Palladio
Instructions for Use

with texts by
Colin Rowe
Peter Eisenman

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A preamble: from Palladio to Garden City 5

Measures and Proportions, in the Virgil’s Dream

Colin Rowe
The Mathematics of the Ideal Villa 42

Peter Eisenman
The End of the Classical: The End of the Beginning, the End of the End 87

Palladio, Instructions for Use 143

Rewriting Classicism 146

Bibliography 212

Rotonda’s plan; from Palladio A., I quattro libri dell’architettura, Venezia 1570, Libro secondo, p. 19.
The idea that design is a mathematical exercise is fascinating and, at the same time, illusory. The result of this famous Colin Rowe text, *The Mathematics of the Ideal Villa*, is that, in different ways, architecture takes advantage of mathematics, uses it, folds it and transgresses it. But it is also true that this divide between the means (math) and the ends (architecture) does not diminish the importance of composition at all. On the contrary, is the architect’s ease, the arbitrariness and the originality of his choices, which manage to transform mathematics into a process that generates order, proportion, form and meaning.

At first, at the beginning of his complex argument, Rowe is in perfect continuity with the classical culture and, using a statement by Christopher Wren, bases the legitimacy of architecture on the laws of the natural world. The quotation from Wren’s *Parentalia* covers the role of an overture that, promptly, directs the reader to Rowe’s reasoning: nature is not the occasional actor that, as in the story of Vitruvius about the birth of the Corinthian capital, suggests the architect a new architectural form. Rather, nature is the set of abstract rules, set by Neo-Platonic Humanism, which architecture alone is able to receive and return to a material representation of the world of ideas.

"Geometric figures are naturally more beautiful than
irregular ones: the square, the circle are the most beautiful... There are only two beautiful positions of straight lines, perpendicular and horizontal” writes Wren, and Rowe seems to be warning us that all his reasoning will take place within these beliefs, trying to explore and explain the breadth of this territory through two apparently far-off masters, such as Andrea Palladio and Le Corbusier. Rowe’s discourse resumes the idea of classical architecture as a discipline organized according to abstract laws of nature, but also engaged in a dialogue, specific, physical, with the most obvious and most architectural aspect of nature: that is, with landscape.

Christopher Wren’s short text can sound astonishing, and even paradoxical, when it says that there is nothing more beautiful than the right angle, the square and the circle, because these are the most natural forms. We know that this is not true, literally, and that, on the contrary, these forms represent exactly what in nature does not exist. The idea of the beauty of nature, declaimed in Virgilian terms by Palladio himself, thus coincides with the idea of an architecture that includes and incorporates the deepest, most hidden laws of natural beauty. The classical order is, for Palladio, and, perhaps, for Rowe too, the measure of all human things, the knowledge and the discipline that allow us to transform the world respecting its most secret and truest order. It is a non intuitive reasoning, based on an intimate adherence to the values of the classical age and to the conviction that, for modern culture, classicism is a living and working reference.

The Rowe’s parallel, between Palladio’s Rotonda and Le Corbusier’s Villa Savoye, reveals a profound analogy on design, and also about the common confidence in the harmonic possibility of architecture, in its potentiality and vocation to present itself as a sublimated nature, such as visual focus and architectural reason of a natural landscape.

But, proceeding beyond the Virgilian idyll, Rowe leaves the two most known masterpieces and prefers to concentrate on two more complex, and maybe more difficult, projects. Then, he enters into the heart of the composition by comparing plans and facades of villa Foscari, the so-called Malcontenta, with those of Villa Stein in Garches. The analysis starts from the observation that both follow a similar scheme, based on the repetition of eight units, the alternation of simple and double spans, and a tripartite body. The adopted diagrams follow the theoretic principles of architects: Palladio considers the symmetry necessary for building stability, while Le Corbusier asserts that free plan is the inevitable consequence of the punctual
structure and Rowe, not without malice, notes that there are buildings built in traditional masonry that are asymmetrical and perfectly stable, as well as there are perfectly symmetrical framed, punctual, structures. The relationship between structure and form, therefore suggests Rowe, is essentially a theoretical production and, moreover, we may say that, for these two masters, this relationship gives life to ideological, tendentious syllogisms that pretend to derive from imaginary technological constraints pure formal determinations.

This is especially evident for Le Corbusier, because of the clarity of its five points: the free plan and the free facade (thanks to the independent structure), the window in length or the glass pane, the pilotis, the roof garden; and we can also consider, for our discours, the interior service facilities that allow to free up space from the furniture. The Corbusian theory grows on a series of operations and goals where the keyword is ‘to free’, to make each building’s fundamental element independent of one another: the plan, the facade, the structure. The project is therefore derived from the composition of parts that, in some way, have evolved and refined independently and are later assembled into the unit of the complete building.

After carefully measuring the observance and discretion that Palladio alternates with respect to the predetermined proportional relationships, Rowe comes to a remarkable observation that rescues the four centuries separating the two masters with one simple and convincing equivalence: Palladio found in section the same freedom which Le Corbusier, through the application of the five points, gained in plan. As Rowe writes: “Instead of the free plan (Palladio uses) the free section”. And it follows that, for Le Corbusier, the drawing that shows the formal matrix (proportional, but not only) of the project is the façade, while for Palladio is the plan, because is there that the rule wins, while the same rule is no more readable in the drawings related to the 'freed' parts, elevations and sections.

The beautiful dissertation of Rowe ends with the recognition of the mastery of both architects, whose works have generated, for good and for evil, a long series of replicas and imitations where rules are transformed in styles, leaving intact the incredible values of their theoretical and practical oeuvres.

After Wittkower

In the academic year 1945-46 Colin Rowe (1920-1999) was the lonely student of Rudolf Wittkower (1901-1971), at the Warburg Institute in London, where he obtained his Master in History of Arts with a thesis entitled The Theoretical Drawings of Inigo Jones: Their Sources and Scope. The relationship between the German historian of architecture and arts and the young architect from Liverpool was crucial, for the education of the second, and there is no doubt that there is a close continuity between the Wittkower’s Principles of Palladio Architecture, the seminal essay published in two separate sections, in 1944 and 1945, in «The Journal of the Warburg and Courtauld Institutes», and then included in the Architectural Principles in the Age of Humanism (1949), and Rowe’s The Mathematics (1947). The Wittkower tractatus was based on a wide bibliographical and architectural research, and, along with the analysis of Alina Payne, was in a clear relationship, deeper than evident, with the themes of the architectural modernism that were under discussion in those years. In particular, Payne identifies two aspects which make the Wittkower’ text completely different, in comparison with the previous studies on Italian Renaissance architecture, and absolutely modern.

The first aspect is the theoretical process adopted from Wittkower, who starts from a close reading of the texts which determined these architectural principles: first, the
Leon Battista Alberti’s *De re aedificatoria* (first edition in 1450) and, of course, *I quattro libri dell’architettura* by Andrea Palladio. This narrow connection between the books and the buildings means, for example, a subterranean but clear parallel with the phenomenon of the Modernist architecture which, again, put the writing – books, essays and magazines – as a complement directly integrated in the process of definition of the new architecture. And this strong relation between theory, criticism and practice evolved especially thanks to the scholars of the German area who, for political reasons, gathered in London and in the United States, such as historians and theorists Sigfried Giedion, Nikolaus Pevsner, Ernst Gombrich, and leading architects such as Walter Gropius and Ludwig Mies van der Rohe.

The second aspect which made of *Principles* a main reference book and a best seller in the modernist arena, was a quite loosian refusal of the ornament. Wittkower was radically indifferent to the materiality of the construction, to colors, textures and ornamental apparatus; Italian architecture of XV and XVI century, for him, was a refined and cerebral application of the sophisticated principles which were able to translate the myth of Roman architecture and culture in a brand new, ‘modern’, architectural language, a new classicism which becomes the timeless basis of our modern, and Modernist, era.

Humanistic architecture, in the perfect Wittkower’s enunciation, is absolutely similar and coherent with the
methodological premises and formal aims of the rationalist and hermetic wing of modernist architecture, the modern movement, of the twenties and thirties of XX century. The tools that really made Wittkower’s arguments perfect to be transferred and applied to contemporary architecture of his time were his meta-historical, timeless diagrams, which made immediately understandable the relationship between proportions, program, typology and spatial organization; eliminating, on the other side, any reference to technology, materials, and tridimensional perceptions. The diagrams, imagined to explain the planimetric schemes of the Palladian villas, became a by-pass which projected Renaissance architecture in the middle of the modernist debate. And it was his pupil Colin Rowe who, first, jumped over a gap of 450 years and compared the Palladian with the Corbusian diagrams as if they were made of the same matter, for the same world. This extremely abstracted approached allowed to go straight to the compositional questions, and, in its radical nakedness, it was perfectly aligned with two of the main currents of Modernism: the ideals of the Corbusian purism, and the functionalist reduction to the typological schemes operated, in particular, by Ernst Neufert (1900-1986), the German architect who, in the Bauhaus years, was a collaborator of Walter Gropius and Otto Bartning. Neufert’s *Baumentwurflehre (Architect’s Data)*, firstly published in 1936, sprawled widely the use of diagrams as a simplified and effectual international language for learning the principles of modernist architecture. It is also important

to remember that, in those years, one of the editors of «The Architectural Review» was Nikolaus Pevsner, the leading modernist historian and ideologist who, like Wittkower, arrived in London fleeing racial prosecution in Nazi Germany. In this perspective, in the Wittkower's Palladian diagrams we can see a reduction of the Renaissance villas to an orthodox modernist approach and, of consequence, the starting point of the Palladio's transfer into the domain of modernist architecture operated, through the comparison with Le Corbusier, by Rowe.

The strong input generated by the texts of Rudolf Wittkower, first published in the «Journal of the Warburg and Courtauld Institutes» and then collected in Architectural Principles in the Age of Humanism (1949), a book which had a large, immediate and durable echo in the international architectural debate, took Andrea Palladio again at the center of the architectural scenario. The combined effects of the splendid Wittkower's diagrams and the Wölfflinian detailed comparative analysis which Rowe exploited between the Palladio's Malcontenta and the Le Corbusier's villa Stein de Monzie, put again the classical principles at the center of the modernist debate.

As described by Anthony Vidler, the English neo-palladianism of the forties met a short life, quickly overpassed by the interest of other personalities, such as Reyner Banham and the Smithsons, towards technology and informality, tendencies which at the end led to the construction of the movement called New Brutalism, and, for other paths, to high-Tech architecture.

Nevertheless, the manneristic approach of Rowe found a direct representation, in his times, in the architectural design of James Stirling, who managed and manipulated the modernist images, matters and myths with the refined disenchantment of a modernist mannerist, an analogous of the Italian painters and architects of the second half of the XVI century studied and beloved by Rowe (see the Peter Eisenman’s report on Perspecta 41).

Stirling shared with Rowe the same citizenship, both came from and were educated in Liverpool, at the same school of architecture, and Stirling got his degree in architecture under Rowe’s supervision. But it was interesting another Rowe’s link with a great architect, the American Peter Eisenman, who mentored in a memorable Grand Tour through Italy, in 1961. In some way Eisenman, through the intense frequentation of Rowe, arrived to the Wittkower’s diagrams, something that he reinvented for his analytical drawings of Giuseppe Terragni’s architecture and, recently, for Palladio. And, coming back along the Warburg Institut’s cultural origins, Eisenman fixes Heinrich Wölfflin as a father of his own approach to architecture, considering that "Wölfflin argues that Renaissance architecture was autonomous because it was governed by an idea of formal beauty internal to its discipline, one not deduced from the characteristic exhibited in the works of a particular style but that exists in its own right" (Eisenman, 2008).
This full immersion of Eisenman in the classical Italian heritage can suggest the reason of his constant interest towards a classical idea of architectural composition, his fascination and, at the same time, his impossibility to accept a classical explicit influence.

A wide representation of this duplicity, the love and the refusal of the classical, is the reason of his seminal text, *The End of the Classical: The End of the Beginning, the End of the End*. In this essay, published in the volume 21 of *Perspecta* (1984), Eisenman establishes a possibility of maintaining the Classical as a fundamental reference, finding for it a new life free of any historicism, nostalgia and revivalism.

Before Eisenman: architecture as a cold case

"Instead of focusing on typology, geometry, proportion, or history, the analytic drawings, models, and descriptive texts presented here place Palladio in a new light, marking a departure in a sense from contemporary concerns with aesthetic ideals of surface representation, parametric projection, or figure-ground reversals in favor of conceptual and topological arrangements of solid and void that are other than the literal solid and void described by geometry and function" Peter Eisenman, *Palladio Virtuel*.

With his recent book about Palladian architectural principles, Eisenman explicitly keeps on the lessons of Wittkower's *Principles* and Rowe's *Mathematics*, but avoiding any trace of historical approach in favor of a pure formal analysis. As already explained in *The End of the Classical*, also in this last research Eisenman wants to act as an architect, as it is in his own words, establishing a strategical point of view: in his study, architectural samples are cleaned from any historical dust and dissected in an anathomical manner, such as pure formal constructs.

The bodies of evidence, the buildings, are transformed in cold cases that, independently from their origin and age, are available to be examined and (dis)solved. The buildings become corps which can be dissected, polished from any soft and liquid matter and reduced to their conceptual and geometric skeleton. Of course, in Eisenman's post-
Rowian perspective, the skeleton is the mathematic ideal or, to better say, the pure spatial and topological idea of the building. Screening the Palladian villas, Eisenman produces a X-rays representation which is quite similar with Wittkower’s and Rowe’s schemes, but with a great difference. While the first are simply the schematic and univocal (closed) representation of the plan, the Eisenman’s are deleuzian (open) series of variations which, tendendially, could be infinite. The matrix of the villa is a palimpsest, rather just a geometrical trace, whose greatness is exactlty in its generative capacity. It, the scheme, has the precise duty to proliferate, to incube and grow infinite possible compositions.

In the Eisenman’s infinite jest, there is no difference between the original and the copies, or, to be more precise, there is no original, because Palladio is already working in a post-historical condition, being a Venetian Republic citizen of the XVI century working with forms, tools and images of the archeological – and literary – remains that he studied in Rome. The perfect description of this condition, that Eisenman shares not just with Palladio but, in a sense, with all of us contemporary architects, is dedicated to the end of classical, a text that establishes a possible useful link between us and the history of architecture.

In particular, Eisenman designs a continuity with classical principles through the permanence of three "fictions": representation, reason and history, which are the vehicles to simulate meaning, truth and timelessness. For his
text, Modernism is in continuity, is still inside classical architecture because it did not cease to follow these three fictions. Now, for Eisenman, it is time to leave these fictions and start with a new beginning, with an architecture freed by these fictional aims and open to the risk of losing meaning, truth and timelessness. An architecture which can use, manipulates and reinvents the simulacra of the Classical as a basic, fundamental material which can give representation, reason and historical meaning to our time. Then, Eisenman's reasoning moves on two interlaced goals. The first is the logical demonstration of the continuity of the classic from the Renaissance to the Modernism and, ultimately, the attestation that we do not have, in fact, an architecture, a history and a culture outside the classical. The second goal is the institution of the possibility to rebuild architecture on a base that, to be quick, could be defined as postmodern, or post-historical, and that he calls with the term: non-classical. An architecture that is defined by subtraction, for its deliberately withdrawal from the simulation of classical architecture. After all, Eisenman's demonstration is based on a process of smuggling, demystification and radical burial, an alchemical distillation process at the end of which remains, it should remain, the essence of architecture. But it is also true that this process is based on the elements of its denial: the potentiality of non-classical architecture can only be measured in relationship with the classical one, and therefore its reasoning is still a long, elliptical reference to representations, reasons and histories of classical narratives constructed by theorists and architects, as well as Andrea Palladio, of the Italian Renaissance.