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The Palladio Method: Draughtsman and Designer, Mason and Engineer. Learning from the Master

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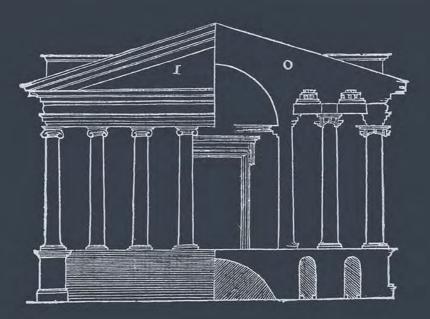




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Thorsten Bürklin and Martin Ebert (eds.)

The Palladio Method





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FH MÜNSTER University of Applied Sciences

MSA FB Architektur Münster School of Architecture



The Palladio Method

Draughtsman and Designer, Mason and Engineer

Learning from the Master

[transcript]



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Foreword

This book project was originally conceived in the spring of 2017, on a study trip to Northern Italy with students from the MSA Münster School of Architecture. Experiencing Palladio's works first-hand, we realized that there was more to his architecture than that currently evidenced in historical research. It was while we were visiting the Redentore church in Venice that we decided to have a closer look. Inevitably, the discussions led us to ask what lies "behind" the surface and the ornamentation. Reflecting on spatial design, construction, and the use of materials, we wanted to learn about methodology.

Finally, after the restrictions of the pandemic were lifted, we were able to organize a symposium at the MSA. Architects and architectural historians from Italy, the Netherlands and Germany met on May 13 and 14, 2022. From the outset, the purpose of the conference (The Palladio Method) was to consider Palladio as a draughtsman and designer, mason and engineer, innovator and image maker. Participants were asked to explore what can be learnt in modern practice from the 16th century master. This volume collects the contributions from the symposium. Two papers have since been added by authors unable to attend the conference.

We would like to thank the FH Münster, University of Applied Sciences, and the MSA Münster School of Architecture for their generous support in organizing and running the symposium, and in funding the publication of the book. We would also like to thank the Palladio Museum and the CISA Centro Internazionale di Studi di Architettura Andrea Palladio in Vicenza for their collaboration and the supply of drawings and images for this publication.

Thorsten Bürklin and Martin Ebert

Münster, July 2023

"Io mi rendo sicuro, che appresso coloro, che uederanno le sotto poste fabriche, e conoscono quanto sia difficil cosa lo introdurre una usanza nuoua, massimamente di fabricare, della qual professione ciascuno si persuade saperne la parte sua; io sarò tenuto molto auenturato, hauendo ritrouato gentil'huomini di cosi nobile, e generoso animo, & eccellente giudicio, c'habbiano creduto alle mie ragioni, e si siano partiti da quella inuecchiata usanza di fabricare senza gratia, e senza bellezza alcuna; [...]."

Palladio 1570, II 4 (Cap. III)

"I am sure that they, who shall look upon the Buildings I am going to give the draughts of in this Book, and they, who know how hard it is to introduce a new way, particularly into the Art of Building (in which every one presumes to be knowing) will think me very happy, that I have met with Persons who were generous, judicious, and reasonable enough to hear and approve my Reasons; and afterwards to give over that old way of Building, which is without any proportion or grace at all: [...]."

Palladio / [Leoni (publisher)] 1742, SECOND BOOK, 45 (Chap. III)

The Palladio Method Introduction

Palladio's Method(s)

The essays in this volume explore the question of methodology in Palladio's work. From the perspective of today, they ask what might be gained for the current architectural and cultural debate. Reflecting on Palladio's method(s) it should be stated that we cannot talk about *the* Palladio method. There will be no easy-to-understand formula. Rather one could identify *several* Palladio methods. In any case, the inquiry demands scientific precision and professional honesty, examining one's own goals, purposes, and horizons for action.¹

Short-sighted analogies with the present must be avoided. Even if Palladio was a master of inventing images and applying a copy-and-paste-method to his design, only a shallow view may create simplistic parallels to today's situation. In our times of a pervasive disregard for context, one can no longer even dream of binding narratives that go beyond the requirements of capitalism and societies' desire for spectacle and consumption.² Economic pressures and the struggle to gain visibility make it difficult to resist the temptation of using superficial analogies and an enticing imagery in an effort to legitimize contemporary architecture. Instead, when it comes to Palladio's methods, it is particularly significant that he did not simply copy pieces from the ancient repertoire. By assembling them into a theoretical edifice, he shaped the ideological and pragmatic space in which he designed and built. In this sense, Palladio is far from us – ideologically and practically.

The approach towards Palladio's methods needs to be justified through an expressed interest.³ Yet, it would be inappropriate to expect a complete programmatic explanation from the onset. Rather, one should expect, in line with Gadamer's hermeneutics, that the theoretical and pragmatic horizon develops alongside the investigation of the subject as a whole: "He, who wants to understand a text always projects.⁴" The same is true for understanding architecture or an architectural method: The point is, through critical discourse, to create a theoretical context and to make the historical object accessible from a contemporary perspective.

Learning with the Past

We have to consider the legitimacy of the approach: would one do an injustice to Palladio's work or would it receive unfair or inappropriate treatment if we ask about his methods from today's perspective?

Palladio wrote about introducing "a new way" (una usanza nuoua)⁵ by refering to an interpretation of Classic Roman architecture. In doing so, was he not himself plundering the ancient models for his own purpose?⁶ And was he not downright radical when he "corrected" the facts found and recorded on site—in view of the ancient ruins of Rome—with a look at an "ideal" classicism he was striving for?⁷ As Manfredo Tafuri said, he took the liberty—"to 'de-historicize' and destroy the symbolic structure of language itself."⁸

Put simply:

Palladio appropriated antiquity—we are appropriating Palladio.

However, doubts remain about the legitimacy of the appropriation of history. At this point, we should mention a dispute that arose between Bruno Zevi and Manfredo Tafuri in 1964 on the occasion of the exhibition *Michelangelo architetto* in Rome.⁹ Zevi was convinced that history could be employed to better understand the present since the question was raised about the relevance of Michelangelo's work for the modernist architectural discourse. In this context, Zevi, engaged with volumetric and spatial interpretations, asked students from the IUAV (Istituto Universitario di Architettura di Venezia) to perform "critical plastics"¹⁰, analyzing, for example, the Capitoline Square in Rome. Tafuri, however, argued that history should not be instrumentalized, that it cannot be understood as an imperative for action in the present.¹¹

The dilemma lies in the fact that both positions are valid. After all, we can understand the intellectual, political, and economic setting that was underlying the construction of the Capitoline Square in sixteenth-century Rome only from a distance. In no way will we be able to appreciate the historic situation in the same way as Michelangelo's contemporaries did. Any appropriation from today's perspective is always an interpretation which leaves the traces of one's own interests like a genetic code on the placement of history.¹² And this is Tafuri's objection: an "original" view of Michelangelo or—in our case Palladio—remains inaccessible. However, we can create viewports that bring to light individual aspects of the original that have relevance—for us—from our point of view. This is what Zevi was interested in. Even if the initial idea of the creation of a work of art or architecture did not anticipate later interpretations, these nevertheless belong to its reality. Like a child leaving home, the work detaches itself from its author and his intentions. As long as they are relevant, the possibilities of interpretation are basically inexhaustible—as Hans-Georg Gadamer put it.¹³

Whenever architectural history and theory is understood this way, then the consideration of the past is always a consideration of the present. Thus, it is quite legitimate to make use of historic resources for our reflection on architecture and our professional practice. Neither art, nor architecture or literature can be thought of without reference to what already exists. However—and here Tafuri is right—it would be naïve to believe that historical knowledge could simply be translated into action, i.e. into designing or planning. His objection probably was motivated by the concern that the works of the 16th century could be instrumentalized in the context of a capitalist process of exploitation. After all, subsequent developments in the art and tourism markets, mining the global treasures of cultural achievements, prove Tafuri right.¹⁴

Nevertheless, together with Bruno Zevi, one can also encounter history in another way that is neither about instrumentalization nor appropriation. Probably little is learned *from* history. Nevertheless, we can learn *with* it. We can let it tell us something that leads to critical reflection and perhaps even to questioning our own assumptions.¹⁵ This is possible because themes such as simplicity, reduction, economy, representation, monumentality, and the use of materials—significant terms in Palladio's work have always pervaded architectural endeavour and still do.

Even if we do not always realize it—as, for example, it is the case with grammatical structures of everyday language—, the tradition emanating from Palladio plays a significant role in the development of European and Western-dominated discourse on architecture.¹⁶ We all are part of history, or perhaps part of different or parallel histories. These, however, can only be understood from a present standpoint, or standpoints.¹⁷ We do not have any other option than to look at the world from the present. And there is no independence from context, we can only act within it.

But precisely herein lies the creative potential of our objective, and profession—which brings us back to methodology. Our focus and field of action can be realigned if the context, i.e. the traditions in which we operate, are known. Yet, while in the past a canon formed a reliable framework, nowadays, the sometimes disparate and competing cultural, social, and political settings in which we live and work, confront us with the difficult task of securing reliable contexts.¹⁸ Therefore, designing is more than just the creation of form. It includes understanding the world in which we live and act.

Beyond the Superficial

In recent decades, architects (like the rest of society) have been confronted with a number of dramatic challenges: Climate change, scarcity of resources, and economic pressure. Added to this comes a profound crisis in the reputation of architects in society, as planners are struggling with the values of design and construction, exploring what architectural culture could mean in the present.

In this light, dealing with Andrea Palladio may seem like escapism: there is comfort in the memory of an epoch in which the world was supposedly manageable and orderly; but that would be a fallacy. Palladio himself lived in difficult times. On December 10th, 1508—a few days after his birth¹⁹—, an armed alliance, the so-called League of Cambrai, was formed against Venice. It included the Holy Roman Empire of German Nations, the kingdoms of France and Hungary, the Crown of Aragon and the Papal States. In the following decades the dependence on grain imports from the Ottoman Empire weighed heavily on the *Serenissima* and the Veneto.²⁰ Famines were the order of the day. As a result, parts of the Venetian nobility, with a long tradition in trading overseas, were now required to monitor the food production on the *terra ferma* (the mainland of Venice).²¹

International competition and wars, uncertainties in trading, shortage of food, plagues—sounds familiar? This is today's daily news, in a different guise! Moreover, the discovery of America, the reformation, and the *Sacco di Roma* were outstanding historical events that had an enormous impact on the societies of the 16th century. The European world was in crisis, and it would never be the same again.

In this context Palladio operated in various fields that went well beyond the creation of beautiful surfaces. He was engaged in the large-scale drainage of the marshlands of the *terra ferma* that allowed the subsequent exploitation of the newly created farmland. There he developed a new design for the typology of the Venetian villa, from where the nobility was able to control agriculture and trade, and where, at the same time, his clients found an appropriate place of representation.

Palladio was the architectural figurehead of a (relatively small) group of noble men and intellectuals in northeast Italy—in Vicenza, in Venice, and in the surrounding countryside—who devoted themselves to the illusion of re-creating the life of Roman antiquity.²² Thus, Palladio's hyper classicism, pitched against his time and the Mannerist tendencies coming from Rome, was aligned with an ideological horizon which—in a certain way—was already out of time, but could still be identified as a reasonable framework for thought and action. The frescoes in Villa Barbaro or Villa Emo, which anchored the manor houses as the ideological centers in an "antique" world, tell us about the yearning, but also of the futility to make these dreams a reality.²³

Palladio was guided by the conviction that he could make a significant contribution to cultural innovation. With his work, he gave the cities and the landscapes of the Veneto a distinctive face, one that is still present today. Palladio was a draughtsman and a designer, a mason and an engineer, an innovator and an image maker. He used a comprehensible architectural language, the grammar which he laid down in the Quattro Libri. Thus, he had developed an intellectual and creative horizon that served as a contextual framework for designing and for creatively shaping his world in his time. Perhaps, in this sense, one can speak of a Palladio method, or Palladio's methods. This is not about a dogmatism of design rules to be followed according to a fixed canon. If it were, one would neither understand the façades of the Palazzo Valmarana or the Loggia del Capitaniato in Vicenza nor the spatial structure of the church Il Redentore in Venice. Palladio had already introduced non-conformism himself.

Towards Process

This collection of essays looks at aspects of Palladio's work from a perspective of process. We want to understand the "how" and less the "what". But as we have established the interest in Palladio's methods from today's perspective, further questions arise, including, who asks these questions and what might be gained from exploring and, perhaps, answering them? What exactly can we learn from Palladio's methods, from discovering and understanding them?

When looking to the present and the future of architectural practice, there is little insight to be gained from a traditional formal approach: A symmetrical plan arrangement based on harmonic proportions rarely satisfies contemporary domestic requirements and, exceptions aside, there is little meaning in applying Palladian decoration to the front of a building. Today's society is less concerned with recreating a Roman world and more with an existential crisis of climate change and a fairer distribution of wealth. Perhaps paradoxically, despite the interest in process, we still approach buildings from the front, or the outside. We need to start with what we see and examine the facts before our eyes. Layer-by-layer we want to dig deeper, explore the substance behind the image and examine a number of these process-related questions:

- 1. How was Palladio able to borrow fragments from antique architecture? How was antique architecture documented and then how did it become available as a repertoire for new architecture? As Palladio's works were created in the Veneto and not in Rome, it was not possible to copy pieces 1:1; they had to be translated from the ruin to then become available for builders to "reproduce" them hundreds of kilometres further north. How was this "visual quarry of references" created, transcribed and made available to Palladio and his contemporaries?
- 2. How did Palladio compose the reliefs in his façades? What are the patterns that he followed or the systems he used?
- 3. How was imagery applied to the inside of his villas? What does this imagery reflect and how did this change the spatial experience?
- 4. How were Palladio's buildings constructed? What methods did he use and how were they developed?
- 5. How do building and image relate, and how did the use of orthogonal projection predetermine the connection between internal spaces, structure and external appearance?
- 6. What does it mean to be an architect (in a Palladian sense)?
- 7. And what importance did ideological and zeitgeist aspects play in the introduction of "a new way" of building?

Studying the methodology behind the work rather than just the outcome will allow us to understand a variety of aspects of design and construction. It will help to compare the work of different architects independent of style and epoch, as well as to clarify the respective approach to solving problems.

So, the fundamental aim of this research is to begin to understand how Palladio may have worked and which processes he applied and how this can help us today to become more competent and effective with our own endeavours; whether this be designing buildings, explaining the background of historic action, or simply enjoying architecture more by understanding how it was conceived.

Endnotes

If not indicated otherwise, all translations are by the authors of the introduction.

- 1 See Bürklin 2013, 53.
- 2 See Debord 1992/1967; Baudrillard 1970.
- 3 This is an argument that goes beyond mere historical reflection.
- 4 Gadamer 1975/2004, 269. / Germ.: Gadamer 1960/1990, 271: "Wer einen Text verstehen will, vollzieht immer ein Entwerfen."
- 5 Palladio/[Leoni (publisher)] 1742, SECOND BOOK, 45 (Chap. III); Palladio 1570, II 4 (Cap. III).
- 6 See Forssman 1965, 41: "[...]: Römische Größe in venezianische Form gegossen. Genau das muß Palladios eigenes Anliegen gewesen sein, nachdem er von seinem zweiten Romaufenthalt ins Veneto zurückgekehrt war." / Engl.: "Roman greatness in Venetian form. This must have been precisely Palladio's intention after he returned to the Veneto from his second stay in Rome."
- 7 Bruschi 1978, 21: "Perfino le complesse organizzazioni spazio-strutturali delle antiche terme, come è stato osservato, sono sottoposte ad un deciso processo di riduzione e di semplificazione." / Engl.: "Even the complex spatial-structural organizations of ancient baths, as has been noted, underwent a decisive process of reduction and simplification."—See also Bruschi 1978, 25: "Rifiuta nella sostanza la lezione spaziale dell'architettura imperiale e pure, in larga misura seppur ambiguamente, i suggerimenti non puramente linguistici dei cinquecentisti romani." / Engl.: "In essence, he rejects the spatial lesson of imperial architecture and also, to a large, although ambiguous, extent, the not purely linguistic suggestions of the Roman sixteenth-century."
- Tafuri 1969, 127; "Essa [la tipologia; the editors] non è più usata come struttura invariante di soluzioni 8 particolari [...], bensì, all'opposto, come risultato di un'articolazione tendenzialmente infinita di 'soluzioni' grammaticali ripetibili. Ma tale scelta comporta una conseguenza ricca di significati. Per poter usare davvero liberamente il lessico classicista e gli apporti delle fonti contemporanee, è infatti necessario compiere una distruzione concettuale: bisognerà disarticolare tutti i nessi sintattici interni al linguaggio e alle tipologie assunte come fonti e, consequentemente, compromettere i significati simbolici ad esse connessi. Bisognerà compiere, in altre parole, l'operazione inversa a quella, preliminare, dello scavo filologico, procedendo a 'de-storicizzare' e a distruggere la struttura simbolica del linguaggio stesso." / Engl.: "It [la tipologia; the editors] is no longer used as an invariant structure of particular solutions [...], but, on the contrary, as the result of a tendentially infinite articulation of repeatable grammatical 'solutions'. But such a choice carries a sequel that is rich in meaning. In fact, in order to really use classicist vocabulary and the contributions of contemporary sources freely, conceptual destruction is necessary: it will be necessary to disarticulate all the syntactic connections internal to the language and typologies assumed as sources and, consequently, to compromise the symbolic meanings attached to them. It will be necessary to perform, in other words, the reverse operation to that, preliminary, of philological excavation, by proceeding to 'de-historicize' and destroy the symbolic structure of language itself."-See Bürklin 2019, 88-89.
- 9 The exhibition was curated by Paolo Portoghesi and Bruno Zevi; see Leach 2013, 501.
- 10 See Biraghi 2019, 50.
- 11 See Leach 2013; Biraghi 2019, 50-52.
- 12 See Gadamer 1960/1990, 289: "Bei den Geisteswissenschaften ist vielmehr das Forschungsinteresse, das sich der Überlieferung zuwendet, durch die jeweilige Gegenwart und ihre Interessen in besonderer Weise motiviert." / Engl.: Gadamer 1975/2004, 285: "Rather, in the human sciences the particular research questions concerning tradition that we are interested in pursuing are motivated in a special way by the present and its interests."

- 13 Gadamer 1960/1990, 379: "Geschichtliche Überlieferung kann nur so verstanden werden, daß die grundsätzliche Formbestimmung durch den Fortgang der Dinge mitgedacht wird, und ebenso weiß der Philologe, der es mit dichterischen oder philosophischen Texten zu tun hat, um deren Unausschöpfbarkeit." / Engl.: Gadamer 1975/2004, 366: "Historical tradition can be understood only as something always in the process of being defined by the course of events. Similarly, the philologist dealing with poetic or philosophical texts knows that they are inexhaustible."
- 14 Palladio's architecture has become an important offer on the tourism market.
- 15 See Gadamer 1960/1990, 273: "Die hermeneutische Aufgabe geht von selbst in eine sachliche Fragestellung über und ist von dieser immer schon mitbestimmt. [...]. Wer einen Text verstehen will, ist vielmehr bereit, sich von ihm etwas sagen zu lassen." / Engl.: Gadamer 1975/2004, 271: "The hermeneutical task becomes of itself a questioning of things and is always in part so defined. [...]. Rather, a person trying to understand a text is prepared for it to tell him something."
- 16 This is not about the role of architecture of Classicism and Palladianism in the context of representation and exercise of power of European and North American colonial rule; see Nightingale 2012, esp. 79–88, 218–224. As important as this aspect is: the use of architecture (and urban planning) as an instrument of domination is not limited to historical styles. The so-called classical or international modernism was also used in this sense; see Bader 2009; Mattioli 2009.
- 17 See Gadamer 1960/1990, 281: "In Wahrheit gehört die Geschichte nicht uns, sondern wir gehören ihr." / Engl.: Gadamer 1975/2004, 285: "In fact history does not belong to us; we belong to it."—The dislocations of Peter Eisenman (see Eisenman 1995, 145–150, Die blaue Linie) in particular are based on the concept of *locus*.
- 18 See Mille plateaux from Gille Deleuze and Felix Guattari (Deleuze/Guattari 1980).
- 19 See Beltramini 2008a, 4.
- 20 See Beltramini/Burns (eds.) 2008, 236.
- 21 See Holberton 1990, 3-14, 162.
- 22 One can think of the architectural staging apparatus built under the direction of Giangiorgio Trissino on the occasion of the entry of Bishop Niccolò Ridolfi into Vicenza in 1543. Andrea Palladio planned a neoclassical mock architecture that covered the house façades along the processional route. See Barbieri 1997, 57.
- 23 See Holberton 1990, 164-178; Bentmann/Müller 1992, 51-59.



The Empty Space, the Enclosure and the *boîte à miracles:* Let's Go Back to Palladio

Some one said: "The dead writers are remote from us because we know so much more than they did." Precisely, and they are that which we know. (T.S. Eliot, 1920¹)

History as Project

There are complex reasons and forms that determine the link between Ancient and New if we examine it in view of the socalled classical architecture. This is even more the case if this link is sought in modern and contemporary architecture.

Affirming that the most significant component of a master's work lies in his ability to evoke the Ancient and transmit the spiritual and moral legacy that made architectural *inventio* possible is still an open question today. It is a complex subject of discussion in the academies of architecture, above all if one wants to face the thorny theme of the relationship with Tradition and History, both in relation to the Ancient and in its identification with a supposed and wanted spiritual continuity.

We are well aware, for example, of the value that the architects of Italian Rationalism attributed to Tradition (from Giuseppe Terragni and the Gruppo 7 and the articles published in *Rassegna* *Italiana* in 1926–27 to Giuseppe Pagano and Edoardo Persico in the pages of *La Casa Bella* and in the exhibitions of the Milanese Triennale etc.) and the need to continually evoke the cultural bond of modern architecture with ancient, and in particular with the "Roman" architecture.²

It is a matter of validating a working method that feeds on memory and accepts the comparison with history as a *modus operandi*, i.e. as a research that investigates the ancient, compares it to and reconceptualizes it in the theories and culture of its time.

In this sense, the architectural project becomes a place of research and theoretical advancement that measures and substantiates the relationships that thought—Action—establishes with one's personal history, with the culture of one's time and with the creative process.

In investigating and studying ancient or modern places and architectures, we recognize or attribute to them a meaning which in some cases becomes a transmissible value for the architecture and the city of our time. As Works—which deeply capture concepts and techniques of the ancient lexicon—they evoke their essence and establish a "cultural" bridge of reference with us and our history.³

Andrea Palladio is an emblematic case of this way of looking at history and interpreting it. Still today, at a distance of time, his works continue to educate us (beyond stylistic stereotypes) and, as if we were immersed in a sort of "Siberian education", teach, for those who know how to understand its depths, the very essence of ancient architecture.

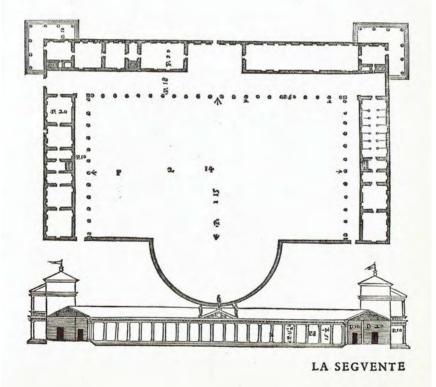
In addition to his monumental work, as a legacy, he has left us a working method which, in the simplicity of the tools, in the geometric schematic nature of the adopted architectural types, as well as in the frankness of his observations reported in his Treatise-Manifesto, manages to face complex aspects of reality, and declines and transfigures them according to his own poetics [fig. 1].

1 Palladio 1570, Cover page.



SECONDO

LA FABRICA fottopofta è in Campiglia luogo del Vicentino, & è del Signor Mario Repeta, ilquale ha efequito in quefta fabrica l'animo della felice memoria del Signor Francefeo fuo padre. Le colonne de i portici fono di ordine Dorico : gli intercolunnij fono quattro diametri di colonna : Ne gli eftremi angoli del coperto, oue fi ueggono le loggie fuori di tutto il corpo della cafa, ui uanno due colombare, & le loggie . Nel fianco rincontro alle Italle ui fono ftanze, delle quali altre fono dedicate alla Continenza, altre alla Giufitia, & altre ad altre Virtù con gli Elogij, e Pitture, che ciò dimoltrano, parte delle quali è opera di Meffer Battifta Maganza Vicentino Pittore, e Poeta fingolare : il che è ftato fatto affine che quefto Gentil'huomo, il quale riceue molto uolentieri tutti quelli , che vanno à ritrouarlo ; poffa alloggiare i fuoi foreftieri, & amici nella camera di quella Virtù , alla quale efsi gli pareranno hauer più inclinato l'animo. Ha quefta fabrica la commodità di potere andare per tutto al coperto; e perche la parte per l'habitatione del padrone, e quella per l'ufo di Villa fono di vno ilfeffo ordine ; quanto quella perde di grandezza per non effere più eminente di quefta ; tanto quefta di Villa accrefee del fuo debito ornamento, e dignità, facendoli vguale à quella del Padrone con bellezza di tutta l'opera.



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It can be said that his work is based on a theory of Works, as an expression of a research of compositional-spatial nature, which identifies and feeds on the Works themselves. For a contemporary architect, reasoning on Palladio's method, showing possible design ways, brings about a particular investigative aspect that looks at the work in its constituent and compositional elements: the articulation of the plans according to tripartite elementary schemes, the geometric-spatial relationship between the plan and elevation of the buildings, the theme of the basement as a principle of relationship with the surroundings, the art of conceiving the façades as the superimposition of the Orders or of architectural and spatial sequences, etc.

The relationship between history and design, in Palladio, is always revealed and, in some cases, as in one of his most enigmatic works (the "metaphysic" Villa Repeta in Campiglia dei Berici which we will discuss later), takes on the most evident characteristics of Ancient architecture, to the point of identifying with it [fig. 2].

Above all, the starting point from which some reflections emerge and are placed in terms of design pretexts should be noted, just as Palladio's works express the authenticity of their existence as works of art of their time. At the heart of this thought, one remembers a significant proposition by Ernesto Nathan Rogers on the particular link between the concept of conserving and that of building. This should be taken as a principle to be read in architectural terms. Rogers observes: "[...] conserving and building are moments of the same act of conscience, because both are subject to the same method: conserving has no meaning if it is not understood in the sense of updating the past, and building has no sense if it is not understood as a continuation of the historical process: It is a question—he concludes—of clarifying the meaning of history to us".⁴

2 Villa Repeta. In: Palladio 1570, II 61.

Open Spaces and Urban Voids

The invention of San Giorgio Maggiore in Venice, which will soon become the extraordinary urban backdrop of Piazza San Marco, coincides with the construction of a piece of the city. Conceptually, the project creates a dialogue with the theme of urban conservation-transformation in continuity with the history and the architecture of the city of Venice.

Looking from the entrance to Piazza San Marco under the clock tower beyond the basin towards San Giorgio Maggiore, you can see the relationship between the island of San Giorgio and the Piazzetta and the space in front of the square itself.

What is captured in Palladio's proposal is above all his idea of perceiving the value of the water space's void and of the whole part of the city. In this case the Palladian invention of replacing the modest horizon of that part of the San Giorgio island with a new monumental façade gives the spatial composition a double figurative dynamism: of the city's urban continuity, beyond the consolidated city, and—at the same time—of architectural discontinuity, the result of a great scenographical contribution [fig. 3].⁵

In 1500, Jacopo de' Barbari created the first detailed map of the city, a bird's eye perspective drawing of the roofs of Venice. One can see the city from the entrance of the basin of San Marco, the islands, and in the foreground the island of San Giorgio Maggiore, which at the time was also known as the island of Cypresses. In de' Barbari's map it appears as one of the many islands scattered across the lagoon, without any relationship with the city or monumental emphasis. Actually, analyzing the drawing carefully, it can be seen that the volume of the pre-existing church is located inside the Monastery, circumscribed, isolated and far from the city [fig. 4].



3 San Giorgio Maggiore





4 Jacopo de' Barbari, *View of Venice* (also known as de' Barbari Map), 1500, Museo Correr, Venezia. Next to representative, scenic and monumental Venice—the quintessence of this part of the city that borders the basin—the island appeared peripheral. On the edges it was marked off by low and modest houses, with a limited front and devoid of urban quality. As Frederic C. Lane so effectively reports [fig. 5, 5a]: "When Palladio designed the church and monastery, nondescript structures in front of the church interfered with such a view, [...] they were removed so as to give an unimpeded view from the Ducal Palace of the façade of the church. Without such buildings as Palladio designed for San Giorgio Maggiore, that side of the Bacino San Marco would merge into the low, unstructured horizon of the island-spotted lagoon. As it is, the great sheet of water is enclosed within the architecture of the city."⁶

The Palladian invention rebuilds the missing side of the urban scene of that part of the city: the layout of the new church rotates, the buildings in front of it will be demolished and a large square-churchyard overlooking the basin will be designed.

Beyond the well-known triangulation, which is created between the three monumental poles of the basin of San Marco (San Marco, Punta della Dogana and San Giorgio Maggiore), what takes on even more value today is the idea of "urban stage", of the city as a theater, a significant and absolutely modern example of the construction of a piece of the city [fig. 6]. At that time, the only example of a church overlooking the lagoon was that of the extraordinary project by Mauro Codussi for the church of San Michele in Isola (1468–1470), with the splendid Istrian stone façade.⁷

Certainly, Palladio understood its urban value due to the audacious position that the church assumes with respect to the lagoon and in relation to the water shore. The Fondamenta Nove had not been built yet and that part of the city facing north showed the signs of an unadorned and fragmented back side, "a border still largely undefined, both from a functional point of view and in a physical sense" from which stood out, unique in its kind, the icy Codussian profile [fig. 7].⁸

5 a

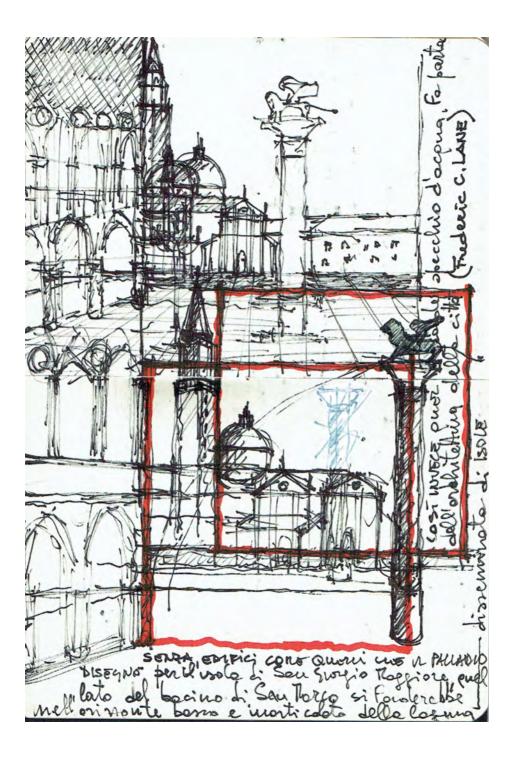
Bonifacio De' Pitati, Annunciazione e Padre Eterno in Piazza San Marco, 1540–1545, detail.

5

Bonifacio De' Pitati, Annunciazione e Padre Eterno in Piazza San Marco, 1540–1545, Gallerie dell'Accademia di Venezia, sala XII.









Even more extraordinary, in terms of composition and scenography, will be Palladio's project for the island of San Giorgio Maggiore overlooking the basin of San Marco. Its spectacular scenography, a large composition is dominated by the relationships that the buildings interweave at a distance from each other.

That architectural space will become a theoretical point of reference for understanding both the role of urban voids within the city and the visual value attributed by Palladio to his own architecture in the context of Venice and the Veneto.

6

Drawing of the compositive scenes of Bacino San Marco, 2016. Drawing by the author.

7

Mauro Codussi, San Michele in Isola, 1468 and following.



Again, Lane reminds us how even Palladio's villas were positioned so as to be perceived from afar.⁹ Much later, Giuseppe Samonà will understand the compositive value of that water space and theorize—taking inspiration from the Palladian experience—the theme of urban voids as a design approach to the complexity of the contemporary city.¹⁰

Palladio, with the invention of San Giorgio Maggiore and later with the project for the church of the Zitelle and the construction of the church of the Redentore on the Giudecca island—following the example of Codussi for San Michele in Isola—will show a new vision of the lagoon city's space. Paraphrasing Bettini, one may speak of a worthy example, albeit still *in nuce*, of the "poetics of the open form" which represent a clear signal for the future development of the city of Venice and its theorization [fig. 8].¹¹

In Dialogue with the Ancient

While he designs, Palladio writes and draws. In the *Quattro Libri dell'Architettura*, together with the drawings of the ancients
—studied and redesigned—he will publish a summary of his projects. This will be a further affirmation of his working method:
"The *Quattro Libri* (Venice 1570) constitute his authoritative architectural legacy, in which he establishes the formulas for

8

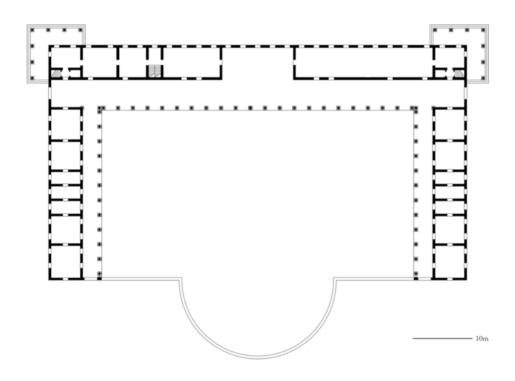
Perspective view along the Canale della Giudecca, highlighting the Palladian architectures of San Giorgio Maggiore, Zitelle, and Redentore. the orders, for the dimensions of the rooms, for the stairs and for the design of the details. In the *Fourth Book* he published the renderings of the Roman temples which he had carefully studied, and in the *Second* and *Third Book* (as no architect before him had done) he offered a sort of retrospective exhibition of his own projects. Of clear and concise language, effective in the communication of complex information thanks to the combination of tables and texts, the *Quattro Libri* represent the most valid illustrated work of architecture published up to that time."¹²

From this also comes his major influence on the world known at the time, i.e. the Nordic and overseas world which would adopt the Palladian style as its *koinè* for its most representative buildings. But what is still perceived today in Palladio's *Quattro Libri dell'Architettura* is this modernity as a product of synthesis that expresses, in some cases even radically, the relationship between tradition and innovation, between history and design.

This is an attitude common to all Italian architectural culture from Vitruvius to Leon Battista Alberti, from Palladio to Terragni, and which is expressed in the contemporary world, with different intentions and interpretations, even by some masters of the modern and contemporary architecture: from Ignazio Gardella to Aldo Rossi, from Guido Canella to Gianugo Polesello, just to name a few.

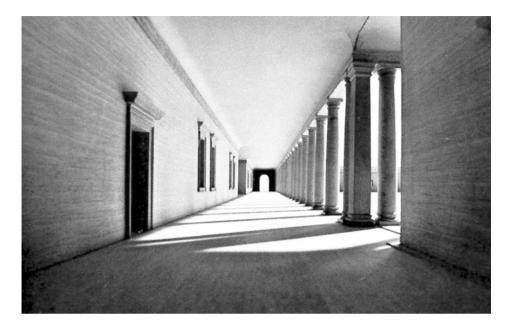
In other words, this affirmation will be the expression of a spirit shared by a certain design culture interested in searching the relationships between the history of architecture and architectural design, in a relationship of continuous typological transformation between tradition and innovation, between new and ancient. Between our present and our past.¹³

"Italian architecture thus becomes, at least from the Renaissance onwards, an architecture of transformation, as it establishes a relationship, different from time to time, between the conservation of the existing and the design of the new, between project architecture and historical architecture, between tradition and



9

Villa Repeta, Piazza Vecchia, Campiglia dei Berici (VI), ipotesi ricostruttive della pianta (redesign of the plan).







9 a Model of Villa Repeta, colonnade.

9 b Model of Villa Repeta.

10 Model of Villa Repeta. innovation, along a path of experimentation that has always valued, even in times of apparent detachment, memory and history."¹⁴

Another example of extraordinary modernity and somewhat "singular in Palladio's production" will be the project for the villa of Francesco and Mario Repeta built in Campiglia dei Berici in the mid-16th century. It will be a further proof of the Palladian *res aedificatoria*.¹⁵

Of this project, nothing has survived except the plan and elevation drawing of the villa and the description in the *Quattro Libri dell'Architettura*. What emerges with unprecedented relevance is the figure generating the overall plan, a repeated sequence of colonnaded porticoes that run along the sides of the various buildings without interruption, like a colonnaded square, or rather a *forum* in the manner of the Latins:

"Ha questa fabrica la commodità di potere andare per tutto al coperto; [...]; quanto quella perde di grandezza per non essere più eminente di questa; tanto questa di Villa accresce del suo debito ornamento, e dignità, facendosi uguale à quella del Padrone con bellezza di tutta l'opera".¹⁶ (Engl.: "This construction has the convenience of allowing to walk everywhere indoors; [...]; how much one part loses in size by not being more eminent than the other; so much does this Villa increase its due ornament and dignity, making itself equal to that of the master with the beauty of the whole work.")

The elevation drawing shows the villa which actually differs from the other buildings only by the presence of a timid tympanum—with statues—erected in the center and aligned with the courtyard. The general layout presents itself as an inhabited enclosure apparently without scale distinctions.

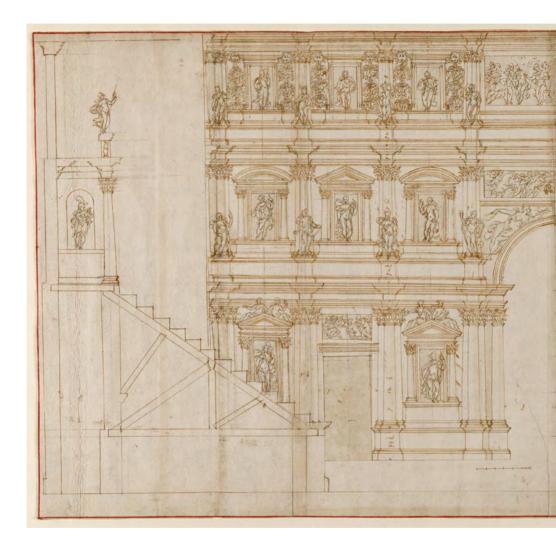
It is a project in which the absence of a main volume predominates as if Palladio had chosen to renounce spectacularization. Looking closely at the plan and elevation of the villa, however, some variations can be noted: such as the choice to differentiate the depths of the porticoes (18 Vicentine feet for the main body and 10 for the side buildings, while the volumes of the buildings remain unchanged inside), or the two twin corner solutions, with small towers (two dovecotes) with open and superimposed loggias set against each other [fig. 9, 9a, 9b, 10].

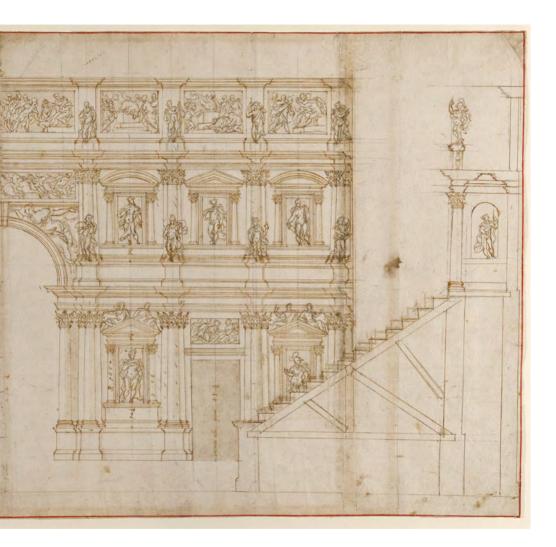
Once again, the reference to ancient architecture and the interest in archeology are evident, and in this case also corroborated by the collaboration with Daniele Barbaro who, precisely at the time of the Villa Repeta project, was completing the annotated translation of the *Dieci Libri dell'Architettura* by Vitruvius: "It is therefore an invention [that of Villa Repeta; Armando Dal Fabbro] from the same period as those inspired by studies on the Books of Vitruvius and on ancient Roman villas. In fact, in 1556 the architect had completed the drawings for the Commentaries of Barbaro to the Ten Books of the Latin treatise. Therefore, the master from Vicenza developed his idea by imagining a large courtyard with architraved porticoes on three sides, with a single Doric order of twenty-one intercolumns in front and eleven on each side."¹⁷

It is another distinctive sign of Palladio's vocation to express the value of architecture in few repeated modular elements, by "[...] making use of the simplest, most normal and measured, indeed chastised, forms and common and often humble materials."¹⁸

An Ancient boîte à miracles

Of a different nature, but equally representative of his poetics, will be the extraordinary reinvention of the Teatro Olimpico in Vicenza, located inside a pre-existing building: By adapting the three constituent parts—cavea, orchestra and scene—of the ancient theater to the existing rectangular lot, deduced from the Vitruvian canons as well as from the study of the existing remains, it seems to prefigure its transition to the modern theatre, marked by a duality between space of the show and the spectator's space.



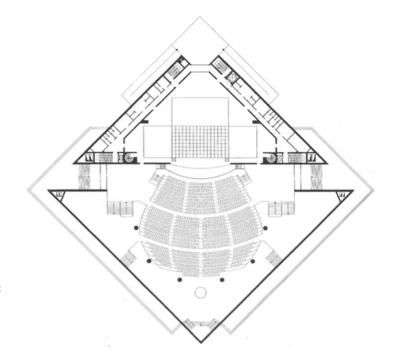


11 Andrea Palladio, Interior façade project for the stage of Teatro Olimpico, Vicenza, 1580. This occurs by transforming the semicircular auditorium of the Roman theater into a semi-elliptical one, thus drastically reducing the orchestra and enlarging its scene. In addition to the typological experimentation that places this work as a moment of transition from the ancient to the modern theater, it presents another peculiarity, in the relationship with the place. The theatre, inserted in the walls of the old prison, is not visible from the outside. For those who enter, the effect is that of surprise, wonder, in the 'discovery' of an admirable theatrical space [fig. 11]. As Manfredo Tafuri writes: "[...] in the space of the Olimpico one can only 'sink': not surprisingly, it renounces giving itself a façade in front of the city. A theater without a façade: an extraordinary choice by Palladio, who was an inventor of façades."¹⁹

Almost five centuries later, on the occasion of the competition for the new Teatro Comunale in Vicenza (1968–1980), Ignazio Gardella will propose a similar solution. Boxed in a completely solid volume with a square base, cut diagonally, he will re-propose the compositional duality of the theater plan, separating "the (illusionary) space of the show from the (real) space of the spectators"²⁰ [fig. 12–14].

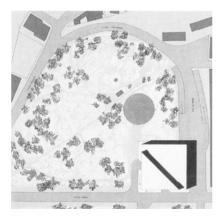
For Gardella "[...] the comparison with Palladio's Olimpico was inevitable, a perfect model of the classical theater of the Renaissance and repeatedly taken up: auditorium with steps and fixed stage, architectural and perspective, which could be used for tragedy and, with small variations, for comedy. [...] Gardella must have thought a lot about the presence of that masterpiece in the city: his solution takes it into account but is dialectically opposite. In fact, his theater has a plastic compactness that places it in the context as a strong closed and squared block."²¹

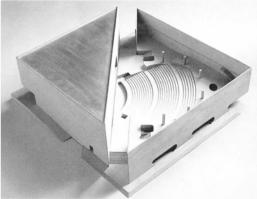
In any case, beyond the certainly acceptable contextual differences, also in the Teatro Olimpico in Vicenza Palladio designs a modern idea of architecture for the city, managing to give shape and character to a pre-existing building. The challanging conviction is to imagine it as an ancient Le Corbusian *boîte à miracles*, which in the totality and eloquence of its constituent elements



13

Ignazio Gardella, Project for Teatro Comunale di Vicenza, first solution, floor plan at stage level, 1968–69.



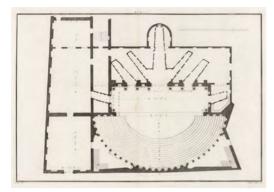


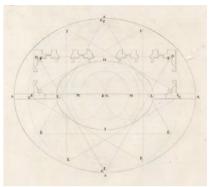
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Ignazio Gardella, Project for Teatro Comunale di Vicenza, plan of the first solution, 1968–69.

14

Ignazio Gardella, Project for Teatro Comunale di Vicenza, first solution, model views, 1968–69.





leads us to the origin of architecture and of the ancient city. This was also the case for the Palladian villas scattered in the countryside which with their "small town-planning" filled with humanism and rural rationalism give shape and expressive quality to the landscape of the Veneto [fig. 15, 15a, 16].²²

As can be seen from the Palladian examples considered here, starting from the invention of San Giorgio Maggiore in Venice as a modern example of the transformation of the city, up to the extraordinary modernity of the Teatro Olimpico in Vicenza "closed in itself where everything is architecture"²³, the remote dialogue with the Ancient and with some universal and necessary rules of Art never stops.

The Palladian lesson invites us to see the links that can be established between history and design as an expression of a research that does not give up on measuring itself with the spatial characteristics of the city and architecture. This was the case for Palladio (and, we could add, for a large part of the great classical and modern art) who in his research path encountered the Ancient, studied and measured it, interpreted and transformed the Ancient, in dialogue with it.

15

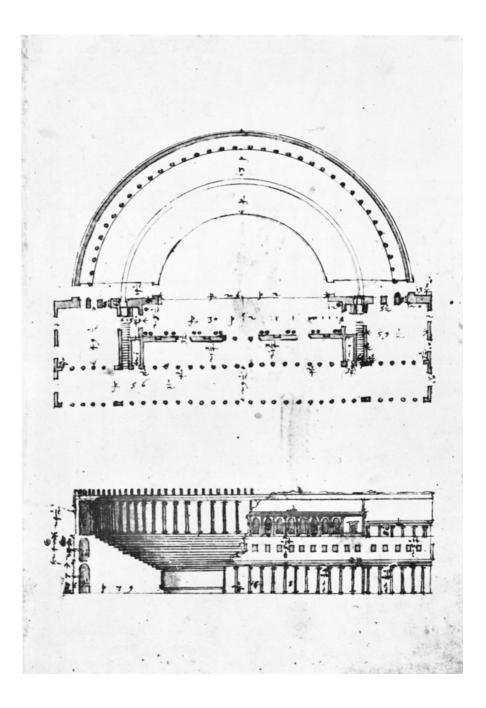
Bertotti Scamozzi, Plan of the Teatro Olimpico building complex, drawing 1776, in: Bertotti Scamozzi 1776–1783, libro I, tav. I, pianta dell'intero complesso.

15 a

Bertotti Scamozzi, Plan of the Teatro Olimpico building complex, drawing 1776, in: Bertotti Scamozzi 1776–1783, libro I, tav. [1]. Testo di riferimento a tavole I–V.

16

Andrea Palladio, Plan and section of the Teatro romano on Mount Zaro in Pola, drawing, 1540, London.



Endnotes

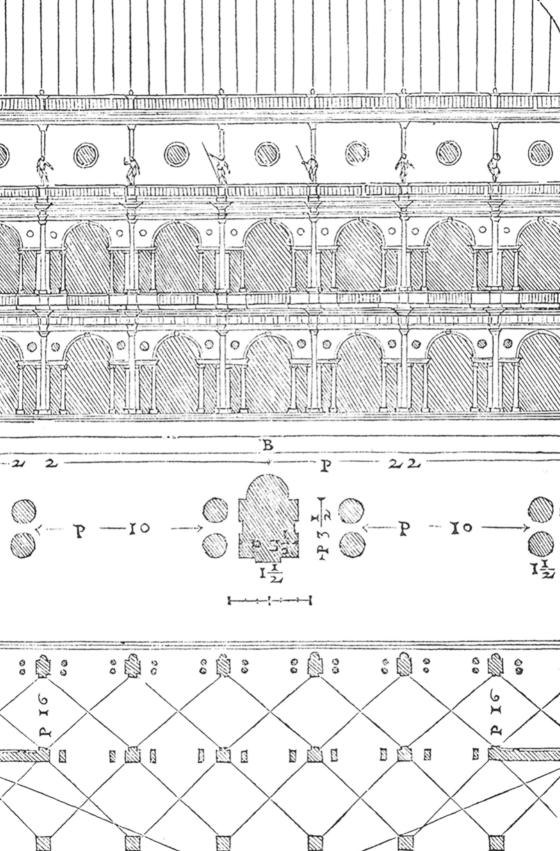
If not indicated otherwise, all translations are by the author of this paper.

Some of the thoughts in this article are inspired by conversations made at different times with Prof. Pierluigi Grandinetti on Palladian themes and on the dialectical comparison between Andrea Palladio and the Modern in general, as well as comparing his work with the projects of Giuseppe Terragni. The essay is also indebted to a typescript of the lecture presented by Grandinetti on the occasion of the seminar *Italian architecture between tradition and innovation*, held at the IUAV Università di Venezia on 31.03.2022. See also on these topics: Grandinetti (ed.) 1985. Some useful reflections on the themes of designing in relation to the role of composition in the contemporary world can also be found in: Grandinetti/Dal Fabbro/Cantarelli (eds.) (2019).

- 1 T.S. Eliot in his essay Tradition and the Individual Talent. In: Eliot 1920, 43.
- 2 The essays by Gruppo 7 have been published in *Rassegna Italiana* from December 1926 to May 1927, later in the reprint of *Quadrante*, no. 23 and no. 24, March–April 1935. Briefly quoted here is a passage from the article that raises the question of the relationship between Tradition and Modernity: "Between our past and our present there is no incompatibility. We don't want to break with tradition: it is tradition that transforms itself, takes on new aspects, under which few recognize it." / Ital.: "Tra il passato nostro e il nostro presente non esiste incompatibilità. Noi non vogliamo rompere con la tradizione: è la tradizione che si trasforma, assume aspetti nuovi, sotto i quali pochi la riconoscono." On the relationship between tradition, Italian rationalism and rurality, see also Pagano/Daniel 1936.
- 3 To endorse this interdependence between critical ability and creativity, see the theses of T.S. Eliot in: Eliot 1920.
- 4 Rogers 1997/1958, 292: "[...] conservare e costruire sono momenti di un medesimo atto di coscienza, perché l'uno e l'altro sono sottoposti a un medesimo metodo: conservare non ha senso se non è inteso nel significato di attualizzazione del passato e costruire non ha senso se non è inteso come continuazione del processo storico: Si tratta—conclude—di chiarire in noi il senso della storia."
- 5 Dal Fabbro 2022
- 6 Lane 1973, 445
- 7 McAndrew 1995, 204.
- 8 Tafuri 1985, 281: "[...] un 'bordo' in gran parte ancora indefinito, sia in senso funzionale che in senso fisico, [...]."
- 9 Lane 1973, 444.
- 10 Samonà 1971.
- 11 Bettini 1962
- 12 Burns 2000, 9: "I Quattro Libri (Venezia 1570) costituiscono il suo autorevole testamento architettonico, in cui egli stabilisce le formule per gli ordini, per le dimensioni delle stanze, per le scale e per la proget-tazione dei dettagli. Nel Quarto Libro egli pubblicò le restituzioni dei templi romani da lui attentamente studiati, e nel Secondo e nel Terzo Libro (come nessun architetto prima di lui aveva fatto) offrì una sorta di mostra retrospettiva dei propri progetti. Di linguaggio chiaro e conciso, efficaci nella comunicazione di informazioni complesse grazie alla combinazione di tavole e testi, I Quattro Libri rappresentano la più valida opera illustrata di architettura pubblicata fino a quell'epoca."
- 13 See Eliot 1920.
- 14 Grandinetti, Pierluigi, from typescript of the lecture held at the IUAV Università di Venezia on 31.03.2022: "L'architettura italiana diventa così, almeno dal Rinascimento in poi, un'architettura della trasformazione, in quanto stabilisce un rapporto, di volta in volta diverso, tra conservazione dell'esistente e progettazione del nuovo, tra architettura di progetto e architetture della storia, tra tradizione

appunto e innovazione, lungo un percorso di sperimentazione che ha sempre dato valore, anche nei momenti di apparente distacco, alla memoria e alla storia."

- 15 Beltramini 2000, 171.
- 16 Palladio 1570, II 61.
- 17 Zorzi 1969, 120: "Si tratta quindi di una invenzione [quella di villa Repeta; Armando Dal Fabbro] dello stesso periodo di quelle ispirate agli studi sui libri di Vitruvio e sulle ville antiche romane. Infatti l'architetto proprio nel 1556 aveva ultimato i disegni per i *'Commenti'* del Barbaro ai dieci libri del trattatista latino. Perciò il maestro vicentino svolse la sua idea immaginando un grande cortile con portici architravati su tre lati, con un unico ordine dorico di 21 intercolunni di fronte e undici per ogni lato."
- 18 Cabiati 1980, 3: "[...] servendosi delle forme più semplici, normali e misurate, anzi castigate, e dei materiali comuni e spesso umili."
- 19 Grandinetti, Pierluigi, from the typescript of the lecture held at IUAV Università di Venezia on 31.03.2022: "[...] adattando al lotto rettangolare già esistente le tre parti costitutive—cavea, orchestra e scena—del teatro antico, desunto dai canoni vitruviani oltre che dallo studio dei resti esistenti, sembra prefigurarne il passaggio al teatro moderno, segnato da una dualità tra spazio dello spettacolo e spazio degli spettatori. Il che avviene trasformando la cavea semicircolare del teatro romano in semiellittica, riducendo così drasticamente l'orchestra e ampliandone la scena. Oltre alla sperimentazione tipologica che colloca quest'opera come momento di transizione dal teatro antico a quello moderno, essa presenta un'altra peculiarità, nel rapporto con il luogo. Il teatro, inserito nel recinto murario delle vecchie prigioni, non si mostra all'esterno. Per chi vi entra, l'effetto è quello della sorpresa, della meraviglia, nella "scoperta" di uno spazio teatrale mirabile. Come scrive Manfredo Tafuri: "[...] nello spazio dell'Olimpico si può solo 'sprofondare': non a caso, esso rinuncia a darsi un volto al cospetto della città". Un teatro senza facciata: una scelta straordinaria del Palladio, che è stato un inventore di facciate." Tafuri is cited from: Tafuri 1976, 30.
- 20 Grandinetti, Pierluigi, from a typescript of the lecture held at the IUAV Università di Venezia on 31.03.2022: "[...] lo spazio (illusorio) dello spettacolo da quello (reale) degli spettatori."
- 21 Argan 1979, 92: "[Per Gardella] [...] era inevitabile il confronto con l'Olimpico del Palladio, modello perfetto e più volte ripreso del teatro classico del Rinascimento: cavea gradinata e scena fissa, architettonica e prospettica, da poter servire alla tragedia e, con piccole varianti, alla commedia. [...] Gardella deve aver molto riflettuto sulla presenza in città, di quel capolavoro: la sua soluzione ne tiene conto ma è dialetticamente opposta. Il suo teatro, infatti, ha una compattezza plastica che lo inserisce nel contesto come un forte blocco chiuso e squadrato" See also Guidarini 2002, 196.
- 22 Franco 1959, 19: "[...] 'piccola urbanistica' [...]." The concept was taken up and quoted in: Bettini 1962, 96.
- 23 Tafuri 1976, 30.

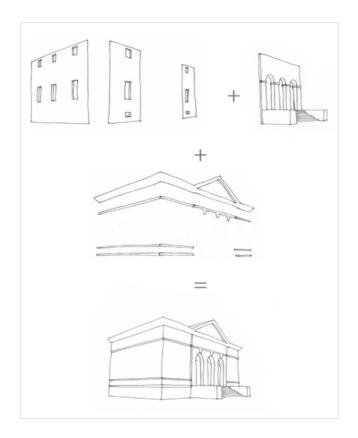


Thorsten Bürklin

Radical Pragmatism

Usanza nuova. A New Method

Palladio was a pragmatist. This is evident in the implementation of the so-called *usanza nuova* (new custom, new method), which he mentions in the *Quattro Libri*.¹ He used the ancient Roman ruins as treasure troves for his projects. From a contemporary perspective, one could speak of a copy-and-paste process, as architectural elements were taken from their original context and integrated into new ones. With regard to the methodical adoption of selected pieces, Howard Burns thus spoke of a "composition kit".² This technique made it possible to use and further develop a comprehensible language that was valid beyond place and time through a "controlled vocabulary" and a "prestabilised grammar".³ In the case of the villa buildings in particular, one can observe how far rhetorical standardization could be pushed, while at the same time individuality of expression was realized.⁴



Above all, this approach supported the desire for economy. With few exceptions, Palladio designed plain building boxes [fig. 1].⁵ In this sense the mansions of the Villa Cornaro and the Villa Emo [fig. 2, 12] show windows that appear as openings merely "punched out" of the masonry mass. Porticoes were added like layers, or sometimes as protruding volumes, to smooth surfaces. Thus, very straightforward means produced monumental and representative effects.⁶ Moreover, in order to build economically, columns were usually constructed of brick and then covered by a plaster coating.⁷ Until then the mansions of villa complexes were little more than townhouses set into the landscape.⁸ Palladio's pragmatism was by no means banal. With great efficiency, he developed an image of the villa that was to shape the design of the centuries to come. It was he who gave this typology its own face.

1

Elements of composition: the façade images developed from the frontal view and the portico, as well as the eaves cornices and bands that run around and tie all the façades together into one body. Drawing by the author.



2 Villa Cornaro, Piombino Dese (Treviso), 1553–1588 ca.



3 San Giorgio Maggiore, Venezia, 1565–1611.

Yet not only villa buildings were provided with memorable façade images. From the other side of the Canale della Giudecca, the churches San Giorgio Maggiore and Il Redentore shine across the water with their white façade panes [fig. 3, 4].⁹ On the periphery of the core city of Venice, they develop a scenic effect that cannot be overlooked. Elsewhere, in Vicenza, the aim was to give the city a completely new look. In the beginning, only a few buildings shone in a lighter (white or beige) classicist dress amidst the medieval building structure. Nowadays, the streets of the little town appear like a neoclassical jewel box. Palladio's buildings and those of his successors have shaped an entire region [fig. 5]. To this day, it is a powerful factor in the production of a regional identity, and highly important for the tourism industry. Perhaps, therefore, when looking at Palladio's method, we should also speak of an "identity kit".¹⁰ History, presented as an event. sells.¹¹



4

Il Redentore, Venezia, since 1575.

5

Piazza dei Signori, Vicenza, with the Loggia del Capitaniato, 1571/72, in the foreground to the left side and the façade of the Basilica (Palazzo della Ragione), 1546–1614, on the right side, both designed by Andrea Palladio.



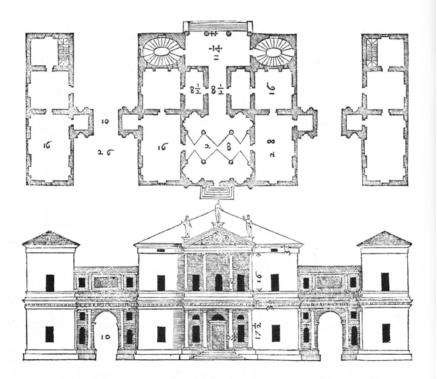
Anyhow, to become successful as an architect, one needs to do more than design and build well. Above all, one must tell the world about the quality of one's own works. We know this phenomenon. Think of Le Corbusier (*Vers une architecture*), Rem Koolhaas (*S*, *M*, *L*, *XL*), or Bjarke Ingels (*Yes is more. An Archicomic on Architectural Evolution*).¹² In these writings, again and again, one encounters catchy and succinct sequences of content. The language and illustrations support the particular concern. Thus, architectural theory develops into a weapon that serves to assert one's own ambitions.¹³ Palladio is, in a certain sense, at the beginning of this development. His *usanza nuova* did not only refer to building. At the same time thinking about architecture and communicating the guiding concepts of design had to undergo a radical change.

It is very likely that Palladio did not know Latin.¹⁴ He made a virtue out of necessity. The *Quattro Libri* appeared in the vulgar language, i.e. in Italian. Thus, the broadest possible audience could be involved. Moreover, Palladio's publication is rich in woodcuts. One could almost speak of a picture book, in which the information was presented in a concise (reader-friendly) mix of illustrations and text. Furthermore, with his *Quattro Libri*, Palladio provided the basis for a placeless and (in a certain sense) timeless reflection on architecture. The woodcuts show idealized façades, sections, and floor plans in orthogonal projection without reference to context [fig. 6]. In this way, his examples have become in turn models to be copied and modified anywhere, at any time, and under changed intellectual and material conditions.

Palladio's method of representation is thoroughly pragmatic. It is precisely where he presents his own projects that the advantages of orthogonal projection come to show. Ideally, the main view and the floor plan are superimposed on one sheet so that an immediate understanding of the interior-exterior relationships can emerge. Straight away, the woodcuts show Palladio's technique: the porticoes and pediments, all the figurative pieces, that he had taken and transferred from classic examples, were applied to

Villa Pisani, Montagnana. In: Palladio 1570, II 52 (Cap. XIIII). 52

LA SEGVENTE fabrica è appreffo la porta di Montagnana Caftello del Padoano, e fu edificata dal Magnifico Signor Francefco Pifani : ilquale paffato à miglior uita non la ha potuta finire. Le ftanze maggiori fono lunghe un quadro e tre quarti : i uolti fono à fchiffo, alti fecondo il fecondo modo delle altezze de' uolti : le mediocri fono quadre, & inuoltate à cadino : I camerini, e l'andito fo no di uguale larghezza : i uolti loro fono alti due quadri : La entrata ha quatro colonne, il quinto più fottili di quelle di fuori : lequali foftentano il pauimento della Sala, e fanno l'altezza del uolto bella, fecura. Ne i quatro nicchi, che ui fi ueggono fono ftati fcolpiti i quattro tempi dell'anno da Meffer Aleffandro Vittoria Scultore eccellente : il primo ordine delle colonne è Dorico, il fecondo Ionico. Le ftanze di fopra fono in folaro : L'altezza della Sala giugne fin fotto il tetto. Ha quefta fabrica due ftrade da i fianchi, doue fono due porte, fopra le quali ui fono anditi , che conducono in cucina, e luoghi per feruitori.



LA FABRICA

a plain building box. No words are needed to explain this method. The radical strength of these images lies in the fact that they speak for themselves. Short texts clarify the tasks and requests of the clients. In addition, only a few numbers inscribed in the woodcuts emphasize the claim that proportions were of fundamental importance in his compositions.¹⁵ This way he was able to accommodate the spirit of his times and the intellectual demands of the patrons.¹⁶

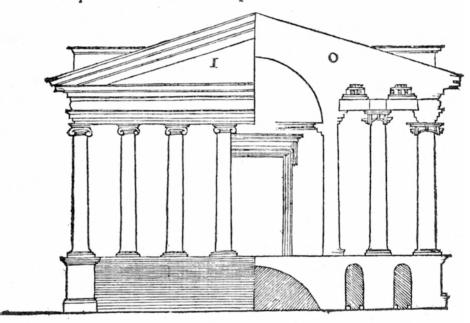
Consequences of the New Method: Architecture of Images

Sketches from Palladio's hand show that he generally produced drawings in orthogonal projection.¹⁷ This technique allows an "infinite" distance and therefore ideal viewpoint from which all dimensional relations can be read in their true proportions. In the commentary of Vitruvius' writings on architecture, Palladio's mentor Daniele Barbaro had explained the importance of elevation, section and plan (orthographia, sciographia, and ichnographia) in orthogonal projection.¹⁸ Palladio produced the woodcuts for it [fig. 7].¹⁹ Subsequently, this instrument of rational mastery and control was to become a standard of design.²⁰ In the *Quattro Libri*, Palladio used this tool to suggest comprehensibility and planning reliability.

Finally, this technique reveals itself like a genetic code in the realized buildings that appear in three dimensions. Like the drawings in orthogonal projection, the erected buildings demand a distanced frontal view. This means that the ideal standpoint of an observer is on the mirror axis in front of the symmetrically laid out façade. As a consequence, the primacy of the frontal view assigns less importance to oblique or lateral positions.²¹ The Villa Saraceno, built from 1548 onwards in Finale di Agugliaro (Vicenza), shows this fact.²²

7

Daniele Barbaro and Andrea Palladio, representation of the Orthographia and Sciographia in Barbaro's commentary of Vitruvius from 1567, in: Barbaro 1567, I 32.



La parte doue è la lettera J. è lo in piè della pianta precedente. La parte doue è la lettera O. è il profilo.



8

Villa Saraceno, Finale di Agugliaro (Vicenza), since 1548 ca., main façade.

9 Villa Saraceno, Finale di Agugliaro (Vicenza), since 1548 ca., view from southwest.



The building presents itself as a simple volume. Its front is dominated by a portico that is harmoniously inserted according to proportion as well as the used materials [fig. 8]. The visitors who advance via the axis of symmetry perceive this representative feature which is still further emphasized by the staircase that comes down from the open arcades. From an overhead position, however, it is all the more striking that the portico is merely a rather flat layer applied to the mansion—a 2D image attached to





10

Villa Pisani, Montagnana, 1552–55, main façade and side façade to northwest.

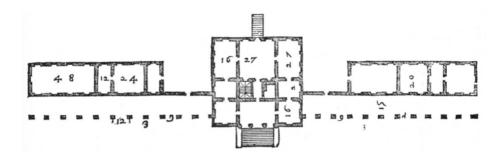
11

Villa Pisani, Montagnana, 1552–55, side façade to northwest with the portico of the main façade as a thin layer. the front [fig. 9, 1]. It is the simple stereometric box that, from this observer's standpoint, dominates the appearance.²³ Obviously, this façade image was not conceived and designed in a spatial sense by including oblique viewpoints. Palladio composed en-face images.²⁴ The same fact is revealed even more by the stately volume of Villa Pisani, built in Montagnana in the first half of the 1550s.²⁵ Its two-story portico is no more than a figurative relief that can, at best, develop a representative effect for the distanced frontal view [fig. 10, 11].



12 Villa Emo, Fanzolo (Treviso), since 1558, frontal view.

At the Villa Emo, a Doric *tetrastylos* set into the plane of the façade of the manor house and the *barchesse* extending far to the west and east stress the monumental expression. For those who approach on the central axis formed by a Roman road from antiquity, the claim to power is staged by modest but extremely effective means—which are underlined by a ramp reaching far into the axis in front of the portico. Yet, if the observer moves to the side, the ramp develops into a heavy and massive wedge that causes a spatially undesirable separation in front of the villa building. It is notable that in the *Quattro Libri*, Palladio has reduced this ramp to a less expansive staircase [fig. 12–14].²⁶





14 Villa Emo, Fanzolo (Treviso). In: Palladio 1570, Il 55 (Cap. XIIII).

13 Villa Emo, Fanzolo (Treviso), since 1558, the ramp. The series of examples could be continued. Palladio's "toolbox", which he plundered as needed, was a pragmatic instrument for radical reduction that enabled economic and scenic efficiency. Again and again, his (2D-) images produced extremely expressive and representative architectures. Palladio was an image-maker. It is evident that he thought and designed in en-face images. The experience in space is influenced by this.²⁷ Thus, with the *usanza nuova* Palladio not only strove to establish his interpretation of the Roman architecture in the Veneto. By this term and method, he not only wanted to push the general discussion on architecture by the means of the *Quattro Libri*, at the same time he created a figurative design language for his buildings.

Why Palladio was a Pragmatist

When Palladio entered the stage with the slogan of an usanza nuova, the High Renaissance had already been shaken to its political, intellectual, and artistic foundations. The hopeful dawn of a new epoch had been celebrated in the century before. In the meantime—after Luther's publication of the 95 Theses and after the Sacco di Roma-a deepening skepticism and uncertainty had spread concerning personal and public affairs. Also, Calvinist ideas had reached the Veneto, which suggested an ascetic attitude to faith and life.²⁸ Yet, precisely at this very moment in history, the aristocracy of an insignificant little town in Northern Italysecond or even third rank in economic and political terms-took up the project of a renewed classicism. At first, this project was completely anachronistic and unrealistic.²⁹ The rebirth of antiquity was, in a certain sense, a historically completed fact. Mannerist art and architecture had already worked on past achievements with context-dissolving irony.

Palladio moved in circles that continued to study Aristotelianoriented philosophers such as Pietro Pomponazzi, who had taught at the university in Padua. Pomponazzi turned to a certain extent against both Christian eschatologies and neo-Platonic ontologies. By emphasizing the importance of the practical intellect he placed questions of good or bad action as well as of social success or failure before the general consciousness of competing elites.³⁰ On the one hand, this emphasized the self-determination of the "human chameleon" and his freedom of choice, as Pico della Mirandola already had stressed towards the end of the Quattrocento in his Oratio de hominis dignitate.³¹ On the other hand, the "freely deciding, creative sculptor" who was able to assume the ever-preferred shape³², had to take on a Herculean task, since the scholastic ontologies of the Middle Ages had long since lost their binding power. The inevitable consequence of what has been said is drawn by Pico della Mirandola in the Commentary on a Song of Love, a text he wrote during the same period. There he states that "in God there is no beauty because beauty includes a certain imperfection, and that means to be composed in some way. [...]. After Him beauty begins, since differences begin, without which there can be no created thing, [...]."³³ Thus, ontologically legitimized parameters of beauty (and of action) were called into question. From now on, beauty was to be negotiated as part of this world and with exclusive reference to the appearing world.

In this historical context, Palladio reawakened an ideal without an ideal. At first glance, the *usanza nuova* brought nothing new at all. In the *Quattro Libri*, he often refers to Vitruvius as his example and guide. The grammar on which Palladio's architecture was built had long been known in relevant circles. (At the same time, no statements can be found in his writings that sought to ground the theoretical and practical reference in a philosophical-ontological way.) However, the sheer enthusiasm he had adopted from Giangiorgio Trissino's "militant classicism"³⁴ was guided by a pragmatism that benefited from appropriating the historic ideals in a completely original way.³⁵



Consequently, the façade images of the villas were as immediately memorable as the arrangement of the woodcuts in the *Quattro Libri*. In a similar way, the two-story repetition of the *serliana* of the Basilica in Vicenza achieves an outstanding elegance and monumentality [fig. 15, 16]. Images (of the *serliana*) are superimposed and juxtaposed in an "infinite" series. This invention was self-explanatory, and so was the name he applied to this building, as its success up to this day shows. The classic Roman term *Basilica* underlined Palladio's project, i.e. the transformation of the center of this little town into a Classicist site. It was not of much importance that the ancient ideal could not be achieved. Palladio's task was to give physical reality to the construct of an anachronistic world. In doing so, he imbues his actions with a conciseness and inner coherence that once again brings to (hyper-classical) life, what had already passed away.

A remark from the end of the 1970s on philosophical pragmatism made by Richard Rorty in an admittedly different context may help to understand this approach and success: "He [the pragmatist; Th. B.] proceeds to argue that there is no pragmatic difference, no difference that makes a difference, between 'it works because it's 15 Basilica (Palazzo della Ragione), Vicenza, 1546–1614, view from Piazza dei Signori.



16 Basilica (Palazzo della Ragione), Vicenza, 1546–1614. true' and 'it's true because it works'—any more than between 'it's pious because the gods love it' and 'the gods love it because it's pious.'"³⁶ In this sense, Palladio's pragmatism was radical, not because he carried on the formal language of antique Roman architecture. In his later buildings—such as the Palazzo Valmarana, the Loggia del Capitaniato, and (as a spatial conception) the Redentore church—he would eventually go beyond the classicist laws. He was radical because he himself lived the Renaissance comprehension that human beings are able to have a world only if they creatively shape this world.³⁷ The individual manifests itself through the *poietic*, i.e. productive, work in the context of an existential openness—and also uncertainty.

Embracing the Possible

Palladio's situation is not alien to our present. Since the "end of history" was proclaimed half a century ago³⁸ and since the decline of binding narratives was established³⁹, we have been faced with the urgent dilemma of adopting intersubjective horizons for common thought and action. In this sense, the political and intellectual situation of the late Renaissance shows some interesting parallels to the nowadays lamented loss of meaning.⁴⁰ This is additionally fueled by 21st-century digital media, which make it possible to copy and paste quickly and almost effortlessly-not to speak of artificial intelligence, which not only potentially multiplies content but also calls into question the role of human beings as authors and creators of the world they inhabit.⁴¹ Besides, the resulting uncertainties had already been noticed by Walter Benjamin a hundred years ago in a world that more and more came to be dominated by mechanical reproduction. The technical reproducibility of the works of art had to cause a loss of authenticity—or the disappearance of the aura, as he put it.⁴²

Remarkably, on the threshold of the telematic revolution, Rorty emphasized that (intercultural) understanding could be gainedif at all—through making rather than finding.⁴³ In any case, where an inexhaustible fund is available, it would be extremely unwise not to use it (like Palladio did when he adopted historical models to the requirements of his time). The central question would then be which ideological, economic, or operational filters may help to control the current abundance of what is available simultaneously and ubiquitously. The "pollution of distances" and the global "interactivity in real-time", as Paul Virilio notes⁴⁴, require sincerity.⁴⁵ This is not said in a moral sense. (There are already enough witch hunts.) Instead, it is about measuring the horizon of one's own actions in order to be able to assess the foundation but also the consequences of the same. The climate crisis, but also questions of (international) cultural and social justice demand this discipline.

The same was true with Palladio's *usanza nuova*. It was to be established in a period of general instability. In this situation, a rhetorical pathos (developed for the intellectual and political elite) highlighted above all the model of classical antiquity. However, just beautiful images could hardly have been sufficient to convince his patrons. The solid craftsmanship, the profound knowledge of the techniques of building as well as of the materials were essential qualities that helped the architect generate confidence in his work. Beyond that, Palladio's designs are convincing because of the immense simplicity of the compositions, which never lacked monumentality or charisma. And finally, he built efficiently and economically.⁴⁶

Palladio's opus is immense. He shows to be the creator of a new (classicist) world, an architect who acted with intellectual acuity, but at the same time without philosophical ground. This seems like a paradox: the hyper-classicist Palladio theoretically stood on unsteady legs. But there is another reading: precisely because he laid the foundation of his activity in the uncertainty of his time, he was able to rise on it in the long run. In this context, Palladio was a pragmatist through and through, facing up to tasks, probably with the sincerity gained from many years of craft practice, embracing the possible.

Endnotes

If not indicated otherwise, all translations are by the author of this paper.

- 1 Palladio 1570, II 4 (Cap. III).
- 2 Burns 2008b, 269: "kit compositivo".
- 3 See these terms in: Burns 2008b, 271.
- 4 See Benelli 2008, 51.—See also Bürklin 2019, 87.
- 5 See Bürklin 2019, Abb. 4.9.
- 6 See Bürklin 2019, 312-314.
- 7 Palladio was not the first to do so. According to Christoph Luitpold Frommel 1994, 195, he could learn from Bramante's Palazzo Caprini (casa di Raffaello). The rustication of the basement and the Doric columns of the *piano nobile* were made of bricks. The plaster coating simulated travertine.
- 8 As it was the case with the Villa Medicea designed by Giuliano da Sangallo between 1480 and 1485 in Poggia a Caiano near Florence or with Jacopo Sansovino's Villa Garzoni built in 1540 and after in Pontecasale in the south of Padua.—See Ackerman 1991, 303–324 (Sources of the Renaissance Villa).
- 9 The façade of the church of San Giorgio Maggiore was only realized between 1607 and 1611. In large parts, it does not correspond to Palladio's designs. See Beltramini/Padoan (eds.) 2002, 234. Due to the great distance caused by the Canale della Giudecca, this fact is of no relevant importance with regard to the scenic effect in the urban context.
- 10 This term is borrowed from Stuart Ewen; Ewen 1999/1988, 70.
- 11 Ewen 1988/1999, 258: "As this happens, history disintegrates as a way of comprehending the world; it becomes an incomprehensible catalog display. It shifts from the realm of human subjects engaged in social relations, motivated by interest, circumstance, and experience, to the realm of objects, discrete commodities to be bought and sold."
- 12 Le Corbusier 2005/1923; Koolhaas/Mau 1998; Bjarke Ingels Group 2010.
- 13 See Bürklin 2013, 50-51.
- 14 See Giuseppe Barbieri, 2008, 43.
- 15 See Bruschi 1978, 15–16: "Ma il pragmatismo, l'attenzione all'utilitas e alla firmitas, sono pure fortemente nutriti e resi operanti, nell'esordiente Palladio, dalla sua formazione artigianale; dal circa ventennale rapporto diretto, fisico e manuale, con la realtà concreta dei materiali, delle tecniche, dell'organizzazione esecutiva, della costruzione. Più sottilmente e profondamente, l'attività di lapicida, subordinata nella prassi rinascimentale a quella dell'architetto e strumento della sua 'invenzione'. lascia in Palladio l'idea (probabilmente consolidata dalla lettura di Vitruvio e dalla precoce visione delle antichità di Verona) che l'architettura sia in larga misura riducibile—più che all'organizzazione di spazi interni complessi ed articolati tra loro coordinati, come, ad esempio, in Bramante o nel Peruzzi-ad impianti elementari, specialmente qualificati da un 'codice' di segni di per sé caratterizzanti, da un sistema di elementi linguistici (guelli che l'Alberti chiamava 'ornamenti') che l'architetto inserisce ad organizzare le superfici e i volumi della semplice, ma musicalmente 'proporzionata', costruzione, e la cui esecuzione è affidata proprio ai lapicidi." / Engl.: "But pragmatism, attention to utilitas and firmitas, are also strongly nourished and made operative, in Palladio's early works, by his artisan training; by his almost twenty-year long direct physical and manual relationship with the concrete reality of materials, techniques, the organization of works, and construction. More subtly and profoundly, the activity as a stonemason which in Renaissance practice was subordinated to that of the architect and seen as an instrument of his 'invention', leaves Palladio with the idea (that was probably consolidated by the reading of Vitruvius and the early vision of antiquities of Verona) that architecture is largely reducible to

elementary arrangements—more than to the organization of complex and articulated interior spaces that are coordinated with each other. These arrangements are particularly qualified by a 'code' of *per se* characterizing signs, by a system of linguistic elements (those which Alberti called 'ornaments') which the architect fits together in order to organize the surfaces and the volumes of the simple, but musically 'proportionate', construction. Actually, its execution is entrusted to the stonemasons."

- 16 Yet, Palladio did not always apply the same attention to harmonic proportions as Howard/Longair 1982, 127, state: "Available evidence suggests that the patrons of the most harmonic schemes probably shared an interest in musical or architectural theory. Indeed, it seems that the proclivities of the patrons contributed significantly to the degree of harmony present in the schemes which they commissioned. This is suggested by the fact that even late in Palladio's career when he was designing projects for theoretically-minded patrons in which all the dimensions could be interrelated by musical ratios, he was still producing other designs which displayed relatively little regard for overall musical harmony."
- 17 The importance of the orthogonal projection in Palladio's works is reflected in Burns 1973a, 135: "Lo stesso Palladio disegnava l'alzato ortogonale, accostandolo alla pianta nelle versioni, in bella copia, dei suoi progetti degli anni quaranta, [...] e questo è indicativo della sua preferenza per il metodo ortogonale. Inoltre non vi sono dati sicuri per ritenere che i disegni dall'antico, nei guali l'edificio è reso in modo prospettico, derivano da studi fatti sul posto da Palladio stesso. Invece è probabile che tutti i disegni di questo tipo siano stati copiati da disegni altrui." / Engl.: "The same Palladio drew the orthogonal elevation by placing it next to the floor plan in the fair copy versions of his projects of the Forties, [...] and this is indicative for his preference of the orthogonal method. Moreover, there are no reliable data to suggest that the drawings from the ancient, in which the building is rendered as a perspective, derive from studies made on the spot by Palladio himself. Instead, it is likely that all such drawings have been copied from drawings by others."-Previously, Gian Giorgio Zorzi (Zorzi 1959, 33) had ruled out that perspective representations of ancient architecture could have come from Palladio's hand. On the other hand, see Spielmann 1966, 14; Forssman 1973, 19; Lewis 1981, 45; "But we have repeatedly seen that Palladio's use of non-Venetian measures cannot in itself be taken as an index of copying, any more than Zorzi's old idea that the appearance of perspective renderings [...] would automatically remove a sheet from Palladio's authorship."-See Bürklin 2019, 20-31 (Die orthogonale Projektion).
- 18 Vitruvius Pollio/Barbaro 1567, I 30.
- 19 Vitruvius Pollio/Barbaro 1567, I 31-32.
- 20 See Bürklin 2019, 23–28, where role models like Raffaelo Santi, Piero della Francesca, Donato Bramante and Sebastiano Serlio are cited.—This tradition of architectural notation will be criticized by Bernard Tschumi in the *Manhattan Transcripts* (Tschumi 1994, 9), where he speaks of "a sort of prison-house of architectural language".
- 21 See Bürklin 2019, 32–51 (Der distanzierte Frontalblick—Architekturbilder der Symmetrie und Axialität).
- 22 The barchesse, which were to be placed west of the central manor house have never been realized. See Beltramini/Padoan (eds.) 2002, 131; Ackerman 1967, 46.—Gioseffi 2008, 33, writes, that barchesse is a Venetian term. It names "le parti dipendenti adibite a scopi funzionali" (the dependent parts intended for functional purposes) of a villa.
- 23 See Bürklin 2019, 126-136 (2D (3D)).

- 24 See Bürklin 2019, 60-95 (2. Palladios En-face-Bilder).
- 25 See Bürklin 2019, 141-145.
- 26 See Bürklin 2019, 274-280 (Bilder der Macht).
- 27 See Bürklin 2019, 12-14.
- 28 See Zaupa 1990, 12-13.
- 29 See Franco Barbieri 1972, 74–75: "[...]: in un clima chiuso di provincia, la nobiltà locale, nell'atmosfera di amara decadenza che la priva di ogni autentica facoltà di comando, sfoga nella frenesia di costruire la sua repressa volontà di potenza. Costretto nelle fitte maglie della megalomania imperante, imbevuto, per le cure di un 'patetico pedante' umanista quale Giangiorgio Trissino, di entusiasmi classicistici ormai, alla metà del Cinquecento, già posti in crisi in ambienti più evoluti, Andrea concilia la libertà di artista con la prudenza dell'uomo: [...]: / Engl.: "[...]: in a closed provincial climate, the local nobility—in the atmosphere of bitter decadence that deprives it of any authentic power of command—vents in the frenzy of building its repressed will for power. Bound in the dense mesh of the prevailing megalomania and—by the care of a 'pathetic, pedantic' humanist like Giangiorgio Trissino—imbued with classicistic enthusiasm that by now, in the middle of the Cinquecento, was already in crisis in more advanced circles, Andrea reconciles the freedom of the artist with the prudence of the human being: [...]:—See Bürklin 2019, 318–319.
- 30 Pomponazzi 1990/1562, 176–181. See in particular p. 190: "Praemium essentiale virtutis est ipsamet virtus, quae hominem felicem facit." / Engl.: "The essential reward for virtue is virtue itself; it makes man happy." See as well pp. 190–192: "At opposito modo de vitio: Poena namque vitiosi est ipsum vitium, quo nihil miserius, nihil infelicius esse potest." / Engl.: "But the opposite is true with regard to vice: the punishment of the vicious is the vice itself; there can be nothing more miserable and nothing more unhappy."—Zaupa 1990, 11–13, points out the importance of the Mantuan philosopher Pietro Pomponazzi during the 16th century.
- 31 Pico della Mirandola 1990/1486, 6-10.
- 32 Pico della Mirandola 1990/1486, 6: "[...], ut tui ipsius quasi arbitrarius honorariusque plastes et fictor, in quam malueris tute formam effingas."
- 33 Pico della Mirandola 2001/1486, 83. / Ital., 82: "Di che segue che in Dio non sia bellezza perchè la bellezza include in sè qualche imperfezione, cioè lo essere composto in qualche modo. [...]. Dopo Lui comincia la bellezza, perchè comincia la contrarietà, senza la quale non può essere cosa alcuna creata, [...]."
- 34 See Beltramini 2008c, 27, where he speaks of Trissino's "classicismo militante".
- 35 See Holberton 1990, 80: "Posterity's criticism condemns more his [Trissinos; added by Th. B.] lack of other qualities than his classicism, which had real virtue in its ability both to state the rules and to create satisfactory works of art bound by them or illustrating them. That is an achievement closely analogous to Palladio's in architecture, and one may well assume that Palladio learnt to harness theory and practice partly by the example of Trissino's charioteership."
- 36 Rorty 1982, xxix.
- 37 See Bürklin 1997.—See also in another context Arendt 1958.

- 38 Kamper 1988; Flusser 1992.
- 39 Lyotard 1979.
- 40 Habermas 1995, 15: "Philosophie kann sich heute nicht mehr auf das Ganze der Welt, der Natur, der Geschichte, der Gesellschaft im Sinne eines totalisierenden Wissens beziehen." / Engl.: Habermas 1984, 1: "Philosophy can no longer refer to the whole of the world, of nature, of history, of society, in the sense of a totalizing knowledge."—Virilio 2009, 19–20.
- 41 See Acosta 2012; Krausová/Moravec 2012.
- 42 Benjamin 1991.
- 43 Rorty 1982, xxx.
- 44 Virilio 2009, 54.
- 45 See Bürklin 2013, 53.
- 46 Palladio always remained in close economic dependence on the Vicentine and Venetian rule, which used his skills intensively. See Beltramini 2008c, 73: "Non c'è dubbio che rispetto ad altri protagonisti della scena artistica veneziana, da Tiziano a Sansovino ad Alessandro Vittoria, Palladio non riesce, con il proprio lavoro, a incrementare sensibilmente le proprie entrate. Quello che aveva da vendere erano sostanzialmente idee, come abbiamo visto, non particolarmente ben pagate." / Engl.: "There is no doubt that compared to other protagonists of the Venetian art scene from Titian to Sansovino and Alessandro Vittoria, Palladio does not manage to significantly increase his income with his work. What he had to sell were essentially ideas, and as we've seen, not particularly well paid."-Palladio-the service provider of the Vicentine nobility and their instrument in realizing an usanza nuova, a "new method"-was quickly forgotten after his death. During the coming centuries Britons, such as first Inigo Jones and later Lord Burlington or Alexander Pope, recognized the potential of this architecture in terms of effectiveness, economy and efficiency. In the USA, Thomas Jefferson, the third president of the United States, built according to this model. But Palladianism was still to become a much wider movement. Palladian heritage was also instrumentalized in other parts of the world. As a sign of colonial power, this architecture can be found in the aftermath of the British and Dutch overseas activities.



Damiana Lucia Paternò

Firmitas, Utilitas, Venustas, Economy The Four Principles of Palladio's Way of Building

"Leave aside [...] unnecessary expenses" is one of Palladio's recommendations in the foreword to *I Quattro Libri dell' Architettura* and a principle that he hoped to convey in the book. Nonetheless, if we were to look for the rules of a "constructional grammar" adopted to pursue this intent, there is no point in consulting the pages of his treatise, nor can any specific information be gleaned on the subject from a collection of his drawings. We must consider other kinds of documents: those written in brick, mortar, and lime and manifest in his built architecture.

In 2010, Howard Burns wrote that for Palladio—in addition to Vitruvius' triad of *firmitas*, *utilitas*, and *venustas*—"economy" was the fourth requisite for good architecture.² Starting from this last statement and by means of some examples, the present essay aims to highlight how Palladio revised traditional processes and procedures to construct buildings with a classical appearance, usually resorting to materials considered to be of 'poor value'.



Andrea di Pietro della Gondola was introduced to the world of construction at the early age of thirteen, when he was employed by the workshop of Bartolomeo Cavazza as an apprentice stonecutter. It was from stone, from the principles of stereometry and the need to make models to be used in the carving stage, that he learned to think about assembling finished elements.³ This experience characterized both his design process and his direction of construction sites. In fact, he would develop a comprehensive architectural strategy, based on the repetition of given forms and proportions as well as the recurring use of technical solutions to be applied to the building types of his time.⁴

Despite Palladio's professional origins, we are immediately struck by the fact that the only complete stone works are the façades of the Venetian churches and the loggias girding the Palazzo della Ragione in Vicenza [fig. 1]. For these more

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Palazzo della Ragione, Vicenza. Detail of the western façade on Piazzetta Palladio.



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Villa Thiene, Quinto Vicentino. Detail of the doric entablature of the northern façade.

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Villa Thiene, Quinto Vicentino. Western façade. prestigious buildings, the stonecutter Palladio could rely on greater financial resources, enabling him to choose suitable materials to construct architectures that were *all'antica* both in form and structure. He used two different kinds of *pietra viva*, or fine-grained stone: Istrian stone and Piovene stone. Both types are dense microcrystalline limestone with low porosity and are, therefore, more durable and resistant to weathering. On the other hand, in most of the construction sites for his villas and *palazzi*, Palladio had to find expedients to satisfy patrons whose aspirations for a residence as a status symbol were not always backed by adequate funding. In such cases, Vicenza stone was used: it is a soft limestone that is easier to work and less costly, but more vulnerable to atmospheric agents and consequent decay.

Vicenza stone was normally used only for a few elements, such as cornices, bases, or capitals [fig. 2]. For the rest of the building, Palladio preferred to adopt *pietra cotta* (brick or terracotta), which was then finished with *marmorino* to imitate more sumptuous wall facings [fig. 3]. *Marmorino*—also called *stucco* or *terrazzetto* in Italian—appeared in Venice in the late fifteenth century and its use rapidly spread throughout the Veneto mainland. This finish was made of lime and fragments of ground and sifted stone worked into the mortar. Applied in uniform

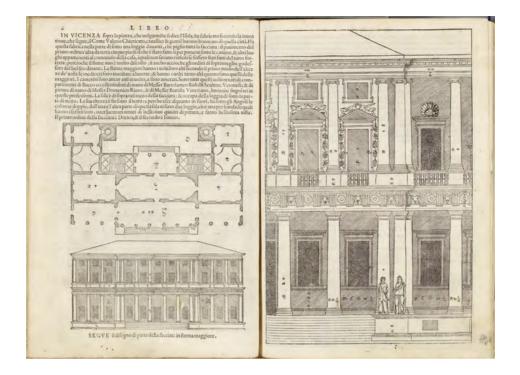


thicknesses, the *marmorino* was then smoothed and compacted by pressing it several times with a so-called *ferro* (an iron tool) until a perfect finish was obtained. The last stages in the process consisted in polishing the surfaces with cooked linseed oil or soap and wax; this particular treatment gave the surface a "wet" look similar to that of stone and also drastically reduced the plaster's permeability to water, thus improving its durability.⁵

Although a long-standing traditional technique, the emulation of stone elements using common materials coated with plaster began to be revived and used widely again in the late fifteenth and early sixteenth century with the advent of a new architectural language.⁶ The first to employ this technique was Bramante, in buildings such as the Palazzo Caprini and the Nymphaeum at Genazzano. Subsequently, we find it in many important buildings in Rome and other parts of Italy, such as Mantua, where the use of stone on the exterior of the Palazzo Te is reduced to a minimum. The rustication characterizing the ground floor of the Palazzo Thiene in Vicenza was also made in this way [fig. 4]. Scholars now agree that Giulio Romano played a part in the initial design for this palazzo; so, thanks to Palladio's direct contact with the Mantuan architect⁷, his various trips to Rome in the 1540s, and his experience as a stonecutter, he rapidly created

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Palazzo Thiene, Vicenza. Detail of the rustication at the ground floor.



5 Palazzo Chiercati, Vicenza, plan. In: Palladio 1570, II 6 (Cap. III). a series of building techniques for constructing *all'antica* architecture with enduring materials that were less expensive than stone.

In 1550, the project for the Palazzo Chiericati in Vicenza marked a turning point for Palladio, because here he developed several formal and technological solutions that were to become his recurring practice in subsequent projects.⁸ As usual, in *The Four Books* there is a brief description of this architecture⁹, accompanied by a plan of the ground floor and an elevation of the main façade [fig. 5]. The building lies on the edge of a large open space, the *Piazza dell'Isola*. A continuous portico occupies the front on an approximately two meter high basement (indicated as five foot in Palladio's *Quattro Libri*). This basement is meant to house the service rooms and, at the same time, protect the building from the frequent floods of the



7 Palazzo Chiericati, Vicenza. Doric loggia.



6 Palazzo Chiericati, Vicenza. Overview from piazza Matteotti. nearby Bacchiglione River. The first floor is characterized by a large hall that occupies the central part of the façade and by two side loggias with coffered ceilings. The plan of the *palazzo* follows the rectangular shape of the site. Rooms and the staircases are placed symmetrically to the double apse atrium and the hall on the main floor. Since the building could not be completed at the end of the century, it had the look of a monumental fragment: the portion lying south of the palace had been terminated, while the works on the central part had stopped after the completion of the first bay. Therefore, on the first level, only one window of the great hall had been built. Moreover, the foundations of the central sector of the ground floor loggia had also been laid, and the other columns had been built up to a height of about two feet from the base [fig. 6].

Even if it had remained unfinished, Palazzo Chiericati was the result of a truly "experimental" construction site. One of the great new features was the construction of *all'antica* freestanding columns made of brick with a *marmorino* finish [fig. 7]. Palladio was the first architect in sixteenth-century Italy to

adopt this solution, which he also applied in the atrium of the Palazzo Iseppo Porto in the same city, at around the same time.

Erecting columns with brick shafts was a Medieval tradition. On his trips to Rome, Palladio may have seen ancient examples of columns built in this way. Moreover, they are also mentioned by Vincenzo Scamozzi in his treatise L'idea dell'architettura *universale*.¹⁰ In 1567, Palladio was asked to give his opinion on a model for the Brescia Cathedral. In his written comment. known as the *Scrittura*, he describes the benefits of using brick to make the pillars, vaults, and other parts of the building.¹¹ Brick offered more economical solutions and, after being provided with a plaster finish, could be used to emulate more lavish stone surfaces. The same conviction was reiterated in the first of The Four Books. When describing what should be considered in the construction of a building, he writes: "And if the ornament of a building is to be supplied by columns or pilasters, [then] their bases, capitals, and architraves should be stone, and the other parts of brick".12

As evidenced by various entries in the account book for the Palazzo Chiericati, each column was entirely made up of *lunette*-shaped bricks, which had the form of a triangle with a rounded external side and arranged with each segment pointing to the center. These discs were then laid on top of each other to obtain tapered shafts by gradually reducing the thickness of the mortar bed joints and with the aid of wooden molds called *valagnini* or *valanghini*. The bases and capitals were made of Vicenza stone in both, the doric and ionic orders and stood a few millimeters proud of the brick shafts so that the joints between the *marmorino* and stone parts could be made with the surfaces perfectly flush.¹³

Freestanding plastered brick columns were not the only new feature that Palladio applied in the Palazzo Chiericati. He was also the first to try another technological experiment, namely the wooden architrave. In antiquity, Vitruvius had already described the use of timber entablatures in Etruscan temples (with the Tuscan order), and he suggested their use in the case of aerostyle intercolumniation. He thus advised against using a single slab of stone that would probably break. Palladio reiterates this advice in his *First Book* when discussing the Tuscan order.¹⁴ He stresses the suitability of using wooden architraves, especially in villas, and he points out that they were more economical and allowed wider bays to be constructed, which were better suited to the passage of carts and other "farm implements". But in Palladio's architecture, the use of this building technique also appears in other cases not specified in his treatise. It is found, for instance, in the ionic order of the Palazzo Chiericati, both, in the part with the loggia and above the half-columns, which are the distinguishing features of the central section of the main façade. Although during the nineteenth-century restoration work on the palazzo, these architraves were partially replaced and modified with the addition of stone cladding, the wood is still visible in the intrados. There are many reasons why Palladio adopted this building approach, the most pressing of which were structural considerations: the intercolumniation in the ionic order is wider than the three diameters and, therefore, should be handled as prescribed in the ancient treatises. In the case of the Palazzo Chiericati, each architrave is formed by coupled beams, whose total width is equal to the diameter of the neck of the capital, and its top aligns with the crown molding beneath the frieze.

Economy must also have been a factor in extending the use of wooden elements to parts where the architrave no longer serves a structural purpose but has simply become a cornice. This is the case with the central section of the main façade, in which the static functions are performed by the brick wall. Here Palladio does not use suitably molded bricks to define the projecting parts but partly recesses the wooden elements into the body of the wall, making them jut out above the ionic half-columns. The surface obtained this way was then probably still plastered and painted white to imitate stone.

Although in the Palazzo Chiericati stone continued to define large portions of the main façade, such as the moldings, sills,



door and window jambs, and the entire doric order entablature, in other buildings constructed just afterwards, the "faux stone" technique was extended to most of the main building. In the construction site for the Villa Pisani at Montagnana in the province of Padua (1552), Palladio resorted to stone only in a few cases, such as the bases and capitals of the columns, the balustrades of the windows, and the corners of the crowning moldings of the pediments. The panels of the metopes and the triglyphs in the doric frieze were made of brick, while in the southern front, the architraves of both orders were made of wood [fig. 8]. These architraves were divided into fascias, formed by pin-fixed fillets. In the case of the doric order, the *guttae* and *taeniae* of the triglyphs shape the entablature.

The architraves of the loggias on the north front are made of brick. Palladio varied the structural motif of the flat arch, thus citing a well-known solution in the Roman world, which, at that time, was rarely used in the local Veneto tradition. All the surfaces have a *marmorino* finish. This had the purpose of simulating the effect of the *opus quadratum* technique through 8

Villa Pisani, Montagnana. Detail of the doric entablature on the southern façade. 9

Villa Pisani, Montagnana. Detail of the *bugnato gentile* in *marmorino* plaster on the southern façade. careful scoring on the surface. The smooth rustication (or *bugnato gentile*) is not designed in an undifferentiated pattern but varies according to the architectural elements of the building: for example, at the height of the architraves above the windows, the rustication emulates a stone flat arch lintel with five voussoirs, thus echoing the typical structural arrangement of isodomic masonry [fig. 9].



While Palladio was engaged with the Villa Pisani at Montagnana, he also worked on the Villa Cornaro at Piombino Dese, near Padua. Here he used the same construction methods and even went so far as to employ brick with plaster finish for the Ionic and Corinthian capitals in the loggia of the front overlooking the courtyard. He was also to adopt these solutions for the pronaos of the tempietto of the Villa Barbaro at Maser and in the church



of the Redentore in Venice. For the Redentore the capitals in the larger interior order were made up of various elements joined together by mortar and pinned to the wall. The whole surface was then covered with a kind of white wash to imitate stone.¹⁵

Almost ten years after starting work on the Palazzo Chiericati, Palladio began what was to be his Venetian period, which marked another turning point in terms of the aesthetic and the construction register of his architecture. With the construction sites for the Villa Malcontenta, the refectory of San Giorgio, and the monastery of the Carità, Palladio's complex "white machines"¹⁶ began to be tinged red. This was the first time that brick was given full expressive dignity on par with stone and was treated like full-fledged raw isodomic masonry to be left visible. The most emblematic building, in this case, is arguably the monastery of the Carità.¹⁷ Here, clay bricks play a leading role by forming not only the walls and other parts of the building but also most of the elements of the orders. The bricks in the column shafts, friezes, architraves, moldings, and molded fascias are characterized by a particularly meticulous process. After each brick was fired, its faces were smoothed using a rotating disc

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Convento della Carità, Venezia. Detail of the *peristilio*. and a paste of water and sand. This process made it possible to obtain an extraordinarily regular, compact wall with bed joints only a few millimeters thick [fig. 10]. The surfaces obtained this way were finished by additional gradual smoothing, first with rasps and files, then with molar stones, and finally, with abrasive powders. The inevitable differences in tonality between the individual bricks were concealed by applying a very thin layer of red stain. In the past, this was called "red stucco" and was probably made of a mixture of resinous oil substances and red ocher. Applied with a brush, it was then smoothed with an iron tool.

Treating the surfaces this way is reminiscent of a Medieval technique called *regalzier*, used in Venice in the fourteenth and fifteenth centuries. The technique aimed to give walls, made of bricks of different sizes and colors, a uniform appearance. *Regalzier* is a plaster used to imitate brickwork and consists of a very thin layer of lime and sand binder, which was then applied wet with red ocher. Scores with a nail were made on this finish as guidelines for thin whitish lines drawn to imitate the pattern of the joints.

Regalzier was not the only "old" building technique Palladio adapted and refined in Venice. In designing such carefully constructed brickwork walls, he combined various elementsthe imitation of ancient architecture, local traditions. and the use of past techniques developed in northern Italy. In ancient Rome, we already find walls made of bricks, cut and ground to be left raw, but, for the way the bricks were worked, we also must look to the Po Valley region. From the eleventh century on, excellent results were achieved in this area with regard to structural and decorative aspects. The presence of northern Italian craftsmen must have contributed to the spread of masonry techniques developed in Rome in the late fifteenth and early sixteenth century. Examples of this can be found-to mention only a few cases—in the exterior side elevations and the courtvard upper order in the Palazzo della Cancelleria, the lower Belvedere Courtyard, and many of Sangallo's buildings.

In the sixteenth century, in general, molded-brick walls with very thin joints seem to have been valued as much as isodomic stone walls. Beginning with Leon Battista Alberti, the Renaissance treatises also express the conviction that the quality of architecture not only depends on the use of "noble materials", but rather the care and precision of building techniques capable of ennobling "common materials", such as simple brick. Palladio was probably inspired by the same conviction in his project for the monastery of the Carità. Starting from already known techniques and experiments in architectural language, he achieved entirely new expressive results: in the elevation on the Rio Terà di Santa Agnese, for example, he inverts the usual hierarchy of values for architectural elements and noble materials by making the entablature of brick and covering the walls with *marmorino* to imitate stone.

The last project designed by Palladio can be interpreted as the final version of his own personal "manifesto" about how to build according to the classical language, leaving aside "unnecessary expenses". Completed by his son Silla, the Teatro Olimpico (1580) consists of *all'antica* architecture made, however, with ordinary local materials, such as brick, limestone from the Vicenza quarries, stucco, and wood [fig. 11]. The whole theater was then coated with *marmorino* to imitate classical marble. The hierarchy between basic and opulent materials seems to have been completely replaced in the name of the overall control of the formal and compositional aspects of the construction. To achieve greater truth in fiction, even the Vicenza stone was coated with a thin layer of plaster in order to conceal the flaws due to a coarser grain and to change the original yellowish color into a marble hue similar to the surrounding plaster. Significantly, this treatment of stone with a technical expedient turns out to be the opposite of the technique used thirty years earlier for the bases of the columns in the nearby Palazzo Chiericati. This time the stone parts are undercut compared to those with *marmorino*, so that a layer of finish could be applied to ensure the surfaces were completely flush.

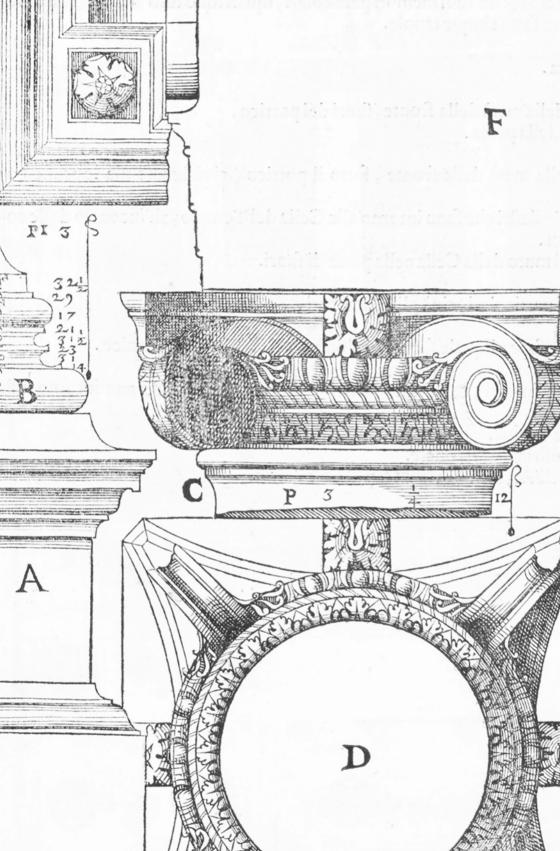


11 Teatro Olimpico, Vicenza. "Buildings are admired more for their form than for their materials", Palladio says in his cited comment on Ludovico Beretta's model for the Brescia cathedral.¹⁸ In the light of the examples that are presented in this paper, this claim cannot be reductively interpreted as a lack of interest in construction aspects but should be seen as part of a different conception of the value of materials and their application. The language encoded in *The Four Books* is, therefore, the outcome of the experiments that the stonecutter Palladio conducted on construction sites in search of that *usanza nuova*, which was to contribute to his impressive reputation around the world in the centuries to come.

Endnotes

If not indicated otherwise, all translations are by the author of this paper.

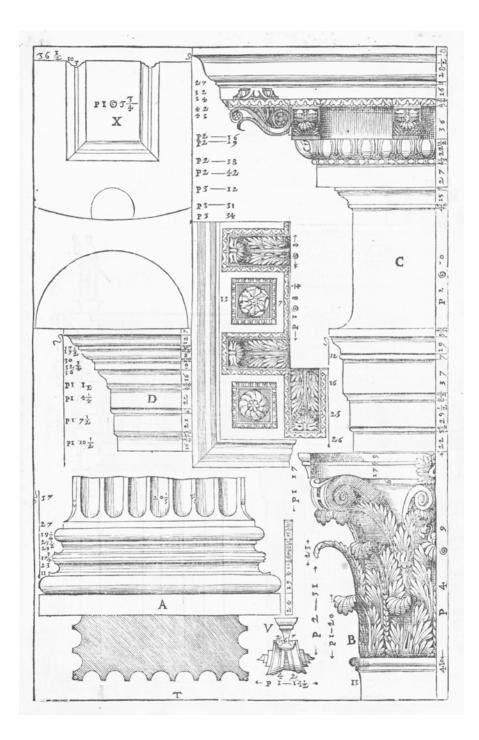
- 1 Palladio 1570, I 5: "[...]: onde cosi à poco à poco s'impari à lasciar da parte [...] le superflue spese, [...]."
- 2 Burns 2010.
- 3 See Burns 2002; Burns 2008b.
- 4 See Paternò 2018.
- 5 See Biscontin/Piana/Riva 1982; Biscontin/Piana/Riva 1986; Piana 2006.
- 6 See Pagliara 1997; Pagliara 1999; Pagliara 2002; Pagliara 2007.
- 7 See Pagliara 2008.
- 8 Paternò 2012.
- 9 Palladio 1570, II 6-7 (Cap. III).
- 10 Scamozzi 1615, II 309.
- 11 Palladio's Scritturo was published for the first time in Temanza 1762, XCV. For a recent transcription, see Palladio 1988, 123–125.
- 12 Palladio 1570, I 7 (Cap. I): "E se nella fabrica anderanno adornamenti di colonne, ò di pilastri; si potranno far le base, i capitelli, e gli architraui di pietra, e l'altre parti di pietra cotta."
- 13 See Burns 1991, 212, no. 160; Piana 2008, 319, cat. 154.
- 14 Palladio 1570, I 16-19 (Cap. XIIII).
- 15 See Cherido/Zaggia 2011.
- 16 See Beltramini 2008a, 11.
- 17 See Piana 1999; Piana 2008b, 321, cat. 158; Piana 2011; Paternò 2017.
- 18 Palladio 1988, 124: "[...], perciocché le fabriche si stimano più per la forma che per la materia."



Francesco Marcorin

Palladio's Drawings as a Means of Knowledge: Looking at the Past Through Modern Eyes

When Thomas Jefferson, President of the United States of America and self-taught architect, designed the Rotunda of the University of Virginia in Charlottesville in 1822, he drew inspiration from one of the most iconic ancient buildings: the Pantheon. Although Jefferson had never been to Rome, he could examine the plates in Andrea Palladio's *Quattro Libri dell' Architettura* (Venice 1570), of which he owned a copy of the English edition by Giacomo Leoni (London 1721). He relied blindly on Palladio's illustrations and even explicitly asked his workers and suppliers to refer to them for the capitals [fig. 1, 2].¹





1

Andrea Palladio, *I Quattro Libri dell'Architettura*, ornaments of the Pantheon in Rome. In: Palladio 1570, IV 80 (Cap. XX).

2

Thomas Jefferson, University of Virginia, Charlottesville: capitals of the Rotunda (1822–1826; 21st-century replicas). Jefferson had begun to study Palladio's treatise in the 1760s, when designing his own house at Monticello, and for the rest of his life he would consider it his 'architectural Bible'. As one can easily imagine, Palladio's *Quattro Libri* was not Jefferson's only reference source: he was also well versed in English and French Neoclassical architecture, and the books in his library included *Parallèle de l'architecture antique et de la moderne* by Charles Errand and Roland Fréart de Chambray (Paris 1650). Compared to other books on architecture at that time, however, Palladio's treatise was different: it did not simply present a repertoire of models but provided tools to *understand* architecture and its functions.²

Two and a half centuries earlier, Palladio himself—just like Jefferson—had relied on drawings made by others. The practice of drawing constituted a highly effective tool of knowledge, performed not only with reference to the architecture of the past. Drawings furnished information on distant or inaccessible buildings and reconstructed images of monuments that had fallen into ruins. They were also used to develop theoretical thinking or to elaborate and communicate ideas for buildings that had not yet been constructed. The various uses were interrelated: valuable lessons could be learned from the experience of the past to design, build, and decorate new architecture.

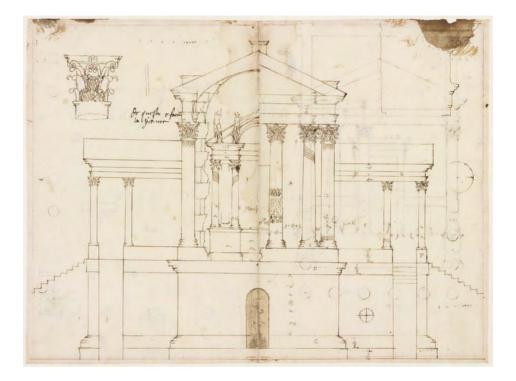
Architectural drawings from the 15th and 16th centuries testify to a great desire to further knowledge that led some architects to explore architecture beyond the boundaries of ancient Rome. Cyriacus of Ancona, for example, was one of the few to see the Parthenon in Athens. For a long time, his drawings were the only source of knowledge about the famed Greek monument. Drawings of the Holy Sepulchre in Jerusalem and other faraway monuments circulated from hand to hand, often with the help of diplomats. Through a drawing by Marco Grimani, for example, Sebastiano Serlio was able to learn and, in turn, publish information about the pyramid of Cheops in Egypt.³ The Sangallos scoured the Italian peninsula, from Naples to Verona, for Etruscan and Roman monuments that they could draw and survey, while they also gathered information on some French antiquities. Other architects, including Falconetto and Sanmicheli, traveled to the east coast of the Adriatic to document the antiquities of Pula and Split.⁴ Again, through drawings, the prototype of the Arch of the Sergii in Pula spread throughout the territories of the Venetian Republic and to many other parts of Italy and Europe.

Such an enormous quantity of drawings circulating through copies from one workshop to another enabled architects to share information and 'learn remotely' about buildings, sometimes without ever seeing them. This phenomenon undoubtedly stimulated the interests of the young Andrea Palladio. Indeed, even while still an apprentice and before his various trips to Rome, he had been able to see and copy drawings by other authors.⁵ He certainly studied the drawings after the Antique owned by his godfather, Vincenzo Grandi, as well as those in the workshop of his master, Giovanni di Giacomo da Porlezza.⁶ Moreover, he might have seen the drawings of Michele Sanmicheli from Verona, who was a guest twice in the Vicentine home of Giovanni di Giacomo. Significantly, the approximately 400 surviving drawings by Palladio include his copies of drawings by Giovanni Maria Falconetto, Pirro Ligorio⁷, Ventura, the aforementioned Sanmicheli, and others. Palladio was also familiar with many printed works, such as Sebastiano Serlio's *Terzo Libro* (1540), Torello Saraina's *De origine et amplitudine civitatis Veronae* with plates by Giovanni Caroto (1540) and Jean Poldo d'Albenas's Discours historial de l'antique et illustre cité de Nismes (1560).⁸

If we look at Palladio's drawings after the Antique, we soon realize that many are reproductions of drawings by other authors, subsequently made into 'fair copies' by standardizing the mode of representation—changing from perspective/axonometric views to orthogonal views—and the unit of measurement [fig. 3–5].⁹ Among the drawings of antiquities in Rome, for example, some were clearly made by Palladio before he visited the city and then corrected on the spot after directly observing the monuments he had previously reproduced.¹⁰

Palladio also made some first-hand survey drawings. But while the Sangallos could count on a vast workshop and were able to put together surveys of many buildings in a short time, Palladio worked alone, at least in the early part of his career. Copying survey drawings made by others helped him simplify and speed up the work, but this method did not rule out the direct observation of ancient monuments. Many of Palladio's drawings contain on-site measurements and notes, and Palladio's use of surveying tools and techniques is well documented: he knew how to use the rule and plumb line; he was able to convert units of measurement and to scale drawings, and he probably also knew how to use a relatively complex instrument like the circumferentor (surveyor's compass).¹¹





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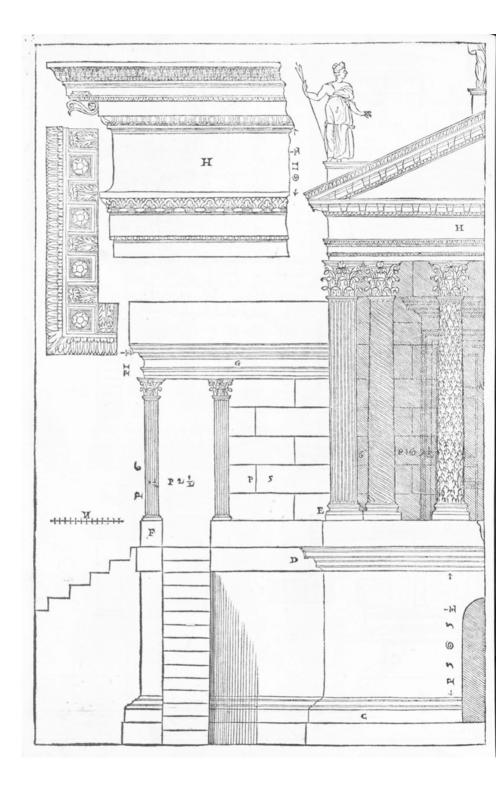
Andrea Palladio (after Pirro Ligorio?), The temple of Clitumnus near Spoleto, 1540s, stylus, traces of black chalk, pen and brown ink on paper, 428 x 282 mm, Vicenza, Musei Civici, D 22r.

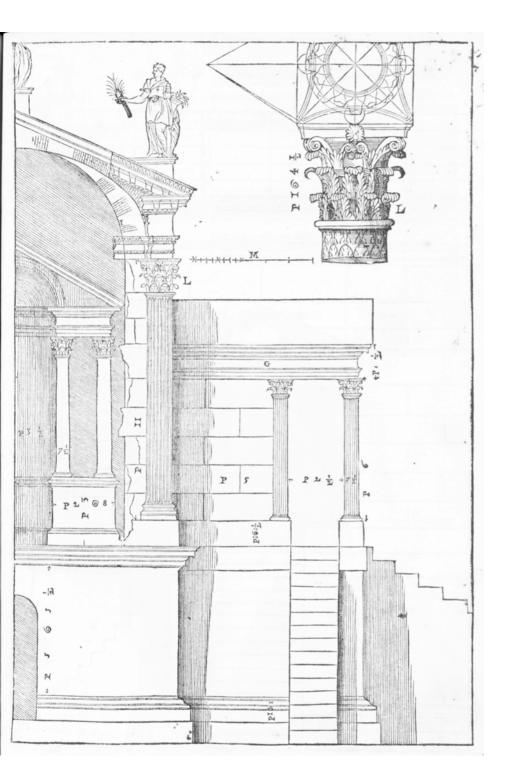
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Andrea Palladio, The temple of Clitumnus near Spoleto, late 1560s, stylus, traces of black chalk, pen and brown ink on paper, 280 x 375 mm, London, RIBA Library Drawings and Archives Collection, XI/15r.

Next pages

5 Andrea Palladio, *I Quattro Libri dell'Architettura*, The temple of Clitumnus near Spoleto. In: Palladio 1570, IV 100–101 (Cap. XXV).





Why did Palladio focus on buildings constructed more than ten centuries earlier? Palladio's interest in ancient architecture was part of a wider cultural vision that had been pursued for at least two generations, in which the study of Vitruvius and the monuments of ancient Rome was aimed at reviving the rules of the buona maniera, the 'good [antique] way' of building. In the 15th century, ancient monuments were seen as catalogs of models and decorative motifs to be imitated; in the 16th century, deeper knowledge of them was the basis for more thorough analyses. Thanks to the work of Bramante, Raphael, and Peruzzi and the studies of Fra' Giocondo and Antonio da Sangallo the Younger, a definitive classification of the various architectural orders had been reached. Architects began to explore the relationship between the form and function of buildings.¹² Raphael, and especially his famous *Letter to Leo X* (written around 1519), went a long way towards establishing an approach and method for dealing with ancient monuments:¹³ instead of demolishing them to obtain building material, they were to be measured, drawn and reconstructed on paper with their missing parts included in order to understand their original form. Having become the main tool for collecting and communicating data, drawing was codified in a 'scientific' way: perspective images were to be abandoned in favor of orthogonal representations, the only drafting method that correctly reproduced the proportions of buildings to scale. Raphael's premature death did not put an end to the ambitious project of drawing the entirety of ancient Rome, and within a few decades, his guidelines became standard practice.

In the meantime, Palladio made use of another important cultural development: the advent of the printed architectural treatise. This epoch-making turning point meant that, instead of borrowing drawings and copying them, which involved having the right personal acquaintances and enough time, with the risk of oversights and errors, all that was required now was to buy a printed book. Beginning with Serlio's *Terzo Libro*, followed a few months later by Saraina's *De origine*, books on ancient architecture were generally organized in the same way, i.e. with short descriptive texts and plates showing the plan, elevation, and

LIBRO TERZO,

O detto qui adietro de le latitudini, e de le profezze, hora trattaro de le altezze, e prima: l'ale tezza de la luce de l'arco è dupla a la larghezza - le befe del piedestalo è minuti quattromeno di due piedi , la cornice d'esso predestalo è alta minuti trentacinque , l'altezza de la bose de la colonna col zocco, che ui è fotto, e circa un piede: e tutti questi membri, et ancho il capitello de la colonna ben proportionati di mifure fono nel principio de l'ordine Composito nel mio quarto libro . il netto del piedostalo e piedi quatro e mezo l'altezza de la colonna fenza la bafe e l'capitello è piedi.xvii.e minuti.xiii. l'altezza del apricello è piede uno, e minuti uentificte e l'architraue è piede uno, e minuti dicinome e l'altezza del fregio è piede uno, e minuti dicifette e l'altezza de la cornice è piedi due e minuti fei eil bafamento del opitajfio è quanto il fregio. l'altezza d'esso epitaffio è piedi noue, e minuti dodici , la fua latitu dine e piedi uentitre : i quai membri faranno piu diffufamente difegnati , e descritti ne le carte feguenti .



S otto queft'arco ci fono .xv. quadri molto ornati , e nel mezo e un maggior quadro con un Gioue fculpito .

6

Sebastiano Serlio, Il Terzo Libro, The Arch of Titus in Rome, In: Serlio 1540, CV. section of buildings and some details [fig. 6]. Exactly thirty years later, in 1570, Palladio's Book IV of the Quattro Libri followed this model and reaffirmed the importance of drawing as a means of communication: it was not the plates that illustrated the text, but the short text-reduced to a minimum-that provided a commentary for the illustrations.¹⁴

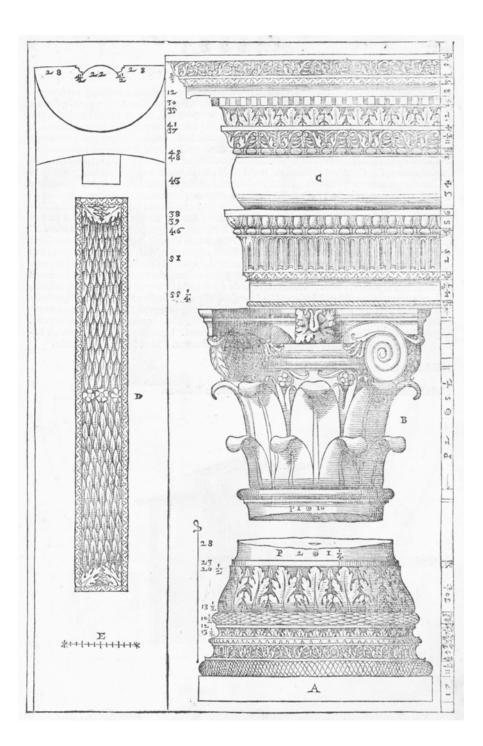
Palladio was interested in understanding the logic behind the architecture, that is, why a particular building was designed the way it was. A similar approach had been adopted a few decades earlier in Rome by Antonio da Sangallo the Younger, who was interested not so much in studying the 'archaeological' aspect of ancient architecture, but in grasping its 'inventione', i.e. its design idea. What emerges from the innumerable annotations on his drawings—written both as a reminder for himself and to be shared with the other draughtsmen in his workshop—was his willingness to learn and be inspired by the design ideas of the past.¹⁵ Palladio almost took this tendency to extremes. When studying an ancient building, he tried to identify with the architect who had designed it and understand the specific features of the site. He thus reconstructed the thinking that had led to a particular solution.

The architectural language and building techniques of the 16th century were not so different from those of Antiquity and presented common issues: compositional problems, such as designing the corner solution of a building or distributing a specific sequence of rooms within the plan, and practical problems, such as sheltering areas from sun or rain, connecting different levels, or reusing construction materials. For Palladio, studying and drawing ancient buildings was a source of inspiration for his own projects. Thus, for example, the Roman baths and basilicas were a model for the basilicas of San Giorgio Maggiore and the Redentore in Venice; ancient theatres for the Teatro Olimpico; and the Roman theatre in Verona and the sanctuary of Palestrina for the Villa Badoer at Fratta Polesine and the Villa Trissino at Meledo.¹⁶ It has long been debated why Palladio, unlike other Renaissance architects, was so profoundly 'philological' (i.e. he adopted a well-documented, historically accurate, scholarly approach) in reintroducing the forms of ancient architecture. One possible explanation is that, not having had opportunities to study the relatively distant ancient monuments of Rome and Verona during his apprenticeship, his approach was less 'instinctive' and more dependent on the drawings at his disposal.¹⁷ Nonetheless, he was clearly capable of ignoring or rejecting

ancient design ideas that he did not consider valid or interesting, such as the Vitruvian Ionic base or the unusual form of the capitals of the upper order in the Pantheon interior.¹⁸

Palladio was not just interested in building but in understanding all the theoretical and technical aspects of architecture. When faced with design problems, instead of seeking new solutions, he adopted a scholarly approach and turned to ideas from the past. In some cases, he himself described the initial problem and the reference model for the solution, while in other cases, we can deduce the original model by considering the knowledge he had acquired.

In Book IV, when describing the Lateran Baptistery in Rome, Palladio refers to a practical problem he had to solve on a building site in Venice, involving the reuse of two column shafts of precious marble in the portal in the counter-façade of the basilica of San Giorgio Maggiore.¹⁹ The shafts were too short for the full height of the portal, and he had to find a way of making up the difference. Instead of adding a double plinth under the base, he inserted an unusual element between the base and the shaft to act as a 'cushion' between them. The reference model was the couple of large columns at the entrance of the Lateran Baptistery. To make the reference explicit, Palladio decorated the two 'cushions' used in Venice exactly like the originals in Rome, with a series of leaves [fig. 7, 8].



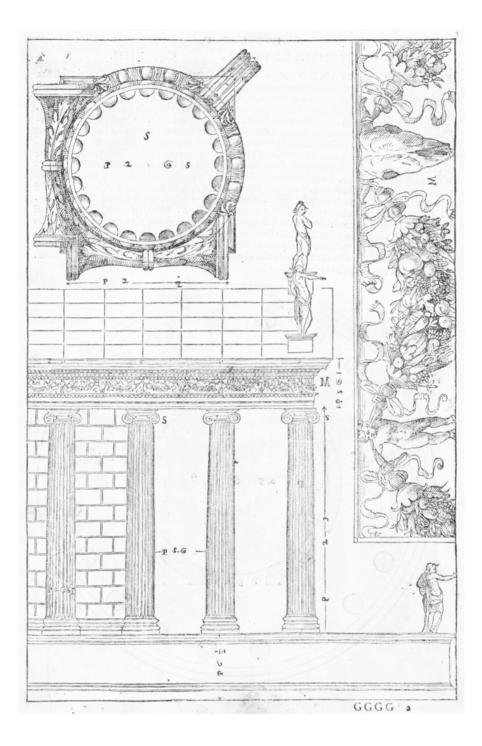


8

Andrea Palladio, Basilica of San Giorgio Maggiore in Venice, detail of the portal (counter-façade), 1565–1576.

7

Andrea Palladio, *I Quattro Libri dell'Architettura*, ornaments of the Lateran Baptistery in Rome. In: Palladio 1570, IV 63 (Cap. XVI). Another well-studied example is the corner Ionic capital in the pronaos of the Temple of Fortuna Virilis (known today as the Temple of Portunus) in Rome. In describing a corner volute, rotated by 45 degrees away from the front so that the Ionic capitals could be continued along the side of the building, Palladio pointed out that this solution was particularly ingenious. Not surprisingly, he used it in many of his buildings to give continuity to Ionic colonnades. The Ionic capitals themselves could be based on different models, depending on their function, as can be seen in the Palazzo Barbarano: in the loggia, designed to be viewed from the courtyard, Palladio adopted traditional Ionic capitals, while in the atrium he replicated the four-faced capitals he had seen at the Temple of Concordia (or Saturn) in Rome [fig. 9–12]. With no dominant front, these capitals were designed to be seen on all sides and to detract attention from the irregular shape of the atrium and the resulting misalignments of the columns.

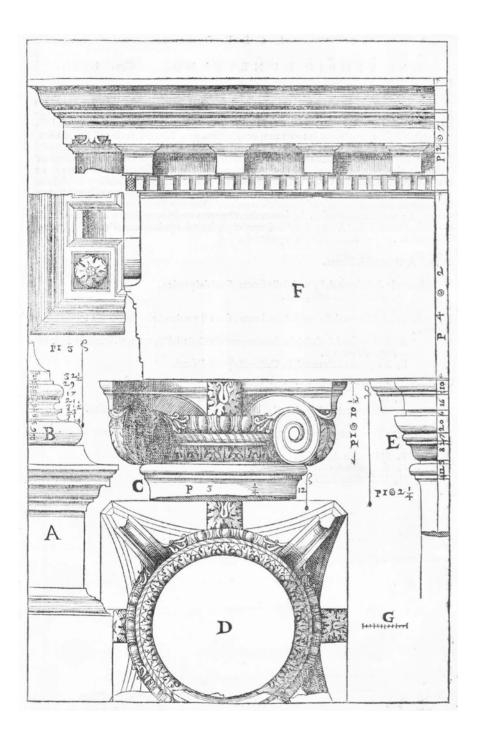


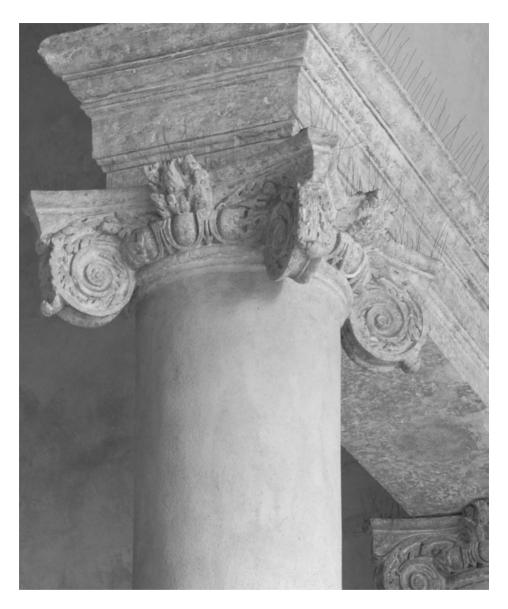


Andrea Palladio, *I Quattro Libri dell'Architettura*, ornaments of the Temple of Fortuna Virilis (known today as the Temple of Portunus) in Rome. In: Palladio 1570, IV 51 (Cap. XIII).

10

Andrea Palladio, Palazzo Barbarano in Vicenza, detail of the corner capital of the loggia, 1569–1575.

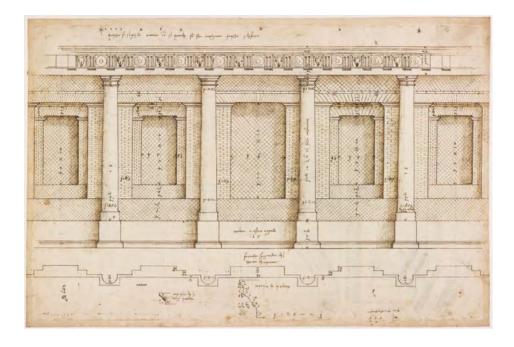




Andrea Palladio, *I Quattro Libri dell'Architettura*, ornaments of the Temple of Concordia (or Saturn) in Rome. In: Palladio 1570, IV 127 (Cap. XXX).

12

Andrea Palladio, Palazzo Barbarano in Vicenza, detail of one of the capitals in the atrium, 1569–1575.



There were also some more strictly practical issues, such as preventing people from tripping over column bases when crossing narrow passages. Palladio carefully analysed the problem in ancient monuments. In some cases, as in his description of the Temples of Vesta in Rome and Tivoli, he observed that the bases had no plinths to avoid obstructing the passage. When designing the loggias for the Palazzo della Ragione in Vicenza, Palladio kept this potential issue in mind, and for the minor columns of each bay, he drew inspiration from another ancient model: the upper portico of the Roman theatre in Verona [fig. 13, 14].²⁰ The same solution was adopted in the *barchessa* of the Villa Trissino at Meledo, where the presence of 'drum' bases served to prevent any damage from passing carriages, which might have scraped the moldings on a canonical base.²¹ In the *barchesse* of the Villa Badoer at Fratta Polesine, on the other hand, Palladio solved the problem by eliminating the bases, simply by quoting Vitruvius and the Tuscan order.²²

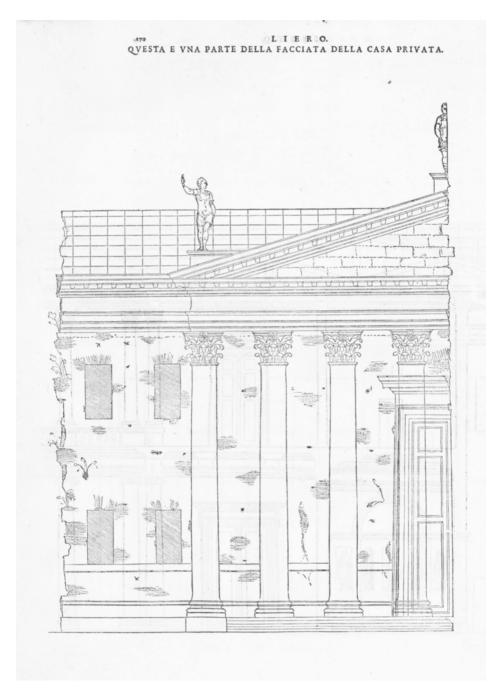
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Andrea Palladio (after Michele Sanmicheli?), plan and elevation of the second terrace of the Roman Theatre in Verona, 1540s, stylus, pen and brown ink on paper, 290 x 433 mm, London, RIBA Library Drawings and Archives Collection, XII/22v.



14 Andrea Palladio, the Basilica in Vicenza, detail of the bases on the ground level, 1549–1561.

At times the issues were of a structural nature. Palladio is acknowledged today for his extensive use of columns with shafts made of brick instead of stone, which brought to an end a thousand-year-old practice. This reduced material and labor costs when building large colonnades. There was a drawback, however: brick shafts were weaker than stone shafts, not so much under the strain of vertical loads as in the presence of any horizontal forces. One possible solution was to reinforce the two short sides of loggias and porticos with a more stable structure. Once again, the answer came from an ancient monument: the Portico of Octavia in Rome, where each of the two short sides of the colonnade is filled in by a large arch. Palladio introduced an arch to enclose a loggia for the first time in the Palazzo Chiericati (1550)²³, and he later replicated this solution in the Palazzo Barbarano (1569) and in the porticos of the Villa Chericati at Vancimuglio (c. 1550), the Villa Cornaro at Piombino Dese (1552-53) and the Villa Rotonda (1566).²⁴ In the Villa Foscari (1555), on the other hand, he returned to his first design for the Villa Chiericati, conceived five years earlier²⁵, and set columns on the three sides of the portico, thus entirely emulating the model of the ancient pronaos.

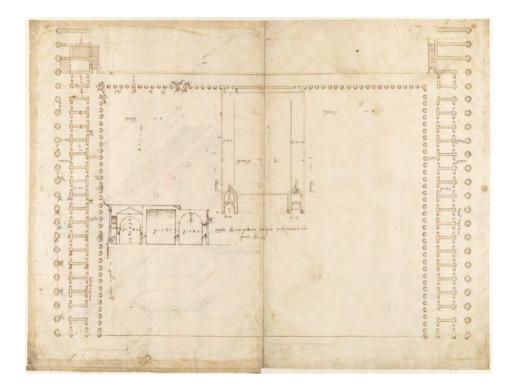




Daniele Barbaro, *I Dieci Libri dell'Architettura di M. Vitruvio*, elevation of the Roman House. In: Barbaro 1556, VI 170.

16

Andrea Palladio, Villa Cornaro at Piombino Dese, 1552–1588. The presence of the pronaos at the center of a villa façade was the result of observations and reflections, in which two different traditions converged: the house of the ancients as described by Vitruvius and the local building practice. Vitruvius, later taken up by Alberti, recommended setting a pediment above the entrance to the villa. The pediment should not be as wide as the entire façade, as was the case for temples, but only occupy the central space. Possibly inspired by the Villa Medici at Poggio a Caiano, Palladio came up with the idea of setting a pronaos and a pediment at the center of the façade.²⁶ The presence of 'wings' on either side of the pronaos exemplified the correct interpretation of the relevant passage in Vitruvius. Elaborated from the 1540s onwards, this idea was simultaneously developed by Palladio in connection with the plates for the Italian edition of Vitruvius' De Architectura, published by Daniele Barbaro in 1556 [fig. 15, 16].²⁷ At the same time, however, the portico in Palladio's villas was a sort of updated version in a classical key of the existing traditional 15th-century villa loggia. The arches were transformed into trabeated columns, but the portico's function was an entrance and shelter basically remained the same.



Andrea Palladio, plan of the Temple of Hercules Victor in Tivoli, 1547 ca., stylus, pen and brown ink on paper, over chalk underdrawing, 424 x 560 mm, London, RIBA Library Drawings and Archives Collection, X/16. Palladio also looked to ancient architecture and the drawings in his possession for solutions on a larger scale. For example, in the Villa Foscari the nature of the site and the structure of the building led him to carefully select reference models. The villa was to be built along the river Brenta, on a low plot of land prone to flooding. As the first villa that travelers would encounter coming up the river from Venice, it had to be given an imposing appearance. Palladio turned to his drawings of the Temple of Clitumnus, near Spoleto, and designed the villa following the same basic idea: a building raised on a high base with a hexastyle pronaos flanked by two symmetrical flights of stairs. Inside, he created a large cross-vaulted hall and solved the lighting problem by placing large windows in the rear façade, inspired by both the Roman baths and Raphael's Villa Madama in Rome.

Palladio's methodical approach aimed at establishing a well-defined order is also found in the general organization of his villas. The traditional Veneto villa, particularly in the 15th century, was based on the random arrangement of buildings around a courtyard enclosed by defensive walls. The various buildings (the manor house, stables, granaries, and dovecotes) were constructed independently, according to the requirements and the shape of the site, albeit with the residential spaces separate from the stables. Palladio's villas, on the contrary, were conceived as one whole complex, with the manor house at the center and the outhouses symmetrically arranged on the sides. As Palladio explains in Book II of the Quattro Libri, this solution had the advantage that each part of the complex could be reached through porticoes providing shelter from sun and rain.²⁸ Once again, the source of inspiration was probably an ancient building, the Temple of Hercules Victor at Tivoli,²⁹ which Palladio and his contemporaries mistakenly believed to be Maecenas' Villa [fig. 17, 18]. Conditioned by this erroneous interpretation, Palladio was impressed with the very practical idea of connecting the two side wings with the large central building, since it maintained a hierarchy between the various functions but at the same time created an ordered, single complex.

All the information about ancient monuments that Palladio gathered in drawings and adapted to modern building requirements was shared and explained in the Quattro Libri. Once again, drawing proved to be the most effective means of communication to describe ancient monuments as well as to present designs for villas, palaces, and public buildings. Through sketches on paper, Palladio exchanged views with his patrons and reflected on the design of his buildings, starting with schematic representations of the plan and defining the elevations accordingly.³⁰ He subsequently made presentation drawings and plates to show the idea in its final form. The plates in the *Quattro Libri* further developed the tradition of architectural treatises by using a now fully codified graphic language. Compared to Serlio's illustrations, which are sometimes orthogonal projections and sometimes axonometric, Palladio's plates never deviate from the rule of providing a plan, elevation, and section, with details in orthogonal views. This ensures that every part of the scale drawings can be measured, and that information can be obtained on the dimensions or parts of buildings, even when not indicated. Palladio also introduced a system that made the illustrations more independent from the text by including the measurements of the various elements directly on the drawings instead of describing them in words.³¹ Consulting the plates became even more immediate. Moreover, the plates did not only show the forms and proportions of buildings: Palladio also added conventional graphic signs to indicate different types of building materials, such as stone, brick, and wood, in the sections of walls and roofs [fig. 19]. This was yet another step in the process by which Palladio so successfully transmitted his knowledge, ideas, and reflections through drawing, thus teaching future generations of architects how to look at all aspects of architecture and understand the way they functioned as a whole.



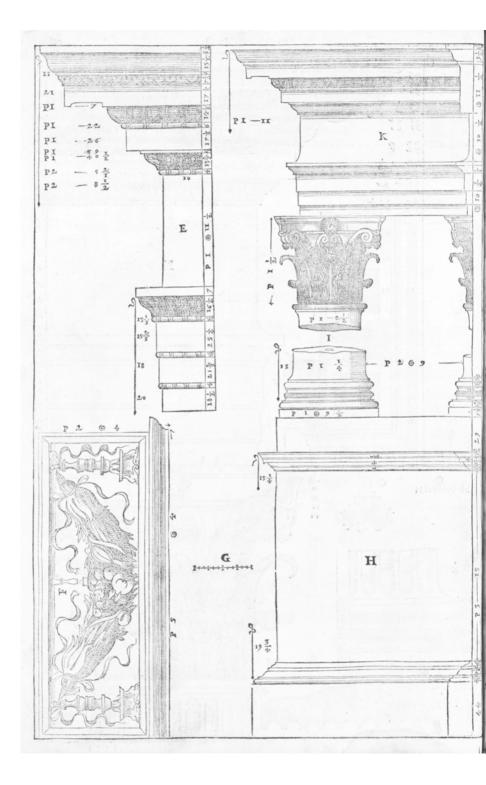


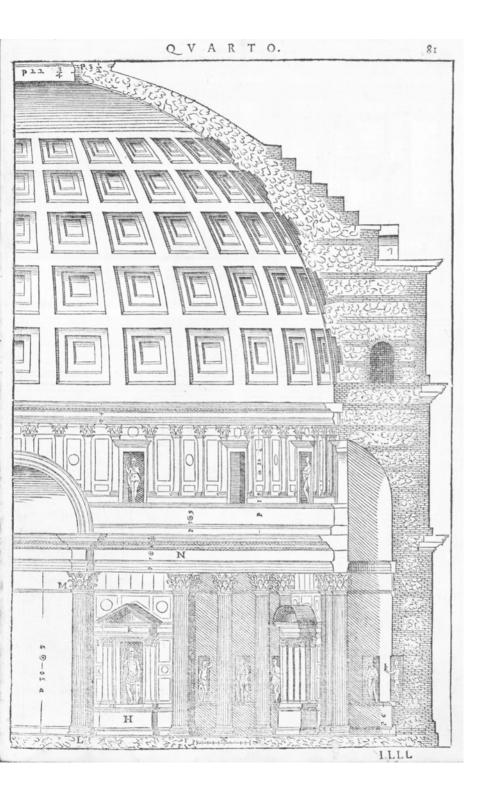
Andrea Palladio, Villa Saraceno at Finale di Agugliaro, 1548–1555.

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Andrea Palladio, *I Quattro Libri dell'Architettura*, details and section of the Pantheon in Rome. In: Palladio 1570, IV 82– 83 [84, 81] (Cap. XX).



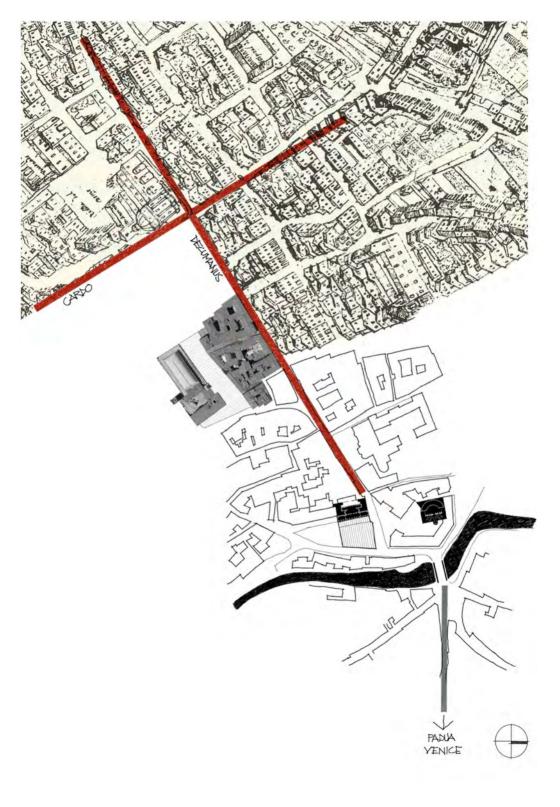


Endnotes

If not indicated otherwise, all translations are by the author of this paper.

- 1 See Patton 1906, 185.
- 2 See Magagnato/Marini (eds.) 1980, LIII-LIV.
- 3 Serlio 1540, XCIIII.
- 4 See, for example, the drawings in London, RIBA Library Drawings and Archives Collection, VIII/23r. See Beltramini/Burns (eds.) 2008b, 308–311.
- 5 Burns (ed.) 1975, 247–252. See also Frommel 2008.
- 6 See Gros 2006, 11.
- 7 For a survey drawing of the Temple of Clitumnus after Pirro Ligorio (Vicenza, Musei Civici, D. 22r), see Burns (ed.) 1975, 102; Beltramini/Burns (eds.) 2008b, 134–135. For a drawing of a tomb in Spoleto, also after Ligorio (London, RIBA Library Drawings and Archives Collection, IX/18), see Burns (ed.) 1975, 147. For Michele Sanmicheli and the survey of the Roman Theatre in Verona (RIBA, XII/22v), see Burns (ed.) 1975, 111. For a survey of the portal of San Salvatore in Spoleto (RIBA, IX, 17), see Burns (ed.) 1975, 137. On Palladio and Pirro Ligorio, see Occhipinti 2008. On Palladio, Falconetto and Sanmicheli, see Zorzi 1955; Zorzi 1956; Zorzi 1959, 15–16, 33–39; Ackerman 1966, 24–25, 47; Boucher 1994, 17, 31–36. On Palladio and Serlio, see Boucher 1994, 234.
- 8 For Saraina/Caroto, see Beltramini/Burns (eds.) 2008b, 248–249; for D'Albenas see Burns (ed.) 1975, 259.
- 9 See Burns (ed.) 1975, 102, 111; Burns 1980; Magagnato/Marini (eds.) 1980, XX-XXI; Boucher 1994, 26-27.
- 10 See Beltramini/Burns (eds.) 2008b, 54–56. See also drawings D. 10v, 13 and 15 in Vicenza, Musei Civici (Beltramini/Burns (eds.) 2008b, 58–59).
- 11 See Burns 1980, 83; see also Magagnato/Marini (eds.) 1980, XIX-XXIII; Beltramini/Burns (eds.) 2008b, 286-291; Battilotti 2011, 13-14.
- 12 Francesco di Giorgio Martini was not in a position to fully understand the Vitruvian system of orders, but his notes circulated and were of great help to other architects, such as Leonardo, Bramante and Peruzzi. In turn, Peruzzi's drawings and notes were used by Serlio for his treatise. See Burns (ed.) 1975, 101, 205; Boucher 1994, 241–242.
- 13 See Settis/Ammannati 2022, 148–183. On Palladio and Raphael, see Magagnato/Marini (eds.) 1980, XX; Di Teodoro 2008.
- 14 See Burns (ed.) 1975, 101.
- 15 To give a few examples, Sangallo annotated his survey of San Vitale in Ravenna with the words: "È fatto di mala compositione, ma la fantasia è bella." (Firenze, Uffizi, GDSU 887 Ar) / Engl.: "It is badly put together, but beautifully conceived." Similarly, of the Porta Marzia in Perugia he wrote: "Solo se ne pigli la forma, overo invenzione." (GDSU 1207 A) / Engl.: "Only take the form, that is the invention."
- 16 See Burns (ed.) 1975, 247. For how Palladio studied ancient architecture and Vitruvius in search of design ideas, see Beltramini/Burns (eds.) 2008b, 266–270; see also Gros 2008.
- 17 See Burns (ed.) 1975, 247.
- 18 For the Ionic base, see Palladio 1570, I 31 (Cap. XVI). The upper order of the Pantheon was demolished between 1740 and 1758 precisely because of this 'anomaly'. See Burns (ed.) 1975, 255.
- 19 Palladio 1570, IV 53 [61] (Cap. XVI). See also Marcorin 2018, 147.
- 20 See Cevese 1968-69, 71-72; Burns (ed.) 1975, 218.

- 21 See Cevese 1968-69, 71-72.
- 22 See Boucher 1994, 142.
- 23 See Ackerman 1966, 61; Puppi 1973, II, 286; Burns (ed.) 1975, 39; Boucher 1994, 147; Beltramini 2020, 18.
- 24 See Burns (ed.) 1975, 179-180.
- 25 See Beltramini 2020, 58.
- 26 See Burns (ed.) 1975, 179; Boucher 1994, 146; Beltramini 2020, 64.
- 27 Barbaro 1556, VI, 170; Magagnato/Marini (eds.) 1980, XXVII; Gros 2006, 75-76.
- 28 Palladio 1570, II, 46 (Cap. XIII).
- 29 London, RIBA Library Drawings and Archives Collection, X/16. Boucher 1994, 146-147.
- 30 For sketches of plans, see those for the Villa Arnaldi at Meledo (Vicenza, Biblioteca Civica Bertoliana, Gonz.28.1.4=471), the Villa Mocenigo at Marocco (ASVe, *Confini*, b. 262), an unidentified villa (ASVi, *Notarile, Giovanni Maddalena*, b. 458), housing in Venice (London, RIBA Library Drawings and Archives Collection, XVI/9v) and the Palazzo Volpe in Vicenza (RIBA, XI/22r). See Burns (ed.) 1975, 220–223; Beltramini/Burns (eds.) 2008b, 300–314.
- 31 See Burns (ed.) 1975, 102.



Patrizio M. Martinelli

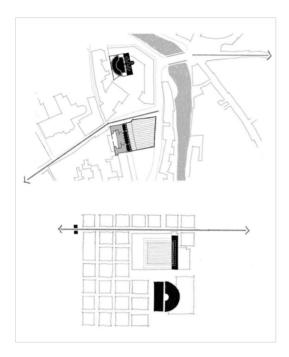
Palladian Façades: Inhabited Thresholds and Theatrical Urban Micro-Cosms

Introduction¹

Walking along Vicenza's Corso Palladio, after leaving behind the Basilica and heading east, we reach the end of our journey before crossing the Ponte degli Angeli bridge. Here, we encounter two magnificent buildings designed by Andrea Palladio. On our right, we can admire Palazzo Chiericati, a former private residential building now hosting the Civic Museum, with its monumental colonnade facing Piazza Matteotti, and beyond this square and a row of houses, the Bacchiglione river. On our left, through a courtyard, we can access the Olympic Theater, set up inside an existing building, whose exterior belies the magnificence of the interior. They belong to two different moments and phases in Palladio's life and architectural career: Palazzo Chiericati was designed in 1550, whereas the Olympic Theater is dated around 1580 and can be considered his final masterpiece, completed by Scamozzi after the architect's death. The two buildings can also be considered two protagonists of Palladio's idea of a city, which

1

Vicenza, analytical diagram. Palazzo Chiericati, the Olympic Theater, the Basilica as monumental civic buildings inserted in the urban fabric. Drawings and montage by the author.



he was able to build, through fragments, in Vicenza [fig. 1]. Along with the reinvention of the Roman house-designing the urban palaces for the most important families of the time-and the transformation of the pre-existing gothic Palazzo della Ragione into the Basilica—named like the similar ancient Roman civil structure—Palladio seems to complete the re-birth of the Roman city inside Vicenza's urban fabric through two other fundamental core types such as the *forum* (Palazzo Chiericati) and the theater (the Olympic Theater) [fig. 2]. These buildings also define a very specific place. Both situated along the city's eastern edge of the decumanus (Corso Palladio), facing the Bacchiglione river and the bridge that crosses it (built by the Romans, and now called Ponte degli Angeli), they define the entrance to Vicenza from the cities of Padua. Treviso. and Venice. Finally, they represent a very particular idea of collective building, with a deep connection to the urban fabric and its constituents-the square and the street-via a specific

2

Vicenza and Timgad, the theatre and the forum inside the urban fabric. Drawings by the author. architectural feature, the façade. In these two buildings, the façade can be considered as a thick, inhabited, in-between space. It may be public and private, urban and domestic, exterior and interior (Palazzo Chiericati). Alternatively, it can be seen as an urban component brought inside the building to evoke and recreate an urban microcosm within an interior space (Olympic Theater). The following notes and reflections capture these aspects, demonstrating through a series of case studies how Palladio's ideas about the city, its buildings, and its architectural and urban elements are still relevant in contemporary times. They continue to contribute to the construction of meaningful places, both interior and exterior, in our cities and buildings.

The Palazzo Chiericati Method: The Façade as Inhabited Thick Threshold

As Christian Norberg-Schulz points out, in Renaissance architecture, the façade represents the cosmic order that belongs to both the outside and the inside. Not only from a religious/ideological point of view but also tectonic and spatial. He explains that the "relationship between outside and inside comes into play, where the exterior acts as a preparation for the interior. The built form is façade as well as interior elevation, and spatial organization consists in a path which leads from the outside towards a goal within."²

In the Redentore Church in Venice, Palladio overlaps five façades one above the other, following a design strategy well interpreted by Rudolf Wittkower.³ Each one of them is conceived as a projection of a component of the interior space: the entrance, the central nave, the chapels on either side, the transept, and the main volume that keeps together the whole. The elevation, as a thick and dense composition of planes, also clearly stands for the tectonics of the orders: pilasters, cornices, and gables are not flat representation, but have three-dimensional consistency. So, the interior, its character, and structural principles are anticipated clearly outside of the church. We could also add that this Palladian "façade made of façades" considers the urban environment, with an architectural density that seems justified by the strength needed to establish relations with the powerful place, the Canale della Giudecca and the urban front on the other side of the canal. This aspect (possibly reminiscent of the Chiericati project) is very relevant during the processions dedicated to the Redeemer ("Redentore"), which started from the Doge's Palace, "passed over a floating route supported by boats [...], attracted and distracted the Venetians who followed this spectacular event while staying in their boats" or along the Giudecca's *fondamenta*.⁴

This "reaction" to the context is well expressed by the eighteenthcentury Italian architecture and art historian Francesco Milizia, who links this aspect to the analogy between human physiognomy and architectural façades. He points out that the façade (as a human face that reacts to a particular context or situation) expresses "the nature of various buildings, which changes much due to the variety of their uses, sites and numerous other circumstances."⁵ The façade is the architectural "response" to a given context, and gathers and defines the relations that the building establishes between interior and exterior, defining urban connections and the dialogue between these two spheres. Other aspects as the climate conditions, for instance, could influence the number and shape of the openings, the construction system, and the design of the urban elevations. In Venice, the façades are pierced screens of diaphanous loggias onto which the *piano nobile* faces, open and transparent to the light of the city. They seem to belong more to the canal than to the buildings and find a chromatic unity and surface rhythm alongside each other.⁶ In the cities of northern Europe, on the contrary, the façades are built in front-gabled masonry and small openings placed along the streets, with pitched roofs fitted with dormer windows.

According to Colin Rowe, we can find a similar "response" to the conditions of the place in the façades of the Quirinale in Rome, one open onto the city street, the other onto the garden: "Thus, with respect to the street on the one side and its gardens on the other, the Manica lunga acts as both space occupier and space definer, as positive figure and passive ground, permitting both street and garden to exert their distinct and independent personalities. To the street it projects a hard, 'outside' presence which acts as a kind of datum to service a condition of irregularity and circumstances (Sant'Andrea, etc.) across the way; but, while in this manner it establishes the public realm, it is also able to secure for the garden side a wholly contrary, softer, private and, potentially, more adaptable condition."⁷ The different prospect (towards street/city *versus* towards garden/nature) molds architecture, the same building faces onto different places with a different inflection of the elevation.

But there are other aspects to be considered. As pointed out by Rudolph Arnheim in his seminal book *The Dynamics of* Architectural Form, the role of architecture is to reconcile the two worlds of dwelling, domestic and urban. On the one hand, it must provide shelter and protection, creating a congenial internal private environment; on the other, it must create a public exterior that "is never alone", that is part of an urban or natural landscape that influences or is influenced by the building. The great challenge for the designer "derives from the paradoxical contradiction between (1) the mutual exclusiveness of autonomous, self-contained interior spaces and an equally complete outer world, and (2) the necessary coherence of the two as parts indivisible of the human environment."⁸ The place where the designer can solve this contradiction is the enclosure that separates inside and outside, the wall that belongs to both worlds. This "point of change-Robert Venturi explains—becomes an architectural event [...], the spatial record of this resolution and its drama" that, if considered, "opens the door once again to an urbanistic point of view."⁹ The façade, among all the walls that separate the interior from the exterior, is where the transition (the drama) between worlds is represented the most. This happens above all when this element turns from a simple two-dimensional vertical plane into a deep, inhabited space, and thus into a literal, figurative, and phenomenological place where the relations between interior and exterior,

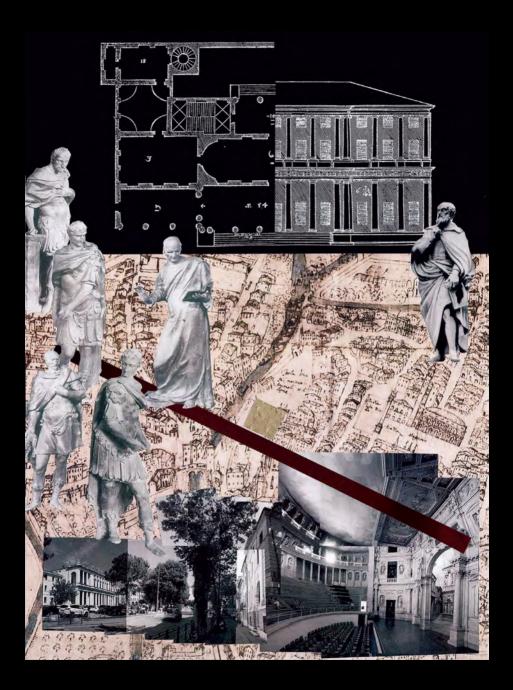
public, and private dimension, and architecture and city find their representation, sense, and significance.

Therefore, the façade (aside from being a representation of the inside and a device that reacts to the outside, as previously argued) can be designed as a device that, simultaneously, separates and unites these two realms. It is interesting and challenging when this connection, as Aldo Van Eyck points out, is "articulated by means of defined in-between places which induce simultaneous awareness of what is significant on either side. An in-between space in this sense provides the common ground where conflicting polarities can again become twin phenomena."¹⁰Georges Teyssot argues that several architectural elements and spaces create the experience of this in-between, transforming it in an inhabited threshold between architecture and city: the doorway, the portal, the *portico*, the *peristyle*, the *narthex*, the triumphant arch. "These imaginary and tectonic lines—Teyssot explains—create not boundaries, but the space of the intermediate. A figure both in space and in time, the threshold, which is in the middle, is an interval between things. A medium, in a way, that by allowing entry, opens up the possibility of being in-between"¹¹, and being inside.

All these characteristics appear in Palazzo Chiericati in Vicenza, which may be read, in the plan, and even in the elevation, as a composition of architectural layers that run parallel to the Piazza dell'Isola, evoking the spatial depth of the building, well anticipated by the façade. Palazzo Chiericati, Rudolf Wittkower argues, "has to be built along one side of a large square, and not in a narrow street. Palladio therefore visualized its façade in terms of a Roman forum and designed long colonnades in two tiers."¹² The use of columns, as Palladio explains in the *Four Books*, is a necessary spatial feature: "*Porticoes*, such as the ancient use, ought to be made round the piazze."¹³ The façade is resolved with a broad *portico* on the ground floor and a *loggia* on the *piano nobile*, which constructs "a three-dimensional architecture, where space becomes an integral part of it, incorporating itself there and becoming a decisive feature of it."¹⁴

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Andrea Palladio, Palazzo Chiericati and the Olympic Theater, Vicenza. Fragments of a theatrical urban experience. Montage by the author.



This architecture has part of its rationale associated with an open public space. The idea of the overlapped transparent colonnade is represented clearly in the illustration of the façade shown in the Four Books, where the walls of the central bays of the piano nobile, which interrupt the openness of the *loggia*, are rendered like those more withdrawn, restoring the continuity and transparency of the *chiaroscuro* to both floors. The orientation of the building, facing east and the sun path, also allows these dramatic, almost sculptural, effects of light and shadow. On the ground floor, the portico belongs to the city as a shady, protected, and safe public space: it is actually an urban space between the city and the interior, the reinvention of a Roman *forum*. The upper *loggia* belongs to the residents' private realm, where they can stay and experience the outside through a privileged view of the city, but it is also a place where the aristocratic family's power and wealth are represented to the people in the square itself, transforming the place in an open-air theatrical space [fig. 3].

We can find some analogies with this project in many buildings in which the façade is the element that creates the connection with the urban environment while also forming an architectural inhabited space. The work of Le Corbusier, after the Purism era, can offer many examples. From the Immeuble Clarté in Geneva¹⁵ to the Unité d'Habitation, from House Curutchet¹⁶ to the private and collective buildings in India, the Corbusian façades become actual places, with the introduction of the sun-breaker, designed as a protective device but also as a sort of re-invention of the traditional *loggia*. "Every unit is protected by a sun-breaker, which is actually the *loggia* of the ancient Mediterranean Greek, Roman, Italian tradition", declares Le Corbusier in 1951.¹⁷ The façade, so thick that it could recreate the play of light and shadow that belonged to ancient architecture, becomes an inhabited space and a monumental device to frame the outside world from the interior, and the inside from the outside.¹⁸

Similarly relevant, as a reinvention of the conceptional idea of the Palazzo Chiericati, is the Tognella House in Milan, also called "House in the Park" (1947–1953), designed by Ignazio Gardella in front of Parco Sempione.¹⁹ As Rafael Moneo points out, Gardella's contribution to architecture is to "insert on the structure of Modern architecture the principles and criteria established in Renaissance and effective for centuries."²⁰ Art historian Giulio Carlo Argan underscores how in Gardella's research, "the building is nothing else but the formal definition of an environmental situation", where the environment is "the dimension of



4

Ignazio Gardella, Tognella House, Milan. Drawings and montage by the author. Model by the students of University IUAV of Venice, academic year 2008–2009.



possibilities: open toward the past, through memory, and toward the future, through imagination."²¹ The building has five floors, with one big apartment each. The plan of this five-story residential building is divided into three rectangular parallel spaces, running parallel to the street, as in Palazzo Chiericati. The one that contains the bedrooms and the services has a conventional layout of closed rooms and equipped hallway, with an exterior envelope made of solid opaque walls cut by vertical openings. The central part contains the staircase, elevators, and hallways [fig. 4].

The part facing the park is an open space where the dining room, living room, and studio flow one into the other, open to a balcony that runs across the whole façade. A monumental frame of pillars and slabs, as a vertical composition of "hanging *porticoes*", which recalls the giant order of classical architecture, defines this main elevation. The contrast with the opaque volume behind it is evident, and being slightly shorter, it appears to be a detached and independent component of the building. Behind the frame, Gardella designs the envelope that encloses the interior as a broken line made of thin solid panels but mostly of big floor-toceiling windows, as an asymmetrical free form flowing behind and between the pillars. This is one of the "transgressions" typical of Gardella's architecture, as Argan calls them: the capacity to take composition beyond the expected and the predictable as a pure act of imagination and invention.

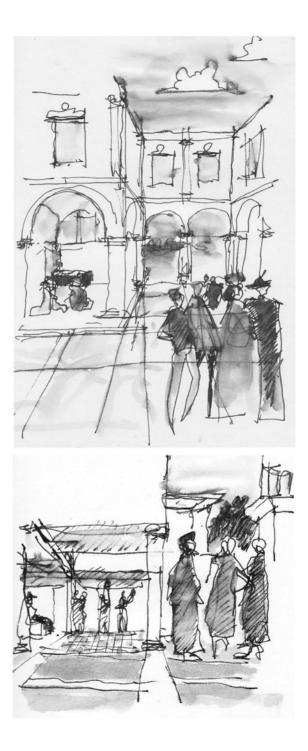
Yet, Argan notes, this is not a simplified personal gesture abstract from reality, but a reaction to light and atmosphere and the actual life inside the building.²² From the inside, the vertical composition of the pillars frames the view towards the park, which is a consistent presence in the interior, enclosed by the transparent thin wall of windows. This flowing envelope, which sometimes incorporates the pillars into the interior, seems to extend and contract under the vital pushes of the interior and as a reaction to the outside. As Robert Slutzky notes in a brilliant metaphor that describes the post-purist Corbusian façades, it is like a lively device "made to absorb all the energies present in the architectural milieu, participating in a fluid interchange"²³ [fig. 5].

5

Ignazio Gardella, Tognella House, Milan. The inhabited façade. Drawings and montage by the author. As in Palazzo Chiericati, in the Tognella House, the play of light and shadow contributes to the perception of the thickness of the façade from the outside and clearly shows the tension between the classical rigidity of the pillars and the gracious and sculptural arrangement of the thin wall behind them. Since in front of the building there is an open space and a huge park, this *chiaroscuro* play helps to give visual strength to the building, also when seen from a distance. This is the result of the fertile and balanced tension between memory and invention,²⁴ and a tribute to how architecture was built in ancient times.

The Olympic Theater Method: Theaters and Domestic Scenes as Urban Micro-Cosms

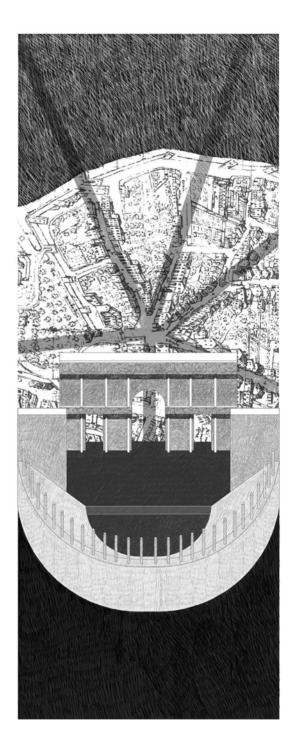
It is well-known that the theatrical representation belongs to the city far earlier than its expression and realization as an architectural type. As Bernard Rudofsky points out, "the street is where the action is [...], the street itself has been the great world theater. Drama and comedy, both spontaneous and contrived, were supplied by daily life."25 Even in contemporary times, the spontaneous representation of the citizens' life takes place on the streets, in the open air, with real buildings as a backdrop. There we witness funerals, weddings, religious processions, secular festivities and triumphs, or even the theatrical plays of actors and dancers. In Medieval Europe, theatre was performed in the public space of the cities, with small temporary stages and cloths as the backdrop. As Florian Beigel notes, "people watching the performance were both engaged in the daily life of the city and all the other things that were happening in the square, as well as the imaginary world that was made by the musicians and the performers."²⁶ During the Renaissance, theater informed the interpretation of the world,²⁷ as a real performance (set in the city fabric) and a conceptual idea of the human existence. In Florence, for instance, the Uffizi palace and its *piazza* can be read as theater and stage.²⁸ In Venice, according to Alban Janson and Thorsten Bürklin, "anyone who enters a Venetian *campo* (small square) is subconsciously aware



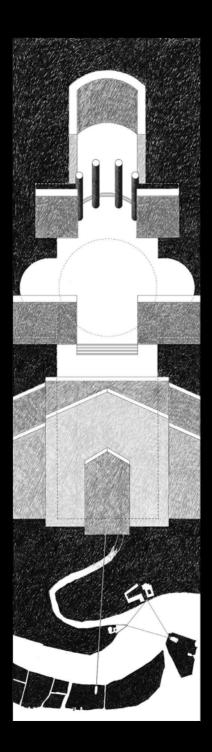
Pietro Perugino, The Miracles of San Bernardino. Miracle baby born with one dead, and Piero Della Francesca, Flagellation. Drawings by the author. of the scenic effect of the public space, struck by a sense of having stepped onto a stage." $^{\mbox{\tiny 29}}$

This character of the urban environment—interpreted as a theatrical stage (and it is important to highlight that the word "scene," according to Renaissance scholar Leone de' Sommi, derives from the Hebrew *scèhonà*, which means "street with several buildings")³⁰—also informed the representation of the city and its citizens' lives. Among many, in Pietro Perugino's *The Miracles of San Bernardino. Miracle baby born with one dead* (1473) and Piero Della Francesca's *Flagellation* (1455–1460), architecture is represented as an ambiguous theatrical stage, an interior with strong relations with the exterior. Even earlier, the backdrop of the *Miracle of San Zenobio* by Domenico Veneziano is represented as an urban street with overlooking buildings: the painting dates to 1445, a century earlier than Sebastiano Serlio's codification of stage design as a "reinvention" of urban space,³¹ later built by Palladio and Scamozzi [fig. 6].

In Palladio's project for the Olympic Theater-the first to be conceived and built as a proper building type and not anymore as a temporary installation—the Vitruvian theatrical archetype codified by Vitruvius (slightly distorted and adapted to the existing envelope of the building) is inserted inside an existing building.³² In front of the auditorium, the scenae frons is designed as a triumphal arch or the façade of a palace. Architectural historian Licisco Magagnato argues that Palladio wanted to recreate on the stage an urban public space defined—as the Greek and Roman squares—by *porticoes*, like the ones described in the *Four Books*, where people could stand and watch the theatrical representations.³³ Magagnato even mentions Renaissance poet and dramatist Angelo Ingegneri, for whom the stage of the Olympic Theater could be interpreted as a *piazza*, a street, or another kind of public urban space, and the *scenae frons* as the urban loggia, or the classical *peristylium* that defines this ideal square where the actions and performances take place.



Andrea Palladio, the Olympic Theater, Vicenza. The *scenae frons*, designed as a fragment of public building set up in the interior, evokes an urban micro-cosm. Drawings and montage by the author.



Beyond, lies a system of urban streets, that evoke the seven roads of Thebes but can even be read as a fragment of the city that Palladio was building in Vicenza. In this regard, looking at the plan of the theater inserted in the map of the city, it is interesting to notice how the central five *trompe l'oeil* streets that depart from the scenae frons seem to mimic and evoke-also considering their real location and orientation-the actual five real streets of this eastern part of Vicenza. Beyond the bridge on the Bacchiglione, they lead to the countryside, to Padua, Treviso, and, farther away, to Venice. This aspect, together with the montage of the urban fragments such as the façade/loggia and the street fronts within the building, ideally transforms the interior into a metaphorical exterior and transfigures Thebes into Vicenza. The existing building's envelope and ceiling, painted as a cloudy blue sky, dematerialize in the spectator's experience. The enclosed space of the theater becomes an open space, a square in the city of Vicenza [fig. 7].

The theatrical component is also evident in the interiors of the churches designed by Palladio in Venice. As Magagnato points out, "we can see an effect almost of stage design in his insertion of space within space: certainly, the fruit of his loving study of late Roman architecture." He continues that in the Redentore and San Giorgio churches "we have the most striking illustration of his use of these ample spaces seen through great colonnades that have the effect of walls. I should like to call them Veronese effects. But Palladio is not trying to give the effect of a wall pierced by openings. He is seeking an effect of light and freedom: to set his structures in zones of space and light that are, however, defined and firmly tied down into the composition by the linking of the structures that lie behind".³⁴ The colonnade, or *perystilium*, through which we can perceive the intimate space of the choir, also works as a backdrop for the ritual of the mass, celebrated in front of the spectators, sitting in the nave. This spatial arrangement, very similar to Palladio's proposal for the Olympic Theater (the backdrop for the theatrical play that frames the space behind it), is clearly discernible [fig. 8].

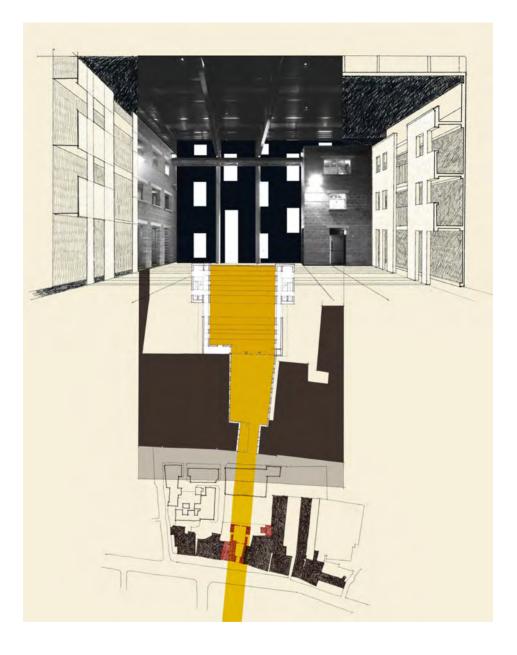
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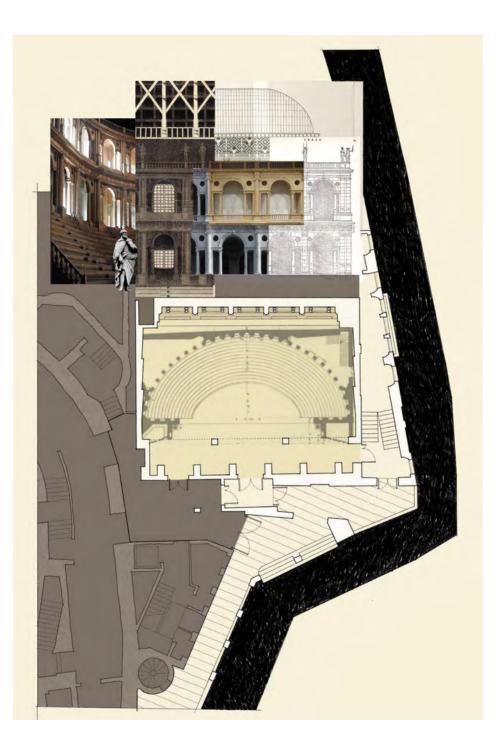
Andrea Palladio, the Redentore Church, Venice. The façade as stratification of planes anticipates the interior theatrical transparencies. Drawing by the author. Palladio's lesson in the context of theater design (as Scamozzi's theater in Sabbioneta or the Farnese Theater in Parma, where a fragment of Palladio's Basilica defines the auditorium) is still relevant in contemporary times. The most remarkable example with respect to this is certainly the Half Moon Theater in London, completed in 1986 and designed by Florian Beigel and the Architecture Bureau.

The overall intervention is conceived as a sequence of spatial experiences and spaces starting from the entrance and leading to an open-air courtyard defined on the sides by galleries-enclosed by façades that mimic residential buildings-and eventually the covered theater. These "negative" open spaces are "carved out" from the urban fabric, creating a series of squares (covered and uncovered), that blend one into the other, as in the map of Rome drawn by Giambattista Nolli in 1748. "The space of the building is conceived as a void", notes Beigel, "the void is the figure, [...] the void space is for us the essence of space."³⁵ Analogously to the open courtyard, and with a strong intellectual relationship with Renaissance models, the theater is conceived as public open space, a square, surrounded by buildings, or, better, by three-story façades with galleries behind and covered with a roof. Porticoes and doors open to the piazza on the ground floor, where people can freely sit and movable seating devices can be arranged in flexible configurations. Elizabeth B. Hatz defines all these elements and spatial sequences "as a Borges-like collection of labyrinthine spaces that alternate in being the 'outside' of one another, making spatial relations theatrically ambiguous."³⁶ It is certainly evident, like already anticipated, that this project is, conceptually, "also a return to the street theater of the past or the play space in the market square where actors and audience mingled freely"³⁷, where the act of performance is contiguous with the everyday life of the street. All of these aspects (architectural and phenomenological), inserted within a building, transform the architectural interior in an urban microcosm, and thus in a fluid intersection of scales, between interior and exterior, morphology and typology; and transform Rossi's "architecture of the city" into Beigel's "architecture as city"³⁸ [fig. 9].

9

Florian Beigel and the Architecture Bureau, Half Moon Theater, London. Drawings and montage by the author.





The work and design principles of the Renaissance masters and the theme of theatricality are an active presence in Aldo Rossi's theoretical speculation and design explorations.³⁹ The idea of shifting a fragment of the city inside an interior space is evident in his projects such as *Little Scientific Theater* (1976), Theater of the World (1979), Interior with a Theater (1982), and Domestic Theater (1986). However, Palladio literally comes into play in Rossi's project for the reconstruction and renovation of the La Fenice Theater in Venice, which had been partially destroyed by arson in 1996. In the context of this very complex intervention, he designed a small rehearsal room (the "Rossi Room") where one of the interior elevations is a reproduction in wood of a fragment of the façade of Palladio's Basilica in Vicenza. Similar to Renaissance masters' practice and the realization of the Baroque Farnese Theater in Parma, a façade is set up inside the building. This interior façade and "fixed stage" of the interior of the room (which resembles and functions as a tiny theater) defines a piazza (Piazza dei Signori in Vicenza). Thus, like Palladio, Rossi reproduces the city inside the architectural interior, using the façade as a deliberate and tangible device. Rossi chose the façade of the Basilica "not only because it is beautiful, but also because it is an attempt to recreate inside the building that specific Venetian world, between history and invention" [fig. 10].

The Renaissance theatrical interpretation of the world also informed Andrea Palladio's design for the villas for Venetian aristocrats, which were complex buildings that kept together the functions of agricultural production, territorial control, and the need to affirm and communicate the elevated social standings of their inhabitants. The villas had to serve these aims not only in the exteriors, as architectural backdrops in the Venetian landscape, but also in their interiors. One can find evidence in Palladio's writings in which he describes the core space of the villa as an actual theatrical apparatus for acting and seeing what is represented and performed: "The halls serve for feasts, entertainments and decorations, for comedies, weddings, and such like recreations; and therefore these places ought to be much larger than the others, and to have the most capacious form, to the end

10

Aldo Rossi, Rossi Room at La Fenice Theater, Venice. Like in the Renaissance theaters, a façade (the Basilica in Vicenza) is recreated inside the building and becomes the "fixed stage" of the interior. Drawings and montage by the author. that many persons may be therein commodiously placed, and see whatever is done there."⁴¹ The hall becomes a square, a *piazza*, an opportunity to ideally set up inside the house a Venetian *campo*, for the Venetian patrons, residing temporarily in the countryside. Not by accident, in the Villa Pisani in Bagnolo, the central hall is defined by interior façades designed with rectangular and thermal windows, even if they do not look out. In this interior "hall-as-*piazza/campo*" receptions and celebrations occur. There people can see and be seen, like in a public urban space [fig. 11, 11 a].

Similarly, in the seventeenth and eighteenth centuries, theatricality was not limited to theater and stage design, but was also an important component of residential architecture in the work of British architects like John Soane. His houses can be seen as theatrical representations of his architectural universe, with façades playing a role similar to the prologue of a theatrical piece or even as theaters themselves.⁴² In the Great Hall of the Audley End House in Saffron Walden (Essex, England) designed in the mid-1700s by John Vanbrugh—who was also a playwright—a

11 and 11 a Villa Pisani, Bagnolo, Lonigo.





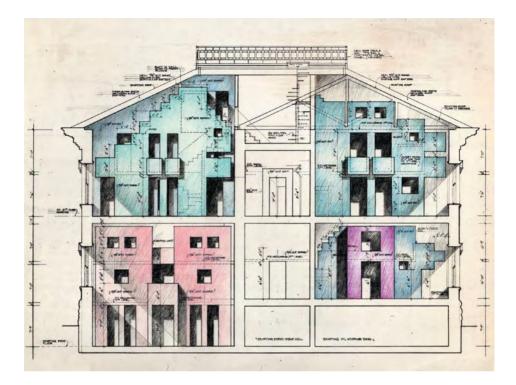


Fig. 12 John Vanbrugh, Great Hall of the Audley End House in Saffron Walden, Essex. remarkable example of the theatrical insertion of an urban façade into a domestic interior space is well represented.⁴³ In the Great Hall, the architect removed an existing wall to enlarge the room. Furthermore, he added a grand staircase. He needed a supporting element for structural reasons, so he inserted a two-story screen made of stone, designed as a building façade, with pilasters and very wide arches. This allows transparency that reminds us of Palladio's theater and churches, or even his villas, performed "in the manner of a Veronese set piece in architectural style", as Fred Scott points out.⁴⁴ This design strategy amplifies the space alluding to what is beyond the screen (in this case the staircase that crosses the stone threshold leading to the mezzanine from where—through the screen—one looks down to the Great Hall), but also acts as a theatrical backdrop to the activities performed in the Great Hall [fig. 12].

More recently, the work of American architect George Ranalli exemplifies this strategy. In his project for the First of August Boutique in New York (1975–1976), the layered façade alludes to a transparent inhabitable thickness that extends the interior towards the street. At the same time, the shop's interior is designed as a street with a thick double-height wall that resembles an abstract *portico* [fig. 13]. Similarly remarkable is the renovation of the Callender School in Newport (Rhode Island, USA), transformed in 1979–1981 into a residential building with six houses intricately and carefully inserted into the existing two-story National Register Landmark Building from the late nineteenth -century. Inside, the architect set up a core element that crosses through the entire structure and contains the new apartments' kitchens, bathrooms, stairs, and more private rooms. The living rooms have double and triple heights strongly defined by this inhabited core that takes the shape of an interior façade with openings, balconies, windows, and portals. It is a house inside the house, an urban fragment facing the public space of the living rooms. As Anthony Vidler argues, "the apartments take on the form of abandoned palaces whose balconies overlook the deserted piazza below or out, outwards the empty countryside."⁴⁵ Ranalli, in the suburban American fabric that lacks collective public spaces, recreates the idea of an interior *piazza*, defined by interior façades which emphasize the theatricality of the domestic interior through "a magnificence of scale" and "a brilliant piece of scenography"⁴⁶ [fig. 14]. It is evident on the one hand the intention of blurring interior and exterior while almost de-materializing the brick envelope of the existing former school; and on the other to re-invent within the building the concept of public collective space, as a response to its absence in the urban fabric of the American suburbs.

13

George Ranalli, First of August Boutique, New York. Elevation oblique of the front façade, the existing building and the new interior.



Conclusion

14

George Ranalli, Callender School Renovation, Newport. East West Section of the south side of the building. The relationship between inside and outside has always been a fundamental component in the construction of architectural and urban space. The façade is the most important element that can define this link and the variable degrees of openness between the two worlds. Palladio's façades can be read as an architectural canvas that represents the literal or technical manifestation of internal arrangements projected onto the external surface—in a sort of anticipation, from the outside, of the experience of interior space. As in Palazzo Chiericati, the façade might also be a thick and inhabitable threshold that becomes an interior space deeply connected with the urban realm. Another design strategy that intertwines the interior to the outside draws from the theater, or better, from a theatrical idea of the world and the city, perfectly represented by the Olympic Theater. Here an imaginary city (that metaphorically represents Vicenza) is assembled on the stage and the auditorium, and transforms the interior space of the theater into an open space, a street, a square, and a courtyard, surrounded by buildings (and their façades).

In a contemporary global context, where façades are often designed as technological skins aimed at ensuring interior comfort, the exterior appearance tends to defy any relationship between the inside and outside, as well as any expression of the building's character and its connection to the surrounding environment. Despite this trend, there are architects from both modern and contemporary times who continue to explore the Chiericati archetype and the concept of an inhabited façade that transforms into an intermediate space, blurring the boundaries between the interior and the city, while celebrating the experience of both the building and its urban context. Inspired by the Olympic Theater, some architects have revisited Renaissance stage design, incorporating interior urban fragments into their work. This approach can also be applied to domestic spaces, where montage techniques—combined with a renewed focus on metaphor, symbolism, allegory, and analogy-enable designers to compose interiors that resemble urban scenes. The concept of the interior as a reinvention of a theatrical stage emerges, with the interior façade serving as a backdrop for the inhabitant's life, activities, and performances.

Endnotes

If not indicated otherwise, all translations are by the author of this paper.

- 1 This essay includes parts (which have been expanded, revised, and re-edited) of an article published in Interiors. Design/Architecture/Culture, 2023, copyright Taylor & Francis, available online:http://www. tandfonline.com/10.1080/20419112.2023.2168052, and an article published in Journal of Interior Design, 2020, copyright Wiley, available online on https://onlinelibrary.wiley.com/doi/10.1111/ joid.12163.
- 2 Norberg-Schulz 1984, 71.
- 3 Wittkower 1944, 119-122.
- 4 Foscari 2010, 238.
- 5 Milizia 1785, 183.
- 6 See Bettini, 1978.
- 7 Rowe/Koetter 1978, 79.
- 8 Arnheim 1977, 92.
- 9 Venturi 1966, 86.
- 10 van Eyck 1962, 602.
- 11 Teyssot 2013, 87-88.
- 12 Wittkower 1962, 81-82.
- 13 Palladio 1965, 72.
- 14 Forssman/Cevese et al. 1973, 100
- 15 See Martinelli 2018.
- 16 See Martinelli 2017.
- 17 Quote from Le Corbusier's lecture *Proporzione e tempi moderni* at the conference *De Divina Proportione*, at the Triennale di Milano in 1951, published in Cimoli/Irace (eds.) 2007, 99.
- 18 See Arnheim 1977, 233: "The function of leading in and out [...] is fulfilled by brise soleil shutters and similar transversal slabs, which lend depth to window openings and guide the eye from the outside through the wall to the interior."
- 19 See in particular Porta (ed.) 1985, Buzzi (ed.) 1992, Casamonti (ed.) 2016.
- 20 Moneo 2016, 17.
- 21 Argan 1959, 10.
- 22 Argan 1959, 15.
- 23 Slutzky 1980, 48.
- 24 See Rogers 2006/1961, 74: "Memory is the necessary element of artistic expression. [...]. Invention generates new phenomena characterized by personal action. [...]. The challenge is to find the dynamic balance between these two tendencies, so that the result (the synthesis) is always the affirmation of a present open to the future."
- 25 Rudofsky 1969, 123.
- 26 Bieigel/Christou 2013, 113.
- 27 Curtius 1983, 138-144.
- 28 See Fleming 2006.

- 29 Janson/Bürklin 2002, 15.
- 30 de' Sommi 1968, 14.
- 31 See Magagnato 1951.
- 32 See the diagrams in Magagnato 1992, 19-23.
- 33 Magagnato 1992.
- 34 Magagnato 1951, 218.
- 35 Bieigel/Christou 2013, 114.
- 36 Hatz 2019, 4.
- 37 Segal 1985, 16.
- 38 Beigel/Pritchard 2011.
- 39 See Ferlenga 1997, Celant 2012.
- 40 Rossi 1997.
- 41 Palladio 1965, 27.
- 42 See Furján 2002. On the theme of the house as a "theater of memory" see also Martinelli 2021.
- 43 See Neville 1836, Latham 1907.
- 44 Scott 2008, 101. In his book, Scott attributes this intervention to the Adam brothers.
- 45 Vidler 1988, 10.
- 46 Sorkin 1988, 6.



Sören Fischer

Architecture within Architecture Strategies of Spatial Design in Andrea Palladio's Villas

Introduction

This article will pay special attention to a phenomenon that plays a key role in many of Palladio's villas and that seems crucial in understanding Palladio's sophisticated concept of space and architecture [fig. 1]. It will focus on the interplay between real and painted architecture, the extension and enhancement of Palladio's architecture through murals, and the conceptual merging of architecture and painting, the two fundamental space-creating principles.



1

Paolo Veronese and workshop (most likely in collaboration with Andrea Palladio), Sala dell'Olimpo, Villa Barbaro, Maser, 1560/61. In many of Palladio's villas, painted architecture is one of the most important elements of decoration.¹ Not only does it provide the rooms with a distinct structure, it creates a unique self-sufficient form of decoration so that painted architecture can be considered a leitmotif within the villas.² Aside from its pure framing function, painted architecture plays a crucial role in shaping and manipulating space. Completely covering the surfaces of a villa's walls, painters combined architecture with landscapes and historical figures to open the rooms onto illusionistic worlds. By doing this, the murals provoked a substantial effect on the observer's perception of the interior. But there is more. Implementing a fictitious space into a real one creates illusionistic rooms, which seem, at first glance, to be in conflict with the building in which the illusion is taking place.

Andrea Palladio was a master of spatial design. Unlike any architect before him, he understood how to design the various levels of space. Particularly with regard to his extraordinary villas, the following can be formulated: Palladio did not consider the courtyard in isolation from the façade, the façade not isolated from the staircase leading into the building, the loggia not detached from the exterior and interior space, the *salone* not independent of its views and vistas of the surrounding landscape. As Palladio postulated in his book *I Quattro Libri dell'Architettura*, published in 1570, the parts have to be in harmony with the whole, and the whole has to be in harmony with its parts.³

This paper investigates the assumption that the architect applied this consistency also to the interior decorations of his villas and that he understood the murals as important protagonists of an overall design when placing a painted architecture within real architecture. This examination is intended to reflect on Palladio's spatial concepts, the perception of space within his villas as well as the emotional-sensual evocation of interior space.

The key thesis is this: In Palladio's villas space is not built, it is designed, and that principle can be observed very clearly in areas

where architecture and wall painting meet and are set in relation to each other. At these spots, illusions are made plausible to the viewer; at these seams, painting and architecture are transformed into an image that opens up to the observer's space.

Although illusionistic fresco painting was explored by Italian artists and patrons since the early 14th century-one may refer to Giotto's fresco cycle in Assisi (Upper Church, S. Francesco, c. 1300) and the Last Supper fresco in the Florentine Church San Apollonia by Andrea del Castagno (1447)—very little is known about the theory and critical perception of that kind of decoration. However, in 1537, the architect and author Sebastiano Serlio released his Libro Quarto, which deals with domestic decorations, including painted architecture and its potential to create optical illusions. As a key example, Serlio referred to the Sala delle Prospettive, painted by Baldassare Peruzzi in the Roman Villa Farnesina for the banker Agostino Chigi shortly before 1519.⁴ In this room, the walls seem to open towards deep loggias, which are difficult to identify as paintings. Serlio highlighted this illusionistic masterpiece as an example of a perfect deception: "And if the painter then wishes to elongate a hall or other room by using the art of perspective, he will be able to make that part that faces the entrance seem much longer than in reality by rendering some architectural orders. And this Baldassare [Peruzzi] did. so gifted in this [kind of] art [...]."⁵ As Serlio clearly stated, painted architecture has the potential to change a room's visual appearance.

Reflecting on ideas of mimesis and illusion, the following examination will focus on the mural decorations of the Villa Godi, the Villa Barbaro, and the Villa Emo. By choosing these Palladian buildings of the Venetian terraferma, which were decorated between c. 1540 and 1570 by the painters Gualtiero Padovano, Paolo Veronese, and Giovanni Battista Zelotti, it is the aim of the essay to highlight the various forms of painted architecture and to investigate Palladio's attitude towards the illusionistic wall decoration.

Villa Godi

Although almost all of Palladio's villas feature opulent wall paintings and make-believe architecture that manipulates the interior, very little is known about what Palladio thought about this kind of decoration. Unfortunately, he never commented on the subject of illusionistic painting.⁶ In his book *I Quattro Libri dell'Architettura*, he mentions and praises some painters but he never reflects on painting in terms of art theory. For Palladio laying down generally applicable rules for interior decoration made very little sense because he obviously knew from many years of experience that the wishes of clients and fellow painters usually led to very individual solutions. By implementing strict rules, he would have restricted this creative freedom.

So far, only one drawing is known that Palladio probably made in preparation for a mural painting. Whether it is an original or a contemporary copy is still disputed.⁷ This drawing was identified by Douglas Lewis as a draft for the Salone of the Villa Godi. In addition, we also know of payment records to Palladio, which suggest that the architect was paid for wall-painting designs at Villa Godi. One question is at the center of this controversy:⁸ Did Palladio consider wall painting merely as an additional supplement to his buildings or did he see it as an important extension of interior space?

The Villa Godi is considered Palladio's first villa conceived and built by him between 1537 and 1542 for the Vicentine nobleman Girolamo Godi and his family.⁹ The architect was only 30 years old at the time. Here, the main themes of Palladio's architecture were formulated for the first time, such as the connection of the elevated villa with lateral buildings, the prestigious emphasis of the central axis by stairs and loggia, the opening of the country house to the landscape, nature, and rural fields, the intended staging of framed views and vistas by windows and doors, the symmetrical room layout and the central *salone*, which, in accordance with Venetian tradition, runs across the entire floor. As Andrea Palladio tells in his *Quattro Libri*, the piano nobile of



Gualtiero Padovano, Stanza dei Cesari, Villa Godi, Lugo di Vicenza, 1548/50. Villa Godi was painted, among others, by Gualtiero Padovano. In his treatise, he praises the frescoes, executed around 1548 and 1550, as "the most beautiful paintings".¹⁰

Almost every room on the piano nobile was decorated with frescoes. Characteristic of the early stage of the Palladian villa is the fact that for each room an individual decoration was applied, not unlike the rich interior mural paintings in the Villa Imperiale in the vicinity of Pesaro (1530–1537; painted by Girolamo Genga and his workshop).¹¹ Diversity and variety apparently were considered more important than the concept of an overall unifying design.

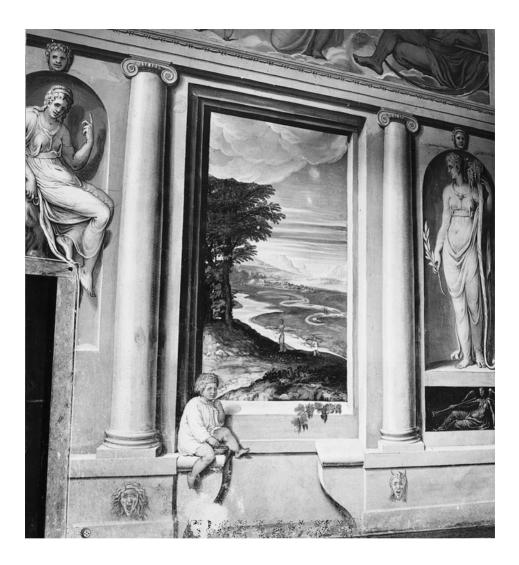
In the rectangular *Stanza dei Cesari*, the viewer finds himself in the middle of a painted loggia [fig. 2]. Four vistas, framed by marble columns, offer a panoramic view.¹² The three real windows blend in with the painted architecture so that the room opens up to landscapes through a total of seven vistas. Already Vitruvius demanded a high degree of realism from such kind of painted architecture.¹³ In the midst of this *stanza*, an entertaining interplay of painting and architecture opens up a life-like loggia, known at the time, for example, from the Villa Imperiale.¹⁴ The observer enjoys the endless landscapes and their idealized depictions of *Santa Agricoltura* and *Paradiso terrestre*, key topoi to the Italian villa culture in that period of time.¹⁵ The framed views out into fertile nature—created by the artist's hands—and the high credibility of the illusionistic architecture increase the illusion of living in a perfect environment, surrounded by green plains, sheep, blue rivers, and Roman ruins.¹⁶

Still today, the surprise is enormous. Having just seen the modest façade of the villa, the viewer unexpectedly is confronted with an opulent, roman-like architecture of colored marble and gilding. The Villa Godi was inspired by central Italian archetypes such as the *Sala di Costantino* (1520; Vatican) by Raphael and Giulio Romano, or the *Sala Paolina* (1545–47; Rome, Castel S. Angelo) by Perino del Vaga. In this sense the columns and walls are shown in a monumental manner, enabling them to carry the room's ceiling. By focusing on the mimetic potential of painting, the illusion evokes a classical order that seems touchable and, at the same time, is close to contemporary architecture like Sansovino's Libreria in Venetian's Piazzetta di S. Marco or Falconetto's Loggia Cornaro in Padua.

In the *Sala dei Cesari* we meet an important leitmotif of Palladio's villas: the combination of real architecture and wall painting, creating an artistically generated experience of space. The wall decoration seems to proclaim: Space is not only designed by architecture. It is shaped by the combination of the arts. Blurring the real framework of the architecture, architecture itself transforms into an expanded image—and the image transforms into architecture. In short, in the *Sala dei Cesari*, illusionistic mural decoration is seen through the eyes of an architect.



3 Andrea Palladio, Villa Godi, Lugo di Vicenza, 1537/42. The fact that the magnificently painted architecture had no counterpart in the non-classical façade obviously was no problem, neither for Palladio, nor for the painters [fig. 3]. Evidently, they separated the decorative potential of external (real) architecture and that of the mural paintings, accepting the two in a harmonious relationship. Extending the eleven real views through the windows and the loggia, the murals in the southern rooms of the Villa Godi add twelve illusionistic vistas to the villa. Particularly interesting is the fact that the painted views are very often set in direct interplay with the Villa's windows. That interplay is visible impressively in the *Stanza di Bacco e Proserpina*, a small room in the rear part of the building used most likely as bedroom [fig. 4, 5].



Gualtiero Padovano, Stanza di Bacco e Proserpina, Villa Godi, Lugo di Vicenza, 1548/50.



Andrea Palladio, Villa Godi, Lugo di Vicenza, 1537/42, detail of the window and its benches. Andrea Palladio had equipped some of the villa's real windows with benches. Certainly, a reminiscence of traditional palace architecture, but above all, a reference to the importance of the topos of windows and views within the villa culture. In his famous book *Gli Asolani*, published in 1505 in Venice, the humanist Pietro Bembo, for example, had already praised the window benches as the ideal place to enjoy the landscape.¹⁷ With great attention to detail, Palladio designed these benches in the Villa Godi—and with equal attention to detail, Gualtiero Padovano cited and transferred them into his make-believe architecture.

Thus, the painting in the *Stanza di Bacco e Proserpina* repeats the real window while providing an exquisite illusion¹⁸: a little boy—most likely the young Bacchus—sits on the bench, looking directly at the viewer outside the image.¹⁹ The child is eating grapes, and simultaneously, he seems to invite the observer to take a seat on the painted bench, to join him in his joyful pictorial world of prosperity and peace.

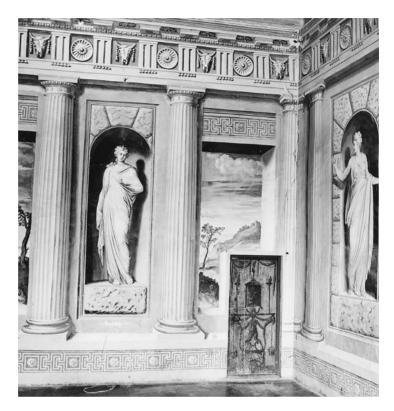
The interplay between painting and architecture is remarkable, and it seems no coincidence that the frescoes in other rooms of Villa Godi also repeat forms that Palladio used in various buildings at the same time. The southern room next to the Loggia (*Stanza dei Sacrifici*), for example, features a Doric frieze of the kind Palladio used for the façades on Palazzo Chiericati (Vicenza) and Villa Pisani (Montagnana) between c. 1550 and 1552 [fig. 6, 7].

The murals in the *Stanza di Bacco e Proserpina* have a tremendous effect on the observer's perception of interior space: Palladio's architecture becomes part of an illusion that fundamentally expands the real room into a deeper imagined space. Even the clouds of the divine sphere penetrate the view behind the painted frame. The imitation of light and shadow enhances the mimetic effect of this impressive spatial play, in which the body of the visitor as well as his movements play a part. What would this room look like without its painted architecture? Would it not be small and boring? In any case, it would be much less spectacular, much less sensical, and much less entertaining.

Villa Barbaro

Speaking of the entertaining potential of illusionistic wall paintings within Palladio's secular buildings, we must shift our attention to Villa Barbaro, one of his most famous country houses, constructed in a village called Maser at the Terraferma. The villa of Daniele and Marcantonio Barbaro, brothers and noblemen from Venice, was painted by Paolo Veronese and his workshop around 1560/61. Influenced by detailed villa descriptions from the Roman politician and author Pliny the Younger, Palladio designed the central body as an elongated building that looks out over the landscape on all three sides.²⁰

Fifteen windows frame the landscape so that nature becomes an essential visual aspect of the interior. These real vistas are enriched by eloquent, most impressive interior wall paintings that decorate the five living rooms of the *piano nobile* as well as





Gualtiero Padovano, Stanza dei Sacrifici, Villa Godi, Lugo di Vicenza, 1548/50.

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Andrea Palladio, Villa Pisani, Montagnana, 1553/55, detail of the façade.



its central cross-shaped *salone*.²¹ A total of twenty-six painted views open the walls, showing picturesque scenes of landscapes, ruins, rivers, green trees, and rural buildings—even the Villa Barbaro itself is depicted in a self-portrait. By implementing a magnificent unifying decoration system made of painted Ionic and Corinthian columns, marbled windows, and illusionary doors, the Piano nobile transforms to a belvedere with forty-one real and painted vistas. This transparent (or diaphanic) quality literally negates and obscures the solidity of Palladio's primary architectural concept.

Particularly the murals in the so-called *Stanza del Tribunale d'Amore* and *Stanza di Bacco* manipulate the perception of interior space with great power [fig. 8].²² On the north and south walls, illusionistic architecture depicts deep loggias, adding life-like pictorial spaces to the villa. The complex fictitious architecture, that most likely was designed in situ with the help of pre-drawings (*cartoni*) in the scale of 1:1, presents itself in a Palladian-like elegance and solemnity *all'antica*.²³ Inspired by prototypes from Central Italy, like the *Sala delle Prospettive* made by Baldassare Peruzzi in the Roman Villa Farnesina some decades earlier and following the principles of the art of perspective and optical illusion, the painted architecture in Villa Barbaro no longer serves as a limit between the space of the observer and the pictorial space.

Paolo Veronese was, in fact, a master of painted architecture. He designed and executed it, unlike any other Venetian artist, in an outstanding "theatrical magnificence"²⁴. Be it in paintings, be it in fresco, Veronese many times used painted architecture to arrange his narrative scenes and to evoke an ambiance *all'antica*. In none of his other projects, however, painted architecture had such a strong impact as in Villa Barbaro. He most likely was advised by Palladio, as well as by Daniele Barbaro, commentator of Vitruvius' architectural treatise *Dieci libri dell'architettura di M. Vitruvio* (first edition from 1556). As the astounding interior decoration indicates, Daniele Barbaro as well as Veronese and Palladio must have been very interested in exploring the transitory potential of the wall's surface.²⁵

8

Paolo Veronese and workshop (most likely in collaboration with Andrea Palladio), Stanza di Bacco, Villa Barbaro, Maser, 1560/61. In his article, Andrea Palladio e le architetture dipinte di Veronese, Howard Burns stated that the quality of the decoration of Villa Barbaro indicates mutual cooperation between painter, architect, and patron²⁶: "The realization of Maser's decorations required, at the programmatic and design level, the talent and science of the patrons especially Daniele, Palladio, and Veronese. Without Palladio and Barbaro, it would not have been possible to plan a reconstruction of the appearance of ancient Roman interiors, starting from the text of Vitruvius and Palladio's knowledge (and restitutions) of Roman temple environments, later published in the *Quattro Libri*."²⁷ The assumption that Daniele had a deep influence on the interior decoration is also supported by the fact that, shortly after the completion of Villa Barbaro, he occupied himself intensively with the art of perspective-the basis for painted architecture: In 1569 Daniele published his results in the book La Pratica della Prospettiva.

Using the art of perspective, the walls of Villa Barbaro appear, in reference to Gerd Blum's studies, as as *finestre aperte*, or open windows, and are therefore committed to the fundamental Renaissance notion of painting as window, as Leon Battista Alberti wrote in his art theory Della Pittura around 1435–36.28 The optical enlargement of the Stanza di Bacco and the Stanza *del Tribunale d'Amore* changes the entire perception of the rooms. The painting adds elegant, almost free-standing, marble-white belvederes to Palladio's architecture. Even the real light of the window becomes part of the illusion as the painted columns cast shadows [fig. 9]. The space seems to be walkable and to be part of the room. Probably real architecture and painted architecture, real space and illusionary space, have never before entered into such a convincing union. The perspective quality of the illusion is outstanding. The viewer is surprised, confused, and at the same time delighted, unmasking the illusion.



Paolo Veronese and workshop (most likely in collaboration with Andrea Palladio), Stanza del Tribunale d'Amore, Villa Barbaro, Maser, 1560/61, interplay between the real window and the painted architecture. When planning the villa, Palladio must have already had the future murals in mind. It is likely that he designed the sculptural frieze zone in the rooms in preparation for the painting that was yet to be done. The architect laid the foundations, the framework, in which Veronese and his assistants could credibly embed their illusion. The painting, in turn, quoted the Ionic columns that also adorned the façade—in this way, the interior and exterior design were closely intertwined. As Erik Forssmann explained about 50 years ago, a Palladian elegance can be noted for the painted architecture²⁹: The rhythmic sequence "pillar—round niche with sculptures-pillar-rectangular window-pillar-round nichepillar", that was used to organize the walls in the Stanza del Tribunale d'Amore and in the Stanza di Bacco is also found in a remarkably similar design in Palladio's illustrations of the so-called Egyptian Hall (La Sala Egizia) and Corinthian Hall (La Sala Corinthia), published less than ten years after the completion of the frescoes in Villa Barbaro [fig. 10]. As formulated by Burns: "It cannot be argued that the false 'opening' of the wall is alien to Palladio's principles or taste, since a similar approach is also observed in the frescoes of Villa Emo and Villa Poiana."30

The Villa Barbaro presents itself as an example for the "ideale congenialità"³¹ between Veronese and Palladio, between the painter and the architect and, in general, between painting and architecture in the 16th century.³² The Villa Barbaro finally shows impressively that architecture and mural decorations were conceived by the painters, the patrons and their architect as an overall concept.³³

Villa Emo

The painters who, next to Paolo Veronese, chiefly inspired the way of using illusionistic mural decoration in Venetian villas were Giovanni Antonio Fasolo and Giovanni Battista Zelotti. In their work, they successfully combined monumental orders of architecture with well narrated-historical scenes. Painted architecture created space for human actors and transformed 10

Andrea Palladio, La Sala Corinthia, woodcut from the book I Quattro Libri dell'Architettura, in: Palladio 1570, II 39 (Cap. IX).



closed walls into an open stage-like area in which Roman history was told. The interplay between architecture and wall painting in Palladio's villas can only be fully understood by examining Villa Emo, decorated by Zelotti around 1565 in the rural village of Fanzolo.³⁴ It is a project in which the interplay of real and painted architecture reaches a climax. This villa illustrates impressively the methods Palladio and his fellow painters followed in shaping interior space merging the physical world with the world of imagination.

As a mediator between inside and outside, between landscape and architecture, the loggia of Villa Emo occupies a prominent position in Palladio's understanding of architecture and its surrounding space. As in many others of his country houses, the loggia of Villa Emo is conceived as a space of transition [Schwellenraum] that gives the architecture a nearly transparent quality. Using monumental doric columns that unmistakably define the entrance area of the villa, the loggia has a highly communicative quality. The dignified design of the open façade literally draws the guest into the architecture. Once in the loggia, this place presents itself as a protected area between inside and outside, offering a sublime view of the surrounding lands.

The importance of painting in designing interior space is underlined on the loggia's three walls that were ornamented with elaborate decoration [fig. 11]. The murals are intended to transform the entrance area into a space that stages painted figural scenes as seemingly real vistas. Beyond two painted rectangular frames, the observer witnesses two scenes of ancient mythology, partly inspired by Ovid's book *The Metamorphoses: Jupiter seducing Callisto in the form of Diana* (left painting) and *Juno beating Callisto whose hands have already changed into bear paws* (right painting). Above the central door, in the form of a woman, lies the *Allegory of Agriculture*.

In the loggia, real and painted architecture merge into a symbiosis which is on par with Villa Barbaro. Here in Villa Emo, as in Villa Barbaro, the detailed repetition of Palladio's architecture is

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Giovanni Battista Zelotti (most likely in collaboration with Andrea Palladio), Loggia, Villa Emo, Fanzolo, c. 1565.





12 Giovanni Battista Zelotti (most likely in collaboration with Andrea Palladio), Loggia, Villa Emo, Fanzolo, c. 1565, detail of the painted Attic base.

remarkable. The paintings create deceptive copies of Doric columns and imitations of Attic bases using the classical sequence "torus trochilus—torus" [fig. 12]. In the tradition of *paragone*—i.e., the artistic competition between architecture and illusionist painting—real and painted columns stand side by side, each claiming to be the true sister of the other. The vivid dialog of painting and architecture is also revealed in the loggia's ceiling and its monumental beams. There, the painted columns give the impression that they support the heavy ceiling [fig. 13]. This illustrates an observation already described above at Villa Godi and Villa Barbaro: painted architecture is almost never purely decorative or additive in nature; rather, the illusory architecture in the loggia of Villa Emo reveals itself to be an integral part of a plausible overall architectural construction.

Noticeable is also the unique illusionary wooden pergola in the vestibule of the villa. Previously, painted pergolas, as in the famous Odeo Cornaro (Padua), designed by the landowner and author Alvise Cornaro around 1540, or in the Villa Barbaro, consisted of delicate branches and leaves of vines [fig. 14].



13 Andrea Palladio, Villa Emo, Fanzolo, 1559/65, interplay between the Loggia's ceiling and painted architecture.



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Giovanni Battista Zelotti (most likely in collaboration with Andrea Palladio), Vestibule, Villa Emo, Fanzolo, c. 1565, detail. The wood structure in Villa Emo, instead, is characterized by its thick wooden boards and correct construction. Even in detail, the painting mimics a wooden structure that could be built. Considering that Palladio occupied himself on several occasions with wooden buildings—for example at the Ponte Vecchio in Bassano del Grappa from 1569³⁵—the architect's participation in the decoration of Villa Emo becomes much more convincing.

The assumption that Zelotti's painted architecture took part of an overall design becomes particularly obvious in the central *salone* [fig. 15]: there, comparable to the loggia, Palladio designed a coffered ceiling with wide and heavy beams. Since a ceiling of this kind cannot hang freely above the viewer and real columns were not executed—as for example, in the *salone* of the Villa Cornaro in Piombino Dese—we have to assume that it was Palladio, who, together with the painter (and probably motivated by the Venetian Emo family)³⁶, planned the elaborate illusionary architecture. The heavy beamed ceiling really seems to rest on columns. A detailed look at the decoration system reveals that the paintings and the architecture match perfectly. This constructive coherence can also be observed in other rooms of Villa Emo. There, too, the beams rest on painted columns [fig. 16].

The fact that the real wooden architrave in the *salone* was not covered with plaster but instead remained visible and was decorated with paintings, thus becoming a part of the fictitious architecture, confirms the assumption that Palladio prepared his architecture in advance for his fellow colleague Zelotti.

The illusionistic effect is impressive. As already observed by Wolfram Prinz, the room seems to be divided by four (painted) columns—similar to the ancient *Sala di Quattro Colonne*, meaning the Vitruvian hall with four free-standing columns.³⁷ Supporting the heavy coffered ceiling, the added columns give credibility to the painted spaces: art begins where architecture ends, and vice versa. The architect himself was very fond of the *Sala di Quattro Colonne*, a motif that he used on several occasions and that was also described in detail in his *Quattro Libri*.³⁸ He particularly appreciated this type of room since it ensured more stability to the construction. Moreover, four free-standing columns provide a harmonious proportion in the interior.³⁹ Consequently, he argues both as a structural engineer and an artistic designer.



Giovanni Battista Zelotti (most likely in collaboration with Andrea Palladio), Salone, Villa Emo, Fanzolo, c. 1565.



We do not know why Palladio has chosen not to use real columns in the Villa's *salone*. Perhaps the space seemed too small to erect columns; perhaps columns were a luxury that the client did not want to pay for. One thing is certain, though: fictitious architecture always has been a smart way to save money and to express a certain kind of modesty at the same time. Regarding motifs, the illusionary architecture in Villa Emo appears with the highest claims (Corinthian order) but is executed with comparatively inexpensive materials (painting).⁴⁰ That concept follows Palladio's pragmatic belief that the design (the form) always must be considered more important than the materials it is made from.

The four white columns make the *salone* of Villa Emo an exceptional visual experience. The painted architecture and its two scenes of virtue, designed much more opulently than the sober exterior, opens up spaces for scenes from the long-gone Roman antiquity: *The Death of Virginia* and the *The Mercy of Scipio*.⁴¹ Using two-meter high bases on each wall and an

16

Giovanni Battista Zelotti (most likely in collaboration with Andrea Palladio), Salone, Villa Emo, Fanzolo, c. 1565, interplay between ceiling and painted architecture. architectural arrangement strikingly reminiscent of the façade of the church of San Francesco della Vigna (c. 1570) built by Palladio in Venice, both, painted architecture and historical figures form a plausible narrative space. The idea of the Vitruvian *Sala di Quattro Colonne* is transformed into an architecture that enriches the squared *salone*. It delights and educates the viewer through historical examples. In the very center of the Palladian villa, painted architecture unites and separates past and present, reality and ideas, truth and illusion.

Finally, the depiction of the *Allegory of Architecture* illustrates how much Zelotti reflected on the interplay between architecture and painting [fig. 17].⁴² The female figure presents the drawn floor plan of the villa and points precisely to the very room where she and the viewer, outside this programmatic depiction, find themselves.



17

Giovanni Battista Zelotti, Stanza delle Arti, Villa Emo, Fanzolo, c. 1565, detail from the fresco Allegory of Architecture.

General Methods

Evidently, painted architecture is one of the most important elements of decoration within Venetian villas. Even by provoking certain conflicts with the interior, even by adding new arrangements that change the plan, and even by putting magnificent wall paintings in contrast to a plain and clear Palladian form, it was the intention of painted architecture not to disturb but to create unique spaces. With the help of illusionism, the very character of many Venetian villas, that means the strong interaction and visual relationship between house and countryside, between framing architecture and distant landscape, as also described by Palladio himself, was translated into the genre of wall decoration. Thus, the frescoes reflected in a congenial manner the concept of transparent and open architecture that offered various perspectives. The fact that Palladio liked that kind of transparent quality and the idea of directing the eye through architecture-be it painted, be it real—is also supported by the artist himself. Talking about stairs and doors, he recommended architecture that shows the viewer the most beautiful areas of the building as soon as he looks through the main door.⁴³ Changing one's views in a building leads to creating tension. At the same time, according to Palladio, this visual dramaturgy would make the building appear larger than it is.

According to the previous analyses, the following strategies (general methods) can be summarized as a working basis and impulses for continuing considerations.

1. Strategy of coherence

Many Palladian villas display an intense structural interaction, a harmonious interplay of real and painted architecture. Painted architecture hereby does not create disruptive arrangements in the villas but aims at a formal and spatial connection with the building's real dimensions. This observation confirms a proposition made by Lewis: "Palladio himself may thus be shown, through documents, drawings, and printed prototypes [...] to have been unquestionably the inventor and supervisor of the complete decorative cycles within his two most controversial interiors, those of the Villa Godi at Lonedo of 1549–1557, and the Villa Barbaro of 1558–1561."⁴⁴

2. Strategy of imitation

Painted architecture imitates Palladio's architecture in detail, repeating it on opposite walls (like a mirror) and thus provoking a vivid interplay between reality and imitation, between fact and illusion, between the real space and the painted space.

3. Strategy of spatial flexibility

It becomes apparent that Palladio did not perceive the interior space as absolute. Interior space is not so much shaped by the actual architecture, rather it is shaped with the help of the added painted architecture. The art of painting was therefore used to simulate what could not be realized on-site, due to costs or to structural limitations. The following evolution can be observed: While in the early stage of the Palladian villa (Villa Godi), nearly each room was decorated with an individual system of painted architecture, in Villa Barbaro and Villa Emo, the artists aimed at a more unifying layout of the murals. This was a programmatic shift most likely stimulated by Palladio, for whom a harmonious appearance and a correspondence of all parts to each other always was of paramount importance.

4. Strategy of dissolution

In dialogue with real architecture, painted architecture establishes manipulative arrangements that blur the dimensions of elevations and plans. The walls are dissolved in their function as the picture's surface, questioning, thus, the very essence of the image. This dissolution provokes a perception of space and body, through which the narrowness of the rooms is annulled. The viewer is still in a sheltered interior, protected from the outside world and its potential negative influences (bad weather, political instabilities, social conflicts, economic challenges), but simulteaneosly can enjoy a vastness and openness that architecture cannot offer.⁴⁵ It is well known that already Leon Battista Alberti had described the healing effect of landscape paintings. In strong correlation with the Palladian architecture, the art of wall painting puts an idea on display which is key to understanding the Venetian villa culture: the painted vista—staged as an idealized image of landscape and domesticated nature—becomes a permanent, imperishable setting—a visual soundtrack, so to speak—for the exclusive life in the countryside.

5. Dramaturgy of movement

We observe a certain dramaturgy that progressively evolves in splendor as the visitor moves from the exterior to the interior (modesty at the exterior—Roman magnificence in the interior). As exemplified by Palladio and Zelotti in Villa Emo, the theme of magnificence [Magnificenzia] is found only inside the building. Already Kornelia Imesch noted that the Villa Emo's external sobriety (Tuscan order) contrasts with its interior splendor (Corinthian order), expressed primarily through painted architecture.⁴⁶ A conceptual movement can thus be discerned, flowing from the modesty and ornamental restraint of the façades to the picturesque splendor of the interiors.

6. Strategy of emotional design

The unity of real and painted architecture generates feelings of surprise, astonishment, and overwhelmingness. It provokes feelings and moods, which the viewer's body consciously or subconsciously perceives.

7. Strategy of immersive architecture

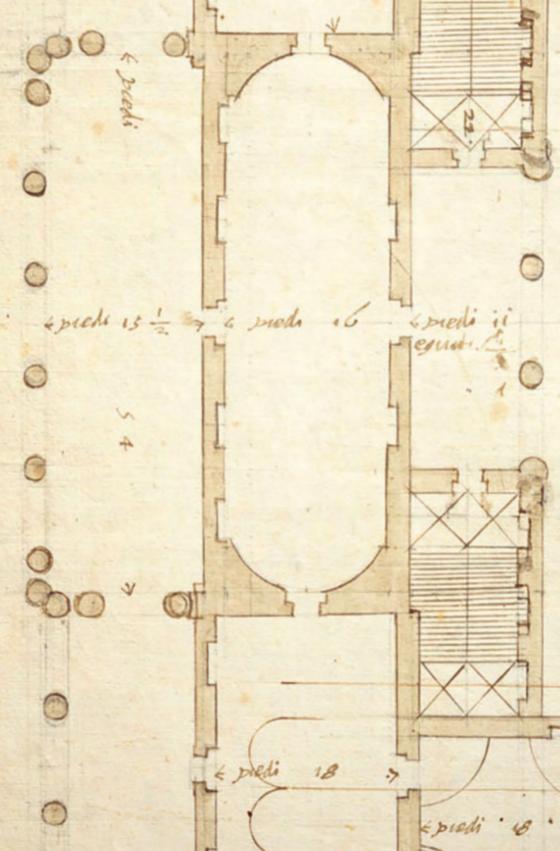
Palladian architecture and images (paintings) stimulate and enhance each other. In this sense, an illusionary architectural framework provokes an immersive effect. Architecture becomes an expanded image. Interior space is not built; it is—by using the art of painting—designed. Therefore, the murals functioned as an extension of artistic, creative power.⁴⁷ This immersive quality is, in the author's opinion, one of the foundations for Palladio's success and for his timelessness to this day. When we see how gifted Palladio was in the field of interior design, and when we recognize how flexible and creative he was in the dialog with his fellow painters, we understand how innovative he was and how his methods and his ways of creating space and influencing the observer's perception resonate until today.

Endnotes

If not indicated otherwise, all translations are by the author of this paper.

- 1 For an introduction to painted architecture in the mural decoration of the 16th century, see Blunt 1959; Sandström 1963; Krieger 1996.
- 2 For the illusionistic mural decoration in Venetian villas of the Cinquecento, see Fischer 2014, 74–158; Burns 2014a; Burns 2014b.
- 3 Palladio 1570, II 1.
- 4 For an introduction to the wall paintings of the *Sala delle Prospettive*, see Sandström 1963, 102; Luchterhandt 1996; Kliemann/Rohlmann 2004.
- 5 Serlio 1584, vol. 1, IV, 11, fol. 192r: "Et se'l pittor vorrà tal volta con l'arte della prospettiva far parere una sala, o altra stanza piu lunga; potrà in quella parte, che guarda all'entrata, con alcuni ordini d'Architettura, tirati con tal arte farlo parere assai più lunga, di quel che ella non sarà in effetto. Et questo fece Baldassare cosi dotto in questa arte [...]."
- 6 See Wolters 1968, 255-256.
- 7 Lewis 1982, 68-73.
- 8 For a short summary of that controversy, see Fischer 2014, 102.
- 9 For an introduction to its mural decoration, see Pavanello/Mancini 2008, 272-286.
- 10 Palladio 1570, II 15.
- 11 See Börsch-Supan 1967, 262-263
- 12 Fischer 2014, 100-108.
- 13 Vitruv 2009, VII 5.
- 14 Fischer 2014, 50-52.
- 15 For the metaphorical significances of painted landscapes and framed vistas in the Venetian villa of the 16th century, see Fischer 2014, 59–73, Blum 2015, Fischer 2015a, Fischer 2015b.
- 16 See also Smienk/Niemeijer 2011.
- 17 Fischer 2014, 37.
- 18 For the interplay of real and painted windows in 16th-century mural painting, see Fischer 2016.
- 19 Fischer 2014, 144-149.
- 20 Burger 1909, 108. See also Huse 1974, 115-118.
- 21 For an introduction to the mural decoration of Villa Barbaro, see Pavanello/Mancini 2008, 322–346.
- 22 Fischer 2014, 119-125.
- 23 Fine lines in the plaster of the *Stanza di Bacco* indicate that *cartoni* were used to prepare the complex illusionistic architecture. See Burns 2014b, 31.
- 24 Burns 2014a, 4.
- 25 See Forssman 1967a; Forssman 1967b.
- 26 This assumption was also stated by Huse 1974, 106-122.
- 27 Burns 2014b, 30–31: "La realizzazione delle decorazioni di Maser richiedeva, a livello programmatico e progettuale, il talento e la scienza dei committenti sopratutto di Daniele, di Palladio e di Veronese. Senza Palladio e Barbaro non sarebbe stato possibile pianificare una restituzione dell'aspetto degli interni romani antichi, partendo dal testo di Vitruvio e dalla conoscenza (e restituzioni) di Palladio degli ambienti dei templi romani, poi pubblicati nei Quattro Libri."

- 28 Alberti 2002, II, 19, 92. For Alberti's concept of painting that creates illusionistic windows, see Krüger 2001, 27–45; Blum 2008; Blum 2015, chapter III, 7.
- 29 Forssman 1967b, 71-76.
- 30 Burns 2008a, 116: "Non si può sostenere che la falsa 'apertura' del muro sia estranea ai principi o al gusto del Palladio, dato che un simile approccio si osserva anche negli affreschi di villa Emo e villa Poiana." The affirmative attitude of Palladio towards the mural decoration in his villas is confirmed also by Oberhuber 1968, 188; Lewis 1980; Lewis 1982, 73–74; Fischer 2014, 104.
- 31 Brizio 1960, 21.
- 32 The fact that Palladio, in his short description of Villa Barbaro, did not mention Veronese as the artistic master of the villa's frescoes (often interpreted as evidence of his dislike of illusionistic paintings in general) might also be based on the mutual collaboration of painter, architect and patron. Praising Veronese as the mural's inventor would have decreased the performance of the architect and contractor. See Burns 2014b, 31: "Si può anche aggiungere che per Palladio elogiare Veronese specificamente per gli affreschi avrebbe significato dare credito al pittore per un lavoro in parte anche suo e di Daniele Barbaro [...]."
- 33 See Rybczynski 2004, 45.
- 34 Introducing the mural decoration of Villa Emo see Pavanello/Mancini 2008, 224-238.
- 35 Puppi 2000, 389-390.
- 36 Forssman 1999, 70–71: "Es kann kaum ein Zweifel bestehen, dass Zelotti, wohl auf Wunsch des Bauherren, in der Villa Emo die Sala di Quattro Colonne mit der Hilfe der Wandmalerei wiedererstehen ließ."
- 37 Vitruv 2009, VI, 3, 1; Prinz 1969.
- 38 Palladio 1570, I, 8, 36-37.
- 39 Palladio 1570, II 8, II 14, II 17.
- 40 See Imesch 2003, 139.
- 41 Pavanello/Mancini 2008, 224-238.
- 42 Rupprecht 1966, 210.
- 43 Palladio 1570, I 28.
- 44 Lewis 1982, 73.
- 45 That thought was inspired by Friedrich 2015, 51-52.
- 46 Imesch 2003, 113.
- 47 By examining the close intertwining of architecture and painting within Palladian villas, the present study tried to add some thoughts to the analyses on architecture as an extended image in Palladio's work, recently published by Blum 2015, and by Bürklin 2019.



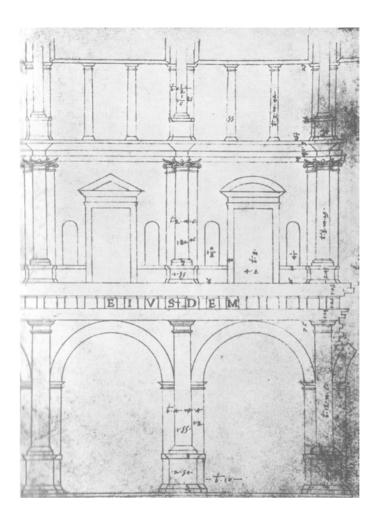
Renata Samperi

Corners and Design Process in Palladio's Architecture

Corners, in architecture, are significant parts that often represent and reveal, in a kind of synecdoche, the character of the structural, formal, and spatial components of the entire work.¹

In Palladio's work, as with every building involving architectural orders, corner solutions are closely related to the relationship between the orders and the overall building and, in the case of orders engaged to the wall, to the intense interplay between wall and column. This latter idea was a pivotal theme in Renaissance architectural culture, which implicates the relationship between very distinct, yet inevitably connected, fields of construction: support and adornment, structure and form, actual structure and represented structure.²

This essay will focus on some remarkable realized buildings, such as Palazzo Chiericati and the Venetian churches of San Francesco della Vigna and Redentore, and on some non-realized projects connected to them.



The Palazzo Chiericati

Engaged orders were extensively employed by the most important architects of the early 16th century and, as we will see, their works—both realized or unrealized—were to have a great influence on Palladio's architecture. Architects like Bramante, Raffaello, and others used engaged orders to achieve a layering of the wall, which created a sense of spatial depth. In this process, half-, or counter-pilasters, placed behind and offset from

1

Elevation of the Belvedere Court, according to Bramante's project, London, Soane's Museum, Codex Coner, f. 42.



Rome, Castel Sant'Angelo, aedicule of the Chapel of Santi Cosma e Damiano. a whole pilaster or a half-column, play a fundamental role. The half-pilaster, or counter-pilaster, is a modern lexical element that did not exist in Antiquity.³ Bramante used it in the Belvedere Court [fig. 1] and in the choir of St. Peter's, where he employed two half-pilasters set-back symmetrically next to a whole pilaster in order to form a group, as Raffaello did in the Palazzo Jacopo da Brescia. In the short side elevation of this same palazzo, Raffaello used the association of pilasters and half-pilasters to emphasize the aedicula where Leo X's coat of arms was located.⁴ In this case, one single half-pilaster was placed beside each edge of the aedicula in order to allow it to slightly project forward.

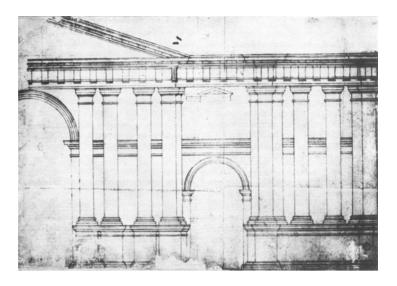
There are some other examples of this solution, such as Leo X's aedicule in Castel Sant'Angelo, by Michelangelo [fig. 2], and the study, attributed to Giulio Romano, for the elevation of the back wall of the courtyard of palazzo Branconio. There an aedicula with half-columns, framing a niche, projects forward from the

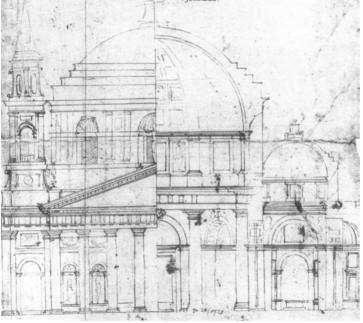


3 Vicenza, Palazzo Thiene, detail of the façade.

pilasters, which in turn frame the wall. This composition creates a layering effect which emphasizes the niche.⁵ A similar solution appears again in Vicenza, with the slight projection of the corner bays of Palazzo Thiene—an idea that can be attributed to Giulio Romano [fig. 3]. We can find the same motif in projects for numerous church façades, such as a drawing for the façade of St. Peter's which is perhaps one of the first of Antonio da Sangallo's re-imagined versions of Raffaello's projects [fig. 4]. In this case, the combination of pilasters and half-pilasters strengthens the hierarchical dominance of the central pedimented section.⁶

A drawing for the church of San Giovanni dei Fiorentini is even more interesting in relation to Palladio's architecture. It is from the papacy of Leo X and was attributed to Giulio Romano by Manfredo Tafuri, who saw it as a possible re-formulation of





Antonio da Sangallo il Giovane, design for the façade of St. Peter's, Florence, Uffizi, Gabinetto Disegni e Stampe, 275Ar.

5

Anonymous of the XVI century (G. Romano?), design for San Giovanni dei Fiorentini, Munich, Stadtmuseum, 36/1928 b.



Raffaello's ideas⁷ [fig. 5]. According to the plan reconstructed by Tafuri, the façade was intended to have a real pronaos, projecting from the building with a pier at the edges and a half-pilaster on the wall.⁸ Following this, there would have been a switch from a multi-layered wall to a three-dimensional structure containing actual physical space. It is clear that in this case, the drawing in orthogonal projection may correspond to different solutions in the plan: the one just described but also one with an engaged pronaos, as seen in some of the preceding projects. In elevation, on paper, the column types are interchangeable: piers, round columns, square columns, half-columns, and pilasters.

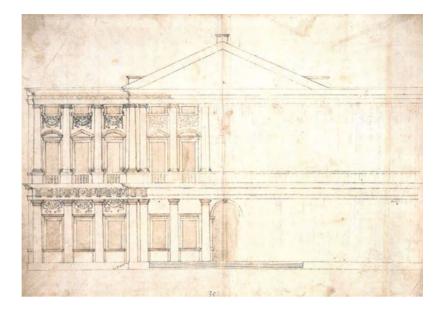
The lesson learned from these examples appears to have been very appealing to Palladio, as a drawing—maybe from the end of the 1540s—demonstrates. It is about the elevation of a villa. Devoid of a corresponding plan, it has been identified by Guido Beltramini as villa Repeta at Campiglia dei Berici⁹ [fig. 6]. As suggested by the two flights of stairs at the sides of the loggia, the corresponding plan, reconstructed by Beltramini, features a central loggia projecting from the flanking wings. As in the

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Andrea Palladio, design for Villa Repeta at Campiglia, elevation, 1547/48, London, RIBA, XVII, 21r.

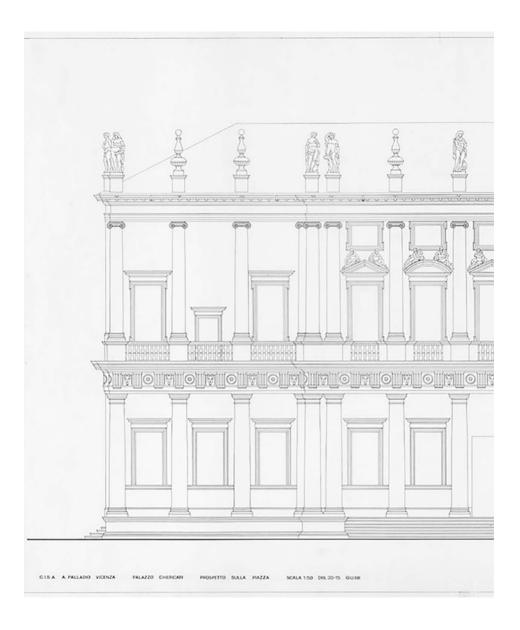
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Andrea Palladio, design for Palazzo Chiericati, elevation, 1550, London, RIBA, Burlington Devonshire coll., VII, 11r.



preceding drawing, in correspondence to the loggia projection, there is a pier at the outside corner at the edge of the pronaos and a half-pilaster at the inside corner on the wall. However, apart from the stairs, the general design might also represent an engaged loggia, and the column types might be different, as the alternative proposal of a quarter of a column drawn at the inside corner on the right suggests.

This same kind of façade recurs in the first project for Palazzo Chiericati, from 1550. It features a huge central block projecting from the wings, crowned by a pediment and provided with an open loggia on the ground floor¹⁰ [fig. 7]. In the ambiguous representation in orthogonal projection, the steps that give access to the loggia on its short side are the clue for deducing the existence of the loggia itself in the central section. The entire façade is framed by two superimposed orders. Again, an element, interpretable as a half-pilaster, defines the passage between the wings and the central block. Based on this same elevation in orthogonal projection, different hypotheses for the plan are possible.

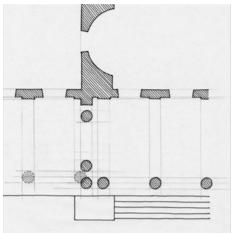


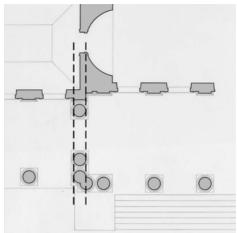


Vicenza, Palazzo Chiericati, Southern view of Eastern elevation, Detail,

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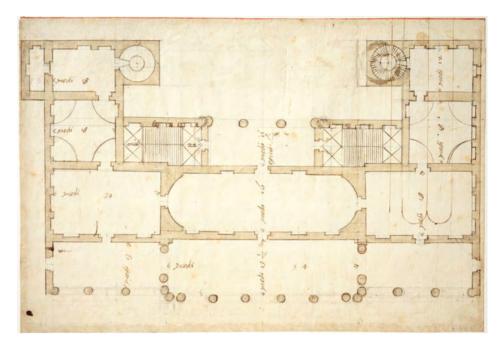
Vicenza, Palazzo Chiericati, view of the façade. Later, when the project was changed to provide a loggia on the ground floor along the whole façade and side loggias on the upper floor, the elevation of the façade remained the same in the drawing in orthogonal projection, except for the elimination of the pediment and some dimensional and proportional changes [fig. 8–9]. However, in the new volumetric layout, the orders, earlier engaged to the wings, were conceptually moved forward from the wall to extend the colonnades of the loggias along the entire lower story and the upper side wings. On both stories, the central five bays project forward through two interlocking free columns at each end of the central section. These columns originate from the organization of the back-set half-pilaster on the corner between the lateral wing and the central block, and the round or square column in the foreground.





Vicenza, Palazzo Chiericati, detail of the plan of the ground floor. Left: simulation of the change of design. Right: survey of the actual building; the dotted lines indicate the misalignment between columns and interior wall. Illustration by the author.

The change of design was not without consequences for the layout of the building and the relationship between the loggia and the interior.¹¹ It is possible to simulate this change by assuming that—as in the executed building—in the first design, two free columns were placed at the outside edges of the central loggia. These two columns were to be planned in line with the interior wall. However, the forward displacement of the pilasters of the wings results in the interlocking of the columns as executed, but also causes an unsatisfactory and disorderly grouping of the shafts at the junction point between the central section and the sides of the loggia. To solve this problem, it would have been sufficient to move the two free columns laterally and recalibrate the distances between the different elements—columns and walls—



Marcantonio Palladio, plan of palazzo Chiericati, London, RIBA, XVII, 8r.

that define the space. [fig. 10]. These adjustments, moving the axis of the columns outward, would have resulted in their misalignment with the interior wall, which is what we can see in the actual building but not in the plan later drawn by Marcantonio, Palladio's nephew and collaborator¹² [fig. 11], nor in the plan in the *Quattro Libri*.¹³ Palladio preferred to amend these last plans from the imperfect correspondence between the vestibule and the central section of the loggia. This example confirms, on the one hand, the initial will of aligning the two structures and, on the other, that the design change occurred during construction, namely when the interior wall—or at least its foundations—was supposed to have already been laid.



The result of the design and execution process, thus reconstructed, is extremely innovative compared to the contemporary domestic façades. Its originality is based on restoring the load-bearing function of columns and is epitomized in the doubling of columns at the end of the projected section, creating a strongly expressive corner knot which, from a tectonic perspective, defines the architectural volumes and spaces [fig. 12–13]. Palladio motivated this choice for the corner solution in the *Quattro Libri* from a structural position by explaining that, as the *sala* on the upper floor protruded above the colonnade, it required double columns under the corners.¹⁴

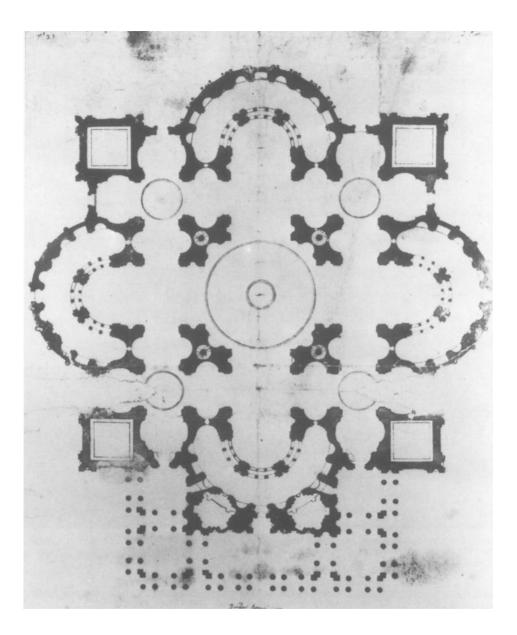
12 Vicenza.

Palazzo Chiericati, view of the façade.

13

Vicenza, Palazzo Chiericati, view of the façade, detail.





14 Baldassarre Peruzzi, design for St. Peter's, plan, New York, American Academy in Rome. Reconstructing the transition from the first to the final project clarifies that the interlocking columns, by acquiring a structural role, nevertheless preserve the memory of the wall which generated them. The slight projection that underscores the central section of the colonnade is obtained through a solution that derives from a conceptually completely different wall architecture and would have been inconceivable without it. Therefore, Palladio recalls the approach of the Roman Renaissance and then suddenly abandons it through an extension of meaning, which again upsets the tectonic sense of architectural orders in a reversal of roles between represented and actual structure.

For this kind of operation, Palladio may have been thinking of a further Roman example, which remained at project stage: a plan for St. Peter's by Baldassarre Peruzzi, stored in the New York office of the American Academy in Rome, which appears to be a very close precedent for the idea of a great façade with trabeated columns¹⁵ [fig. 14]. In the body of the façade, completely opened by colonnades, Peruzzi seems to have proceeded in a similar manner to Palladio's work in the Palazzo Chiericati, by translating the engaged wall order explored in the recent Roman architecture into free-standing vertical supports. The portico imagined by Peruzzi comprises five sections, delimited on the outside by double rows of columns. On the front and sides, in the outermost row, each section emerges from the columns behind it through a joint formed by two interlocking piers. This junction can be attributed the same function as the combination of half-pilasters with pilasters or half-columns in the wall order, transformed here by the use of free-standing piers. The affinity of the interlocking columns of Palazzo Chiericati with Peruzzi's piers—already noted by Arnaldo Bruschi¹⁶—encourages the hypothesis that Palladio reflected on the project for St. Peter's and then realized, in a simplified and reduced form, something conceptually similar in the portico of the Vicentine palace. The substitution of round columns for Peruzzi's square elements constitutes a further original development on Palladio's part.

The design process of the Chiericati façade, which can be reconstructed through archive documents and drawings, includes not only the aforementioned initial project but also different variants of the same overall design, which emphasize its inventive and experimental nature. With great interest is how Palladio responded to the patron's requests, elaborating and transfiguring input from different sources. In addition to the models cited, two other references must be kept in mind, as James Ackerman has pointed out: on the one hand, with regard to the prominence of the middle part of the façade, the Roman house described by Vitruvius and Alberti, which was preceded-according to Palladio's reconstruction—by a central section with a pediment on columns, similar to the forepart of the initial project of Palazzo Chiericati; and on the other hand with regard to the portico along the entire front, the ancient basilica as illustrated in the edition of Cosimo Bartoli's *De re aedificatoria*, published in 1550, the same year that construction of the palace began.¹⁷ These are two types of apparently alternative layouts, capable of being integrated. However, the fusion of columns allows the central part of the façade to emerge while maintaining the continuity of the portico.

San Francesco della Vigna and Il Redentore

At this point, the essay will move on to a reflection on Venetian church façades, in which the theme of the intersection of orders of different sizes—already explored by Palladio in buildings like the Palazzo Valmarana and the Loggia del Capitaniato—appears to be central and is extended to the utilization of two complete temple fronts with pediments; a brilliant solution, anticipated in the early 16th century by proposals from Bramante, Peruzzi and Antonio da Sangallo il Giovane. This solution makes it possible to apply a façade based on the ancient model of the temple, which has a constant height, to the system of variable heights of the Christian church. Engaged to the façade wall, the intersection of two temple fronts aims to project the image of the spatial and volumetric organization of the interior to the exterior.¹⁸ After some unrealized projects, Palladio's invention was translated into real architecture for the first time in the façade of San Francesco della Vigna [fig. 15]. The new façade, constructed around 1566, is placed on the church, built from 1534 onwards, based on a design by Jacopo Sansovino. Above a single basement, Palladio intersected two temple fronts through a complex definition of the relationship between orders and masonry. The major order of half-columns extends with the pediment up to the roof of the nave. It is applied to a wall that emerges in the upper part on corners, separated from the half-columns and marked only by the entablature. This arrangement was already present in various façades of the 1540s and taken up again between the 1560s and 70s [fig. 16].



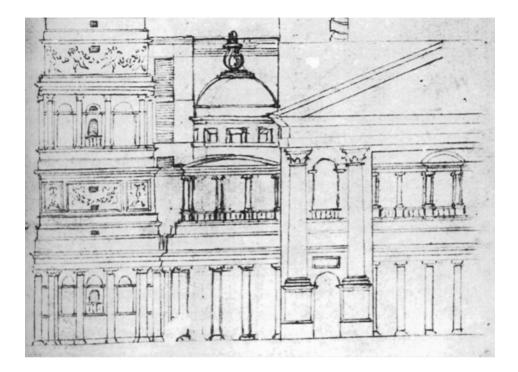


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Venice, San Francesco della Vigna, view of the façade.

16

Venice, San Francesco della Vigna, view of the façade, detail.



Copy of a project by Raffaello for St. Peter's, *Codex Mellon*, f. 71v, detail. In this specific case, the choice may have been directly suggested by observing a similar corner solution in the central section of the façade of St. Peter's drawn in Raffaello's project, represented in the Codex Mellon¹⁹ [fig. 17]. In the Venetian church, Palladio proposed an ingenious replica of this solution. He introduced the downward continuation of the neutral band of wall of the upper corners. In this way he distanced the half-pediments of the minor order from the colossal half-columns. The minor order, with half-columns and piers on the corners, runs along the entire front but is only fully formed in the side bays and the center, where it frames the portal. In the smaller bays of the middle section only the entablature continues, placed in a recessed position and flattened like the one at Palazzo Valmarana, with the cornice reduced to a single band that is less prominent than the underlying pulvinated frieze. This same profile is extended to the short stretch of free wall at the ends of the central body, to soften the contact between the two orders, leaving the complete cornice to touch the colossal half-columns only with the protrusion of the cyma and the corona. The simplified and recessed entablature continues on the edges of the central bay where the complete minor order re-emerges to frame the portal. In the façade just described, the two intersecting temple fronts are clearly legible, but the gradual intensity of the forms of the entablature of the smaller front prevents the larger one from being cleanly cut horizontally, thus losing its correspondence with the full-height space of the nave. This horizontal cut, for example, can be seen on the façade of San Giorgio Maggiore, which was influenced but not designed by Palladio. There the lines of the entablature of the minor order run undifferentiated along the entire width of the front.



Palladio's experience with the theme of the façade with intersecting fronts culminates in the church of the Redentore, whose construction began in 1577 [fig. 18]. In this case, the façade and the body of the building belong to the same design and executive phase, and a more stringent coordination between the parts was therefore possible.

18 Venice, Il Redentore view of the façade.



Venice, Il Redentore view of the façade, detail. The basic scheme is applied according to a new composition strategy, based on a definition through layers with rather limited depth, intended as a projection of the fundamental components of the complex structure of the building. While the precedent of San Francesco della Vigna is taken up in some aspects, different criteria govern the relationship between the parts, the interplay between orders and walls, and the treatment of the corners. The major temple front has a pediment placed lower than the roof of the nave and engaged to an attic, reminiscent of the Pantheon. This front sits on top of a flight of steps and has two half-columns in the center and piers at the corners. In the minor front, the half-pediments are replicated at the top in a simplified form using parts corresponding to the profile of the buttresses. The order, as in San Francesco della Vigna, develops along the entire façade and is formed completely in the outside bays and the center, while applying only the simplified and recessed entablature in the side bays of the major front. As in the previous example, the order frames the portal in the center [fig. 19].

Compared to San Francesco della Vigna, the definition of the outside bays is very different. It features a system of pilasters and half-pilasters placed on different layers, running around the corners and continuing along the sides of the building [fig. 20]. The treatment of the area in contact with the main front also changes, as it is closed off at the corners by protruding piers. Therefore, the wall band, that separates the two orders in San Francesco, is missing here. The minor order is joined to the corner piers of the major order by means of half-pilasters, while the half-pediments are juxtaposed without mediation at the level of the capitals.



20

Venice, Il Redentore view of the façade, detail. The insertion of the half-pilasters in the transition between the wings and the central body recalls, as we have seen, Roman models already proposed as sources for the projects of Villa Repeta and Palazzo Chiericati. Palladio thus recovered particular solutions from Roman examples of the early sixteenth century. This included solutions that had already been exploited, reworked, and apparently superseded during the course of his career, but also solutions that had not been used in his work before, such as the association of pilaster and half-pilaster on the corner, or solutions which were only used in project drawings, such as the combination of half-pilasters with supports of different forms, aimed at coordinating protruding and recessed parts of the wall. For Palladio, the use of flattened pilasters and half pilasters, therefore, seemed to constitute a sort of return to the origins of his training. This took place within a completely innovative architecture, the most mature outcome of a long reflection on the theme of the façade with intersecting orders, but also the fulfilment of the task indicated by Bramante, aimed at representing three-dimensionality, thus evoking spatiality within the limits of an almost flat front. Palladio was able to realize this task based on his long experimentation with the ever-changing play of walls and columns in the envelope of his buildings.

The method of orthogonal projection, used almost constantly, also determines a particular way of using the models 'reduced' through this type of representation. As we have seen, an identical elevation can suggest different layouts in plan, multiplying the possible solutions offered by the same model and, as Howard Burns has pointed out, favoring its creative use²⁰—a design process made up of small deviations and slight changes, but with unexpected and often innovative formal outcomes.

Endnotes

If not indicated otherwise, all translations are by the author of this paper.

- 1 This idea is expressed in the book series entitled Angoli e Demoni, edited by Renata Samperi and Paola Zampa, Campisano editore, Roma. On the theme of corners in Palladio's architecture, see, in particular, Samperi 2019.
- 2 This theme is well established by Alberti, who attributes to the column the dual role of structural element and ornament (Wittkower 1952, 29–32). Among the many contributions on this subject, see especially: Thoenes 1998, 67–75, for the interpretation of the "gioco fittizio" of support and ornament; Bruschi 1969, 209–241, for the relation between design and structure; Bruschi 2006 and Gargiani 2003, for the contradictions and ambiguities inherent—starting with Brunelleschi's experience—in a conception of the wall order as the representation of a structure.
- 3 This motif is open to different interpretations. On the one hand, the half-pilasters flanking the pilasters seem to make the transition between orders and wall gradual, avoiding a sharp contrast between these two systems and emphasizing the corporeal quality of the masonry, its structural concreteness (Bruschi 1969, 353–354). On the other hand, in the light of Serlio, the half-pilasters may be attributed the function of supporting, whether visually or structurally, the part of the entablature placed on a plane behind the projecting section above the central pilaster. According to the latter reading, the order is configured as a load-bearing framework and is distinguished from the wall mass (Pagliara 1992).
- 4 The original state of the short side façade of the Palazzo Jacopo da Brescia can be seen in a drawing by Maarten van Heemskerck (Berlin, Kupferstichkabinett, Skizzenbuch I, f. 68r).
- 5 Firenze, Gabinetto dei Disegni e delle Stampe degli Uffizi, 1884Ar; Pagliara 1984, 206–207.
- 6 Firenze, Gabinetto dei Disegni e delle Stampe degli Uffizi, 257Ar; Frommel 1984, 266.
- 7 Monaco, Stadtmuseum, n. 36/1928b; Tafuri 1984, 224; Tafuri 1992, 172–176.
- 8 See Tafuri 1992, 172-176.
- 9 Until a few years ago, research agreed to date the design to the late 1540s, without reliably referring it to any actual building (Lewis 2000, 152–154, with references to the preceding bibliography). More recently, Guido Beltramini was able to recognize in the Villa Repeta—radically transformed in the seventeenth century after a fire—traces of a building referable to Palladio's project and datable, because of a convincing reconstruction, between 1563 and 1566. Consequently, Beltramini also proposes to place the realization of the design in the 1560s (Beltramini 2010a; Beltramini 2010b, 78–81). In his treatise, however, Palladio, after naming Mario Repeta as the patron of the villa, adds that in this construction, he fulfilled the spirit of his father, Francesco (Palladio 1570, 163; Beltramini 2010a, 404). Francesco Repeta died around 1556 and may therefore have commissioned the work a few years earlier. As argued in Samperi 2017, this hypothesis allows justifying the fact that the characteristics of the project are entirely consistent with Palladio's research in the late 1540s, only to be surpassed, for the most part, in his mature work.
- 10 London, Royal Institutes of British Architects, Burlington Devonshire Coll. VII/11r; Beltramini 2008b, 94–95, with references to the preceding bibliography. For this project, see also Ackerman 1984. For the history of the building and its completion delayed until the end of the 17th century, see Puppi/Battilotti 1999, 281–286, 462–463.
- 11 On the modalities of project change, see Samperi 2008.
- 12 London, Royal Institutes of British Architects, XVII/8r; Beltramini/Burns (eds.) 2008a, 97.
- 13 Palladio 1570, 100.
- 14 Palladio 1570, 102: "[...] perché [la sala] esce alquanto in fuori, ha sotto gli angoli le colonne doppie".

- 15 See Bruschi 1992, 472-475.
- 16 See Bruschi 1992, 482, endnote 107.
- 17 Ackerman 1984.
- 18 Among the many contributions on the subject of church façades with intersecting orders and its genealogy in relation to Palladio's projects, see in particular: Wittkower 1952, 80–87; Ackerman 1966, 138–148; Bruschi 1969, 237–241; Foscari/Tafuri 1983, 150–152; Battilotti 2001, 436–441; Fiore 2012; Guerra 2010; Guerra 2012.
- 19 Codice Mellon, f. 71v; Frommel 2002, 121-123.
- 20 On the relationship between Palladio's design method and the use of orthogonal projection drawing, see in particular: Gioseffi 1972; Burns 1973b, 183–185; Burns 2002, 401; Burns 2008c, 303.



Martin Ebert

Fact and Fiction

Palladio's Buildings: Just Images?

Palladio's buildings are instantly recognisable. They create fascinating and highly memorable architectural images. The plans are simple and seemingly easy to read, and the façades display grandeur with great visual depth, without being overbearing.

Whilst the plans follow a straightforward, almost minimalist, symmetrical layout composed of squares and rectangles with traceable proportions, the elevations are much more elaborate and far more difficult to analyse and decode. The outline is simple, often a box with a gable roof, but the superimposed façades are created from intricate designs, conceived from complex, interwoven and layered compositions, sourced from a classic canon of architectural elements [fig. 1].

When looking at Palladio's designs, historic research tends to separate the analysis of the plan, or the structure, from the façade. In James Ackerman's seminal book on Palladio, chapter 5 on architectural principles mainly concerns itself with the horizontal layout.¹ He discusses façades regarding their artistic merit, but not in terms of the architectural process, analysing proportional relationships and comparing façade compositions to their roman

View of Il Redentore, Venice, from across the lagoon.

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originals and to the designs of other architects. Ackerman does, however, mention that Palladio's façades are the result of "[...] co-ordination of exterior and interior design by representing the interior organization on the façades [...].²

Ackerman's observation of a co-ordination between plan and façade is clearly important, but it is disappointing that he does not elaborate and explain how exactly this co-ordination is achieved. Manfredo Tafuri and Howard Burns take up the notion of "co-ordination"³ independently and explore it further. Tafuri observes how Palladio creates a "projective geometry made of transparencies and superimpositions"⁴ and Burns describes how "overall layout, structure and external appearance are inseparable elements of an organic unity".⁵ However, Burns also points out that Palladio used, what he called, an "extra touch, that slight bending of rules or improvisation in details, which give his buildings their individuality and beauty".⁶

This essay wants to examine this process of co-ordination further and explore if there is relevance in this for the architectural discourse today. The focus is hereby on the architectural methodology behind the designs and not on the intricacies of the actual artistic outcome.

Of particular interest is here whether Palladio's approach of *co-ordination*, clearly different from *matching*, *tracing* or *replicating*, implies a looseness and openness for interpretation that allows him freedom to create façades which cannot be completely rationally explained. Perhaps it is no surprise, and exactly the point, that plan and elevation are not a perfect match, and perhaps it is here where Palladio deviates from his mentor Barbaro who stipulated that the elevation "must also conform to the plan".⁷

Perhaps only in this way an architecture, or an image of architecture, with a higher meaning can emerge? Perhaps this openness is fundamental to artistic endeavour where fact and fiction are intrinsically linked?





2 Basilica of Sant'Abbondio, Como, south elevation.

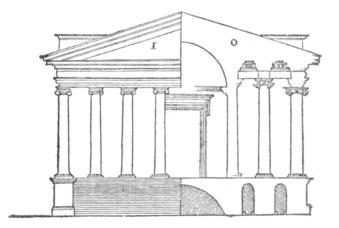
3 Basilica of Sant'Abbondio, Como, corner detail.

Architectural Expression as a Symbolization of Structure and Space

In his book, Palladio, der Bildermacher (Palladio, the Image Maker). Thorsten Bürklin also refers to Howard Burns and what Burns calls a "compositional kit".8 Bürklin goes on to describe how Palladio adds a second layer of classical ornamentation to otherwise simple box-shaped buildings.⁹ This second layer gives the buildings direction and outlook, and provides interest and architectural expression. A key example for this method is Palazzo Valmarana Braga in Vicenza which Guido Beltramini uses to explain Palladio's design method of orthogonal projection to create a composition of superimposed layers.¹⁰ Even though the elevation cannot be fully appreciated head-on, as the building is located in a narrow medieval street, two expressive external "planes" have been added.¹¹ The façade, although condensed to about 40 cm, adds an incredible visual depth to the building, suggesting a deep architectural space in front of the building's actual perimeter.

The device of adding a decorative plane, or layer, to an otherwise not-so-interesting stone volume was nothing new in 16th century architecture [fig. 2, 3]. What is interesting, however, about Palladio, is how he derives key elements of this external layer of classical expression from the building's internal structure. It is the way this layer is added to the outside and yet how it seems to grow from the inside, closely reflecting the internal arrangement and structure that make Palladio's buildings so captivating.

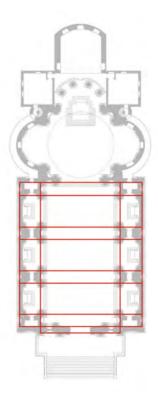
It is perhaps best demonstrated in Palazzo Valmarana Braga and Palazzo Chiericati in Vicenza, as well as in Il Redentore in Venice and, predating these, in his wood cuts illustrating Vitruvius' comments on architecture.¹² In an illustration of a roman temple, Palladio developed the idea of showing section and elevation of the building in the same image, suggesting that they are two aspects of the same idea; that one—the façade—cannot be conceived or comprehended without understanding the other the section [fig. 4]. Analyzing the façades of Il Redentore and Palazzo Chiercati highlights several key steps in Palladio's methodology [fig. 5–8]:



4

Daniele Barbaro and Andrea Palladio, representation of the Orthographia and Sciographia in Barbaro's commentary of Vitruvius from 1567.

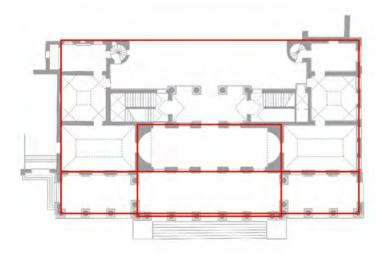




5 Il Redentore, Venice, view of main elevation. Analysis by the author.

6 Il Redentore, Venice, plan. Analysis by the author.





7 Palazzo Chiericati, Vicenza. Analysis by the author.

8

Palazzo Chiercati, Vicenza, plan Analysis by the author. **A.** The façade is a separate layer or space. In particular in Il Redentore, the façade takes on its own allotted zone in plan and is superimposed to the front of the building.

B. As Tafuri suggests, the façade creates transparency.¹³ The artistic composition of verticals and horizontals, columns and architraves is, fundamentally, a reflection of the building's internal spatial arrangement, or its structure. According to Andrea Guerra, the Il Redentore elevation "enables us to reconstruct Palladio's design process, developed through the orthogonal projection of spaces and masses on the plane of the façade."¹⁴ Thus, the façade, the external image, reflects the internal workings of the building by projecting them onto the external elevation. Without the façade, the internal structure of the building would remain hidden behind its (masonry) external walls, and through this process the buildings become transparent and legible.

C. The façade is a dramatization. As it is not the structure itself (which is hidden from view), but an interpretation of it, this allows Palladio both a point of departure and artistic freedom at the same time. The structure becomes the skeleton of the image. It is a rough sketch which provides space to depart from slavishly *tracing* the structure onto the façade. The latter is particularly crucial when trying to understand why it is difficult to fully reconstruct Palladio's façade compositions, as he was able to make adjustments based on visual perception rather than structural or mathematical deduction.

This process of creating façades as images by layering and superimposing, interpreting and dramatizing structure and spatial arrangement can be summarized as creating images by means of symbolization of structure and space.

Thus: Image <=> Structure <=> Space.

The Modernist Pursuit of Truth

Modernism departs from this concept of interpreting and layering. Hendrik Berlage demands of modernism to adhere to "the principle of simple honest construction" and heavily criticizes other contemporary architects and in particular Henry van der Velde and the Art Nouveau movement for being "the opposite of this healthy principle".¹⁵

In the absence of decoration and ornament, modernism is fundamentally concerned with a notion of honesty and truth where the external expression of the building is de facto the building's inner spatial arrangement and structure without mediation or translation. *Image, structure and space become one.*

Thus: Image = Structure = Space.

Architectural quality here relies almost entirely on the architect's artistic ability to create sculpturally coherent structures as there are no other means of artistic expression left. The more successful examples of modernist architecture are often private houses or public buildings in prominent locations where the building shape takes on iconic qualities such as Le Corbusier's Villa Savoye, the Sydney Opera House by Jørn Utzon or Oscar Niemeyer's government buildings in Brasilia. En masse, celebrated masterpieces aside, this resulted in a somewhat contradictory situation. On one hand there was monotony and blandness as buildings started to look uniform and repetitive, and on the other, modernism created many ugly monstrosities due to the often-lacking sculptural and artistic abilities of the average architect.

One of the best, although lesser known and less celebrated, examples of modernist architecture is the National Theatre in London by Denys Lasdun from 1976.¹⁶ Situated on the South Bank of the river Thames, the building offers a series of publicly accessible terraces and spaces facing the river and overlooking the London skyline. The auditoria are buried deep inside the center of the building. The result is a highly complex arrangement of spaces which find their perfect expression in the building form showing the fly tower surrounded by projecting concrete decks on all sides. The building form is derived entirely from the internal arrangement of terraces and spaces. It is a fundamentally open structure, visually and physically accessible from all sides. Thus, it is more landscape than architecture and does not have a façade, building front or perimeter in a traditional sense. It is completely devoid of references of classical architecture and yet it is powerful, unique and completely convincing as a piece of publicly accessible sculpture. The view onto the building is less memorable than the spaces inside or the view from the building onto the London skyline [fig. 9].

9 Denys Lasdun, National Theatre, London, view from Waterloo Bridge.





Modernism enjoyed great success in northern Europe but also in areas with moderate and warm climate and limited requirements for thermal insulation. It is no accident that almost all iconic modernist buildings were built before the great energy crisis of the 1970s. Ever since, architecture has become increasingly concerned (although not sufficiently successful) with lowering energy consumption. Buildings in the northern hemisphere have started to acquire a thick coat of thermal insulation. This added insulation layer makes it more difficult to directly express a building's structure on the outside as piercing through the shell causes thermal breaks, associated heat loss and condensation. 10 Christian Kerez, Leutschenbach School, Zurich. This has not stopped some contemporary architects, especially in the United Kingdom and Switzerland, to adhere to the modernist tradition of expressing the building's structure on the outside. Next to Richard Rogers' works in the UK, Christian Kerez's Leutschenbach School near Zurich¹⁷ and Miller & Maranta's apartment building at Schwarzpark in Basle¹⁸ are prime examples where the structure is visible "as is" on the outside of the building. In particular, Kerez's school is a stunningly beautiful building where the structure takes on a sublime sculptural quality that permeates all spaces and gives the building an unforgettable identity [fig. 10].

But this pursuit of truth comes at a price. Penetrating the building's thermal envelope with loadbearing columns and beams is only possible with highly sophisticated and thermally broken, yet structurally continuous, shear connectors. ¹⁹ These details are not only extremely difficult and expensive to build. They also require highly advanced thermal and structural modelling and cooperation of the local building inspectorate.

It is interesting to compare this type of "tour de force construction methodology" with Palladio's approach. Instead of using ever more complex and expensive means of construction, Palladio would have probably taken a much more pragmatic route. The author would suggest that Palladio instead would have accepted the insulation requirements of contemporary construction and added a further façade layer in front of the insulation rather than penetrate through it.

The Postmodern Disconnect

Fed up with the numbing repetition of simplistic modernist architecture and under the banner "less is a bore" a group of postmodern architects decided in the 1960s to create a more flamboyant architecture where the building's image becomes more interesting and to a greater extent separated from the building's structure and spatial configuration.

As a formula: Image ≠ Structure ≠ Space.

One of the prime examples of this departure from the modernist pursuit of truth is Philipp Johnson's design for the AT&T Tower in New York (now known as 550 Madison Avenue). Inside, the structural and spatial configuration is exactly the same as a typical 1960s office tower with a regular column grid and a central core with elevators, staircases, WCs and technical services. Yet on the outside, the building looks like a giant Chippendale cabinet. Another building, where image and structure are disconnected, is the Piazza d'Italia in New Orleans by Charles Moore. It is an entirely fictitious coulisse, a colorful assemblage of Roman stairs, porticoes, gables and columns to frame a public space. The façade does not represent any building and serves only as public entertainment.

More recent examples of image-driven architecture are de Rotterdam by OMA and West 57th Street in New York by Bjarke Ingels Group.

De Rotterdam is a mixed-use development on the edge of the river Maas with parking, hotel, commercial, office and residential space. The building consists of three towers that are formed from glass-clad cubes which have been shifted from their vertical axis to create cantilevered structures. Viewing the building across the river, it creates a visually striking and memorable image. However, with the façades clad in a uniform glass and aluminium envelope, the image remains a reflection of light and does not provide a deeper understanding of the building's inner workings. Bart Lootsma calls the overall impression "blank" in his appraisal in the Architectural Review.²⁰ The shifting shapes challenge the laws of gravity. The enormous structural support required to allow the cantilevers to work is not referenced on the outside. This leaves the viewer impressed but not informed; the building image does not give any clues as to how this engineering feat is achieved. Although it hides its structural complexity behind a sleek façade, de Rotterdam at least offers some notion of the organization of the building that one might make assumptions about different uses for the different blocks and towers. Perhaps one could argue the shapes symbolize the very idea of mixed-use [fig. 11].

11 OMA, De Rotterdam, Rotterdam, view from across the river.



Bjarke Ingels Group's design for 57th West Street in New York goes one step further by creating a shape that is based on an entirely superficial notion of leaving a mark on the skyline of New York. All consideration for sensible apartment layouts or structural integrity seems to be subordinate to the creation of a memorable icon.

In their book *Learning from Las Vegas*, Robert Venturi, Denise Scott Brown and Steven Izenour explore the disconnect between content and form, structure and image. Interestingly, they notice that in their pursuit of truth, modernist architects have increasingly used the building's structure as the main form giver, and thereby required a usually mundane element of the building fabric to have poetic and artistic qualities.²¹ This is an expectation which the structure normally cannot satisfy, leading to more and more extravagant and complex structural solutions which became increasingly difficult and inefficient to build.

In this juxtaposition of the modernist and postmodernist position, architecture gets stuck in a dichotomy. On one hand, there are post-modern buildings that lack visual and intellectual transparency, where image and content (space and structure) are disconnected, leaving the viewer perhaps entertained but ultimately misinformed and confused. On the other hand, there are modernist buildings that, exceptions aside, are dull, of poor aesthetic quality or increasingly difficult to build.

This is where Palladio's methodology becomes interesting.



Symbolization of Structure and Space in Contemporary Architecture

In the search for more recent applications of Palladio's methodology in contemporary architecture, surprisingly, Ludwig Mies van der Rohe, one of Modernism's main protagonists comes to the fore. His post-war oeuvre tells the story of how he moved away from a strict modernist approach in the 1920s and 30s and started adopting a Palladian construction methodology from the late 1940s onwards.²²

His first buildings in Chicago, constructed between 1941 and 1946 shortly after he arrived there from Berlin, were simple

12 Mies van der Rohe, Lake Shore Drive Apartments, Chicago. industrial buildings in which, in the modernist tradition, he used an expressed structural frame to give order and articulation to the building's façade. In his first commission for a highrise apartment building, the Promontory Apartments (1946–49), he continued with this approach and employed a simple concrete structural frame with brick infills and aluminium windows. However, almost in parallel to this very direct modernist technique, Mies started experimenting with additional layers wrapping around the actual structural frame.

Although some of his first buildings in Chicago were made with a concrete frame, the subsequent ones all employed a primary steel frame. As a steel frame requires fire protection, especially in taller buildings, exposing the actual frame was no longer a possibility. So, protecting and hiding, layering and wrapping the frame was a technical necessity, but also a creative opportunity at the same time, just as it was for Palladio. This approach can notably be seen in Mies' designs for the Alumni Memorial Hall on the IIT campus from 1946 and for the Lake Shore Drive Apartments from 1951 [fig. 12]. In both cases, an internal structural steel frame is encased with concrete for fire protection which, in turn, is faced with steel plates and I-beams mounted at regular intervals.²³

At the time, Mies van der Rohe was confronted with criticism for he was decorating his buildings with elements which look like structure but are in fact not load-bearing. Richard Padovan refers to the decorative layer of I-beams and its relationship to the internal frame in his essay *Machines à méditer*.²⁴ To him the I-beams become an essential part of the building fabric and, in the corners, create a kind of bundle pillar similar to the architectural vocabulary of the high gothic. He compares Mies' approach to Thomas Aquinus' famous definition of truth as the adaptation of reality and understanding, *adeaquatio rei et intellectus*. The façade not only refers to the structure situated behind the cladding, but symbolizes the very idea of *structure*, *support* and *stability*. The decorative layer becomes necessary for a deeper understanding of the building. Mies' student at IIT, Jacques Brownson, employed exactly the same principles with great effect at the Chicago Civic Center (now Daley Center). Here the entire building is clad in a cor-ten steel envelope which, from the outside, looks remarkably like the actual structure, but it is not. Again, the actual steel frame is covered in fire protection and the cor-ten steel envelope is only a very thin skin. Visually striking, and perhaps the reason why the skin looks so much like the steel frame, is the use of applied strips of steel plating to create visual depth within the spandrels and column covers.²⁵

After the postmodern hiatus of about 20 years, one of the first examples where the process of layering and symbolization of the building's structure is used again is I. M. Pei's Bank of China in Hong Kong. The interplay of building shape, structural system and façade design is truly remarkable. As with Palladio's Il Redentore, the building's main viewpoint is from across the water, from Kowloon across Victoria Bay to Hong Kong Island, and the image is similarly unforgettable. In terms of symbolization of structure, Pei employs Palladio's methodology. The crosses shown on the façade represent the building's main structural frame, a three-dimensional system of trusses that creates the building's lateral stability system.²⁶

In today's architecture, there are several architects, notably Hans Kollhoff, Peter Märkli and David Chipperfield, who can be seen in this tradition of Palladio and Mies van der Rohe. These architects have accepted and accommodated the need for simple and efficient construction techniques, but this has not kept them from conceiving sophisticated architectural concepts and designs with striking visual impact. In his designs for the Picassohaus office building in Basle and the headquarter building for Synthes in Solothurn, Märkli uses simple rectilinear forms.²⁷ The Synthes headquarter building is an elongated box and the Picassohaus building creates a U-shaped courtyard towards the main square. In both cases, the building skin has been hung in front of the main frame. The Picassohaus building employs an off-the-shelf cladding system to great effect by enhancing it with folded metal sheets to create an elegant grid of thin verticals and wider horizontals (which also house an external blind system) [fig. 13, 14].



13 Peter Märkli, Picassohaus Office Building, Basel, façade junction mock up



14 Peter Märkli, Picassohaus Office Building, Basel, view along north-facing elevation

15

Peter Märkli, Headquarters Building for Synthes, Solothurn. colonnade detail.



In the Synthes headquarters, Märkli adds another element. Pushed out further from the thermal envelope which sits in front of the frame, representing the building's structure and geometry through windows and pre-cast elements, a colonnade has been provided, running the length of the building in the front and rear. This colonnade creates an intermediate space between inside and outside and gives a sense of scale to the very long building.



Importantly, the colonnade is not part of the building's main frame. It is very much, in the Palladian sense, an additional layer representing the building's frame, which is not the frame itself nor supports it [fig. 15, 16].

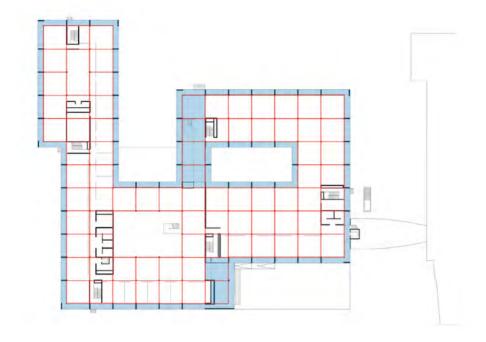
In Hans Kollhoff's tower at Potsdamer Platz in Berlin, the whole building is clad with a sophisticated relief of red bricks. The main frame is made from concrete and the bricks are part of a pre-cast sandwich element which is hung from this frame.²⁸ The pattern of the relief changes as it goes up the building, creating horizontal bands which correspond with steps in the building shape. The structural system does not fundamentally change over the height of the building, demonstrating Kollhoff's intention to show the relief not as structure but as a representation and, in a way, an enhancement of it.²⁹

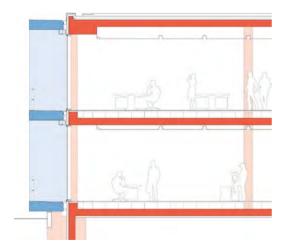
16 Peter Mārkli, Headquarters Building for Synthes, Solothurn, corner view of main elevation.

Bringing Palladio to Westphalia

In 1999 David Chipperfield won the competition for and was subsequently commissioned to design the headquarters for clothing retailer Ernsting's Family in Coesfeld-Lette near Münster in Germany.³⁰ The project was conceived as a group of three pavilions creating a series of courtyards and atria, with offices organized around these spaces. One fundamental consideration was the headquarters' setting in a rural landscape. Framing the views in and out of the building was an important design parameter. To further this intention, the façade was developed as an almost two meter deep space of accessible loggias, providing a space mediating between the office interior and the surrounding landscape. Viewed from the outside, the frames only cover the columns and floors, yet they appear solid and substantial, in particular when viewed at an angle. Due to their depth, the frames visually contract and form a solid-looking mass of concrete which, despite its apparent solidity, seem to defy gravity and "appear to float"³¹ above the ground.

As in Palladio's façades, the loggias are added as an additional layer. They create their own zone or space, wrapping around the building on all sides, including the external courtyard. The corners are emphasized by pushing the frame to the outside of the adjoining loggia thus exposing the internal columns. The loggias also form their own structural system. They share the same foundations as the perimeter columns but they do not cantilever from the internal structure. They are constructed as vertical fins and horizontal architraves with an insulation layer between the internal structure and the external loggias. The loggias are only attached to the main structure with small stainless-steel brackets. at discrete locations for horizontal support. At the main entrance and towards the garden entrance, the loggias are altered to create a portico and a colonnade. Similar to the standard frames, the portico and colonnade are effectively stand-alone structures with their own foundations, only tied back to the main building for horizontal support. [fig. 17-22].





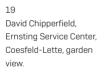
17 David Chipperfield, Ernsting Service Center, Coesfeld-Lette, plan.

18

David Chipperfield, Ernsting Service Center, Coesfeld-Lette, façade detail.







20

David Chipperfield, Ernsting Service Center, Coesfeld-Lette, construction of typical bay.

21

David Chipperfield, Ernsting Service Center, Coesfeld-Lette, construction of main entrance portico.





David Chipperfield, Ernsting Service Center, Coesfeld-Lette, forecourt The similarities between the construction methods of the Ernsting's Family building and Palladio's buildings are clear.

- —The internal structure is simple and straightforward, following a rigorous geometry.
- —The internal structure is augmented and enhanced with an external layer.
- —The external layer is separate from the main building and forms its own structural system.
- -The typical external elevation is a representation of the internal structural arrangement.
- —Parts of the external layer are further enhanced to form a portico and a colonnade.

Symbolization as a Method

Palladio's method of layering the external building envelope and creating a memorable image not just as an arbitrary scenery, but by using the internal spatial arrangement and structure as a reference and starting point, has discipline and yet allows great artistic freedom. This process of layering and symbolization of structure on the building's façade is relevant for both the process of making architecture and the perception of architecture.

Layering and Superimposing

Palladio used the simplest and most efficient forms of construction that were available at the time. This allowed for streamlining of the construction process and meant that his projects could be realized across a large part of the Veneto in northern Italy at a time when a site visit required several days of travel. His contractors simply knew how to build his buildings without much explanation because Palladio employed construction techniques that were widely known.

Building the main frame with simple and accepted standard practice allowed Palladio to focus his design on the precision of the plan and the decoration of the exterior. The buildings are almost always simple box-like volumes and only a few have *barchesse* (added barns or sheds) that would create more complex external spaces and building geometries. Most buildings have no sculptural qualities beyond basic massing. What makes Palladio's buildings interesting is the artistry and architectural composition of the layers added to the outside of these volumes. And this is where Palladio was able to focus his energies.

Today's architects use much of their time creating, what they believe are, interesting shapes, often ending up with buildings that are extremely difficult to build. Much design time is spent working out how the basic structure and the build-up of the external envelope is constructed. As evidenced by the projects by Miller & Maranta and Christian Kerez, the modernist doctrine of truth by directly expressing the building's structure on the outside is running into difficulty in the northern hemisphere as buildings have to become heavily insulated to reduce heating requirements. Thus, penetrating a building's envelope with the structural frame is becoming increasingly technically challenging, difficult to construct and ultimately costly.

Taking a leaf out of Palladio's handbook, architects could spend less time worrying about the shape of the building and complicated detailing, and instead create a simple and purposeful plan, use well-established, standard construction techniques and have more time to concern themselves with the creation of legible and well-proportioned façades.

Accessibility

The other effect of this process of layering and superimposing the structure as an image is that the buildings become more visually accessible. Palladio's façades are immediately recognizable and highly effective, probably mostly due to their visual clarity despite the underlying compositional complexity. They are not arbitrary fabrications of architectural fiction. They represent the building's inner workings and allow the viewer to begin to understand how the building is organized on the inside. Thus, Palladio's façades make the buildings accessible to the public and facilitate an initial, although perhaps unconscious, appreciation of its overall design and layout.

In this way Palladio's buildings achieve something that much of recent architecture does not. They are beautiful and comprehensible at the same time. And perhaps this is why they are so memorable.

Endnotes

If not indicated otherwise, all translations are by the author of this paper.

- 1 Ackerman 1966, 170-185.
- 2 Ackerman 1966, 182.
- 3 Beltramini/Burns (eds.) 2008b, 149.
- 4 Tafuri 1987, XV: "A ciò, Palladio aggiunge una geometria proiettiva fatta di trasparenze e di sovrapposizioni, tale da permettere il contemporaneo controllo di membrature, piani spazi dislocati a profondità successive: [...]."
- 5 Beltramini/Burns (eds.) 2008b, 269.
- 6 Beltramini/Burns (eds.) 2008b, 272.
- 7 Vitruvius Pollio/Barbaro 1567, 30: "[...] deue esser lo in piè conforme alla pianta [...]
- 8 Beltramini/Burns (eds.) 2008b, 269.
- 9 Bürklin 2019, 126-146.
- 10 Beltramini/Burns (eds.) 2008b, 199.
- 11 Tafuri 1973, 155.
- 12 See Barabaro 1567.
- 13 See note 4.
- 14 Guerra 2008. In: Beltramini/Burns (eds.) 2008b, 231.
- 15 Berlage 1991, 70.
- 16 See Curtis 1994, 108-157.
- 17 See Deplazes (eds.) 2008, 435-444.
- 18 See Loudon (ed.) 2011, 32-47.
- 19 See Deplazes (ed.) 2008, 442.
- 20 Lootsma 2014.
- 21 Venturi / Scott Brown / Izenour 1977, 103, 139, and 163.
- 22 See Lambert 2003, 277-325.
- 23 See Carter 1974, 46-49.
- 24 Padovan 1986, 38.
- 25 See Condit 1964, 219; Grube (ed.) 1977, 58.
- 26 Robertson 2019.
- 27 See Johnston (ed.) 2017, 93-105 and 133-156.
- 28 See Deplazes (ed.) 2008, 51.
- 29 See Cepi 2003, 352-361.
- 30 See Marquez Cecilia/Levene 2004, 50-63.
- 31 Weaver 2003, 87.



Dikkie Scipio

Let's Talk About Palladio A Brave Attempt to Understand a 16th-Century Architect

Introduction

To understand the 16th-century architect Palladio and his architecture, we must create some context. Where did he live, when, with whom, and what did he do to be of significance even now, five centuries later? How did he differ from his colleagues? What happened in architecture to break with the classical tradition, and what happened in the architectural debate to abandon the search for beauty? Talking about Palladio, there are basically three points worth considering in today's architecture debate. The first is the lost relationship between image and building. When construction methods become disconnected from the image, the image seeks independence in icons whose value represents an idea rather than being one. Secondly, what happened to the concept of beauty? Suppose we accept the abundance of these ideas. Can we still conclude that architecture is not a result of functionality but that it exists despite it? And finally, what does it mean to be an architect? A relevant question we try to ignore by answering an architect can be everything but not a homo Universalis.



Part I

Why is it that so many people feel connected to the work of Palladio, and why should we architects be? In the beginning, we must refresh our memory and get some context of 15th-century Europe [fig. 1], which changed from a medieval Gothic society into the Renaissance. It was a complex environment ruled by many royal houses and kingdoms. The land that we now know as Italy was divided into many smaller states [fig. 2]. Starting with a potpourri of city-states in the north: the Republic of Venice, the Duchy of Milano, the Republic of Genova, and the Republic of Florence. In the center were the Papal States, and in the south, the (only) kingdom of Napoli, including Sicily.

Mighty families dominated the city-states in the north. They were proud to be independent and not royal, allowing free trade, which ultimately brought them great wealth. So much 1 Europe, 1490 A.D.





wealth, in fact, that by the end of the century, they had become the bankers of half of Europe and gained even more power. The families were very competitive, not only in armory but also in art (including jewelry and crafts), music, theatre, architecture, innovations, and discoveries. This competitive focus on culture was fertile soil for the artists and the arts, and it also made the families demand ever higher quality.

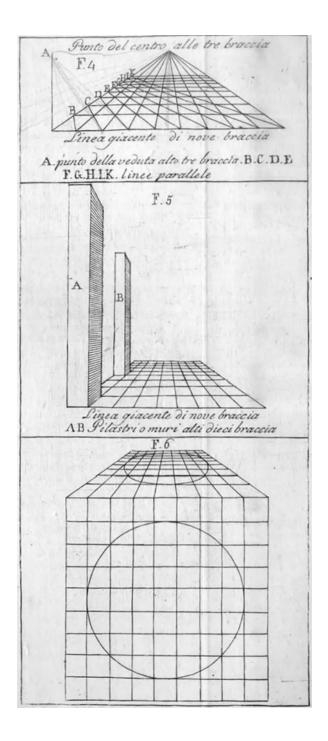
As a result, artists, musicians, actors, architects, world explorers, and scientists were strongly bound to the families. Follow the artists' moves, and you will find the journeys and politics of the families. Filippo Brunelleschi (1377–1446), Leon Battista Alberti (1404–1472), Leonardo da Vinci (1452–1519), and Michelangelo Buonarroti (1475–1564) are just some of many artists who flourished through the wealth-power of the ruling families in a relatively stable environment. Many significant works of art, discoveries, and changes marked the 15th century. Three events, in particular, have extraordinary importance for the field of architecture: the discovery of the *Ten Books on Architecture* of Vitruvius by Bracciolini in 1416, the introduction of the perspective by Brunelleschi in 1415, and the invention of the Gutenberg printing press in 1455.

Gian Francesco Poggio Bracciolini (1380–1459) was an early Renaissance humanist and scholar. Despite his birth town being Florence, he served seven different popes in Rome, contributing to the strong connections between the two states. He continued to keep in touch with his city and was called back to become appointed the Chancellor of the Florentine Republic. In the early 15th century, in 1416, Poggio Bracciolini discovered a manuscript copy of Vitruvius's treatise *De Architectura* in the monastic library of St. Gallen in Switzerland.¹ This was very significant since the architecture of Roman antiquity could previously only be understood by studying the ruins. The discovery of the Vitruvian scrolls is considered the start of the High Renaissance or rebirth of the Roman Antiquity. Vitruvius (born between 100–80 BC) wrote *De Architectura* in the Augustan age of Roman antiquity, probably 25–23 BC. Some parts refer to a period at least ten years before that, when he mentioned his service to Julius Caesar. He recorded for his emperor the architectural and engineering achievements of the Greeks and early Romans and the harmony they had sought between nature and architecture, which he hoped to revive. The text gave information about how ancient buildings were conceived and built with factual information about the materials used, the construction techniques, and the design intentions. The findings were of considerable importance as they would ultimately lead to the Renaissance style in architecture. They are set out in ten books, of which the first one is concerned with defining what an architect and architecture are. Vitruvius explains that an architect must be both a master craftsman and a scholar. He is unequivocal in his statement that without the one, the other will never be convincing:

"The architect should be equipped with knowledge of many branches of study and varied kinds of learning, for it is by his judgement that all work done by the other arts is put to the test. This knowledge is the child of practice and theory."²

"Practice is the continuous and regular exercise of employment where manual work is done with any necessary material according to the design of a drawing. Theory, on the other hand, is the ability to demonstrate and explain the productions of dexterity on the principles of proportion."³

"It follows, therefore, that architects who have aimed at acquiring manual skill without scholarship have never been able to reach a position of authority to correspond to their pains, while those who relied only upon theories and scholarship were obviously hunting the shadow, not the substance. But those who have a thorough knowledge of both, like men armed at all points, have the sooner attained their object and carried authority with them."⁴ Vitruvius named all the disciplines that the architect had to



acquire and studies he must learn, which are numerous: drawing, geometry, history, philosophy, music, medicine, law, astronomy, and the theory of the heavens. Unfortunately, the text was difficult to comprehend fully as it was handwritten, not illustrated, and incorporated obscure technical terms in Latin and a mixture of Greek and Latin.

The introduction of the linear perspective by Filippo Brunelleschi in 1415, one year before discovering the Vitruvian scrolls, was another important moment. The theory was registered in (still hand-) writing by Leon Battista Alberti in 1435 in the book *Della Pittura* [fig. 3]. Alberti was a scientist, writer, artist, architect, and diplomat at Pope Eugenius' IV court. He is most famous for his registration of Brunelleschi's linear perspective and his own ten books on architecture in 1452, *De re aedificatoria*, handwritten in Latin. Alberti criticized Vitruvius, as he considered his books unclear, unreadable, and failing to explain.⁵

Alberti wrote his book in the rhetorical style, which resulted in not only describing the architecture but explaining (rather forcefully) how and why an architect should act:

"I should explain exactly whom I mean by an architect; for it is no carpenter that I would have you compare to the greatest exponents of their disciplines: the carpenter is but an instrument in the hands of the architect."⁶

"Him, I consider the architect, who by sure and wonderful reason and method, knows both how to devise through his own mind and energy, and to realise by construction, whatever can be most beautifully fitted out for the noble needs of man, by the movement of weight and the joining and massing of bodies."⁷

"To do this he must have an understanding and knowledge of all the highest and most noble disciplines. This is the architect."⁸

З

Leon Battista Alberti, Treatise on painting (Study of perspective). In: Alberti 1435, 182. Alberti, in contrast to Vitruvius, was a statesman. He traveled a lot and was the only architect for three projects for the banker Giovanni Rucellai, a close relation of the Medici family. That is perhaps why he made a great effort to make a treatise telling others how to build, in which he warns architects of many possible political and contractual troubles. Nevertheless, Alberti's book reads like a novel and was, until the late 19th century, still the basis of all architectural education.

The last of the 15th century inventions mentioned above is probably the most important: the Gutenberg printing press in 1455. It was the press that made it possible to print and copy the Vitruvius scrolls all over Europe. This provoked a whole stream of dedicated enthusiasts that now had the means to interpret the remnants of ancient buildings, measuring them and then restoring their forms in drawings. With this information, they too could build in the ancient manner.

At the end of the 15th century, Europe had changed. Then the reformation occurred, and the Roman church suddenly lost its undisputable power. Instead of many, now only three dynasties ruled Europe while the Italian republics suffered major defeats, ultimately leading to the Italian city-states' downfall. The families had to deal with their loss of superiority over Europe.⁹

The 16th century requested another mindset. Many families embraced Italian Humanism (or Renaissance humanism), which accepted Roman antiquity as the superior period of Italy's history that they hoped to revive. The Academies in Florence and Rome were famous and promoted classical literature and wisdom. These academies were based on three pillars: study, arts, and virtue. In antiquity, virtue meant excellence and good action. Thus, virtue was preceded by study and knowledge of the arts.¹⁰ Many clergymen were humanists, and many young nobles also enjoyed a humanist education. Andrea di Pietro Della Gondola was born in Padua in a humble family on November 30th, 1508. There, until the age of 16, he was apprenticed to a sculptor before moving to nearby Vicenza and enrolling in the guild of the bricklayers and stonemasons. He was employed as a mason in workshops specializing in monuments and decorative sculpture. When the humanist, statesman, poet, and scholar Count Gian Giorgio Trissino decided to rebuild a villa in Cricoli, just outside of Vincenza, in the Classical style, it was a lucky course of events that Andrea was one of the workers between 1530 and 1538. The villa was Trissino's interpretation of the ancient Roman architect and theorist Vitruvius. It was planned to house an Academy for his pupils, who lived a semimonastic life studying mathematics, music, philosophy, and classical authors. Trissino noticed Andrea and the count undertook to expand his practical experience with a Humanist education.¹¹ When Andrea finished his education at the Academia, he was given the name Palladio, after a Humanist habit, as an allusion to the mythological figure Pallas Athena and a character in Trissino's poem L'Italia *liberata dai goti.*¹² The poem, first published in 1547, talks about an archangel called Palladio, an expert on architecture. It indicates both Andrea's respect for Trissino and the hopes the count had for his protégé.

It was Palladio who later illustrated the publication, translation, and interpretation of Vitruvius's books by Daniele Barbaro¹³, his mentor, after Trissino's death. Palladio's work was dedicated to the search to understand the proportions of beauty in architecture, taking lessons of Vitruvius as guidelines [fig. 4, 5]:

"There are three things in every building (as Vitruvius says) that have to be considered, without which none deserve credit; these are: usefulness or convenience, durability, and beauty."¹⁴

"For one could not describe as perfect a building which was useful, but only briefly, or one which was inconvenient for a long time, or being both durable and useful, that was not beautiful."¹⁵

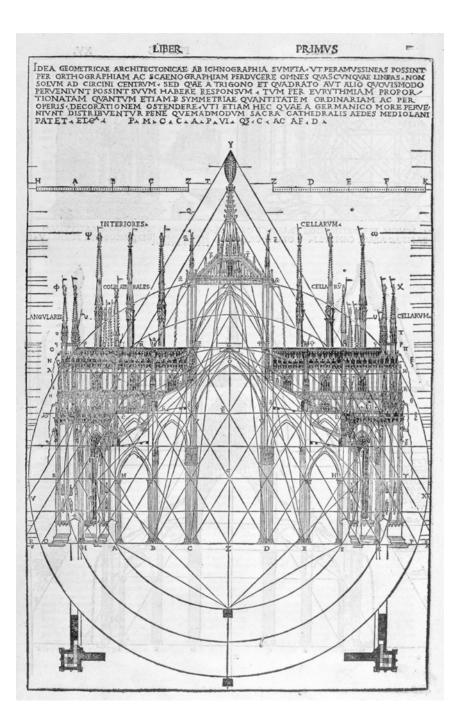
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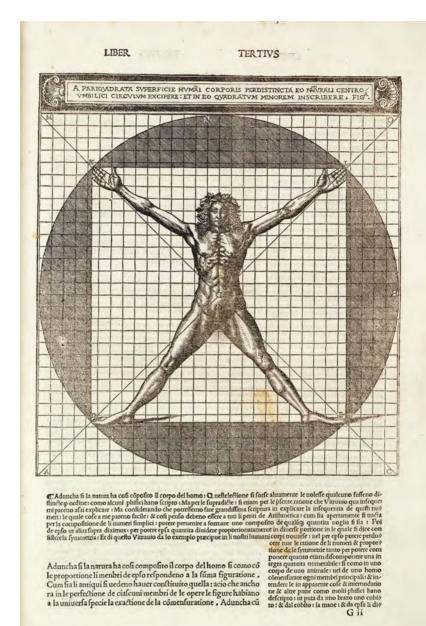
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Cesare Cesariano, Diagram showing Vitruvian principles applied to the design of Milan Cathedral. In: Vitruvius Pollio 1521, Liber primus, XV, verso.

5

Cesare Cesariano, The Vitruvian Man. Ideal proportions revealed to be based on the human body. In: Vitruvius Pollio 1521, Liber tertius, L, como.





"Beauty will derive from a graceful shape and the relationship of the whole of the parts, and of the parts among themselves and to the whole, because buildings must appear to be like complete and well-defined bodies, of which one member matches another and all the members are necessary for what is required."¹⁶

Durability implies longevity, as opposed to the nowadays fashionable sustainability or circularity, which both accept the short lifecycle of buildings. Palladio's buildings were meant to stand as the ancient architecture did. The choice of location, position, carefully selected materials, and the simple stacking of weight on weight made the buildings truly durable.

Usefulness or convenience is understood as the architecture's ability to properly host the client's needs. These needs do not dictate the form and dimensions of the architecture. Therefore, the architecture is not a result of functionality but exists despite it.

The metric system, the mathematical shapes, the dimensions, the playful use of views and light, the steps from graceful entering to privacy, the decorations, colors, and art, applied with craftsmanship, give the architecture an independent quality.

Like Alberti before him, Palladio also wrote a treaty, although he was neither a statesman nor from a noble or wealthy family. He was a hardworking fortunate child of his time. He understood the needs of his clients and had both the knowledge and the craftsmanship that Alberti did not. Palladio's style is very different from Alberti's. He did not write about education in terms of what others should do or be. His ambition to note down his instructions had very different motives. He wrote factual and straightforward instructions without bias and motivated his intentions as follows:

"I considered it worthy of man, who is not born for himself alone but also to be of use to others, to make public the designs of those buildings that I have collected over such a long period and at such personal risk, and to expound briefly what it is about them that seemed to me most worthy of consideration, and also the rules that I have followed and still follow when building; so that those who read my books may benefit from what is useful in them and supply for themselves those things [...] which I will have overlooked."¹⁷

During his life, the four books were never published altogether, but one by one. It is not even sure whether Palladio intended to write only four books. He could also have intended to write ten resembling Vitruvius.

It is conceivable though he considered the four books sufficient. This would be consistent with the promise he makes in the introduction of the first chapter:

"In all these books I shall avoid being long-winded and will simply provide the advice that seems essential to me, and will make use of those terms widely used nowadays by craftsmen."¹⁸

Palladio's drawings prove that he understood what is essential to understand a building. The drawings were compact, not too many, and described exactly what was needed and nothing more. In the 16th century, it made sense to limit the number of drawings to a minimum, considering the time, skill, and concentration needed to make one. The drawings did not only have to be drawn but made in a woodcut (in mirrored plan) to get printed. Consequently, one had to think ahead and know what should be on them before starting. The importance of preparing well is stressed in the first chapter of his *First Book*:

"One must consider carefully every aspect of the plan and elevations of a building before starting to build."¹⁹

Palladio thought it wise only to use what was needed but not less. He wanted to spend his clients' money wisely and was careful not to waste time or materials while building. Although he did not expressly distance himself from Alberti and spoke of him with high regard²⁰, he preferred Vitruvius as his master. As he points out to the reader in the foreword of the *First Book*:

"I elected my master and guide Vitruvius."²¹

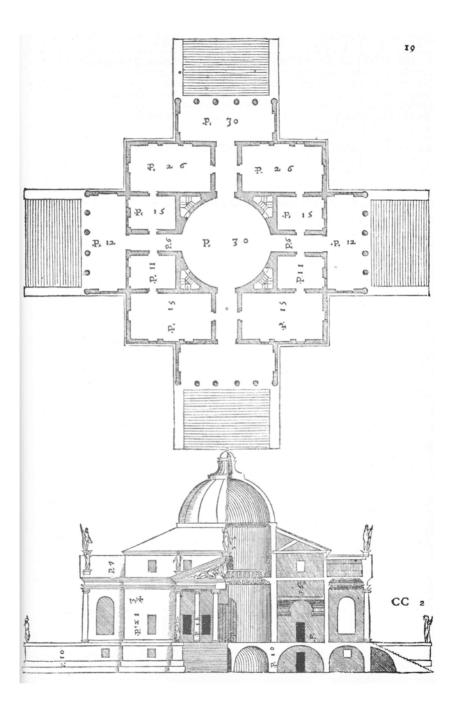
His dedication to architecture was humble. Acknowledging the unity of God and nature as the lead, everything in his books was about understanding, not telling. He considered himself one of many to seek perfection and understanding.

"For my part, I can promise no more than long labour, great diligence, and the devotion which I put into understanding and practicing what I offer; if it pleases God that I have not worked in vain, I shall give thanks to his goodness, with all my heart, while still remaining greatly indebted to those who, through their own ingenious inventions and the experience they gained, have bequeathed us the rules of this art, for they opened up an easier and more direct route to the study of new things, and thanks to them we know of many things that would perhaps have remained hidden."²²

Andrea Palladio is regarded as the greatest architect of the 16th century in northern Italy. When he died in 1580, Palladio left a series of unfinished projects. Among them is the Villa Rotonda, often considered one of his most famous projects. The Villa was finished by Vincenzo Scamozzi (1548–1616) when many of Palladio's clients turned to Scamozzi to finish the Palladio projects. The simple, clear structures and plans made it possible to complete the buildings as faithfully as possible to Palladio's original intentions [fig. 6].

6

La Rotonda (Villa Almerico Capra), Vicenza: plan, half elevation and half section. In: Palladio 1570, Il 19 (Cap. III).



Part II

A. Image and building

For many decades classicism has been the leading architecture depending on the textbooks of Alberti and Palladio until the industrial revolution led to a radical break, and the modern movement was born in the late 19th century. The construction methods changed so dramatically, that the simple stacking weight upon weight was no longer applicable. If quotes from classicism were used, this could only be done as decorating elements, which led to the mockery of modernists. Production methods led to the form that followed function, and perfecting functionality reached ultimate efficiency, i.e. efficiency in controlling the production process.

When we try to embrace the beauty in forms, light, dimensions, and the choice of colors, art, and materials, we must deal with construction and buildings physics, sustainability included, that have very different laws. Building and expression, which was so understandable and clearly related to Palladio's architecture, have now become totally disconnected.

In this light, it is not surprising that form seeks its independence and becomes an image [fig. 7]. With the introduction of the media, first noticed by Marshall McLuhan in 1967 in his book *The Global Village*²³, the image has become the representation of who we are and who we want to be. It has become our brand, our icon.

A brand needs designing only, while construction, physics, and sustainability are part of the efficiency system that holds the brand.





7

La Rotonda. Digital collage by Magdalena Wierzbicka (2022).

B. Beauty

The concept of beauty was abandoned as beauty was no longer seen as the complex composition, the fragile balance, the incredible interchained system of nature that we try to understand, but as an icon that, in the end, could be any shape depending on the opinion of its creator. If beauty becomes an opinion, it loses its status and disappears in the architectural debate, and we can design anything we like. Ultimately, we became the masters of creation. Instead of trying to understand God and nature, we became the human God, the *Homo Deus*, that destroyed nature, as clearly explained in the books by the Israelian professor in history and futurism, Yuval Noah Harari.²⁴

Nowadays, in the age of *Homo Deus*, we are used to the fact that architecture has become the expression of the client, the icon that represents the "brand", and by that, architecture is in great danger of losing its intrinsic quality: the quality of being architecture in itself—architecture that is strong in expression, form, and proportions as one coherent whole. Architecture that stands independently from fashion and time, the architecture we love and immediately recognize as quality, even when we are not trained architects.

Do we really accept such architecture as heritage only and beyond our contemporary reach? And if architecture loses its value as a complete and coherent whole, what will be the future role of architects? Do we accept a serious devaluation of the profession in becoming a designer of built images?

C. What is an architect?

Everyone knows what an architect is, and nobody knows. Even within the profession, we no longer have a united answer. If the question comes to the table, we try to ignore its urgency by ending the debate with weird answers like: "An architect can be everything but not a *homo universalis*". And yet, in the age in which we have to fear a serious devaluation from architecture into the design and into mere opinion, there has never been a more relevant question.

Vitruvius, Alberti, and Palladio were clear in their answers about what an architect was. Palladio, with Vitruvius, believed an architect had to be both a scholar and a craftsman. Alberti considered the knowledge of the crafts more essential than the psychical mastering of the crafts. The architect should draw the plans that the craftsmen must execute. With this, Alberti proclaimed the separation of design and execution that is still subject to debate among architects.²⁵

Conclusion

Palladio was a true child of Renaissance humanism. His oeuvre is made in pursuit of finding the laws of beauty in architecture. He considered himself one of many trying to capture this elusive answer. This was a dominant view in physics until the late 20th century with the concept of the theory of everything by Stephen Hawking, but it was abandoned in architecture long before. Palladio's search was to understand the creations of God and thus nature, not to become God as we do now.

By accepting the absence of beauty and the disconnection between building and designing in contemporary architecture, we risk losing the intrinsic quality of architecture.

This essay advocates that we try to understand and learn from the sincerity in the architecture and the books of Palladio; at least, we can make a brave attempt.

Endnotes

If not indicated otherwise, all translations are by the author of this paper.

- 1 Tavernor 1997, 7; Bracciolini 1974, 188.
- 2 Vitruvius 1914, 5.
- 3 Vitruvius 1914, 5.
- 4 Vitruvius 1914, 5.
- 5 Ottenheym 2022, 520.
- 6 Alberti 1988, 3.
- 7 Alberti 1988, 3.
- 8 Alberti 1988, 3.
- 9 Grataloup 2020, 238, 239, 240, 241.
- 10 Tavernor 1997, 10.
- 11 Richardson, 2022.
- 12 Trissino 1779.
- 13 Vitruvius Pollio 1567.
- 14 Palladio 1997, 6.
- 15 Palladio 1997, 6.
- 16 Palladio 1997, 7.
- 17 Palladio 1997, 5.
- 18 Palladio 1997, 6.
- 19 Palladio 1997, 6.
- 20 Palladio 1997, 5, 7, 12.
- 21 Palladio 1997, 5.
- 22 Palladio 1997, 6.
- 23 McLuhan/Powers 1989.
- 24 Harari 2015.
- 25 Alberti 1988, 315, 317.

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About the Authors

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