



Figure 5.1
Marcantonio Raimondi, *The Caryatid
Façade*, c.1520?, engraving,
215 × 239 mm, Amsterdam, Rijksmuseum,
RP-P-OB-105.449
Photo © Rijksmuseum, Amsterdam

[5] Raphael's Vitruvius and Marcantonio Raimondi's *Caryatid Façade*

Kathleen W. Christian

The print known as the *Caryatid Façade* (Figure 5.1) has received scant attention, even in specialist literature on Marcantonio Raimondi.¹ Described by Delaborde as 'plutôt bizarre que belle', it is not easily read or contextualised with other prints by Marcantonio and his assistants, whether classified as 'after Raphael' or otherwise.² The image, which combines Caryatid and Persian porticoes with an oversized female bust, does not fit easily with the usual narrative about Marcantonio's career in Rome, summed up in Vasari's account that he collaborated with Raphael to publicise the master's *storie*. Rather than being an illustration of a religious or mythological subject, it brings together architectural *fantasia*, archaeology and Vitruvian studies, reflecting on the origins of the orders and the nature of architectural ornament. It is also an indirect trace of Raphael's unfinished projects to reconstruct Rome and to collaborate with humanist Fabio Calvo and others on a new edition of Vitruvius. As I will argue, it probably reflects designs by Raphael or a member of his workshop for the first two illustrations of such an edition.

While J. D. Passavant, in the nineteenth century, wrote that the print reproduced a genuine antiquity visible in the Villa Mattei, in 1904 Thomas Ashby dismissed this idea as a red herring.³ By the 1960s Giovanni Becatti could confidently describe the print as a product of 'archaeological culture of the time and the circle of Raphael'.⁴ Howard Burns, in a brief but incisive catalogue entry for the 1984 exhibition *Raffaello Architetto*, recognised its Vitruvian origins, reading it as a recombination of visual material from Raphael's workshop. Burns related it to drawings by Raphael for the Caryatids in the *basamento* of the Stanza di Eliodoro, the marble portal of the Pantheon, as well as an antique head of a Caryatid visible in the sixteenth century, which will be discussed below.⁵ Since the 1980s, consensus has formed around the idea that the print reflects Raphael's artistic inventions and Vitruvian research.⁶ The image can be probed much further, however, for its interest in architectural ornament, the relationship between architecture and history, and the comparison of Vitruvius's text with Roman antiquities in Raphael's circle. With this experimental image, Marcantonio Raimondi paid tribute to Raphael while making his mark on a particular genre of image – the single-sheet architectural print – a type overshadowed by the much better-known imagery of architectural treatises.⁷ Even though created as an independent print, it commanded particular authority for later

theorists and treatise-writers, who probably understood it as a conduit of Raphael's expertise on the topics of Vitruvius and ancient Rome.

There is one known state of the print, whose plate mark measures 33.2 × 22.8 cm (13 1/16 × 9 in.), numerous examples of which can be found in European and American collections.⁸ In the eighteenth century von Heineken observed that Marcantonio's initials could be found at the left, bottom corner of the print, but this has not been verified in any impression known today.⁹ The engraving shows a Caryatid portico in the Ionic order set above a Persian portico in the Doric, combining the two elements within a single architectural façade. Two barefoot staffage figures dressed in antique-style garb stand inside a large, open portal – one gesturing towards the heavens – and are reminiscent of Plato and Aristotle at the centre of Raphael's *School of Athens*. Above the figures, an oversized female bust or Caryatid capital sits rather awkwardly within the architectural scheme, positioned in front of what appears to be a window. Curiously, in the example in the Spencer album at the John Rylands Library (Figure 5.2), that in the British Museum, and perhaps in others, pupils have been drawn into the eyes of the large Caryatid head, as if to ease a sense of discomfort created by its blank, staring expression. The architecture of the façade represented in the print is not fully rational: the Caryatids seem to float above the Doric architrave, and the sides of the plinths on which the Caryatids and Persians stand are missing, as if the print were an awkward attempt to combine two independent images of the porticoes. This lack of integration is reflected in the Spencer album, where the print has been cut and positioned on the page in two fragments, each trimmed along the architectural lines (Figure 5.2). Overall, as Burns observed, the image gives the impression of a reassemblage of various compositions, or studio materials, brought together on the page.

This hypothesis is supported by a comparison between the print and two pen and wash drawings over pounced outlines in the Larger Talman Album in Oxford (Figures 5.3 and 5.4), showing the Barbarian (fol. 185r) and Caryatid (fol. 186r) porticoes separately.¹⁰ Larger Talman fol. 185r repeats the two barbarians on the left side of Marcantonio's print, and it may be the case that both sheets were cut on the right side, since the truncated caption at the bottom of fol. 186r evidences trimming. The obvious overlap between Marcantonio's print and the Talman sheets



Figure 5.2
 Marcantonio Raimondi, *The Caryatid Façade*, c.1520?, and Master of the Die after Agostino Veneziano, *Two Hercules Terms*, 1536. The John Rylands Library, Spencer 8050, fol. 34r. Photo © The University of Manchester

Figure 5.3
 Anonymous Italian, *A Pair of Male Caryatids*, c.1520s?, pen and brown ink with grey wash, 267 × 181 mm, Larger Talman Album, fol. 185r, The Ashmolean Museum, Oxford, WA1942.55.74. Photo © Ashmolean Museum, University of Oxford

Figure 5.4
 Anonymous Italian, *A Pair of Female Caryatids*, c.1520s?, pen and brown ink with grey wash, 279 × 195 mm, Larger Talman Album, fol. 186r, The Ashmolean Museum, Oxford, WA1942.55.75. Photo © Ashmolean Museum, University of Oxford





Figure 5.5
Marcantonio
Raimondi,
The Vintage,
c. 1517-20,
engraving,
190 × 144 mm,
Amsterdam,
Rijksmuseum,
RP-P-OB-11.944
Photo ©
Rijksmuseum,
Amsterdam

suggests they are based on the same, lost designs, which likely derive from originals by Raphael or his *bottega*. Suggestive of this is the way that the Talman drawings clarify certain awkward features of Marcantonio's print, as is seen in the representation of bunched fabric, hands and feet in the Oxford sheets, or their inclusion of decorated mouldings in the trabeations. The transformation of the Caryatids' Ionic volutes into curled horns, and the rings on the headgear of the barbarians in the Talman Album are notable differences between the drawings and the print, as is the slightly elevated perspective on the figures represented in the Talman albums; these may either be features of the original design that Marcantonio chose to omit or additions and elaborations by the Talman artist. Although the author of the Talman sheets is not known, the style of drawing and handwriting in the caption on fol. 186r ('questa si chima [sic] opera ionicha donde naque lorigine delle colonne ionic[...]') suggest they are not too distant from Marcantonio's print in date.

In the *Caryatid Façade*, Marcantonio cannot be presumed to be a transmitter of Raphael's carefully thought-out compositions, and the print is not easily described as 'after a drawing by Raphael' as Marcantonio's prints usually are.¹¹ Nevertheless, based on a comparison with other prints and works of art, the attribution of the print itself to Marcantonio seems certain, as does its origin in designs by Raphael and his workshop.¹² The *Caryatid Façade* evokes other prints by Marcantonio, as is seen by comparing the Caryatids' sombre facial expressions with that of Bacchus in *The Vintage* (Figure 5.5), after a drawing attributed to Raphael or Giovanfrancesco Penni. Like that of *The Vintage*, the execution of the *Caryatid Façade* is hard and sculptural. The Caryatids and Persians are monumental, standing out vividly against the dark background, casting shadows against a wall behind them as the Caryatids do in the Stanza di Eliodoro.¹³ The Caryatids, and especially the large head in the centre, reflect a model of female beauty favoured by Raphael and his workshop from around the time of the *Holy Family of Francis I* (completed in 1518). Giulio Romano and Penni adopted the chilly, sculptural classicism of this style, and Marcantonio would echo it in prints of around 1520, such as the *Virgin of the Palm Tree*, c.1520 (B. XIV.69.62), *The Virgin and the Cradle* (B. XIV.70.63), or the *Virgin with the Long Thigh* (B. XIV.65.57).

Taking these elements of the design, content and style of the image into account, it seems it may have been produced in the ambit of Raphael's workshop soon after his death.¹⁴ Perhaps it was made to profit from Raphael's fame by looking back to some of his best-known projects, those that he had completed (the *School of Athens*), and those left unfinished: the illustration of Vitruvius and the survey of ancient Rome described in the 'Letter to Leo X', an unfinished text introducing the Rome survey thought to have been written by Raphael in collaboration with Baldassare Castiglione. It is interesting that an inventory made in March 1528 refers to 'foli istanpati de' disegni di Roma di Rafaeolo da Urbino e d'altri', and

perhaps by this time prints had been created out of graphic material left over from Raphael's interrupted Rome project.¹⁵

Raphael's attempt to survey and draw the ancient ruins of Rome, the artist's study of Vitruvius, and his appointment as architect of St Peter's Basilica are different circumstances that can be closely associated, even if it is unclear how the one informed the other. It is known that Raphael asked for an Italian translation of Vitruvius from Fabio Calvo of Ravenna some time before March 1519.¹⁶ When Raphael died in April 1520, contemporaries were familiar with his project to survey the ruins of Rome, and with the fact that it was an integral aspect of his study of Vitruvius. In the days following the artist's death Marcantonio Michiel wrote,

he was laying out the ancient buildings of Rome in a book as Ptolemy had done for the world, showing clearly their proportions, forms and ornaments ... and he had already completed the first region. He showed not only the plans of the buildings and their location, which he discovered from the ruins themselves with great effort and initiative, but also their elevations and their ornaments, following what he had learned from Vitruvius or the rules of architecture or ancient histories to draw what the ruins no longer retained.¹⁷

The close observation of ruins was a means of correcting and deepening Raphael's understanding of Vitruvius, while the close reading of Vitruvius was a guide to the restoration of architectural elements that had gone missing from the ruins. Raphael's expertise in ancient architecture and ancient theory were also fundamentally important for his role as architect of new St Peter's, and the 'Letter to Leo X' informs us that it was the Pope himself who commissioned Raphael's Roman survey. It had probably been his co-appointment at St Peter's with the Veronese humanist and architect Fra Giovanni Giocondo – who published the first illustrated edition of Vitruvius in Venice in 1511 – that inspired Raphael to begin work on Vitruvius, and ultimately, to plan the project that art historians now believe was underway at the time of his death: a printed, illustrated edition of Vitruvius in *volgare*.¹⁸

Marcantonio's *Caryatid Façade* and Raphael's Vitruvius

Since antiquity interest in Vitruvius's architectural treatise had never ceased, yet readership of the treatise accelerated rapidly in the fifteenth century. Architects began to take a professional stake in editing the work, and the Sieneese painter and architect Francesco di Giorgio, who researched Vitruvius over decades, began an Italian translation.¹⁹ Around 1486 the humanist scholar Giovanni Sulpizio da Veroli brought out the *editio princeps* of Vitruvius with a dedication to Cardinal Raffaele Riario. The edition published by Fra Giovanni Giocondo in Venice in 1511 proposed

many corrections to Sulpizio da Veroli's and was the first to include illustrations in the form of over 130 woodcuts.²⁰

The first and second woodcuts in Giocondo's treatise illustrate Vitruvius's accounts of the punishment of the Caryatids and the Persians (Figures 5.6 and 5.7). Neither Leon Battista Alberti in his *De re aedificatoria* (1440s – 50s) nor Francesco di Giorgio had discussed these passages and, as far as we know, the Florentine architect and sculptor Filarete was the only theorist in this era to refer to them directly, as a rationale for the telemons he incorporated into his Temple of Virtue and Vice. While Filarete describes the Caryatids and Persians as 'husband and wife',²¹ Giocondo's Vitruvius brought them into closer relationship with Vitruvius's text and disseminated images of them to a wide audience. Giocondo's disciple Raphael then adopted the Caryatids as signature motif of his workshop, showcasing them on the *basamento* of the Stanza di Eliodoro. Space does not permit a full discussion of telemons and Caryatids in Raphael's circle, though much more could be said about these as visual devices, their relationship to personifications or virtues, and their allegorical meaning.²²

Marcantonio's print seems to bring together in one image Raphael's Rome project, his study of Vitruvius, the *School of Athens*, the Pantheon (Raphael's place of burial), as well as Raphael's revival of antique Caryatids, as if to reference the artist's creative identity as a whole. It is interesting in this regard that Vitruvius's discussion of the Caryatids and Persians was bound up with the self-formation of Renaissance artists as the worthy colleagues of historians and *literati*, since his stated reason for mentioning them was to underscore the importance of history in architectural practice: without it, architects could never know the origin and meaning of ornament. Vitruvius then underscores the moral philosophy, character and virtue of the architect, who 'should be a good writer, a skilful draftsman, versed in geometry and optics, expert at figures, acquainted with history, informed on the principles of natural and moral philosophy'. He should be 'somewhat of a musician, not ignorant of the sciences both of law and physics, nor of the motions, laws, and relations to each other, of the heavenly bodies'.²³

Raphael's interest in Caryatids might be seen as an allusion to his Vitruvianism, as well as his conformity to the Vitruvian ideal of the learned, literate architect. In Daniele Barbaro's Italian edition of the text published in Venice in 1556, the stories of the Persians and Caryatids were themselves described as beautiful ornaments which alleviate the technical, dry prose of architectural theory, just as architectural ornament enlivens the bare, structural members of a building: Barbaro's edition compared them to the 'herbs and flowers of a beautiful garden' which allowed the treatise to rise above the status of technical manual, bringing it closer to the realm of literature.²⁴ Raphael's Rome project is itself a predecessor for such ideas,

Figure 5.6
Giovanni Giocondo and collaborators,
The Caryatid Portico,
fol. 2r, M. *Vitruvius per Jocundum solito castigatior factus cum figuris et tabula ut iam legi et intelligi possit* (Venice: G. da Tridentino, 1511),
ETH Zürich, Photo © ETH-Bibliothek Zürich, Alte und Seltene Drucke



Figure 5.7
Giovanni Giocondo and collaborators,
The Persian Portico,
fol. 2v, M. *Vitruvius per Jocundum solito castigatior factus cum figuris et tabula ut iam legi et intelligi possit* (Venice: G. da Tridentino, 1511),
ETH Zürich, Photo © ETH-Bibliothek Zürich, Alte und Seltene Drucke



as an experiment in what the revival of Vitruvius could achieve to align the architect's profession with the liberal arts.

As already noted Marcantonio's *Caryatid Façade* brings together separate, yet analogous designs of the Caryatid and Persian porticoes, echoing the division of the two subjects in the Larger Talman Album drawings. The composition of the print makes more sense, however, if we consider that these designs originate in the interpretation of two different, yet parallel passages in Vitruvius's text. First, Vitruvius describes the invention of the Caryatid type during the Persian wars of the fifth century BCE, when the small Greek state of Caryae rebelled and joined with the Persian enemy (I, 1,5). In retribution, Caryae's married women were taken captive and put on display in a triumphal procession. Architects began to represent them as weight-bearing columns to set an example and put their punishment on view for future generations. In the next passage (I, 1,6) Vitruvius describes the victory of Spartan troops at the Battle of Platea (fifth century BCE) over a large Persian army, whose soldiers were similarly punished. To celebrate their victory, the Spartans built a portico supported by Persians in barbarian dress, eternally burdened by its weight.

Giocondo's edition of Vitruvius depicts the Caryatids and Persians in two woodcuts which are the first figures in the treatise, on recto and verso of a single sheet (Figures 5.6 and 5.7). Pagliara has attributed the design of the Caryatids to Giocondo himself, owing to a 'lack of finesse', although too little is known about Giocondo's figural drawing to verify this. In discussing the woodcut Pagliara also observed a conflation in Giocondo's figure of the passage about the origins of Caryatids in Vitruvius's Book I and others in Book IV about the origins and gender-identity of Ionic columns.²⁵ Pagliara points out that Giocondo's close philological study of the text informs a merging of the two passages in the image: in the first book Vitruvius (I, 1,5) mentions that the shamed Caryatids were not allowed to put away their 'stolae' or matronly garments when they were captured and paraded. In the fourth book (IV, 1,7), he asserts that while the volutes of the Ionic capital originate in the idea of graceful curls hanging to either side of a woman's face, the even folds of matronly 'stolae' inspired the Ionic column's fluting. Clearly Giocondo's woodcut pays particular attention to the folds of these *stolae*, representing them as if they were flutings, and thus bridging the two parts of Vitruvius's treatise. As discussed below, Marcantonio's print conflated these passages even further, and more explicitly integrates the Caryatids with the Ionic, while also associating the Persians with the Doric.

There is a close underlying relationship between Marcantonio's engraving and Fra Giocondo's two woodcuts. Both put emphasis on the size of the entablatures, and in both the Persians and Caryatids 'wear' architectural capitals like headgear. The poses and facial expressions of both Giocondo's and Marcantonio's Caryatids and Persians do not exaggerate their suffering

or indignity. Yet, particularly if the Caryatid and Persian porticoes in Marcantonio's print originate in two separate designs, Marcantonio's print reads as a reflection of Raphael's attempts to revise Fra Giocondo's first and second Vitruvian illustrations. The print is suggestive of the origins of Raphael's project in Giocondo's, especially given the role of the older architect as Raphael's exemplar and mentor. It might even be said that the print confirms the significance of Giocondo's illustrated treatise in pushing practising architects towards a theoretical engagement with Vitruvius, with the goal of correlating the text with archaeological remains visible in Rome.

Certainly Giocondo's Vitruvius was a ground-breaking effort whose significance would have been enormous for Raphael. On 1 August 1514 Raphael and Giocondo were jointly appointed architects-in-charge of St Peter's. They worked together closely until Giocondo's death less than a year later, in July 1515. In a letter to his uncle Simone Ciarla in 1514, Raphael wrote that the Pope had 'given' him Giocondo as a wise companion who could teach him the 'bello secreto' of architecture, to make him 'perfettissimo in quest'arte'.²⁶ By that time Giocondo had earned his stripes not only as an expert in Vitruvian theory, but also as a specialist *praeceptor* in the field. Previously, in France, he had given lessons on Vitruvius in the circle of Germain de Ganay, working closely with Guillaume Budé on an illustrated edition. Giocondo taught his friends about Vitruvius, it was said, with drawings as well as with words ('graphice quoque, non modo verbis').²⁷ In Rome he probably played a similar role for Raphael, as a mentor helping to advance the younger artist's visual and philological understanding of the text.²⁸ Giocondo had made extensive drawings of antiquities in Rome, and these were central to his project to edit and illustrate Vitruvius. The friar states as much in the dedication, where he declares his intention to compare the text with ruins.²⁹ Raphael picked up on this project and its methods, assuming Giocondo's mantle after his death, when he may have inherited some of Giocondo's notes and antiquarian drawings.

It is now generally accepted that Raphael took Giocondo's edition as a point of departure and engaged in a collaborative attempt to produce a new, illustrated edition of Vitruvius in Italian.³⁰ The steps towards this can be traced in Bayerische Staatsbibliothek, Munich, Cod. It. 37, an Italian translation of Vitruvius by Fabio Calvo, written, as the postscript states, 'in the house of Raphael in Rome, by his request'.³¹ The manuscript is a collaborative work by Calvo, the scribe (whose identity is disputed), Raphael, who added corrections and comments to the text in his own hand, and others.³² Some of the marginal comments in Cod. It. 37 rely so closely on the illustrations to Giocondo's Vitruvius that Francesco Paolo di Teodoro has called them 'verbal transcriptions' of Giocondo's figures.³³ The proximity to Giocondo's project is also seen in the only two references to figures in the manuscript: these are the notations of a 'prima figura' related to the Caryatids and 'seconda figura' related to the

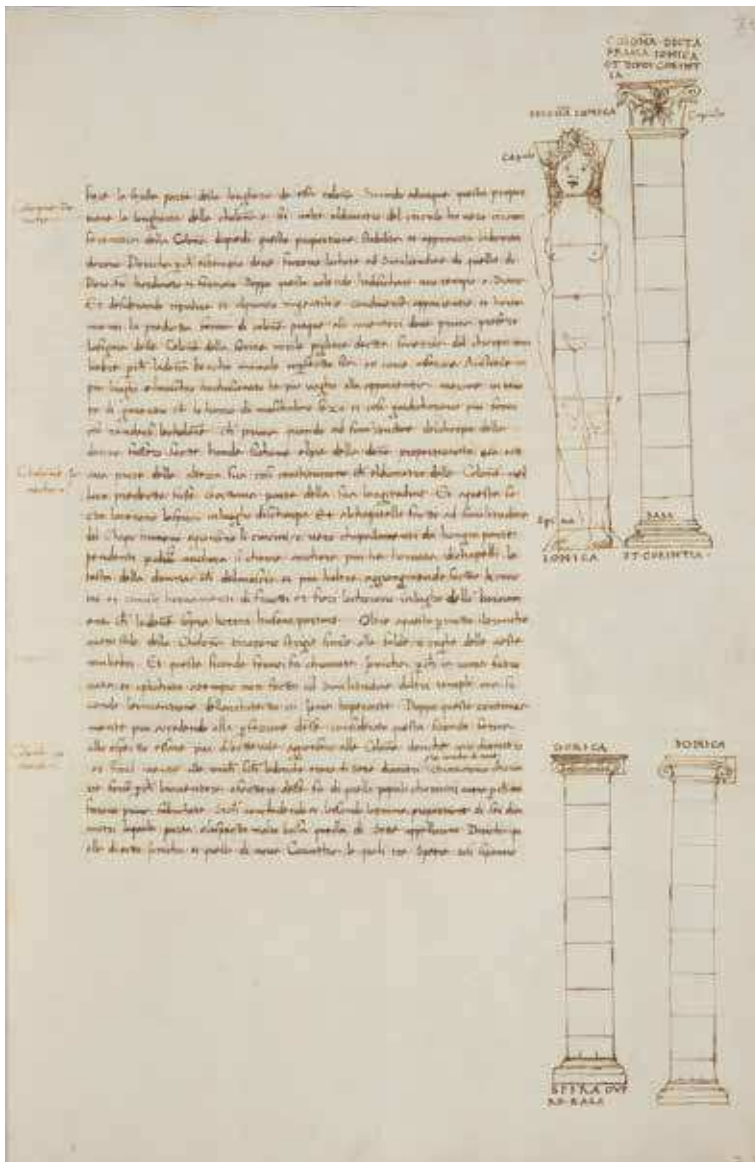


Figure 5.8
 Francesco di Giorgio, Codex Magliabechiano, II.I.141, 1480s, fol. 32, pen and brown ink,
 436 × 296 mm. Florence, Biblioteca Nazionale. Photo © Biblioteca Nazionale, Florence

Persians.³⁴ While it is not certain when these notations were added or by whom, they strengthen the possibility that Raphael may have planned the first two illustrations of a treatise as re-workings of Giocondo's figures of Caryatids and Persians. Many more 'figures' are noted in the margins of the sixteenth-century Cod. It. 37a, a partial copy of Cod. It. 37 written in the same hand and likewise in the Munich Staatsbibliothek.³⁵ The subjects of the intended figures often repeat those found in Fra Giocondo's edition of 1511; the parallels are particularly close in Book I, where the Persians and Caryatids are noted as the first and second illustrations (fols 2r-2v).

While we cannot go so far as to imagine that these captions represent a final list of intended illustrations for a new edition, they close the gap between Raphael, Calvo's translation and Fra Giocondo's woodcuts. Arnold Nesselrath has drawn together scattered visual evidence for the illustrations to Raphael's Vitruvius, pointing to drawings in the Codex Fossombrone, probably after originals by Raphael, that illustrate Vitruvian stories.³⁶ If Raphael did produce designs for any such illustrations before his death, Marcantonio's print, given its close connection with Raphael, its origin in Vitruvian scholarship guided by the example of Giocondo's edition of 1511, its derivation from studies of antique remains in Rome, and its correspondence to figures mentioned in both Cod. It. 37 and 37a, is likely a direct reflection of them.

Comparing the porticoes in Marcantonio's print with Giocondo's, Marcantonio's are much more clearly informed by first-hand archaeological study. In Giocondo's print the hands of the figures of Persians are bound together in front as they are in antique statues of Dacian prisoners, yet the figures wear an orientalist costume and exoticised headdress. Marcantonio's print, however, relies more closely on the *taccuino* tradition – the practice of sketching after the antique which had broadened considerably in the fifteenth century – and the direct study of particular antique remains, as will be considered in more detail below. Marcantonio's imagery also takes further Giocondo's visual conflation of Vitruvius's Book I and Book IV. In Book IV (IV, 1), Vitruvius associates the invention of the Doric with a temple of Apollo built with columns given the 'strength' and proportions of a man's body. He finds the origins of the Ionic in a temple of Diana with columns formed with the proportions of a matronly woman and, as we have seen, compares its volutes to the curls of a woman's hair and flutes to the folds of her dress; he explains the invention of the Corinthian capital with the famous story of a basket left on the grave of a young virgin which became overgrown with acanthus. In reference to Book IV, Marcantonio's image blends the Caryatid's Ionic capitals with their hairstyles and emphasises (like Giocondo) the even fall of folds in their garments. Books I and IV merge together through the gendering and personification of the orders. In this sense Marcantonio's print

looks back to a strain of architectural theory given special emphasis throughout the fifteenth century, but which was given particular attention in the theory of Francesco Di Giorgio. Well-known illustrations in the first and second versions of Francesco di Giorgio's architectural treatise explore, in many different ways, the analogies between the human body and architectural form, as seen in a drawing that merges an Ionic column with a woman's body (Figure 5.8). He was deeply engaged with the origins of structural members of architecture in the human body, and with the animistic sense that columns are like bodies, or contain bodies, exaggerating these ideas far beyond what is found in Vitruvius's text itself.³⁷

Raphael's particular interest in the origins of the orders in human forms might be reflected by a discussion of the topic in an addendum to the 'Letter to Leo X'. This passage is contained however only in one, later version of the letter and not in earlier redactions.³⁸ Its stated purpose is to introduce the topic of architectural representation in perspective, since this, it is argued, stimulates the imagination and brings buildings and their ornaments to life. The passage then elaborates on the 'cinque ordini che usavano li antiqui', the Doric, Ionic, Corinthian, Tuscan and Attic: this is thought to be the very first known use of the term *ordini*, from the Latin *ordo*, to denote the architectural 'orders'.³⁹ The text reads:

And of all of them the oldest is the Doric, which was invented by Dorus, King of Achaia, in building a Temple of Juno in Argos, and then a Temple of Apollo in Ionia and measuring the Doric columns according to the proportions of men ... but in the Temple of Diana these changed, and the columns made according to the measurements and proportions of women and composed in imitation of the female form, with many ornaments in their hair, the bases, and in their entire shafts, or trunks. But those that are called Corinthian are the most svelte and delicate [...] Vitruvius writes extensively about their origins and forms.⁴⁰

Shearman, Di Teodoro and others have cast doubt on whether this passage has anything to do with Raphael, since it is an addition to a late draft and seems not to match earlier versions of the letter in either content or style. Following their arguments, it may be that it was an addendum composed after Raphael's death, possibly in the course of preparing the 'Letter' for publication.⁴¹ Even so, its existence points to the significance of the Vitruvian passages in Book IV for Raphael's circle, echoing the interest in the origins of Doric and Ionic in Marcantonio's print.

Architectural details as they appear in the *Caryatid Façade* are not exact, nor are they drawn with precise, straight lines. Yet the print is both inventive and theoretically informed in its depiction of architecture, revealing a sophisticated thinking about architectural theory and history that reflects the approach of Raphael and his workshop. The print

describes the orders in a hierarchical relationship, the 'masculine' Doric (which Vitruvius says was invented first) below and the more elegant, refined and 'feminine' Ionic set in a position of honour above it. While neither Vitruvius nor Alberti had discussed the superimposition of the orders directly, the Doric-Ionic hierarchy was becoming prevalent in Italian architecture by the early sixteenth century, when it was taken up particularly by Raphael's mentor Bramante.⁴² The concept seems taken for granted in Raphael's own career as architect and is seen, for example, in the cortile of the Palazzo Branconio or in his drawings for the façade of San Lorenzo in Florence.⁴³ In setting the Ionic above the Doric, Marcantonio's print seems to echo Raphael's architectural practice, the study of antique examples – most illustriously the Theatre of Marcellus and the Colosseum – and also Bramante's use of superimposition at Santa Maria della Pace, at the Belvedere courtyard, the Cortile di S. Damaso and the spiral staircase in the Belvedere.

While Bramante is known for his rehabilitation of the Doric, Raphael is given credit for bringing the Ionic out of the shadows, given its role in the Quattrocento as a relatively minor element of architectural design.⁴⁴ In this Raphael was inspired by his own Vitruvian studies, and by Fra Giocondo's, since Giocondo's illustrated Vitruvius advanced the study of the Ionic volute and the Ionic base. Raphael himself is known to have displayed an antique Ionic base in his own antiquities collection, as demonstrated in a drawing by Giulio Romano discovered by Nesselrath.⁴⁵ The caption on this sheet, in the Biblioteca Comunale di Palermo, reads, 'questa è la base Ionica la quale insegna Vitruvio et sta in Roma in casa di Raffaello da Urbino', as if the fragment may have been part of archaeological studies related to the translation of Vitruvius carried out in Raphael's house. What makes the Ionic in Marcantonio's print especially Raphaelesque is, moreover, its use of a pulvinated, or slightly swollen, frieze. This was an ancient motif re-adopted in the sixteenth century, only after it had been employed in an Ionic entablature at Raphael's Villa Madama. As Burns observed, the use of the type at the Villa Madama, and Raphael's particular understanding of it, probably follows a misreading of Vitruvius's text in Calvo's Italian translation. While Vitruvius never actually mentions the pulvinated frieze, Calvo's translation of the text inserts it into Vitruvius's discussion of the Ionic architrave.⁴⁶

Marcantonio's print is also notable for its creative allusion to known antique sculptures of Dacians and Caryatids visible in Rome, an aspect of the image that seems to link it with Raphael's close study of Roman antiquities and his attempt to survey the city's ruins. In antiquity, the Forum of Augustus had been flanked by porticoes which featured – aligned along the upper stories – multiple copies of the Greek korai from the porch of the Erechtheion in Athens. Some of these 'Caryatids' were excavated in the 1930s and put on display at the Museo dei Fori Imperiali

in Rome (Figure 5.9). Although it seems the Forum was not much more intact in the Renaissance than it is today, fragments at least of its many Caryatid figures would have been visible.⁴⁷ Raphael's circle certainly had some knowledge of the Erechtheion type, including a sense of their poses and drapery, and this understanding may have derived from studies in the Forum of Augustus (yet other versions might have been visible elsewhere).⁴⁸

Marcantonio's print certainly reflects an awareness of the Erechtheion type, since the two central figures bend one leg at the knee, with draperies falling in even folds over their straight legs. The Caryatids in Marcantonio's print, furthermore, mimic the way the Erechtheion figures are arranged in mirror-image, symmetrical copies. Originally, they were shown with their arms down at their sides, holding shallow *paterae* decorated with acorns, details that were not fully understood by modern archaeologists until the copies at the Villa of Hadrian were excavated in the 1950s. Perhaps the awkward bunching of drapery around the figures' right hands in the print suggests that the author of this design knew of these *paterae*; fragments were indeed visible in the sixteenth century, as evidenced in a drawing by Antonio da Sangallo the Younger.⁴⁹ At the same time, the Caryatids in Marcantonio's print clearly differ from the Erechtheion versions in their high-belted *chiton* and other details. Their dress seems close to that of the colossal Muse on display in the early sixteenth century in the courtyard of the Palazzo Riario (Palazzo della Cancelleria),⁵⁰ an appropriate parallel, given the iconographic overlap between Muses and Caryatids as types. The belts of the garments worn by the Caryatids in Marcantonio's print seem slightly exaggerated in their size and tension around the waist, as if to emphasise the idea that they are bound, like prisoners.

The large Caryatid head at the centre of Marcantonio's print can be associated with a specific antique object, a rather mysterious capital, keystone or fragment which was visible in the Forum of Augustus in the fifteenth and sixteenth centuries. Sketches in Giuliano da Sangallo's *Codex Barberini* (Figure 5.10) and in the anonymous *Codex Destailleur* in Berlin seemingly represent this same head.⁵¹ The head was found, according to the caption in the *Codex Destailleur*, 'dirimpetto a san basilio in sur un canto di casa', that is, in the vicinity of San Basilio, a church built into the ruins of the Temple of Mars Ultor, the focal point of Augustus's Forum. The drawings suggest it was a copy of Erechtheion Kore D, shown particularly by the raised forelock and the thick plaited torus resting above the hair;⁵² each of these elements are distinguishable in Marcantonio's print and the Barberini and Destailleur codices. A page in the *Codex Coner* illustrates a somewhat different female head – one closer to the Erechtheion Kore A – which, according to the caption, could also be seen in the ruins of the Forum of Augustus.⁵³ This head is similar to one seen in a sketch attributed to 'pseudo-Fra Giocondo' and labelled 'cariadides' (Uffizi 2050Av).⁵⁴ In the version seen in the *Codex Coner*, the head sits on top

of a plinth which very much like the one shown underneath the Caryatid head in Sangallo's drawing.

Judging from these sketches and from Marcantonio's print, then, it appears that there were a variety of capitals or architectural busts resting on plinths, seemingly closely modelled on the Erechtheion korai which were seen, sketched and admired by Renaissance antiquarians in the Forum of Augustus. These antique heads would have been of great interest, presumably, because of the connections observers could have made between them and a Vitruvian, or rather, pseudo-Vitruvian discussion of the origins of the orders in the form of the human body, reading them as antique illustrations of the Vitruvian analogy between capitals (*capitula*) and human heads (*capita*). In Marcantonio's print the architectural head is combined with the Caryatid and Persian porticoes, presumably, because of their common identity as exemplars of Vitruvian theory about the origins and anthropomorphic forms of architecture. The particular emphasis placed on this head might be explained if we consider that the print relies on a type of subject found in architectural model books, that is, illustrations of unusual, decorative capitals, often with figural elements, which were either antique examples or invented *fantasie*. In Giuliano da Sangallo's *Codex Barberini*, for example, the artist added the Caryatid head to a page he had devoted to a set of studies of these sorts of ornamental capitals (Figure 5.10).⁵⁵ Single-sheet architectural prints like Marcantonio's, which take up the concerns of architectural model books, were often focused on the representation of one or more ornamental antique or *all'antica* capitals and bases.⁵⁶

In the Italian edition of Vitruvius published in 1521, Cesare Cesariano seems to rely on models from the Forum of Augustus when he informs readers how to combine a fluted column shaft with a Caryatid head on top as a capital, in reference to Vitruvius's account in Book IV of the invention of the Ionic for the Temple of Diana (Figure 5.11).⁵⁷ The Caryatid head here once again evokes analogies between human heads and column capitals, based on Vitruvius's remarks. At the same time, sixteenth-century viewers of the Caryatid heads in the Forum, and those who studied Marcantonio's print, would not have missed the seemingly un-Vitruvian combination of the Caryatid with a capital that is closer to the Doric than the Ionic.⁵⁸ In this sense the archaeological record contradicts Vitruvius's identification of the Doric as an exclusively 'male' order, an inconsistency between the text and surviving remains which is itself a matter of interest in the print. In this sense, the print is suggestive of the archaeological discussion in Rome in Raphael's ambit, as ruins were used to cross-check Vitruvius, whose authority was not absolute, but could be called into question when disparities were found.⁵⁹

As was mentioned, the representation of the 'Persian' portico in Marcantonio's print also originates in archaeological studies, particularly of



Figure 5.9
Caryatids from the Forum of Augustus, first-century CE copies of fifth-century BCE originals, Rome, Museo dei Fori Imperiali. Photo © Archivio fotografico, Musei in Comune, Rome. By permission of the Sovrintendenza Capitolina ai Beni Culturali, Mercati di Traiano - Museo dei Fori Imperiali

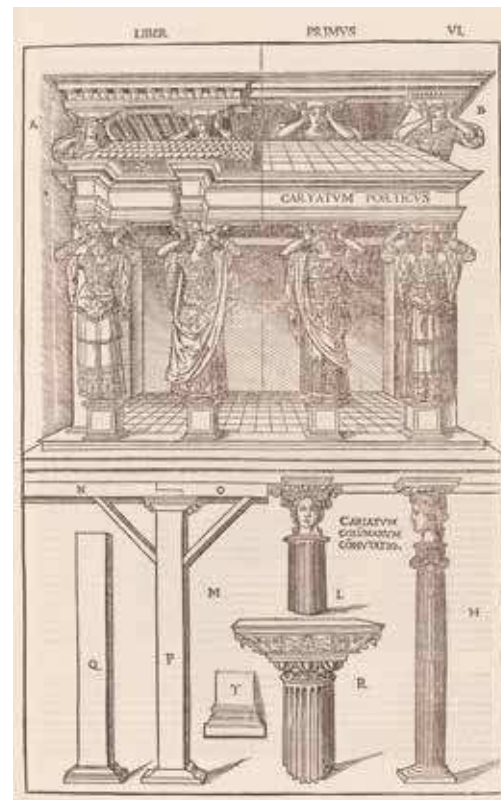


Figure 5.10
Giuliano da Sangallo, Capitals, with Caryatid head added later, c.1480s-1510, Biblioteca Apostolica Vaticana, Barb. lat. 4424, fol. 10v. Photo © Biblioteca Apostolica Vaticana 2016

Figure 5.11
Cesare Cesariano, *Di Lucio Vitruvio Pollione de architectura libri dece* (Como: G. da Ponte, 1521), fol. 6. The John Rylands Library, R51642 © The University of Manchester

the antique statues of Dacians which could be observed in many different places in Renaissance Rome. In antiquity the Forum of Trajan had featured more than one series of sculpted Dacian prisoners, one showing them as supports in an attic-level portico.⁶⁰ Marcantonio's Persians are quite similar to antique sculptures of Dacians. With their fringed cloak pinned with a *fibbia* on the right shoulder, baggy pants bound at the ankle and closed shoes they look back to examples from Trajan's Forum, either observed in situ or in private collections, even if the print shows them with their arms down rather than crossed like prisoners, presumably to make them look more like columns.⁶¹ One close parallel for the imagery of the print would have been the *Loggia dei Colonnese*, a portico in the house of the Colonna family on the Quirinal hill, where white marble Dacians were displayed as architectural supports, no doubt with an awareness of Vitruvius's description of the Persian portico.⁶² Yet the pair of Dacians in *bigio antico* now in the Palazzo dei Conservatori museum, which were in the Cesi collection by the 1530s, seem closer to Marcantonio's in their dress. His 'Persians' also echo the Dacians at the Attic level of the Arch of Constantine, which had been moved there from the Forum of Trajan, and the shift from three figures in Fra Giocondo's woodcut to four in Marcantonio's is likely a direct allusion to the arrangement of Dacians on the Arch.

Marcantonio's print appears at a critical juncture in the history of the architectural orders, when the measurement and close study of ruins and the intensified engagement with Vitruvius were starting to give shape to a more normative approach. Marcantonio's print registers this evolving development and the role of Raphael's circle in it. We have seen, however, that the print is focused on the origins of the Ionic and Doric, in terms of the connections that could be made between architecture and history, rather than on fixing standard measurements or systems of proportion for the orders. This accords with an argument made recently about Calvo's and Raphael's research into Vitruvius, namely, that it betrays limited interest in defining set rules for the orders and 'no understanding of the Vitruvian modular system'.⁶³ Marcantonio's print is attentive not to a canon of proportions but, rather, to a long-standing interest in the relationship between building and the human body, giving archaeological justification to a particular strand of Vitruvian research dealing with the origins of the orders in gendered bodies: this is the same strand of research that inspired famous Renaissance images of the 'Vitruvian man'. In the medieval era, Vitruvius's analogy between the perfection of the proportions of the body and those of a well-built, harmonious temple was understood in the context of Christian symbolism. It was also given special emphasis in Francesco di Giorgio's writings and architectural drawings, which circulated widely. Nesselrath has proposed that there were 'well over 100' copyists of his manuscripts,⁶⁴ and Raphael would have known this material, likely taking Francesco di Giorgio's Vitruvian

projects as a precedent for his own. An interest in anthropomorphism situates Marcantonio's print in an understanding of Vitruvius that would become less prominent by the second quarter of the sixteenth century when the canonisation of the orders came into focus.⁶⁵ Perhaps the crux of the issue in Raphael's circle was the question of how to use the orders decorously, with an awareness of their gender identities. One can think, for example, of Bramante's gendering of the Doric order at San Pietro in Montorio, where the male St Peter is honoured with a 'male' Doric order.⁶⁶

The Caryatid Façade in the Vitruvian tradition

Marcantonio's print constitutes one contribution to a wider effort by architect-theorists, beginning in the fifteenth century, to make lasting contributions to the corpus of texts and images brought together in an expanded field of 'Vitruvian studies'. Their efforts can be traced through the more diffuse practice of architectural drawing and wider participation in Vitruvian thought generally, which brought together collectors, patrons and artists. Vitruvius's treatise was a model for architects, allowing them to prove their virtue and intellectual mettle by mastering its theory.⁶⁷ Vitruvius's treatise had reached postclassical readers in an incomplete state and in the fifteenth century the loss of its original illustrations was often lamented.⁶⁸ For artists, this brought a rare opportunity to restore an essential semantic element of a major antique text. The practice of drawing in Rome came to be associated with the goals of making Vitruvius more understandable and accessible by restoring its missing illustrations. Even if Vitruvius's figures were originally only schematic diagrams meant to clarify technical points, 'illustrating' the text became something much more than a pragmatic exercise. Rather, it offered a chance to bridge theory and practice, uniting philological investigation with the rapidly expanding and evolving art of architectural drawing.

When Antonio da Sangallo the Younger, Raphael's assistant at St Peter's, wrote a *Proemio* to an edition of Vitruvius he never published, he laid out his motives in words echoing those of the 'Letter to Leo X': a dissatisfaction with previous attempts to understand the text, a desire to restore its missing illustrations, and the hope of verifying or disproving the treatise through tireless sketching in Rome.⁶⁹ This concept is foreshadowed by Francesco di Giorgio's approach but only pinned down by the efforts of Giocondo, then Raphael's workshop, and later Antonio da Sangallo the Younger and his brother Giovanni Battista.⁷⁰ Marcantonio's print enters this tradition as an experimental, single-sheet engraving, created at a time when printed, illustrated treatises based on lengthy observations in the ruins were much desired, yet exceedingly difficult to produce.

At the time Marcantonio made his *Caryatid Façade* it was probably clear that any project Raphael had for an illustrated Vitruvius would not materialise. It was also probably understood by contemporaries that Marcantonio's print had been produced out of the vestigial remains of this project, since, even as a unique stand-alone image produced outside the context of a treatise, the *Caryatid Façade* played a significant role in sixteenth-century Vitruvian studies. Just as it had been standard practice in the fifteenth and sixteenth centuries to copy and recycle architectural drawings and sketches after the antique, sixteenth-century printed editions of Vitruvius were characterised by extensive borrowing and re-use. This was the case for Cesariano's illustrated Vitruvius of 1521: many of the woodcut illustrations creatively recycle ideas from Fra Giocondo, or from architectural modelbooks then circulating in manuscript. Cesariano's illustrations of the Caryatid (Figure 5.11) and Persian porticoes go back to Fra Giocondo, and play up his orientalist, or Islamicised 'Persians'. It seems that Cesariano did not know Marcantonio's print. Yet the image directly inspired other sixteenth-century artists and theorists: in particular, Jean Goujon's illustrations of the first French edition of Vitruvius, translated by Jean Martin and printed in 1547, as well as the Caryatid façade Goujon designed for the Louvre in 1550/1. Goujon's musician's gallery in the *salle de bal* of Pierre Lescot's palace (Figure 5.12) – in its four Caryatids, its Ionic entablature, as well as its central portal – clearly echoes several features of Marcantonio's print.

Through the classicising architecture promoted at the French court during these years, focus had turned to the study of Vitruvius, and thus to Marcantonio's print and to Rome, even if Goujon's façade has sometimes been tied to the Athenian Erechtheion and a 'Greek' impulse in French Renaissance art. As Pauwels has argued, the Caryatids in Athens were almost certainly unknown to Goujon. Instead it was the Erechtheion-style Caryatids known from Roman remains which stimulated his interest and admiration, after he had adapted Marcantonio's print in his illustrations of Martin's French Vitruvius.⁷¹ A year after this French Vitruvius, Marcantonio's *Caryatid Façade* was also adopted in the first German book based on Vitruvius, the 'Vitruvius Teutsch' published by Walther Hermann Ryff in 1548. This text illustrates the Caryatids with a plate derived from Cesariano, yet overleaf is an illustration derived from Marcantonio's print, captioned with reference to the Roman origin of the imagery (Figure 5.13). The treatise similarly relies on Marcantonio's print for illustrations of the Caryatid head (Figure 5.14) and the Persian portico.⁷²

Presumably these citations of the *Caryatid Façade* were made with an awareness of their origins in Raphael's workshop, which, by the time of artist's death, would probably have been regarded as an early form of 'Vitruvian Academy'. Indeed, the first Vitruvian academies in Italy would directly echo the practical and theoretical approach to Vitruvius

and Rome that Raphael had adopted.⁷³ It was this authority that made the visual traces of Raphael's projects in Rome so influential for later architectural theorists, such as Sebastiano Serlio, who derived some of his archaeological and architectural illustrations from the work of Raphael and his *bottega*.⁷⁴

There are other possible reasons for the enthusiastic reception of the *Caryatid Façade*. It was a copperplate engraving, in contrast to the standard woodcut technique employed by Fra Giocondo, Cesariano, Serlio and others, which was less expensive and easier to produce. At the time Marcantonio's print was made, copperplate engraving was emerging as a medium well suited to images of Roman antiquity, thanks to its ability to capture the visual authority of the ruins with accuracy, fine detail and subtle expression of line and shading, qualities which would find fuller expression in the collections of prints known as the *Speculum Romanae magnificentiae*. The success of Marcantonio's sheet is also suggestive of a trend that Henri Zerner and others have noted, as an interest in an authoritative visual corpus of Vitruvian imagery took on a life of its own, independent of philological work on the text.⁷⁵ After architects became specialist interpreters of Vitruvius, illustrations were prioritised. This is seen, for example, in the abundance of imagery in Cesariano's Vitruvius, which, it has been written, 'n'est pas une vision textuelle [...] mais imaginée';⁷⁶ or Goujon's illustrations to Martin's Vitruvius, which responds to Marcantonio, Serlio, Philandrier and other visual sources, rather than attempting to visualise Martin's French translation accurately, or even follow it closely.⁷⁷ After architectural illustration by authoritative artists had become a matter of interest in its own right, not only a means of solving textual problems, the relationship between image and text in Vitruvian studies could be quite indirect. This rising prestige of visual contributions opened the door for the success of Marcantonio's single-sheet print, even in editions of Vitruvius produced outside Italy after the printmaker's death.

The *Caryatid Façade* as archaeological capriccio

The print's interest goes beyond its relationship to Vitruvius and the antique, and in conclusion we can briefly consider how it might have been understood as an image of an imagined building, in particular as it might reflect the practice of building elite palaces and collecting antique sculptures for them in more sophisticated and integrally designed architectural schemes. The print shows a façade, seemingly an ancient building fronted by impossibly large sculptures. In the print, the female head above the central portal, given its implied size, recalls examples of large-scale female heads used as keystones in princely contexts, for example the *Iustitia* at the triumphal arch of Frederick II or *Bellona* set above the doorway of the Palazzo Ducale in Urbino. The Caryatids and Persians are also massive in scale, looking back to the aesthetic of the

Mirabilia, in particular the Quirinal Horsetamers and the bronze statue of Marcus Aurelius. Their size seems to reflect changes in the display of sculpture in architectural contexts brought about by the new scale of palace building in Rome, particularly the Palazzo Riario (the Cancelleria), where a colossal antique Muse was put on view in the massive cortile. As a whole, the façade seems to evoke an ideal image of a private dwelling, and on the lower level, the ‘Persians’ standing at either side of the central portal are reminiscent of a passage in Alberti referring to the decoration of private architecture. In discussing creative licence in private building, he reminds the reader that ‘fanciful architects’, presumably ancient ones, had set ‘huge statues of slaves at the door jambs of a dining room, so that they support the lintel with their heads’.⁷⁸

In Marcantonio’s day in Rome, a visual example for the composition of the *Caryatid Façade* might have been suggested by the display of matching telemon-Pans to either side of a portal at the Palazzo Della Valle di Cantone. The print demonstrates the importance of symmetry and of the display of serial copies in antique art, and in this sense reflects the ancient and Renaissance practice of pairing copies of symmetrical or identical sculptures. The pairing of the Quirinal Horsetamers was the most visible example, but the method would be used at the Palazzo Medici in Florence, where two Marsyas stood on either side of a doorway, at the Della Valle collection, in the Cesi garden where two matching Dacians were paired next to each other, and elsewhere. The image, on the whole, reveals a close familiarity with the display of antique sculpture in Rome, as well as with the question of how sculpture can be harmoniously integrated with architectural settings.⁷⁹ Raphael and his workshop were deeply engaged with these issues, not least in the design of the Villa Madama, built in harmony with the antiquities collection meant to be housed there. It was in the early sixteenth century that architects devised what Marcello Fagiolo and Maria Luisa Madonna have termed the ‘facciata museo’,⁸⁰ the integrated display of sculpture on an architectural façade, as in Raphael’s pioneering Palazzo Branconio. Together, these trends – towards monumentality, and towards the harmonious integration of sculpture series in symmetrical architectural designs – are reflected in the fantasy architecture of the *Caryatid Façade*.

Acknowledgements

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- 1 A. Bartsch, *Le peintre graveur*, 21 vols (Vienna: Degen, 1803–14), vol. 14, *Oeuvres de Marc-Antoine, et de ses deux principaux élèves Augustin de Venise, et Marc de Ravenne*, pp. 385–6, no. 538. Literature on the print is summarised in B. F. Davidson, *Marcantonio Raimondi. The Engravings of his Roman Period*, PhD dissertation, Harvard University, 1954, p. 211; Stefania Massari’s entry in G. Bernini Pezzini, S. Massari and S. Prosperi Valenti Rodinò (eds), *Raphael inventit. Stampe da Raffaello nelle collezioni dell’Istituto nazionale per la grafica* (Rome: Quasar, Ministero per i Beni culturali e ambientali and Istituto nazionale per la grafica, 1985), p. 266; I. Du Bois-Reymond, ‘Die römischen Antikenstiche Marcantonio Raimondis’, PhD dissertation, University of Munich, 1978, pp. 167–9; A. Gnann, ‘Facciata con cariatidi’, in K. Oberhuber (ed.), *Roma e lo stile classico di Raffaello 1515–1527*, exh. cat., Mantua: Palazzo Te and Vienna: Albertina (Milan: Electa, 1999), p. 116.
- 2 H. Delaborde, *Marc-Antoine Raimondi. Étude historique et critique* (Paris: Librairie de l’art, 1888), pp. 236–8, no. 214. The tone had been set by Thode’s description of the print as ‘unglücklich’, H. Thode, *Die Antiken in den Stichen Marcantonis, Agostino Veneziano’s und Marco Dente’s* (Leipzig: E. A. Seemann, 1881), p. 3, no. 4.
- 3 J. D. Passavant, *Raffaël von Urbino und sein Vater Giovanni Santi*, 4 vols (Leipzig: Brockhaus, 1839–58), vol. 2, p. 673; T. Ashby, ‘Addenda and Corrigenda to Sixteenth-century Drawings of Roman Buildings Attributed to Andreas Coner’, *Papers of the British School at Rome*, 6 (1913), 207–8. Ashby characterised Raimondi’s engraving as ‘largely fanciful, though the elements are doubtless in part antique’ (p. 208).
- 4 G. Becatti, ‘Raffaello e l’Antico’, in M. Salmi (ed.), *Raffaello. L’opera, le fonti, la fortuna*, 2 vols (Novara: Istituto geografico De Agostini, 1968), vol. 2, pp. 518–19.
- 5 H. Burns, ‘Facciata con ordini di Persiani e di Cariatidi’, in C. L. Frommel, S. Ray and M. Tafuri (eds), *Raffaello architetto*, exh. cat., Rome: Palazzo dei Conservatori (Milan: Electa, 1984), p. 435.
- 6 In 1985 Frank Büttner argued that the print has its origins in Vitruvius and may have been designed by Raphael, ‘Karyatiden und Perser: Bemerkungen zur Verwendung von Stützfiguren in der italienischen und französischen Baukunst der Renaissance’, in F. Büttner and C. Lenz (eds), *Intuition und Darstellung: Erich Hubala zum 24 März 1985* (Munich: Nymphenburger, 1985), pp. 90–1; Gnann, ‘Facciata’, linked the image to Raphael and Vitruvius; Stefan Schweizer argued for the Vitruvian origins of the print and its relationship to Raphael, in ‘Konkurrenzen zwischen Text- und Artefaktautorität: Atlanten, Karyatiden und Perser in der Architektur und Architekturtheorie des Barock’, in U. Heinen (ed.), *Welche Antike? Konkurrierende Rezeptionen des Altertums im Barock (Wolfenbütteler Arbeiten zur Barockforschung 47)*, 2 vols (Wiesbaden: Harrassowitz, 2011), vol. 2, pp. 1055–6; Yves Pauwels has written about the print, ‘elle se situe dans un contexte purement vitruvien’, *L’Architecture et le livre en France à la Renaissance. Une magnifique décadence?* (Paris: Classiques Garnier, 2013), p. 162.
- 7 On the overlooked significance of single-sheet architectural prints see M. J. Waters, ‘A Renaissance Without Order. Ornament, Single-sheet Engravings, and the Mutability of Architectural Prints’, *Journal of the Society of Architectural Historians*, 71:4 (2012), 488–523.
- 8 For example, Staatliche Museen zu Berlin; Österreichisches Museum für angewandte Kunst / Gegenwartskunst, KI 1041 F-138 S-36; Albertina DG1971/461; Fogg Museum M26624.91; Museum of Fine Arts, Boston P1214 (Harvey D. Parker Collection); Rijksmuseum RP-P-OB-105.449; Metropolitan Museum of Art, Accession Number 26.50.1(22); Istituto Nazionale per la Grafica F. C. 5064; British Museum 1973, U.91. An example was sold at C. & J. Goodfriend in 2015.
- 9 C. H. von Heineken, *Dictionnaire des artistes, dont nous avons des estampes. Tome premier, contenant la lettre A* (Leipzig: Breitkopf, 1778), p. 331.
- 10 Oxford, Ashmolean Museum, Larger Talman Album. K. T. Parker, *Catalogue of the Collection of Drawings in the Ashmolean Museum, II: Italian Schools*, 2nd edn (Oxford: Oxford University Press, 1972), Appendix A, p. 554. Parker notes the repetition of the figures in Raimondi’s engraving. Thanks go to Michael Waters for bringing the Talman Album drawings to my attention.
- 11 See relevant remarks in P. Emison, ‘Raphael’s Multiples’, in M. B. Hall (ed.), *The Cambridge Companion to Raphael* (Cambridge: Cambridge University Press, 2005), pp. 186–206.
- 12 The consensus in the scholarship is that the engraving depends on Raphael, though Du Bois-Reymond (*Römischen Antikenstiche*, pp. 67–9) attributed the invention and design to Giulio Romano. Nicole Dacos is exceptional in attributing the print itself to another artist, Agostino Veneziano: ‘Jean Goujon: trois dessins et le voyage d’Italie’, in G. Bresc-Bautier (ed.), *Germain Pilon et les sculpteurs français de la Renaissance* (Paris: Documentation Française, 1993), p. 306; Gnann, ‘Facciata’, makes a convincing case, however, for an attribution to Marcantonio Raimondi.
- 13 As is observed in Gnann, ‘Facciata’.
- 14 Gnann, ‘Facciata’, tentatively proposes a date of 1516–19 but does not give a rationale.
- 15 J. Shearman, *Raphael in Early Modern Sources*, 2 vols (New Haven, CT: Yale University Press and Rome: Bibliotheca Hertziana, 2003), vol. 1, pp. 834–7, document 1528/3. Shearman suggests one of these might have been the *Caryatid Façade*.
- 16 Shearman, *Raphael*, vol. 1, pp. 397–404.
- 17 Original text in Shearman, *Raphael*, vol. 1, pp. 581–3.
- 18 J. Shearman, ‘Raphael as Architect’, *Journal of the Royal Society of Arts*, 116 (1968), 388–409 first suggested that Raphael ‘had in mind an Italian edition’ of Vitruvius (p. 401).

- 19 F. P. Fiore, 'La traduzione da Vitruvio di Francesco di Giorgio. Note ad una parziale trascrizione', *Architettura, storia e documenti*, 1 (1985), 7–30. Francesco di Giorgio, *La traduzione del De architettura di Vitruvio*, ed. M. Biffi (Pisa: Scuola Normale Superiore, 2002); M. Mussini, *Francesco di Giorgio e Vitruvio. Le traduzioni del De architettura nei codici Zichy, Spencer 129 e Magliabechiano II.1.141* (Florence: Leo S. Olschki, 2003).
- 20 L. A. Ciapponi, 'Fra Giocondo da Verona and his Edition of Vitruvius', *Journal of the Warburg and Courtauld Institutes*, 47 (1984), 72–90; P. Gros and P. N. Pagliara (eds), *Giovanni Giocondo. Umanista, architetto e antiquario*, Centro Internazionale di Studi di Architettura Andrea Palladio (Venice: Marsilio, 2014), with previous literature.
- 21 J. R. Spencer (ed. and trans.), *Filarete's Treatise on Architecture, being the Treatise by Antonio di Piero Averlino, Known as Filarete*, 2 vols (New Haven, CT: Yale University Press, 1965), vol. 2, pp. 249, 256–7. On fol. 145r Filarete mentions 'figures in place of columns' who hold up the bronze roof, while fol. 149v includes a drawing of four naked men standing on bases, supporting a portico with their heads and hands. Fol. 150r makes reference to 'columns in the shape of human figures and made like certain peoples who had rebelled and were then forced into subjugation. They were made in this form in order to increase contempt for them. For an additional sign of servitude they were made in the form of a man and a woman, that is, a husband and wife. Good men and women stood to watch under this roof but they were separated' (trans. Spencer).
- 22 Discussion can be found in A. Nesselrath, 'Cariatide', in Frommel, Ray and Tafuri (eds), *Raffaello architetto*, p. 434; F. Dietrich-England, *Die Sockelzone der Stanza di Eliodoro. Ein Entwurf Raffaels* (Weimar: VDG, 2006), pp. 79–86, with previous bibliography. Parallels with Michelangelo's design for the tomb of Julius II, the drawing attributable to Penni for the tomb of Francesco II Gonzaga (Louvre, Département des Arts Graphiques, inv. 1420), and the Caryatid motif in Giulio Romano's work should be noted. For the afterlife of the Vitruvian Caryatids and Persians in general see Büttner, 'Karyatiden'; G. Hersey, *The Lost Meaning of Classical Architecture. Speculations on Ornament from Vitruvius to Venturi* (Cambridge, MA: MIT Press, 1988), pp. 69–75; J. Rykwert, *The Dancing Column. On Order in Architecture* (Cambridge, MA: MIT Press, 1996), pp. 116–41; M. M. D'Evelyn, 'Varietà and the Caryatid Portico in Daniele Barbaro's Commentaries on Vitruvius', *Annali di architettura*, 10–11 (1998/99), 157–74.
- 23 Vitruvius I, 3, translation from *The Architecture of Marcus Vitruvius Pollio*, trans. J. Gwilt (London: Priestley and Weale, 1826).
- 24 As discussed in D'Evelyn, 'Varietà'.
- 25 P. N. Pagliara, 'Fra Giocondo e l'edizione del *De architettura* del 1511', in *Giovanni Giocondo*, pp. 43–4.
- 26 Shearman, *Raphael*, vol. 1, p. 181. The letter is known only from copies.
- 27 Ciapponi, 'Fra Giocondo'; L. A. Ciapponi, 'Agli inizi dell'Umanesimo francese: Fra Giocondo e Guglielmo Budé', in O. Besomi, G. Gianella, A. Martini and G. Pedrojetta (eds), *Forme e vicende. Per Giovanni Pozzi* (Padua: Antenore, 1988), pp. 101–18; M. T. Sambin de Norcen, 'Per leggere e capire. Vitruvio: Fra Giocondo, Guillaume Budé e l'incunabolo Res V 318 della Bibliothèque nationale de France', in *Giovanni Giocondo*, pp. 111–20. For Giocondo's possible role in inspiring Dürer's theoretical studies see A. Nesselrath, 'Disegni di Fra Giocondo', in *Giovanni Giocondo*, pp. 211–19.
- 28 See comments in H. Günther, *Das Studium der antiken Architektur in den Zeichnungen der Hochrenaissance. Römische Forschungen der Bibliotheca Hertziana*, 24 (Tübingen: Wasmuth, 1988), p. 57.
- 29 As Giocondo stressed in his dedication of the 1511 edition to Pope Julius II.
- 30 See the analysis of the relationship between the texts in F. P. Di Teodoro, 'Fra Giocondo fra tradizione e traduzione', in *Giovanni Giocondo*, pp. 169–82.
- 31 Visible online at <http://daten.digitale-sammlungen.de/~db/bsb00007354/images/> (accessed 11 March 2016). The text was published, with errors, in V. Fontana and P. Morachiello, *Vitruvio e Raffaello: il De architettura di Vitruvio nella traduzione inedita di Fabio Calvo ravennate* (Rome: Officina, 1975). Francesco Paolo di Teodoro is preparing a new edition, see his 'Per una nuova edizione del *De architettura* di Vitruvio tradotto da Fabio Calvo per Raffaello: qualche nota sui primi tre libri del Cod. It. 37 della Bayerische Staatsbibliothek di Monaco', in H. Hubach, B. von Orelli-Messerli and T. Tassini (eds), *Reibungspunkte. Ordnung und Umbruch in Architektur und Kunst. Festschrift für Hubertus Günther* (Petersberg: Imhof, 2008), pp. 57–62; 'Per l'edizione del Vitruvio di Fabio Calvo per Raffaello', in F. P. Di Teodoro (ed.), *Saggi di letteratura architettonica, da Vitruvio a Winckelmann*, 3 vols (Florence: Leo S. Olschki, 2009), vol. 1, pp. 191–206.
- 32 Shearman, *Raphael*, vol. 1, pp. 397–404. A letter purported to be from Raphael to Calvo regarding illustrations for the translation is generally accepted to be a forgery (*ibid.*, vol. 2, pp. 1498–1500).
- 33 Di Teodoro, 'Per l'edizione', p. 200. 'talune glosse marginali del Cod. It. 37 sono delle trascrizioni verbali delle figure giocondine'. According to Rowland, Calvo's translation and the annotations to it 'follow closely on the Latin of Fra Giocondo's superb illustrated Vitruvius of 1511' (I. Rowland, 'Raphael, Angelo Colocci, and the Genesis of the Architectural Orders', *The Art Bulletin* [1994], 89).
- 34 'P[rim]a figura' is written next to the marginal gloss 'ch[e] siano le statue caryatide e la loro historia' (fol. 2r) and 'seco[n]da figura' next to 'la victoria delli Laconi co[n]tro li p[er]s[i]' (fol. 2v). Di Teodoro argues that both 'prima figura' and 'seconda figura' were added later than the other comments in the margins. F. P. Di Teodoro, 'La scienographia è una adombratione e della fronte, e del lato ...', il terzo aspetto della *dispositio* vitruviana nella traduzione di Fabio Calvo per Raffaello', in G. Ciotta (ed.), *Vitruvio nella cultura architettonica antica, medievale e moderna*. Atti del Convegno internazionale di Genova, 5–8 novembre 2001, 2 vols (Genoa: De Ferrari, 2003), vol. 2, pp. 491–9 (p. 497); Fontana and Morachiello, *Vitruvio*, pp. 70–1. While in Raphael's MS the 'prima' and 'seconda figura' mark points in text where the relevant passages begin, in Fra Giocondo's edition the figures are inserted after these passages end.
- 35 Available at http://daten.digitale-sammlungen.de/bsb00006252/image_1 (accessed 11 March 2016). Rowland, 'Raphael', Appendix II, pp. 103–4, lists the captions.
- 36 A. Nesselrath, *Das Fossombroner Skizzenbuch* (London: Warburg Institute, 1993), pp. 171–4 (fols 38v–39r). Nesselrath points out that Giovanni Antonio Rusconi's illustrations to Vitruvius published in 1590 are similar, and he may have been working from the same designs as the author of the Fossombrone Codex (*ibid.*, p. 174). It has also been suggested that the drawings in the Codex Stosch relate to Raphael's project to illustrate Vitruvius (I. Campbell and A. Nesselrath, 'The Codex Stosch: Surveys of Ancient Buildings by Giovanni Battista da Sangallo', *Pegasus. Berliner Beiträge zum Nachleben der Antike*, 8 [2006], 33).
- 37 For Francesco Di Giorgio and Vitruvius see Fiore, 'La traduzione'; Hersey, *Lost Meaning*, pp. 79–90; H. Burns, 'Restaurator delle ruine antiche: tradizione e studio dell'antico nell'attività di Francesco di Giorgio', in F. P. Fiore and M. Tafuri (eds), *Francesco di Giorgio architetto* (Milan: Electa, 1994), pp. 151–81; A. Payne, *The Architectural Treatise in the Italian Renaissance. Architectural Invention, Ornament, and Literary Culture* (Cambridge: Cambridge University Press, 1999), pp. 89–110; Francesco di Giorgio, *La traduzione*; Mussini, *Francesco di Giorgio*.
- 38 In Munich, Staatsbibliothek, Cod. It. 37b, a MS bound together with Cod. It. 37a.
- 39 Günther, *Studium*, p. 55; F. P. Di Teodoro, *Raffaello, Baldassar Castiglione, e la Lettera a Leone X* (Bologna: Nuova Alfa, 1994), pp. 30, 198–202; Rowland, 'Raphael', pp. 97–9.
- 40 Original text in Shearman, *Raphael*, vol. 1, p. 527.
- 41 Di Teodoro, 'Raffaello', pp. 35–8; Shearman, *Raphael*, vol. 1, pp. 533–45.
- 42 See C. Thoenes, 'Bramante und die Säulenordnungen', *Kunstchronik*, 30 (1977), 62–3; C. Denker-Nesselrath, *Die Säulenordnungen bei Bramante* (Worms: Wernersche Verlagsgesellschaft, 1990), pp. 100–11.
- 43 C. L. Frommel, 'Raffaello e gli ordini architettonici', in J. Guillaume (ed.), *L'emploi des ordres dans l'architecture de la Renaissance* (Paris: Picard, 1992), pp. 119–36.
- 44 See discussion in H. Burns, 'Raffaello e quell'antiqua architettura', in Frommel, Ray and Tafuri (eds), *Raffaello architetto*, pp. 394–6.
- 45 A. Nesselrath, *Der Zeichner und sein Buch: die Darstellung der antiken Architektur im 15. und 16. Jahrhundert* (Wiesbaden: Harrassowitz, 2014), pp. 128–33, fig. 181. For Giocondo's study of the Ionic see *ibid.*, p. 129 and M. Losito, 'La ricostruzione della voluta ionica vitruviana nei trattati del Rinascimento', *Mélanges de l'Ecole française de Rome. Italie et Méditerranée*, 105:1 (1993), 142, note 12.
- 46 See Burns, 'Raffaello', p. 396, citing Fontana and Morachiello, *Vitruvio*, pp. 80 and 163. Burns notes the use of the pulvinate frieze at the Villa Madama and the courtyard of the Palazzo Branconio dell'Aquila.
- 47 Antonio Da Sangallo drew a hand of one of the Caryatid statues in the Forum of Augustus (Florence, Uffizi, Gabinetto dei disegni e delle stampe A 1283); A. Viscogliosi, *I fori imperiali nei disegni d'architettura del primo Cinquecento. Ricerche sull'architettura e l'urbanistica di Roma* (Rome: Gangemi, 2000), pp. 122–5.
- 48 There are drawings of a free-standing copy of an Erechtheion kore in the Berlin Album of Giovanni Antonio Dosio, Staatliche Museen zu Berlin, Kupferstichkabinett, inv. 79.D1 fol. 79r and in Girolamo da Carpi's Philadelphia sketchbook, Rosenbach Museum and Library, Girolamo da Carpi Codex, f. 64r; a similar, or the same statue is represented in the so-called Peruzzi Sketchbook in Siena, Biblioteca Comunale, inv. S. IV. 7, fol. 6r; C. Hülsen, *Das Skizzenbuch des Giovanni Antonio Dosio im Staatlichen Kupferstichkabinett zu Berlin* (Berlin: H. Keller, 1933), p. 37, no. 181; E. Schmidt, *Die Kopien der Erechtheionkoren, Antike Plastik*, vol. 13 (Berlin: Gebr. Mann, 1973), p. 43; N. W. Canedy, *The Roman Sketchbook of Girolamo da Carpi* (London: Warburg Institute, 1976), p. 51, no. R 64; *Taccuino S IV 7 detto di Baldassarre Peruzzi della Biblioteca Comunale di Siena* (Siena: Biblioteca Comunale 1981). A torso of a Caryatid thought to be from the Forum of Augustus is now in Poggio Imperiale: G. Capecchi, L. Lepore and V. Saladino (eds), *Collezioni fiorentine di antichità I. La Villa del Poggio Imperiale* (Rome: Bretschneider, 1979), pp. 99–101, no. 50. Another statue of a Caryatid presumed to be from the Forum is in the Villa Corsini at Castello, inv. MA no. 13708, F. Paolucci and A. Romualdi (eds), *L'Antiquarium di Villa Corsini a Castello* (Florence: Polistampa, 2010), p. 52.
- 49 See note 47. For the fragment, see Schmidt, *Kopien*, pp. 13–14.
- 50 Now restored as a Melpomene in the Louvre, inv. 386.
- 51 Biblioteca Vaticana, Barb. Lat. 4424, fol. 10v; Staatliche Museen zu Berlin, Kunstbibliothek, Destailleur Sketchbook A, inv. Oz 109, fol. 2v; C. Hülsen, *Il libro di Giuliano da Sangallo. Codice Vaticano Barberiniano Latino 4424* (Leipzig: Harrassowitz, 1910), pp. 19–20; Ashby, 'Addenda'; Schmidt, *Kopien*, pp. 44–5.
- 52 Schmidt, *Kopien*, p. 44–5.

- 53 London, Sir John Soane's Museum, Codex Coner, fol. 88v, captioned 'non lunge a S. Baxilio'. Ashby discusses the differences and similarities between this head and those in the Barberini Codex and the Codex Destailleur in T. Ashby, 'Sixteenth-Century Drawings of Roman Buildings Attributed to Andreas Coner', *Papers of the British School at Rome*, 2 (1904), 58–9, 87–8; see also Schmidt, *Kopien*, pp. 44–5; Ashby, 'Addenda'. It is not known which figure Guillaume Philandrier was referring to when he described having seen a 'statue' of a Caryatid wearing a Doric capital in the Macel de' Corvi in Rome, that is, in a spot near Santa Maria di Loreto where the Vittorio Emanuele monument now stands (see note 58). Pauwels takes this to be a reference to the Caryatid head in the Forum of Augustus (Pauwels, *L'Architecture*).
- 54 Florence, Uffizi, Gabinetto dei disegni e delle stampe A 2050v. The caption is corrected by another hand to 'cariatides'. Viscogliosi, *I fori imperiali*, p. 144, no. 21.
- 55 The sheet is made up of a page from the so-called 'libro piccolo' sketched by Giuliano in the 1480s and 1490s, with strips of parchment added at the margins to increase the size of the 'libro piccolo' and incorporate it in a larger codex. The Caryatid head is drawn on top of these strips.
- 56 See Waters, 'Renaissance without Order' on the close relationship between modelbook pages of ornamental architectural fragments and single-sheet architectural prints.
- 57 Cesariano shows his readers how to use Caryatid column capitals, 'et perche si possano sapere formare non solum queste muliebre statue ma etiam le Columne con li Capitelli et spire seu base signate, como vederai in la subsequente dimonstrazione. La Dorica signata .R. et la Ionica .L.'. He illustrates what appears to be an adaptation of a Caryatid head from the Forum of Augustus as a capital set on top of a fluted column in figures H and L, C. Cesariano, *Di Lucio Vitruvio Pollione de architectura libri dece* (Como: G. da Ponte, 1521), fols 5v.
- 58 Philandrier, followed by Ryff, thought the Doric was used to concentrate the architectural weight on their heads, 'Caryatidum idest statuarum muliebrum in columnis, meminit Pli. Lib. Xxxv. Cap. V. [...] Eiusmodi statuarum foemineam vidimus Romae, in Macello Corvorum. [...] Certe ei quam vidisse retulimus, capitulum erat Doricum, ut capite tantum sustineret', G. Philandrier, *Gulielmi Philandri Castilionii Galli Civis Ro. in Decem Libros M. Vitruvii Pollionis de architectura Annotationes* (Rome: Dossena, 1544), fols 3v–4r; 'Dann die obgemelte Seulen des weibsbildt, so wir als gesagt, zu Rom gesehen, hat ein Dorisch Capiteel, also das sie den last allein mit dem haupt tregt', W. H. Ryff, *Vitruvius Teutsch* (Nuremberg: Petreius, 1548), fol. 13v.
- 59 Raphael was known, after his death at least, as someone critical of Vitruvius; this is seen in the famous line 'me ne porge una gran luce Vitruvio, ma non tanto che basti', in what is known as the 'Signor Conte' letter, which John Shearman has convincingly identified as a literary invention by Baldassare Castiglione in the voice of Raphael (Shearman, *Raphael*, vol. 1, p. 735). See also Celio Calcagnini's letter to Jacob Ziegler, 'I pass over Vitruvius, whom [Raphael] not only expounds, but with the surest arguments either defends or rebukes, but so charmingly that no ill-will attaches to the rebuke' (translation and discussion in Shearman, *Raphael*, vol. 1, p. 548).
- 60 For more recent discussions regarding the arrangement of Dacians in the Forum see L. Ungaro, 'I Daci dal Foro di Traiano', in M. De Nuccio and L. Ungaro (eds), *I marmi colorati della Roma imperiale* (Venice: Marsilio, 2002), pp. 129–33, with previous bibliography.
- 61 See *ibid.* and L. De Lachenal, *Fortuna dei prigionieri Daci a Roma. Documentazione per la storia del tipo dal XVI al XIX secolo* (Rome: De Luca, 1987). Dacos, 'Jean Goujon', pp. 302–5, identified the model for Raimondi's print as the Dacians at Palazzo Colonna, while Büttner believed the Conservatori group was the model (Büttner, 'Karyatiden', p. 90).
- 62 K. W. Christian, *Empire Without End. Antiquities Collections in Renaissance Rome, c.1350–1527* (New Haven, CT: Yale University Press, 2010), pp. 50–2 and 313–15, with previous literature.
- 63 Pollali challenges Rowland's idea that Raphael was interested in a 'systematic understanding' of the Doric, Ionic, Corinthian and Tuscan (Rowland, 'Raphael', p. 89). Calvo, she points out, did not understand Vitruvius's word for 'module': A. Pollali, 'Classical Mistranslations: the Absence of a Modular System in Calvo's *De Architectura*', in J. Burke (ed.), *Rethinking the High Renaissance. The Culture of the Visual Arts in Early Sixteenth-Century Rome* (Farnham and Burlington, VT: Ashgate, 2012), pp. 177–93. It is notable that Raphael does not discuss the orders in his description of Villa Madama, as Frommel observed ('Raffaello', p. 124).
- 64 Nesselrath, *Zeichner*, p. 93.
- 65 See, for example, C. Thoenes and H. Günther, 'Gli ordini architettonici: rinascita o invenzione?' in M. Fagiolo (ed.), *Roma e l'antico nell'arte e nella cultura del Cinquecento* (Rome: Istituto dell'Enciclopedia italiana), pp. 261–310; P. N. Pagliara, 'Studi e practica vitruviana di Antonio da Sangallo il Giovane e di suo fratello Giovanni Battista', in J. Guillaume (ed.), *Les traités d'architecture de la Renaissance* (Paris: Picard, 1988), p. 182.
- 66 See discussion in Burns, 'Raffaello', pp. 394–6; Frommel, 'Raffaello', p. 129; Denker-Nesselrath, *Säulenordnungen*, p. 116; Frommel discusses Bramante's possible plans for St Peter's, which might have favoured Doric on the exterior to honour St Peter and Corinthian on the interior to honour the Madonna (dedicatee of the Choir of new St Peter's).
- 67 Antonio Da Sangallo the Younger is revealing in his description of what he thought were Vitruvius's motivations for writing a treatise, 'fecie questo libro [Vitruvio] per fare conoscersi sé essere valente omo, e quelli altri maestri farli conoscere bene ignioranti come erano', quoted in Pagliara, 'Studi e practica', p. 179. The statement appears in Sangallo's planned preface of a translation of Vitruvius.
- 68 The problem is already acknowledged in Sulpizio's *editio princeps*, which lacks illustrations but leaves wide margins, with instructions to readers to add sketches and annotations; the copy owned and lavishly illustrated by Giovanni Battista da Sangallo was used in this manner; see I. Rowland (ed.), *Vitruvius. Ten Books on Architecture. The Corsini Incunabulum with the Annotations and Autograph Drawings of Giovanni Battista da Sangallo* (Rome: Edizioni dell'Elefante, 2003).
- 69 P. Barocchi (ed.), *Scritti d'arte del Cinquecento*, 3 vols (Milan and Naples: Riccardo Ricciardi, 1971–7), vol. 3, pp. 3028–31; Pagliara, 'Studi e practica', p. 184.
- 70 See Pagliara, 'Studi e practica'; C. L. Frommel, 'Introduction. The Drawings of Antonio da Sangallo the Younger: History, Evolution, Method, Function', in C. L. Frommel and N. Adams (eds), *The Architectural Drawings of Antonio da Sangallo the Younger and his Circle. Vol. 1. Fortifications, Machines, and Festival Architecture* (New York: The Architectural History Foundation and Cambridge, MA: MIT Press, 1994), pp. 1–60; Rowland (ed.) *Vitruvius*; Campbell and Nesselrath, 'Codex Stoschi'. Baldassare Peruzzi also, it seems, began work on an illustrated commentary on Vitruvius: H. Burns, 'Baldassare Peruzzi and Sixteenth-Century Architectural Theory', in Guillaume (ed.), *Les traités d'architecture*, pp. 207–18.
- 71 Pauwels, *L'Architecture*, pp. 159–60; see also Dacos, 'Jean Goujon'.
- 72 Ryff, *Vitruvius*, fols 14v, 16r and 18v, H. Röttinger, *Die Holzschnitte zur Architektur und zum Vitruvius teutsch des Walther Rivius* (Strassburg: Heitz, 1914), p. 30. Discussed in Becatti, 'Raffaello', p. 519; Pauwels, *Architecture*, p. 163; M. Gnehm, 'Cum auctoritate et ratione decoris. Bildinterpretationen in den Vitruvkommentaren W. H. Ryffs', in F. Büttner and G. Wimböck (eds), *Das Bild als Autorität: die normierende Kraft des Bildes* (Münster: LIT Verlag, 2004), pp. 129–56.
- 73 See remarks in G. Scaglia, *Il 'Vitruvio magliabechiano' di Francesco di Giorgio Martini* (Florence: Edizioni Gonnelli, 1985), pp. 65–8; Payne, *Architectural Treatise*, pp. 28–31.
- 74 Presumably some of this material was handed down via Baldassare Peruzzi, who was Serlio's master. See Günther, *Studium*, p. 61; Nesselrath, *Zeichner*, pp. 158–9.
- 75 H. Zerner, 'Du mot à l'image: le rôle de la gravure sur cuivre', in Guillaume (ed.), *Les traités d'architecture*, pp. 281–94.
- 76 R. Recht, 'Codage et fonction des illustrations: l'exemple de l'édition de Vitruve de 1521', in Guillaume (ed.), *Les traités d'architecture*, p. 62.
- 77 F. Lemerlé, 'La complexité de l'entreprise éditoriale à la Renaissance: le cas du *De architectura* de Vitruve', in M. Furno (ed.), *Qui écrit? Figures de l'auteur et des co-élaborateurs du texte. XVe–XVIIIe siècle* (Lyon: ENS éditions/Institut d'histoire du livre, 2009), pp. 151–9.
- 78 *De re aedificatoria* IX.1, translation from J. Rykwert, N. Leach and R. Tavernor, *On the Art of Building in Ten Books* (Cambridge, MA: MIT Press, 1988), p. 293.
- 79 See K. Christian, 'Architecture and Antique Sculpture in Early Modern Rome', in A. Payne (ed.), *The Blackwell Companion to Early Modern Architecture* (Oxford: Blackwell, 2016), pp. 73–104.
- 80 M. Fagiolo and M. L. Madonna, 'Il Possesso di Leone X. Il trionfo delle prospettive', in M. Fagiolo (ed.), *La festa a Roma dal Rinascimento al 1870*, 2 vols (Turin: Umberto Allemandi, 1997), vol. 1, p. 48.