk/2009/02/techcrunch-irresponsible-journalism.html [accessed 9 April 2020].
- **Bryant, L.** 2014. Correlationism An Extract from The Meillassoux Dictionary. *Edinburgh University Press Blog.* December 14. Available at https://euppublishingblog.com/2014/12/12/correlationism-an-extract-from-the-meillassoux-dictionary/ [accessed 9 April 2020].

Wren's Eastern Fragments

- **Carey, D.** 1997. Compiling Nature's History: Travellers and Travel Narratives in the Early Royal Society. *Annals of Science*, 54(3): 269–92. DOI: https://doi.org/10.1080/00033799700200211
- **Hart, V.** 2002. *Nicholas Hawksmoor: Rebuilding Ancient Wonders.* London: Yale University Press.
- **Horsfall Turner, O.** (ed.). 2012. *The Mirror of Great Britain: National Identity in Seventeenth-Century British Architecture.* Reading: Spire Books.
- **Hultzsch, A.** 2014. *Architecture, Travellers and Writers: Constructing Histories of Perception 1640–1950.* London: Routledge.
- **Hunter, M.** 1971a. The Royal Society and the Origins of British Archaeology: I. *Antiquity*, 45(178): 113–21. DOI: https://doi.org/10.1017/S0003598X0006926X

- **Hunter, M.** 1971b. The Royal Society and the Origins of British Archaeology: II. *Antiquity*, 45(179): 187–92. DOI: https://doi.org/10.1017/S0003598X00069 489
- **Pevsner, N, Fleming, J** and **Honour, H.** (eds.). 1999. *Dictionary of Architecture*. 5th ed. London: Penguin.
- **Soo, L.** 1989. Reconstructing Antiquity: Wren and His Circle and the Study of Natural History, Antiquarianism and Architecture at the Royal Society. Unpublished thesis (PhD), Princeton University.
- Soo, L. 2012. The English in the Levant: Social Networks and the Study of Architecture. In: Turner, OH (ed.), The Mirror of Great Britain: National Identity in Seventeenth-Century British Architecture. Proceedings of the Society of Architectural Historians Great Britain Annual Symposium, 22 May 2010. 209–31. Reading: Spire Books.
- **Shapin, S.** 1995. A Social History of Truth: Civility and Science in Seventeenth-Century England. Chicago: University of Chicago Press. DOI: https://doi.org/10.7208/chicago/9780226148847.001.0001
- **Tafuri, M.** 1968. *Teorie e storie dell'architettura*. Bari: Laterza.
- **Walker, M.** 2017. *Architects and Intellectual Culture in Post-Restoration England.* Oxford: Oxford University Press. DOI: https://doi.org/10.1093/oso/9780198746355.001.0001

Designing Works in Sangallo's 'Circle'

- **Giovannoni, G.** 1959. *Antonio da Sangallo il Giovanne.* 2 vols. Rome: Tipografia Regionale.
- Frommel, CL and Adams, N. (eds.). 1994, 2000. The Architectural Drawings of Antonio da Sangallo the Younger and His Circle. 3 vols. New York: The Architectural History Foundation, and Cambridge, MA: The MIT Press. Volume 1: Fortifications, Machines, and Festival Architecture. Volume 2: Churches, Villas, the Pantheon, Tombs, and Ancient Inscriptions. Volume 3: Palaces (forthcoming).

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