On Precedent in Architecture

MARK WILSON JONES

Society attaches great value to originality, discovery, and innovation, not least in areas of technology and medicine, which have transformative potential to improve life, perhaps for millions. This value, both reputational and monetary, is tied to primacy, especially for acts of creativity that spawn new trends or movements. Where patents, branding, and profit are at issue, disputes turn on the temporal primacy of such-and-such an invention, device, or song. In the art world esteem accrues to originators and innovators but is denied to followers and imitators. The market for forgeries underscores this point. We revere blue-sky thinking and mythologize those talented enough, like Archimedes, to have had due occasion to jump out of the metaphorical idle bath to shout, Eureka!

This is hardly a recent development, for Archimedes's fame goes back to antiquity. Modernity, however, has brought a twist with negative as well as positive implications: the avant-garde strategy of shock is a mightily effective route to media interest and popular attention. The greater the rupture with convention, the greater the interest and attention. Proponents of modernist architecture have triangulated originality, novelty, and shock to serve their agendas, simultaneously portraying classicism as mere perpetuation, meaning (by cleverly illogical logic) that it should be perpetuated no longer. Anyone who would employ forms associated with history is familiar with the pejorative charges of "pastiche," "mere copying," nostalgia, and worse.

One might wonder why classical musicians or chefs who maintain regional traditions are not subjected to similar denigration, or why the Rolling Stones are not denigrated for borrowing from Muddy Waters et al. But the fact is that precedent has become hopelessly uncool in architectural circles. Indeed, most architecture programs encourage students to innovate almost from day one, even before they have learned the basics, while promoting the fiction of the solo genius creating, with the sweep of a felt pen or a crunkle of foil, an architectural concept *ex nihilo*. Inversion, subversion, and starting afresh from a *tabula rasa* may be useful studio strategies, but the latter is accompanied by the understanding that in reality it is impossible without denying all precedent, and so too experience and memory. We learn through imitation from the very cradle. Taken literally, the *tabula rasa* is truly corrosive. Since we all copy from one another, to denigrate copying or pretend not to do it generates needless anxiety and invites lazy thinking, hypocrisy, and plagiarism (since sources tend to go unacknowledged given the pressure to keep up pretenses and cover the traces). The iterative feedback loop by which solutions are tried and tested so to be revisited and improved in the light of experience is just one casualty of the doctrine of rupture, not to mention the subtleties of human qualities associated with place and local culture. The lack of the glue of continuity opens voids that only alienation fills.

Creativity, *poesis*, perforce has to do with *mimesis*. After all, there is no such thing as a spontaneous beginning, for "there are always antecedent causes," to quote the novelist Ian McEwan.[1] Or as Quatremère de Quincy observed before him (though I guess unknown to McEwan), "There ought to be an antecedent to everything; nothing whatsoever comes from nothing, and this cannot but apply to all human inventions."[2] Being relatively unconcerned with novelty and originality, and happy to be part of a continuum, artists and architects working with tradition suffer fewer anxieties when navigating precedent. Precedent presents no threat at all; on the contrary, it is a fertile resource—the spirit of which is so evocatively captured in Panini's *Picture Gallery with Views of Ancient*

Opposite page: Giovanni Paolo Pannini's Gallery of Views of Ancient Rome *(frontispiece; 1758, public domain) shows how those happy to learn from the past can repurpose experience, adapting or transforming past creations according to the merits of the case.*

Rome (Fig. Frontispiece). Designers happy to learn from the past can repurpose experience, adapting or transforming past creations according to the merits of the case. This is not to say that a classical architect finds little satisfaction in creating novel solutions or effects—far from it. But the whole terrain is less fraught, more balanced, and healthier.

The fact nonetheless remains that mud can stick. Contemporary architects working with traditional forms may welcome arguments that disprove the charges directed against them. This is what I aim to provide here, along with reflections on my own approach to precedent in practice. And, as I work toward a book on related material, I have been surprised by the relative paucity of discussion of the use of precedent in design by comparison with its importance.[3]

LEARNING FROM CHILDREN

Children learn by copying precedent in the form of their parents, students learn from teachers, apprentices from their seniors; it is a truism that happens to be true. Note too that children learn by imitation as they play, which they do free from dogma—unless they have been brainwashed. Once we have been "trained," however, it takes effort to recover the humility and common sense necessary to appreciate precedent. Indeed, interrogating precedent for the purpose of fresh application allows us to *learn* from the past by critiquing it, learning from what worked well or less well. This promotes *progress*, for anyone who is creative strives to improve on what went before. In tune with the spirit of emulation, a kind of respectful rivalry operates across time, even across eras. This raises the quality of production, bringing potential benefits for all who use, view, and experience architecture. There is a more profound social dimension too. When precedent lives on in new work, it *connects* us with the past by implying continuity into the future. Contrast this with the alienating isolation that flows from blanking out the past, comparable to the insidious effects on character of those who persist beyond adolescence in demonizing their parents (who probably had merits as well as faults).

Consider too the workings of predictability on the one hand and surprise on the other. We derive pleasure from both, as is best observed in children before social conditioning interferes. Give a child a game or story they love, and as a rule they love it to be repeated, not at all *ad nauseam* as an adult might think. There must be some reward mechanism linked to the reassuring reliability of sameness, repetition, and the confirmation of expectation. Other inbuilt mechanisms meanwhile ensure children thrill to the new and unexpected. Of course, these polarities are not mutually exclusive, and for the adult the most compelling engagement will likely come from the interweaving of expectation and surprise that creative work, spectacles, and indeed buildings can deliver. Surprise is only surprise if experienced against a background of expectation, and this is what precedent provides. Archimedes shouted *Eureka!* because, in relation to prior thinking, his intuition was so unexpected.

APPROACHES TO IMITATION

Responses from predictability to surprise are only one of the correlates that flow from framing creativity (*poesis*) in terms of the scale from imitation to invention, as did another ancient Greek whose name begins with A, Aristotle. Where new work sits on this scale is but a question of degree, depending on context and need. Fundamental in fact is the wisdom en-

shrined in another Aristotelian notion, "Necessity is the mother of invention." It is a basis in need that gives heft to an invention; without it, an invention may be no more than a gimmick. Tradition is all about continuity of customs, principles, themes, models, and types, but it is also just as much about variation, adaptation, emulation, invention, and inspiration. It is the nature of the living tree of tradition and precedent to sprout new shoots and branches as artistry reacts to changing demands and techniques.

Design—and its interpretation—is a slippery business, molded by multiple factors and happenstance. As Robert Venturi reminded anyone who had forgotten, complex buildings combine routine *and* invention, predictability *and* surprise, ordinary *and* special. Let us shun binary thinking along with dogma, impeding as they do consideration of what really counts: the quality of architecture and its effect on us.

Society would get a better quality of built environment were we all—architects, clients, and the public—to relax about primacy, originality, and novelty, and give more thought to what works and to positive social effect. There is inherent efficiency and sustainability in repeating while tweaking, for this minimizes consumerist churn and associated waste. For my part, I still like using my racing bike from the 1980s, which, aside from minor subsequent advances, can hardly be bettered—the beneficiary as it was of decades of iteration. I'm proud to be related to the family shoemakers Crockett & Jones, and my feet tell me that the Chelsea boots and Oxfords that I have worn since I was a teenager perform even better now, courtesy of successive tweaking (fig. 1). It is said, When in Rome do as the Romans. When I am there, I don't mind being served a limited repertoire of pasta for the umpteenth time. Repetition only satisfies with a requisite level of quality and substance; otherwise, it becomes tiresome. There is little to be liked in mechanical copying and the sameness-dressed-up-as-difference that is relentlessly peddled in marketing, on TV, and so on, often with the intention to distract us. It would be better for everyone if we were able to concentrate on the intellectual, artistic, and productive strategies that foster quality and sustainability.

It is instructive to reflect on strategies of mimesis in terms of pairings that intertwine, starting with designer and audience (client, user, and viewer), composition, and reception. For the designer, precedent aids composition. By that I mean everything from identifying strategic options to choosing between them, developing designs, and resolving detail. In the same way that precedent has been discredited, composition has supposedly been dethroned by process; yet, similarly, architects as they design cannot help but compose. The viewer, meanwhile, benefits from composition in the form of aesthetic reward. Furthermore, meanings and associations will attach themselves to forms that register with people by dint of precedent, thereby fostering feelings of connection, as mentioned, and so too belonging.

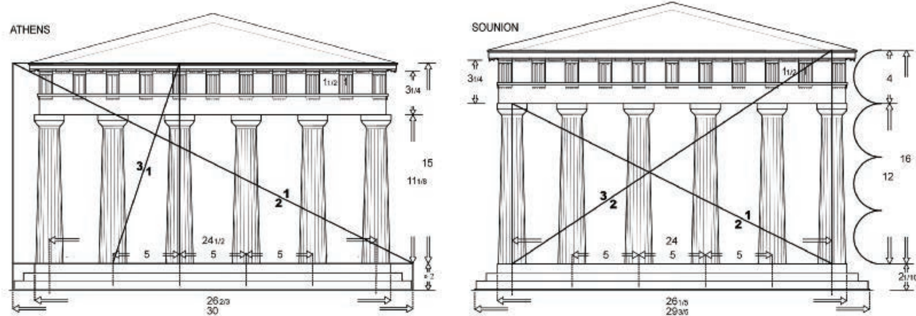
A further pairing is especially significant for designers. This concerns the modalities by which precedent informs new work, via *general principles* and *specific exemplars*.

Again, no hard divide separates the two, and they intersect, just as do theory and practice, general and specific. After all, a principle often needs an example, this having the function of clarifying, illustrating, or qualifying the principle in question. With the Aristotelian mimetic scale in mind, now let us contemplate certain historical shifts in the use of precedent in architecture.

HISTORICAL USE OF PRECEDENT

In antiquity it is hard to find specific buildings that reproduce or adapt previous ones. A case in point is the Column of Marcus Aurelius, this being an edited version of Trajan's Column.[4] Another is the Arch of Constantine, an edited or botched—depending on your point of view—version of the Arch of Septimius Severus.[5] The rarity of such instances is consistent with surviving Roman texts on the art of rhetoric (which often invoke parallels with the visual arts); these texts give little credit for straightforward copying, even of master-

Opposite page: Figure 1. Traditional footwear then and now: Crockett & Jones, today's "Connaughts" compared with those from nearly a century earlier. Image: crockettandjones.com.



pieces.[6] It is also consistent with the relative continuity from Greece to Rome mediated by the Hellenistic period, when compared with the break that separated late antiquity from the Renaissance.

How then to explain Doric temples of the classical period that seem so similar as to be clones, some even having identical dimensions? I hope to have proved that no temple copied any other, and instead that coincidences arose due to Greek architects designing conventional types using shared precepts and methods, often based on modules (fig. 2).[7] Each new project was born of *following principles independently* while varying proportions and profiles. Likewise in imperial Rome certain predominant proportional strategies in tandem with dimensional standardization meant that the Corinthian columns of the Pantheon portico could be exchanged with those of the Temple of Antoninus and Faustina and each would fit its new home. Again, there was no question of copying. Roman architects had evolved an approach that ensured *appartenance*-yet-variety, producing columns (and capitals) analogous to members of a family of individuals with distinguishing features.[8] These findings align with Vitruvius's treatise, where he repeatedly set out the principles and methods by which one ought to proceed, often starting with the ideal of *symmetria* (mathematical harmony), and deploying proportion, geometry, modules, rhythms, conventions, and forms often based on the orders. No matter that his specific recommendations are rarely matched in practice, he was undoubtedly in tune with his fellow Roman practitioners in the value he gave to principles by which architects would generate variation after variation on proven themes and types, as adapted to need and circumstance. Not for nothing did I title my book on such topics *Principles of Roman Architecture*.

Imitative practices arise necessarily for any movement that revives the past; witness the neologisms *Renaissance* and *neoclassical*. Recovering ancient glories became the architectural grail, and by around 1500 leading architects in Italy had succeeded in mastering the Romans' columnar orders and designing *all'antico*. Ancient forms were lifted or quoted here and there, but the radically differing contemporary conditions combined with prevailing artistic ideals ensured a free approach to precedent in the spirit of emulation.[9] Survey drawings of antiquities were copied for the sake of dissemination, while apprentices learned by copying their masters' drawings. Yet, it was nonetheless considered beneath any talented artist or architect to follow precedent closely. Michelangelo and Vasari are clear in this regard.

Aside from a few niche instances in the intervening period, replicating precedent became respectable only in the eighteenth century, as the Greek Revival got underway. Whereas Italy has long been the chief font of precedent, whether ancient or modern, the growing concern for origins and primacy persuaded many that Greek art was the height of purity and

perfection, factors among others that paved the way for the first detailed surveys of Greek monuments published by Le Roy (1758) and Stuart and Revett (first volume 1762).[10] Their success fueled the trend for citing and copying. A prime example is the garden structure built in 1760 at Shugborough and modeled on the Choragic Monument of Lysicrates in Athens (ca. 334 BC). The Greek Revival saw near replicas of this kind built in various parts of the globe, while the wider fashion for revival saw the occasional full-size homage to Trajan's column besides widespread borrowing of favored Roman capitals such as those of the Temple of Castor or the tholos at Tivoli. Fidelity to ancient models became a hallmark of the neoclassical period. The shift of emphasis was underpinned by Enlightenment preoccupations: the preoccupation with Roman "copies" of Greek sculptures (a stereotype, incidentally, that has been hugely overestimated);[11] the rise of collections, museums, academies, and didactic manuals; nascent archaeology and archaeological reconstructions;[12] and mechanisms of transmission and reproduction, including casting.

These developments provided the conditions by which architectural quotations like those just mentioned could be recognized (at least by an informed audience), bringing with them the sentiment of connection discussed earlier. Forms that resonate with history and tradition speak to us through culture, memory, and associations. These are the things that move us, to use a verb dear to Le Corbusier, more so than the abstract "plastic emotion" he invoked. When a viewer sees a new building or artifact and recognizes quotations, this creates a sense of engagement, be it subliminal and vague or, for expert eyes, more knowing. Anyone can enjoy the works of Shakespeare or Quentin Tarantino with but a vague idea of the gist of so many quotations and allusions. These, meanwhile, will enhance the pleasure of theatre and film buffs, all the more so if there are ambiguities, uncertainties, and potential contradictions that inspire debate. Reference to precedent enriches the conversation, and so it is with architectural precedent too.

THE CASE FOR PRINCIPLE

In summary, history bears witness to all manner of positions on the scale from imitation to invention, providing contemporary architects working with tradition ample material to inform their own approach to precedent. Leaving to one side urban design, to which I will return briefly, I have the impression that contemporary classicists tend to privilege exemplars, rather as is implicit for anyone who would visit Panini's fictive gallery for the purposes of instruction (fig. Frontispiece). Meanwhile, given modernist credos, it seems ironic that the precedent study is a standard feature of mainstream architectural education. Historians of art and architecture moreover also tend to focus on exemplars. Two of the most useful books treating imitation and emulation, Ellen Perry's *The Aesthetics of Emulation in the Visual Arts of Ancient Rome* (2005) and David Hemsoll's *Emulating Antiquity: Renaissance Buildings from Brunelleschi to Michelangelo* (2019), are representative in this regard. The critiques they offer revolve around the influence of specific masterpieces, sometimes lost, such as Praxiteles's Cnidian Venus and Bramante's Palazzo Caprini.

The problem with the emphasis on exemplars is that this likely comes at the unwitting expense of principles, which arguably contribute more to raising the level of attainment, as I will attempt to explain. As already observed, ancient architects' practice was based fundamentally on the exercise of principles and methods, and this makes for a sound starting point. This same is true for some architects of later periods, including, I believe, those whose work I happen to appreciate the most. Comparing the work of Baldassare Peruzzi to that of his contemporary Antonio da Sangallo the Younger, it is clear that both were hugely talented and resourceful, but Peruzzi's sensibilities seem keener for being more thoroughly digested and more curious in respect of principles *per se*. The doors of Palazzo Massimo are emblematic in this regard; while each set differentiates itself from the others in terms of dimensions, profile, and moldings, they still cohere by virtue of sharing a 2:1 proportion for the openings, along with the nicety

Opposite page: Figure 2. Modular interpretations of the facades of two Doric temples of the classical period: the Hephaisteion in Athens, and the Temple of Poseidon at Sounion. Each facade is scaled to a common ideal nominal triglyph width or module of 1 unit (M). After Wilson Jones, 2001.

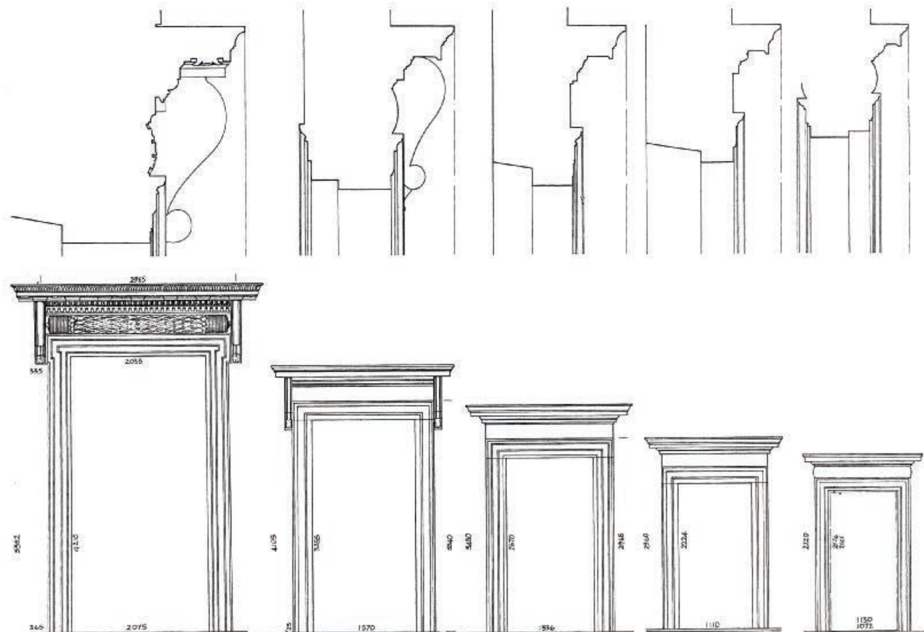


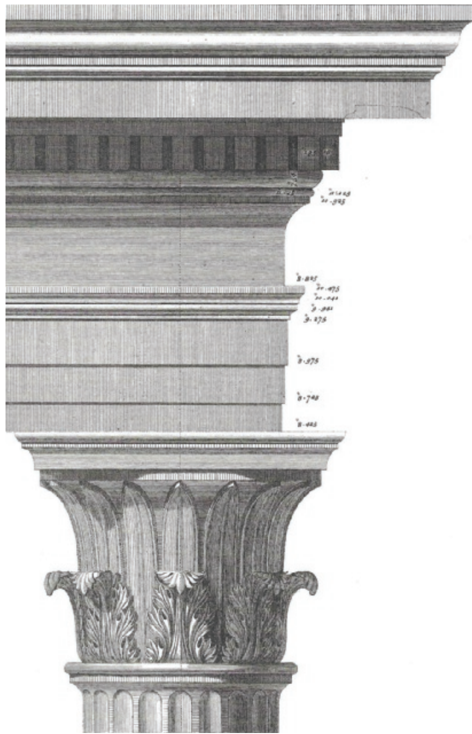
Fig. 18 *Palazzo Massimo, doors, 1:60 and 1:20 (author)*

of the smallest being half the size of largest (fig. 3). Evidently Peruzzi had assimilated the Roman principle of *appartenance*-yet-variety.[13] Importantly, principles do not always produce such harmony and neatness; in following the logic of different principles, contradictions and conflicts may arise. This explains certain ambiguous and tantalizing qualities of the antique references in Palazzo Massimo, along with details that attest to his attempt to reconcile ideal proportions with a complicated site. Peruzzi's struggle with the difficult whole, to paraphrase Venturi, brings out inspired design. It is probably true that the connection with the past will likely be less obvious for many, but it will be deeper for those who engage in the work of interpretation.

Identifying exemplars and perhaps borrowing from them for direct re-application may serve a purpose, and quite efficiently too. Nonetheless, I contend that there is more value in analyzing precedent with a view to understanding what it is that makes it work. *The more study is abstract, analytical, and synthetic, and the less it is orientated toward a temporary goal, the deeper appreciation will be absorbed into the mindstream.* Detail will be harder to recall and more obscure, but critical lessons will be clearer.

A designer who selects solutions or motifs from the past risks copying mechanically or producing an assemblage. *A designer who privileges principles has more freedom of movement, operates with greater elasticity, and is more likely to produce work that is coherent and perhaps inventive too*. Perhaps this is what Frank Lloyd Wright had in mind when he used the word *safe* in the following affirmations:

"Principle is the safe precedent," and *"The working of a principle is the only safe tradition."*[14]



Opposite page: Figure 3. Baldassare Peruzzi, Palazzo Massimo alle Colonne, Rome (1531–1536), principal sets of doors. All openings are precisely or close to 2:1 aspect ratio, and, from left to right, their heights, measured to the tops of the cornices, are 18, 14, 12, 10 and 9 piedi. Image: Wilson Jones, 1988.

This page, left: Figure 4. Capital attributed to the Tower of the Winds according to Stuart, J. and N. Revett, The Antiquities of Athens, *1762. Right: Figure 5. Apollodorus Architecture: Roman Villa, Pool Court, Capital of the so-called Tower of the Winds type. Photo: Wilson Jones.*

Following page: Figure 6. Apollodorus Architecture: Roman Villa, Elevation with rustication.

REFLECTIONS ON PRACTICE

An unexpected fruit of decades researching and measuring classical monuments manifested itself a few years ago (twenty years after I had all but ceased practicing as an architect) in the form of the commission to design a "Roman Villa" in the Caribbean. In effect, the task was to apply what I had learned through my academic work, for which purpose I formed my practice, Apollodorus Architecture. The initial schema for the project were created without consciously consulting sources, according to knowledge already absorbed. The practice ethos developed into a minimal direct reliance on sources, at least until ideas had taken sufficient shape to be critiqued and debated. At this point knowledge of precedent became helpful, and sometimes invaluable, for weighing the pros and cons of different options. Indeed, once a conundrum arises it would be crazy not to interrogate past solutions for instruction.

The greater one's prior understanding, the less one's need to consult precedent, and vice versa. For right or wrong, I didn't feel the need for help with column design except for in the refining of our digital model for CNC cutting a set of marble capitals of the so-called Tower of the Winds type (fig. 4). At this juncture Stuart and Revett's famous publication, plus photographs, helped resolve the shape and profiling of the stylized leaf points climbing up the body of the capital (fig. 5).

On the other hand, never having studied the composition of rustication, I felt it sensible to scrutinize precedent sooner in the process. It became absorbing to try to identify the traits that distinguished ancient from Renaissance practice, and Palladio's solutions from those of Giulio Romano. Observation and publications came into play, particularly Paolo Portoghesi's *Rome of the Renaissance*, with its combination of photographs and line drawings.

The aim remained the same nonetheless: to establish principles and to generate solutions suited to our team's purpose, rather than to take specific solutions and adapt them (fig. 6).

Still further removed from our expertise was the design of a program of wall paintings in the manner of ancient Roman wall decoration. We needed extensive study and travel to be able to accomplish this task. Yet much as we might aspire to assimilating principles in the cause of creative autonomy, our team did not include figure painters. When it came to producing figural compositions, therefore, we were obliged to copy, borrow, and adapt specific Roman examples. In one way or another then, the Roman Villa project drew from us a spectrum of approaches to precedent, which, as is generally true, can coinhabit and blur.

I now turn to the design of a temporary pavilion for the 2022 edition of Marmomac in Verona, *the* annual international fair for the world of marble and stone, and the challenge of addressing simultaneously contrasting audiences. Besides the practical function of providing reception space for the client, Pibamarmi, the installation aimed to show off their skills, ideally by a novelty that would make the pavilion more memorable than its rivals. Overt classicism would have been out of place, yet we aspired to a classical feel. Adolf Loos, a key figure straddling the classical and the modern, exploited marble to obtain decorative effects he judged apt for the modern era, and it happens I discuss his ideas in undergraduate lectures. His cult venue in Vienna, the American Bar or simply Loosbar, came to mind as a precedent, especially being similar in size to the intended stand (fig. 7). We borrowed the coffered ceiling, cunningly mirrored so as to expand the visual horizon. Yet—in the spirit of emulation—we aimed to go one better, the coffered units becoming monolithic and cut thin enough for back-lighting, producing a captivating luminance (figs. 8 and 9). Instead of having confining walls, we held up the

ceiling on a permeable peristyle of Tuscan/Doric columns not unlike those Loos used elsewhere. The precedent helped us refine the scheme, and it was also immediately recognizable to architect visitors. At the same time, the visitors who did not know the precedent were nonetheless drawn to the visual effect, which elicited curiosity as to the thickness of the panels, the source of the marble, and so on. In short, it performed its duty for the client while contributing a little manifesto on the relevance of precedent in a modern context.

Although the Romans laid out cities (based on the cardo, the decumanus, a forum near their intersection, and so on) using approaches compatible to their architecture, the myriad factors bearing on contemporary urban planning mean that precedent operates in different ways, via patterns of practice we experience as streets, squares, and so on. I end with a glimpse of work in progress on a counterproject close to the heart of the city of Bath, a place with special relevance for successive groups of architecture students from the University of Notre Dame in Indiana, who have produced traditional designs for the self-same site. Instead of a glass-and-steel stadium that is being proposed by

the rugby club, we envisage a loose variant of the amphitheater type that offers a more sympathetic contextual experience (figs. 10 and 11). Given the many differences, not least in accommodating a rectangular pitch, there was no sense in consulting specific precedents—the objectivewas more to evoke resonant associations with both the Roman foundations of Bath and the bold crescents for which the city is also famous.

Even in the work of a small practice, then, precedent can be approached in various ways, and the scope for traditional practitioners globally is vast. Indeed, even as the wider market continues in thrall to designers bent on selling shapes that promise to sell their clients' investments and products, the paradigms of originality, novelty, and shock are becoming tedious. Disillusionment is growing with a culture of superficial and unsustainable gestures that date quickly. In both the US and the UK, more and more architectural practices that aspire to do work of cultural value no longer see tradition and its lessons as the enemy. It is the same for students. Recently, when presenting such critiques as these while teaching history, theory, and studio at a leading British school of architecture, I have encountered a more receptive audience than I did in past years. The wind is changing direction, and it is blowing in favor of creativity informed by precedent.

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Previous page, top: Figure 7. Adolf Loos, American Bar, Vienna. Photo: Jakub Ryng. Bottom left: Figure 8. Apollodorus Architecture: Marmomac 2022, Verona, Pavilion for Pibamarmi. Photo: Davide Galli. Bottom right: Figure 9. Marmomac 2022, Verona, Pavilion for Pibamarmi, detail. Photo: Davide Galli.

Opposite page, top: Figure 10. Counterproject for the "Rec" (Recreation Ground) in Bath, stadium and leisure center, view by riverbank. Bottom: Figure 11. Counterproject for the "Rec," aerial view. Images: Apollodorus Architecture.

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1 Ian McEwan, *Enduring Love* (London: Random House, 2006): 17.

2 Quatremère de Quincy (1823), as cited in Samir Younés, *The True, the Fictive, and the Real: The Historical Dictionary of Architecture of Quatremère de Quincy*, Winterbourne, UK: Papadakis, 1999), 27.

3 Leaving aside specialist publications and those with an exclusively historical orientation, see Peter Collins, *Architectural Judgement* (Montreal: McGill-Queen's University Press, 1971), chap. 1; John Hancock, "Between History and Tradition: Notes toward a Theory of Precedent," *Harvard Architecture Review* 5 (1996): 64–77; David Mayernik, *The Challenge of Emulation in Art and Architecture* (London and New York: Routledge, 2013).

4 Mark Wilson Jones, *Principles of Roman Architecture* (New Haven, CT: Yale University Press, 2000), chap. 8.

5 Mark Wilson Jones, "Genesis and Mimesis: The Design of the Arch of Constantine in Rome," *Journal of the Society of Architectural Historians* 59 (1999), 50–71; Wilson Jones, *Principles of Roman Architecture*, 123–126.

6 Ellen Perry, *The Aesthetics of Emulation in the Visual Arts of Ancient Rome* (Cambridge: Cambridge University Press, 2005), 95–96.

7 Mark Wilson Jones, "Doric Measure and Doric Design, 2: A Modular Re-reading of the Classical Temple," *American Journal of Archaeology* 105 (2001), 675–713; Mark Wilson Jones, "Approaches to Architectural Proportion and the 'Poor old Parthenon'," in *Proportional Systems in the History of Architecture. A Critical Reconsideration*, eds. Matthew A. Cohen and Maarten Delbeke (Leiden, the Netherlands: Leiden University Press, 2019): 199–231.

8 Wilson Jones, *Principles of Roman Architecture*, chap. 7.

9 Georgia Clarke, *Roman House—Renaissance Palaces: Inventing Antiquity in Fifteenth Century Italy* (New York: Cambridge University Press, 2003); Pierre Gros, *Palladio e l'antico* (Venice: Marsilio, 2006); David Hemsoll, *Emulating Antiquity: Renaissance Buildings from Brunelleschi to Michelangelo* (New Haven, CT: Yale University Press, 2019).

10 Dora Wiebenson, *The Sources of Greek Revival Architecture* (London: A. Zwemmer, 1969); Joseph Mordaunt Crook, *The Greek Revival* (London: Murray, 1972); Susan Weber Soros, *James "Athenian" Stuart, 1713–1788: The Rediscovery of Antiquity* (New Haven, CT: Yale University Press, 2006).

11 Salvatore Settis et al., *Serial/Portable Classic* (Milan: Fondazione Prada, 2015). My own reservations on the supposed extent of copying of sculpture in antiquity itself stems from conversations and visits with the much-missed Amanda Claridge, starting with my residency at the British School of Rome, when we realized that architects and sculptors shared certain precepts. Her insights, sadly unpublished in a comprehensive form, have percolated through to the work of those like Perry who rightly contest the commonplace of the "Roman copy after a Greek original." See Perry, *Aesthetics of Emulation in the Visual Arts*, esp. chaps. 2 and 3.

12 Frank Salmon, *Building on Ruins: The Rediscovery of Rome and English Architecture* (Aldershot, UK: Ashgate, 2000).

13 Mark Wilson Jones, "Palazzo Massimo and Baldassare Peruzzi's Approach to Architectural Design," *Architectural History* 31 (1988), 59–85.

14 Frank Lloyd Wright, *Modern Architecture: Being the Kahn Lectures* for 1930. Princeton, NJ: Princeton University Press, 1931.