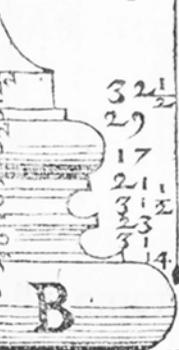


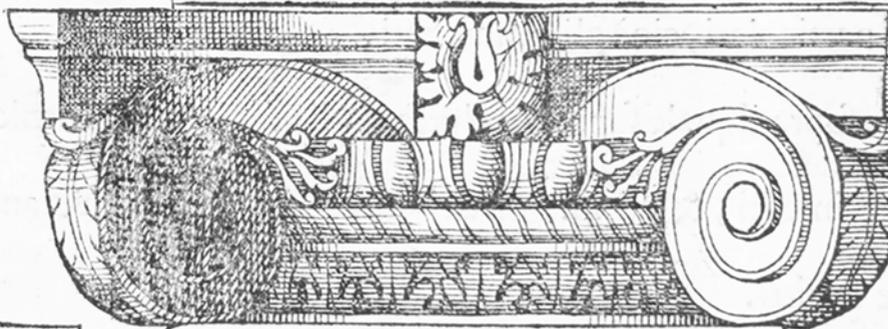
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B

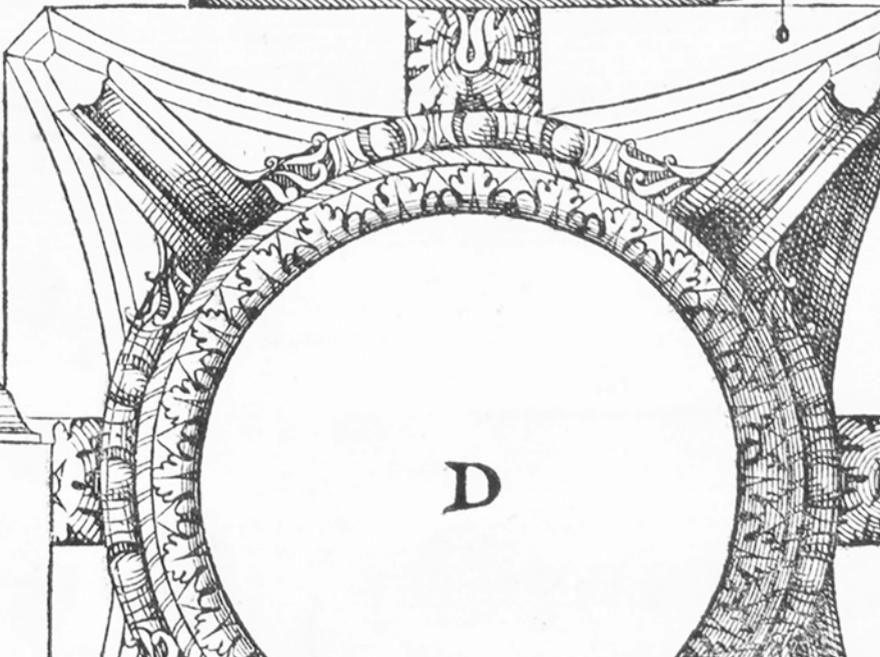


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A



D

# 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].<sup>1</sup>





1  
Andrea Palladio,  
*I Quattro Libri  
dell'Architettura*,  
ornaments 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.<sup>2</sup>

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.

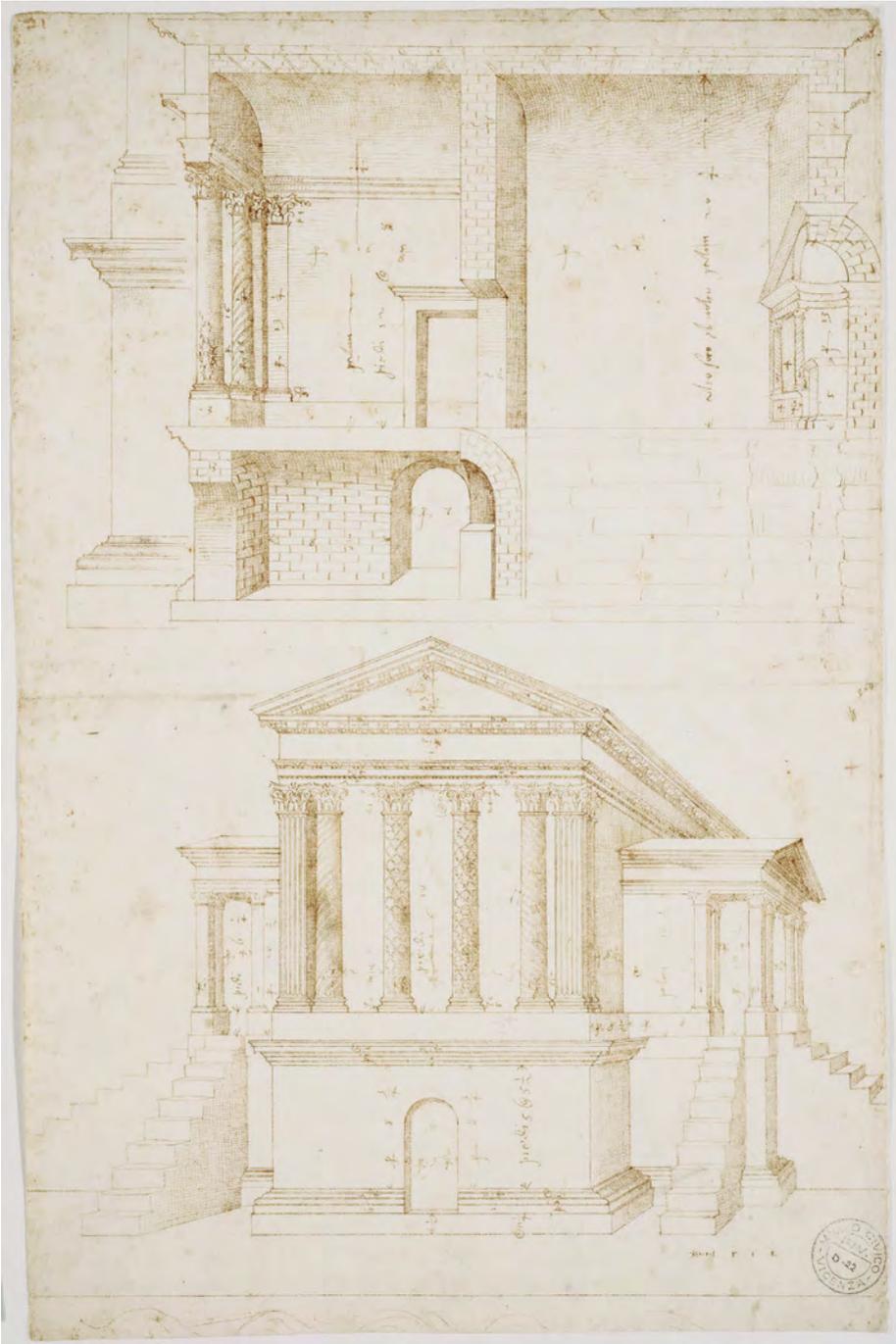
Architectural drawings from the 15th and 16th centuries testify to a great desire to further knowledge that led some architects to explore architecture beyond the boundaries of ancient Rome. Cyriacus of Ancona, for example, was one of the few to see the Parthenon in Athens. For a long time, his drawings 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.<sup>3</sup> 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.<sup>4</sup> 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.

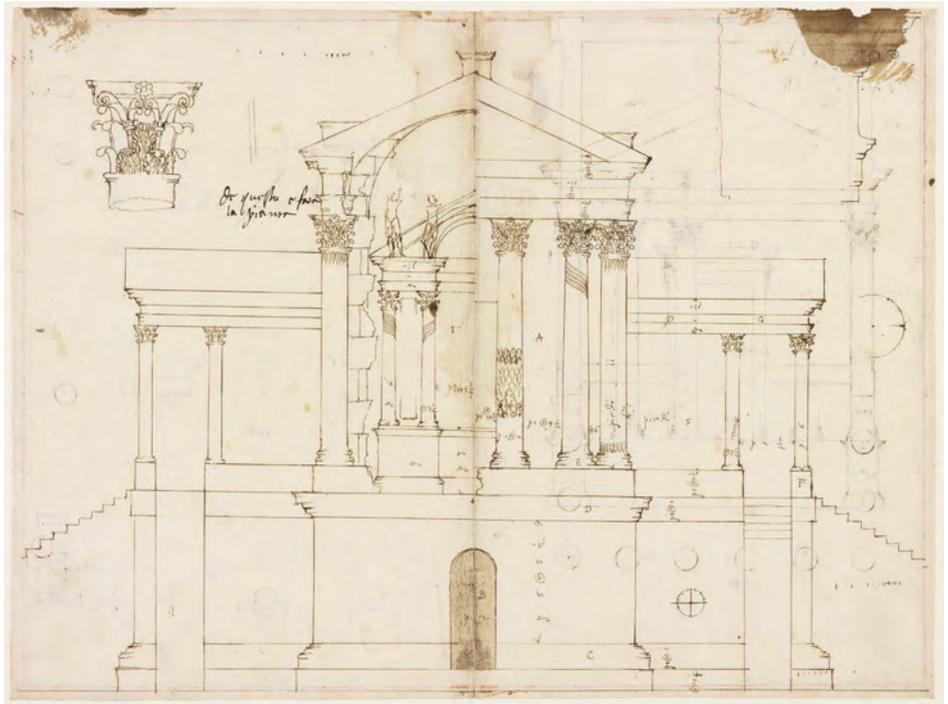
Such an enormous quantity of drawings circulating through copies from one workshop to another enabled architects to share information and ‘learn remotely’ about buildings, sometimes without ever seeing them. This phenomenon undoubtedly stimulated the interests of the young Andrea Palladio. Indeed, even while still an apprentice and before his various trips to Rome, he had been able to see and copy drawings by other authors.<sup>5</sup> 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.<sup>6</sup>

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 Ligorio<sup>7</sup>, 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).<sup>8</sup>

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].<sup>9</sup> 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.<sup>10</sup>

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).<sup>11</sup>

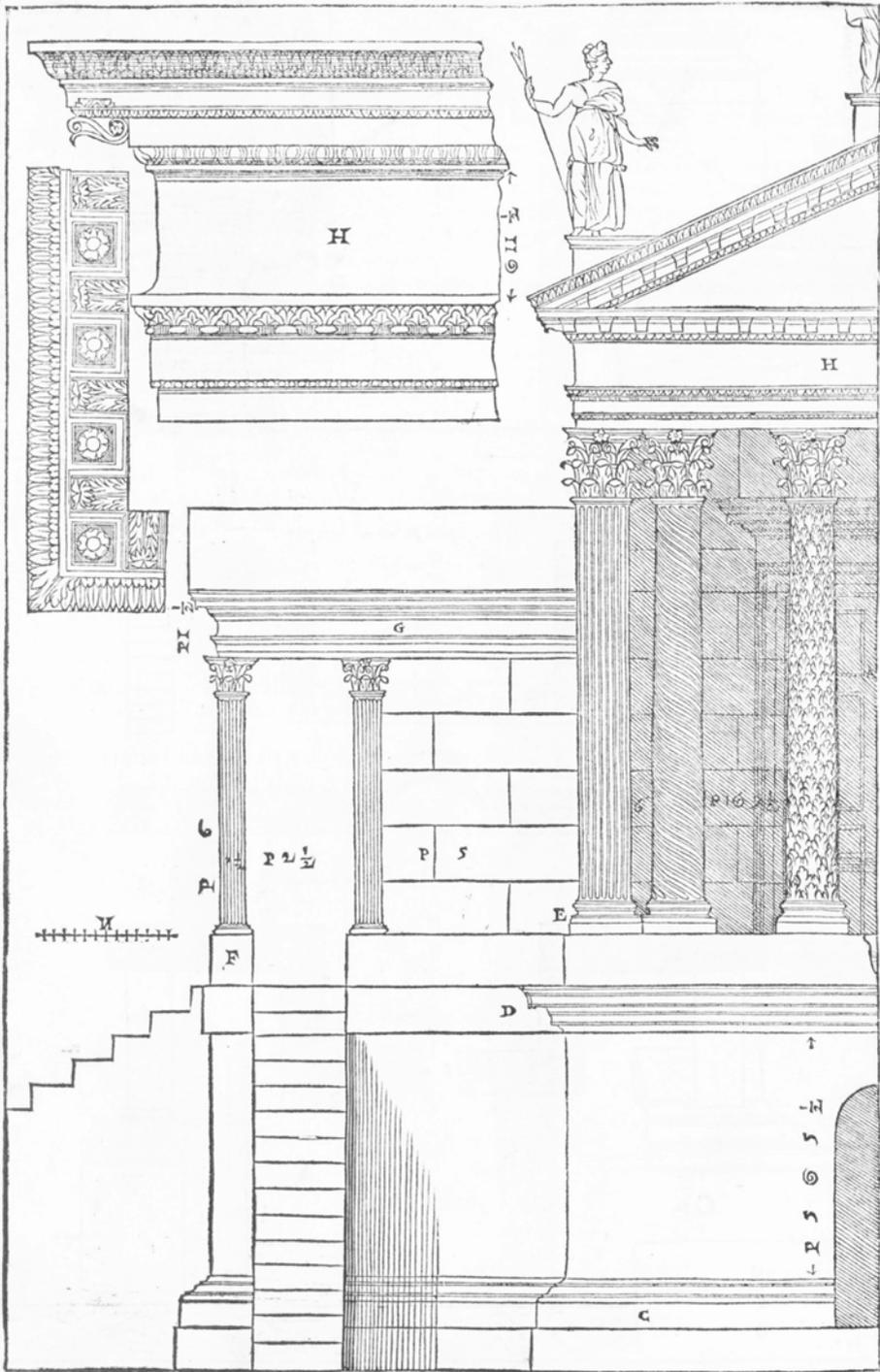


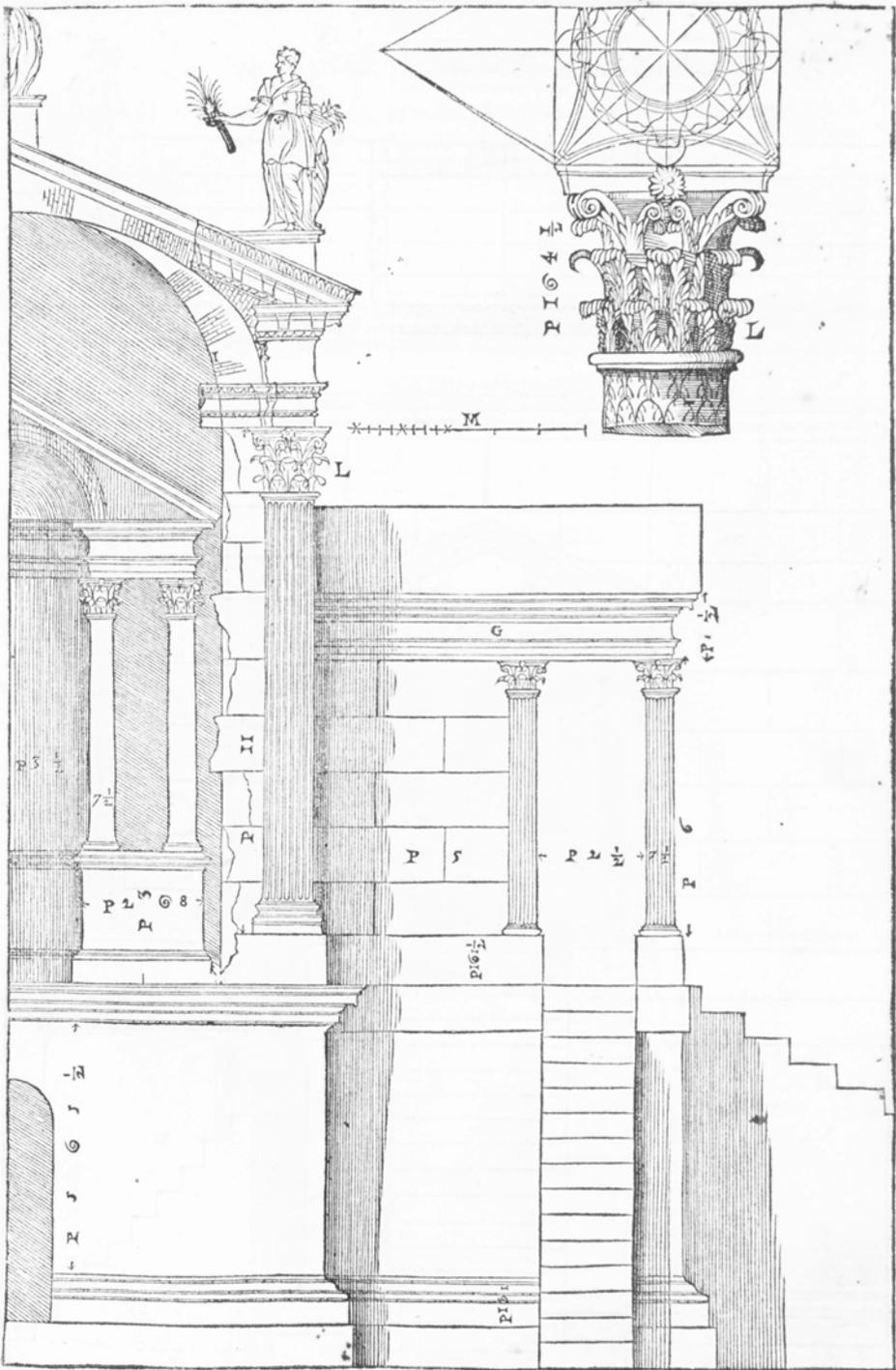


3  
 Andrea Palladio  
 (after Pirro Ligorio?),  
 The temple of Clitumnus  
 near Spoleto, 1540s,  
 stylus, traces of black  
 chalk, pen and brown ink  
 on paper, 428 x 282 mm,  
 Vicenza, Musei Civici,  
 D 22r.

4  
 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.<sup>12</sup> 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:<sup>13</sup> 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



O detto qui adietro de le latitudini, e de le grossezze, hora tratterò de le altezze, e prima: l'altrezza de la luce de l'arco è dupla a la larghezza. le bafe del piedestalo è minuti quattorzo meno di due piedi. la cornice d'esso piedestalo è alta minuti trentacinque. l'altrezza de la bafe de la colonna col zoccolo, che tū è sotto, e circa un piede; e tutti questi membri, et anco il capitello de la colonna ben proportionati di misure sono nel principio de l'ordine Composito nel mio quarto libro. il netto del piedestalo e piedi quattro e mezzo. l'altrezza de la colonna senza la bafe e l'capitello è piedi .xvii. e minuti .xiii. l'altrezza del capitello è piede uno, e minuti uentisette. l'arcotirante è piede uno, e minuti diciouo. l'altrezza del fregio è piede uno, e minuti diciotto. l'altrezza de la cornice è piedi due e minuti sei. il basamento del'epitaffio è quanto il fregio. l'altrezza d'esso epitaffio è piedi due, e minuti dodici. la sua lauita due e piedi uentitre: i quei membri saranno piu diffusamente disegnati, e descritti ne le carte seguenti.



S'otto quest'arco ci sono .xv. quadri molto ornati, e nel mezzo un maggior quadro con un Giove sculpiato.

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.<sup>14</sup>

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.<sup>15</sup> 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.<sup>16</sup> 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.<sup>17</sup> 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.<sup>18</sup>

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.<sup>19</sup> 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].

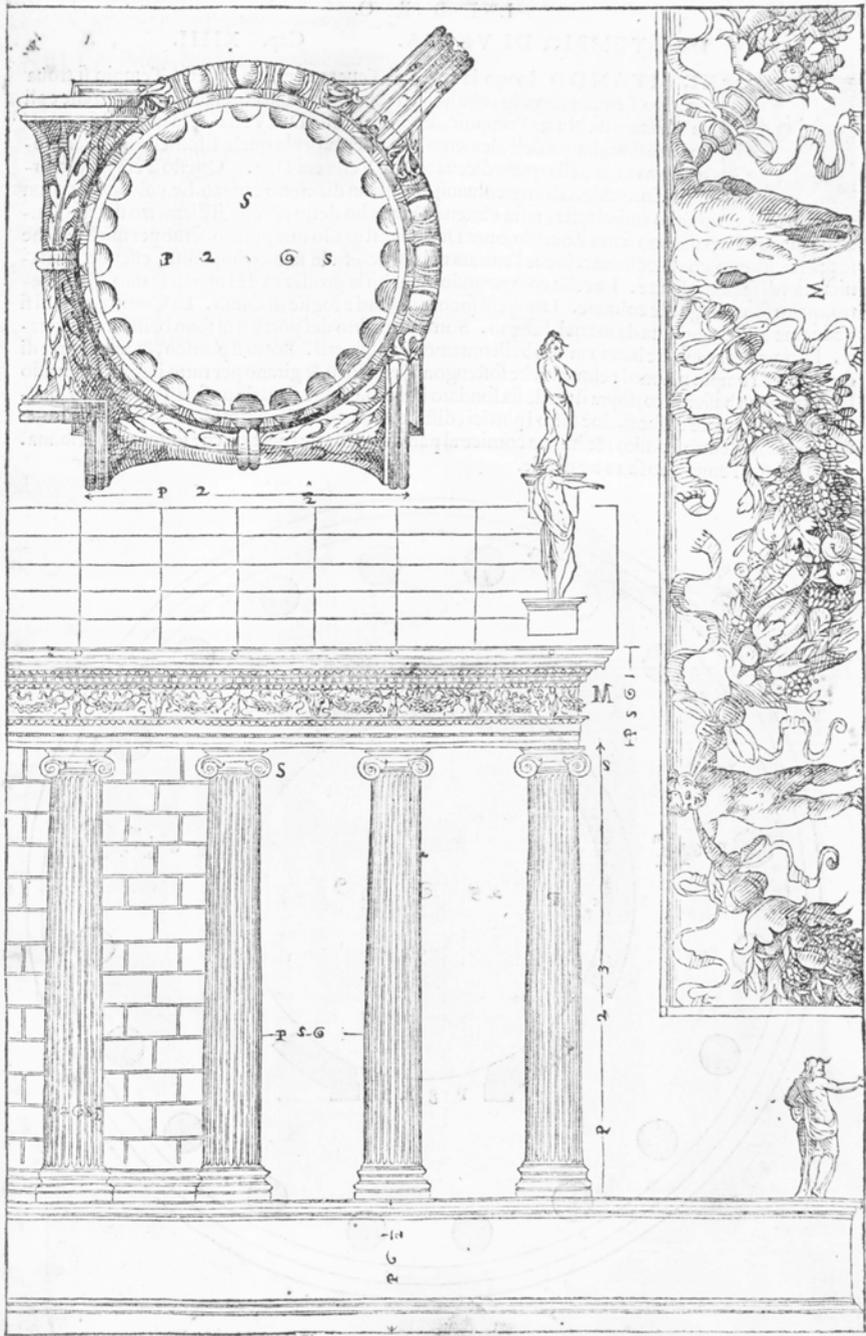




8  
 Andrea Palladio, Basilica  
 of San Giorgio Maggiore  
 in Venice, detail of the  
 portal (counter-façade),  
 1565–1576.

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.



GGGG 2



9

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

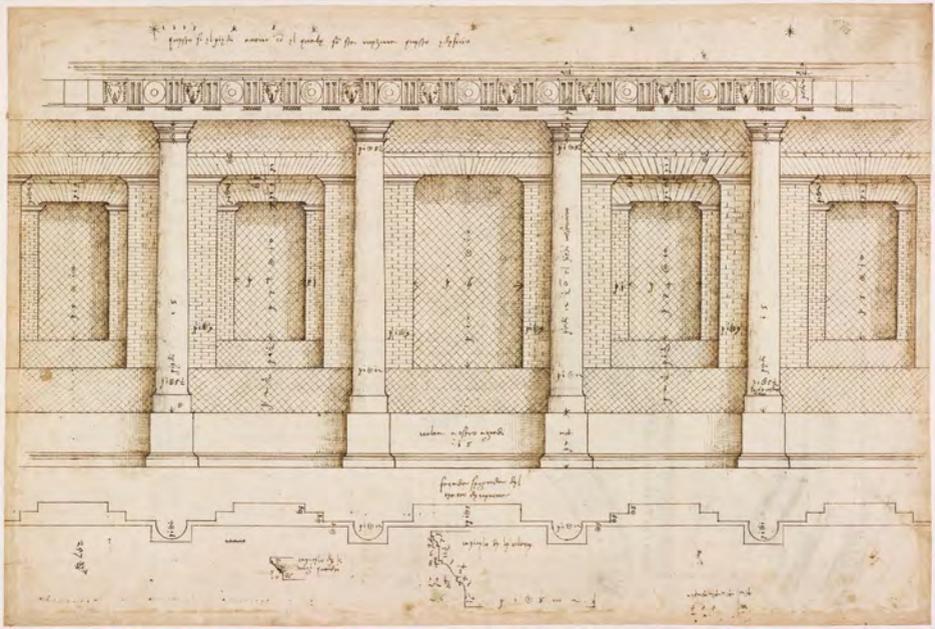
Andrea Palladio, Palazzo Barbarano in Vicenza, detail of the corner capital of the loggia, 1569-1575.





11  
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].<sup>20</sup> 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.<sup>21</sup> 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.<sup>22</sup>

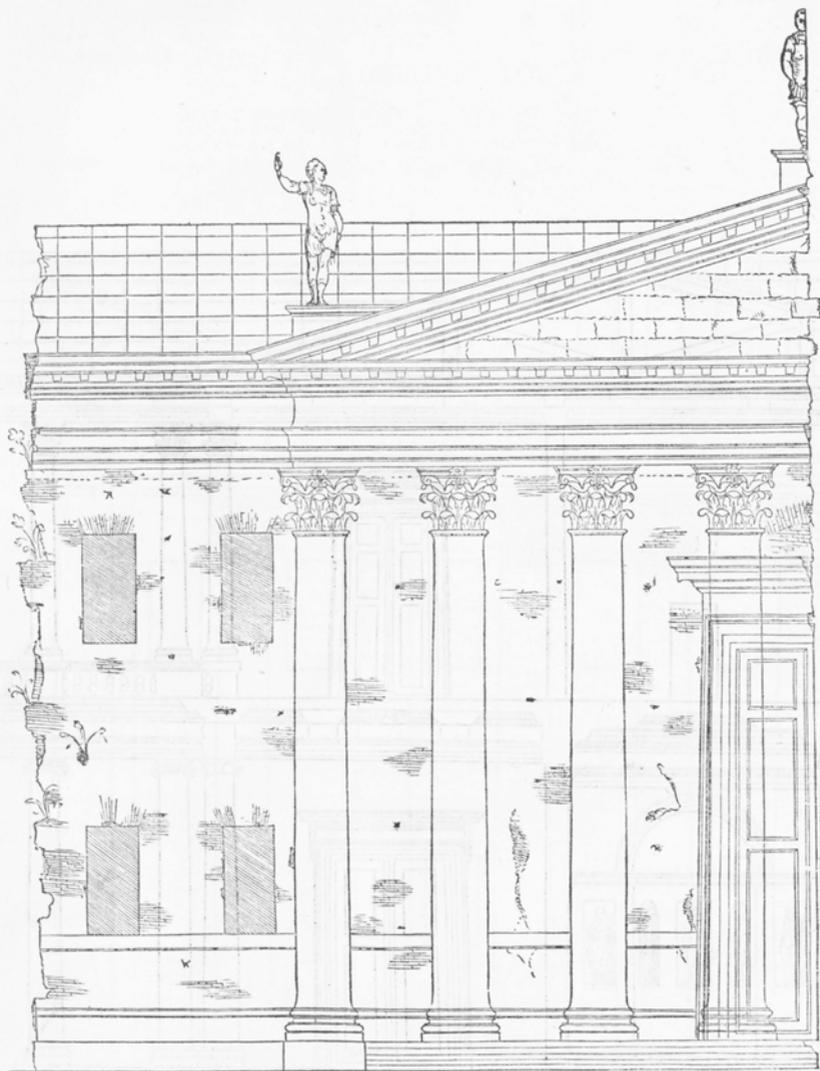
13  
 Andrea Palladio (after Michele Sanmicheli?), plan and elevation of the second terrace of the Roman Theatre in Verona, 1540s, stylus, pen and brown ink on paper, 290 x 433 mm, London, RIBA Library Drawings and Archives Collection, XII/22v.



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)<sup>23</sup>, and he later replicated this solution in the Palazzo Barbarano (1569) and in the porticos of the Villa Chiericati at Vancimuglio (c. 1550), the Villa Cornaro at Piombino Dese (1552–53) and the Villa Rotonda (1566).<sup>24</sup> In the Villa Foscari (1555), on the other hand, he returned to his first design for the Villa Chiericati, conceived five years earlier<sup>25</sup>, and set columns on the three sides of the portico, thus entirely emulating the model of the ancient pronaos.

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QVESTA E VNA PARTE DELLA FACCIATA DELLA CASA PRIVATA.

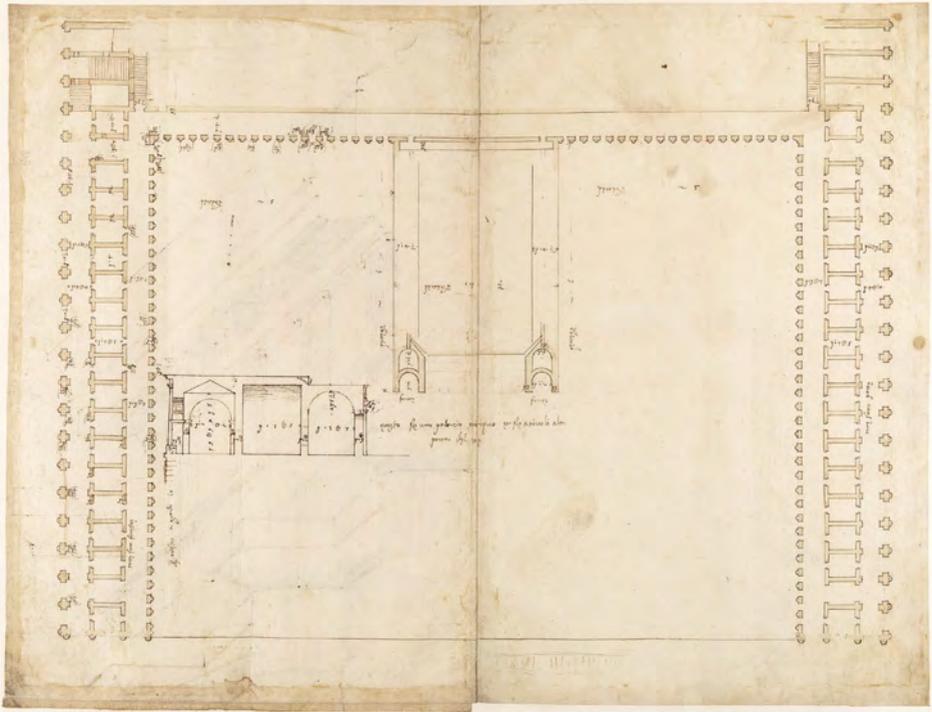




15  
 Daniele Barbaro, *I Dieci Libri dell'Architettura di M. Vitruvio*, elevation of the Roman House. In: Barbaro 1556, VI 170.

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.<sup>26</sup> 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].<sup>27</sup> 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.



17  
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.<sup>28</sup> Once again, the source of inspiration was probably an ancient building, the Temple of Hercules Victor at Tivoli,<sup>29</sup> 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.<sup>30</sup> 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.<sup>31</sup> 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.

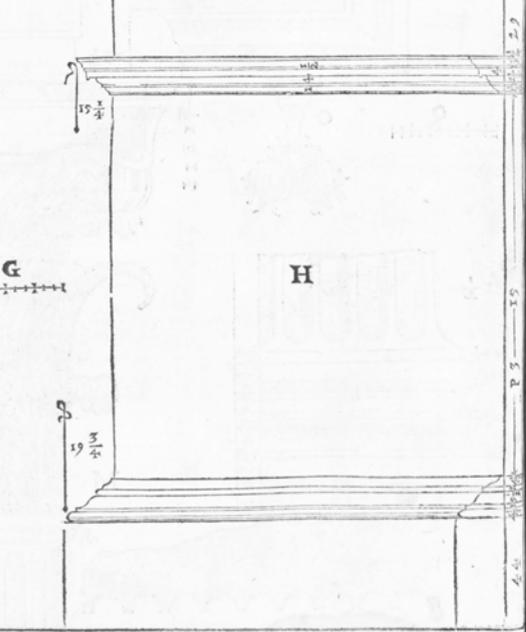
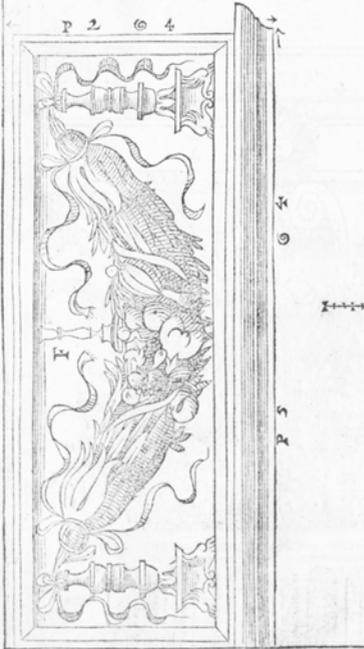
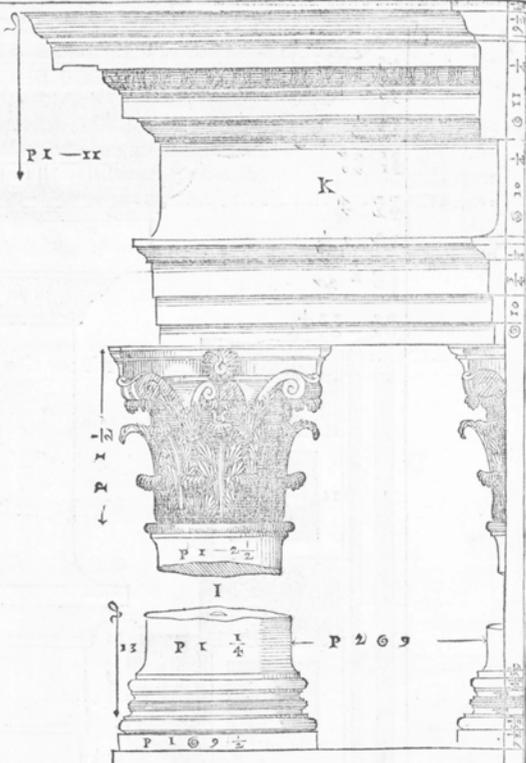
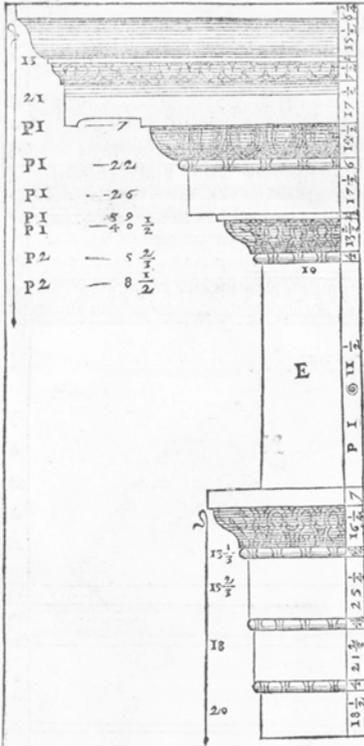


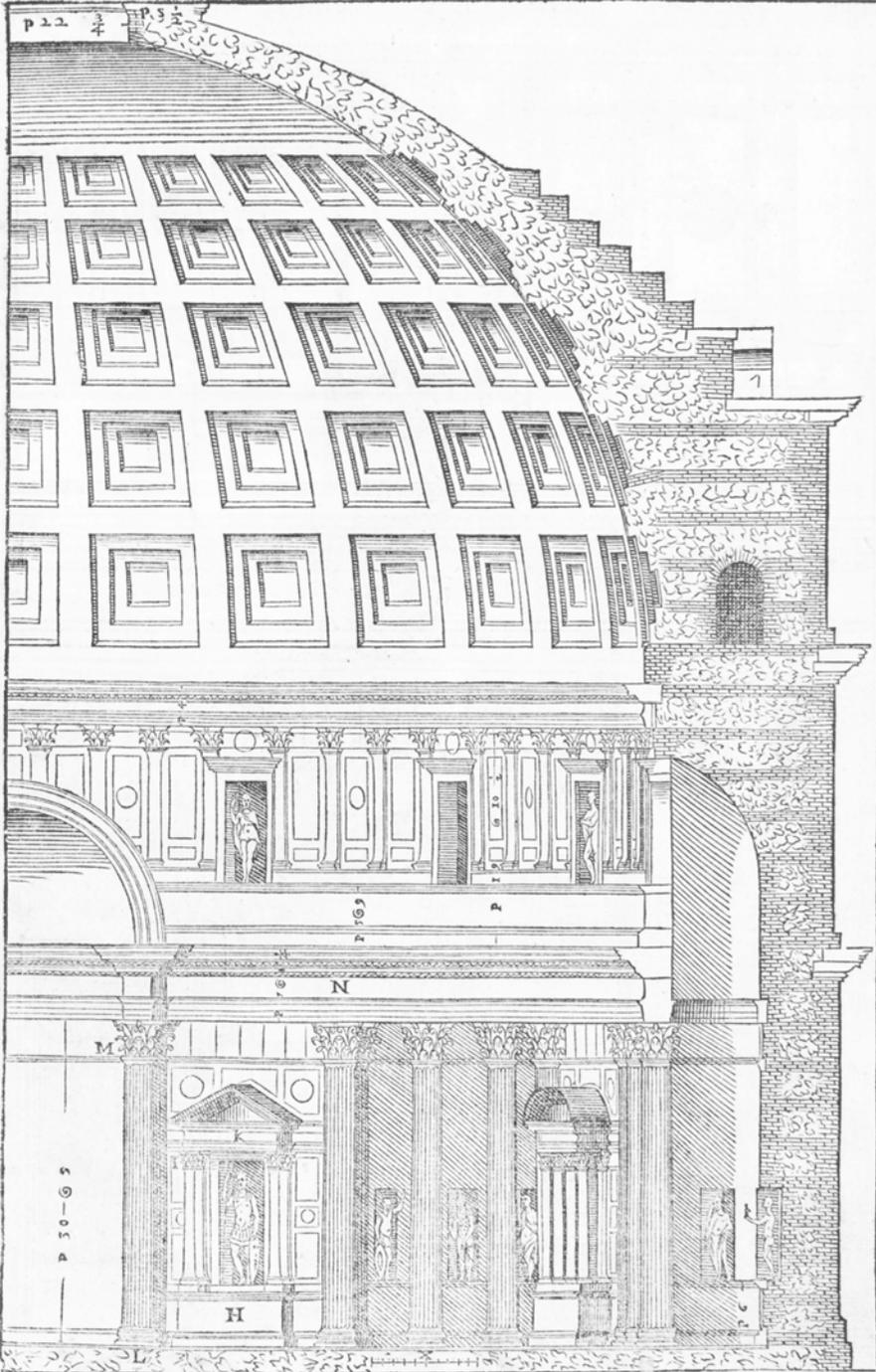


18  
Andrea Palladio, Villa  
Saraceno at Finale di  
Agugliaro, 1548–1555.

Next pages

19  
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].





I L L L

## 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, XCIII.
- 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.