Two Drawings by Michelangelo of an Early Design for the Palazzo dei Conservatori

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We do not know precisely when Michelangelo received the commission for the redesign of the Capitoline Hill in Rome, and the project's design chronology is vague.[1] Furthermore, only three surviving drawings have been associated with the facades of the Campidoglio palazzi, despite the scale and complexity of the project and Michelangelo's involvement in it for almost thirty years.[2] One of these sheets, Ashmolean Museum Parker 332 verso, includes a partial plan of a palace, which was first tentatively associated with the Palazzo dei Conservatori by Charles de Tolnay (Figure 1).[3] Guglielmo De Angelis d'Ossat first identified the drawing on the recto side of the sheet as a study for both the niche on the Palazzo dei Conservatori staircase and the door to the archive room on the *piano nobile* (Figure 2).[4] Significantly, the recto side of the sheet also includes a scaled elevation study that is obscured by but directly related to the superimposed plan on the sheet (see Figure 1).[5] Michelangelo's ruled guidelines and freehand scale provide compelling proof that securely links the elevation study, the plan, and other subjects on this sheet to the Palazzo dei Conservatori.

The second sheet examined here, Casa Buonarroti 42A, is not normally associated with the Campidoglio. The primary subject on the sheet is a partial freehand elevation, which scholars have identified as an early design for the reading room of the Laurentian Library.[6] It has also been associated with an early scheme for the library on an alternate site, which would have included a facade facing Piazza San Lorenzo.[7] In this article, I argue that Casa Buonarroti 42A relates not to the Laurentian Library but to the Palazzo dei Conservatori and is a sketched, freehand version of the studies on Parker 332 verso (Figure 3).[8]

The Campidoglio in the 1530s and Michelangelo's Commission

The official visit of Emperor Charles V to Rome as guest of Pope Paul III on 1 April 1536 instigated discussions about the rehabilitation of the Campidoglio. The Commune began drafting plans on 10 December 1535 for the visit, which included improvements to the urban fabric along the planned processional route, the decoration of the entry gate, and the construction of a triumphal arch in honor of the emperor's recent military victories.[9] The Campidoglio was to be an important destination on the sovereign's tour, and the city intended to decorate it and improve access to the hill with the construction of a new ramp: "ornare la piazza del Campidoglio con prospettive et altre cose neccessarie insieme con la sallita et scesa di essa piazza."[10] It is likely that Paul III envisioned a far more ambitious and monumental project, one that would inextricably link him to the Capitoline Hill. But no improvements were carried out, and the imperial retinue was forced to bypass the hill, probably because of the difficulty of its muddy ascent and the dilapidated condition of the piazza and buildings. There is no hard evidence that explains the cancellation of the project.[11] Perhaps nothing was done simply because there was insufficient time before the emperor's visit.

Further evidence of Paul III's intense personal interest in the site was his initiation of another building project on the hill in 1536. It consisted of a small papal villa, built adjacent to the northeast side of the Church of Santa Maria in Aracoeli on the northeastern peak of the hill. The project included a monumental covered passageway raised high above the streets by huge masonry piers connecting the retreat to the Palazzo Venezia at the foot of the hill to the north, which the Pope also used as a summer residence. The presence of the papal retreat at the Aracoeli, which looked down on the Piazza del Campidoglio, was a tangible sign of the political domination of the papacy over the Commune. If Paul III was envisioning a more comprehensive Campidoglio project at this time, as seems likely, he must also have been considering an architect to carry out his ambitious plans. An obvious choice would have been Antonio da Sangallo the Younger, the official papal architect, but he was preoccupied with the design and construction of the pope's own Palazzo Farnese and St. Peter's Basilica. The next obvious choice was Michelangelo; on 1 September 1535, after commissioning the *Last Judgment*, the pope granted him the unprecedented title of Chief Architect, Sculptor, and Painter to the Vatican Palace.[13] Although no direct evidence exists, it is probable that Paul III was considering a renovation of the Campidoglio as early as 1535 and Michelangelo's potential involvement as architect.

The first official record of the project dates from a meeting on 22 September 1537, when the Conservatori drafted a decree to renovate the Palazzo dei Conservatori. They appointed a three-man committee to oversee the project; all the members were well versed in issues of architecture and urban planning, and one was a member of the Massimi family, who had recently commissioned Baldasare Peruzzi to design the Palazzo Massimo alle Colonne. A fourth member who later joined the committee was Paul III's "maestro di Strada," Latino Manetti.[14] In October 1537, the Conservatori appointed a supervisor for the project, but apparently nothing further came of it due to a lack of funds and political problems.[15] Although the document does not mention Michelangelo, other evidence suggests that he was already involved in the project. In the fall of 1537, Paul III proposed moving the statue of Marcus Aurelius from the Lateran to the Campidoglio, a suggestion to which the Lateran Council objected, both then and again a few months later, but to no avail. Giovanni Maria della Porta mentioned the proposal to move the statue in a letter to Maria della Rovere, the ambassador of the Duke of Urbino. According to this letter, Michelangelo objected to the proposal, "since it seemed to him to be better where it was, and if he had not strongly dissuaded the Pope, his Holiness would also have taken the two horses and statues from Monte Cavallo" (the ancient marble sculptures of Castor and Pollux, which are still on the Quirinale Hill today). The same letter also mentions the design of a new base for the Marcus Aurelius, and although the letter does not directly identify Michelangelo as its designer, we know it is indeed his work.[16] Thus, it is clear that by the fall of 1537 Michelangelo was in direct consultation with the pope about the Campidoglio project, and despite his opposition to the relocation of the Marcus Aurelius to the Capitol, he designed and realized the new base for it shortly thereafter. It seems unlikely that it suddenly occurred to Paul III to move the Marcus Aurelius to the Campidoglio. Indeed, the wording of the Urbino letter with regard to the design of the statue base suggests that the relocation of the Marcus Aurelius was but one component of a larger discussion and project for the Campidoglio, and that Michelangelo was already involved.

Therefore, it is possible that Michelangelo received the commission for the Campidoglio by September 1537, and perhaps as early as the winter of 1536, when plans were underway for the visit of Charles II. In a ceremony on 10 December 1537, Michelangelo was granted Roman citizenship on the Capitoline Hill, and one month later, the statue of Marcus Aurelius was moved to a newly leveled Piazza del Campidoglio. In March 1539 the statue assumed its present position. This suggests that Michelangelo had finalized at least a conceptual design for the entire complex by that time.[17] Undoubtedly, the timing of the Commune's decision to grant Michelangelo citizenship was prompted by his involvement in the Capitoline project.[18]

It is significant that the Conservatori document of September 1537, recording the decision to carry out renovations, refers to the "palazzo" in the singular, which suggests Michelangelo's commission initially involved only the quattrocento Palazzo dei Conservatori. The sketches on the sheets Parker 332 verso and Casa Buonarroti 42A probably record Michelangelo's initial ideas for the project. The evidence suggests Michelangelo did these sketches after the September 1537 Conservatori document but before devising the master plan for the entire piazza and three palaces, which he must have done by March 1539 in order to place the Marcus Aurelius. The conceptual ideas reflected in these sketches and their relationship to the preexisting fabric of the quattrocento Palazzo dei Conservatori are unclear without an understanding of the history and the form of the building before Michelangelo's commission.

The Quattrocento Palazzo dei Conservatori

Almost a century before Michelangelo's project, Pope Nicholas V (1447–55) made significant changes to the fab-

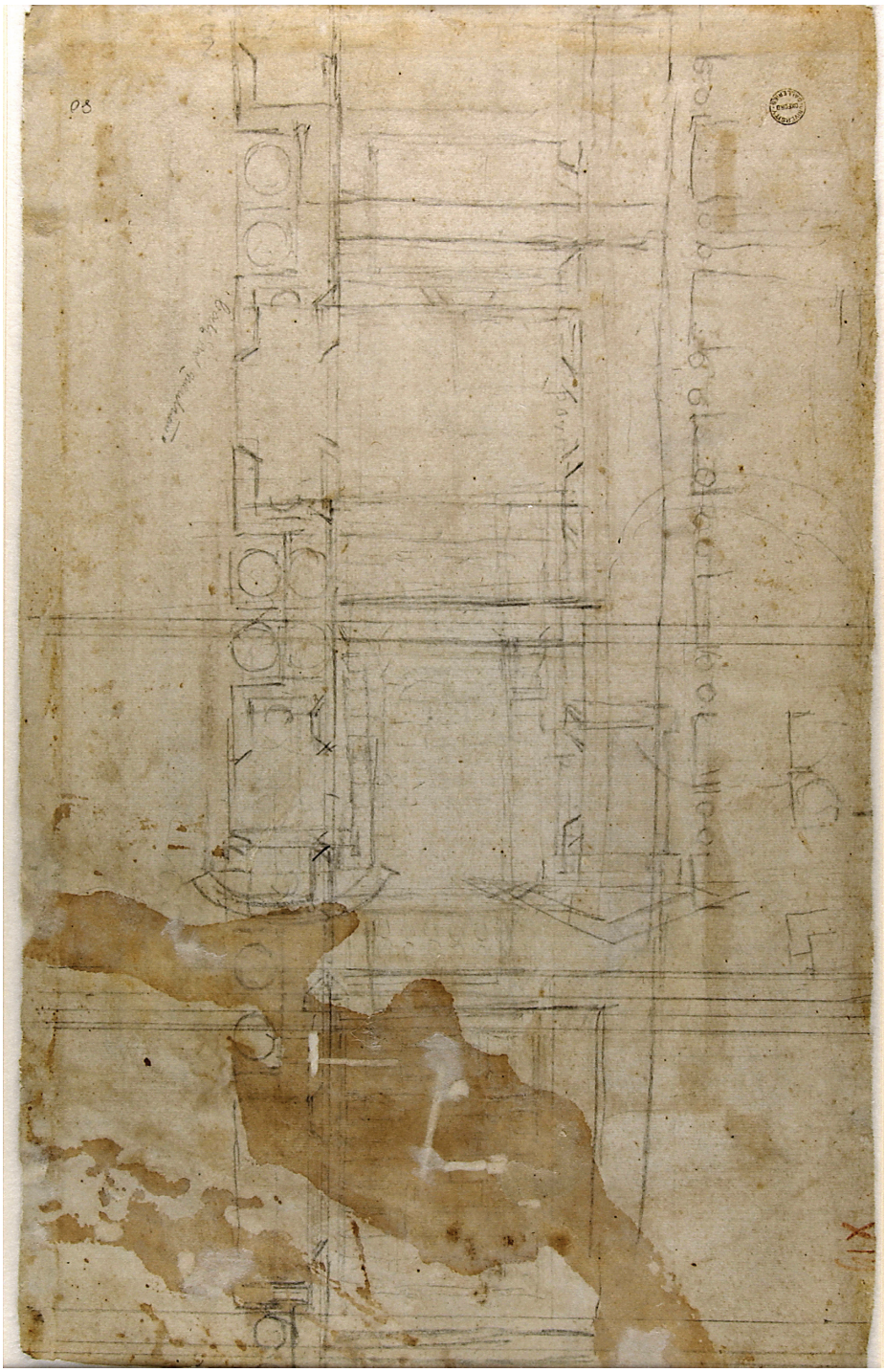


Figure 1 Michelangelo, Parker 332 verso, ca. 1537, partial plan and partial elevation studies for the Palazzo dei Conservatori, red and black chalk

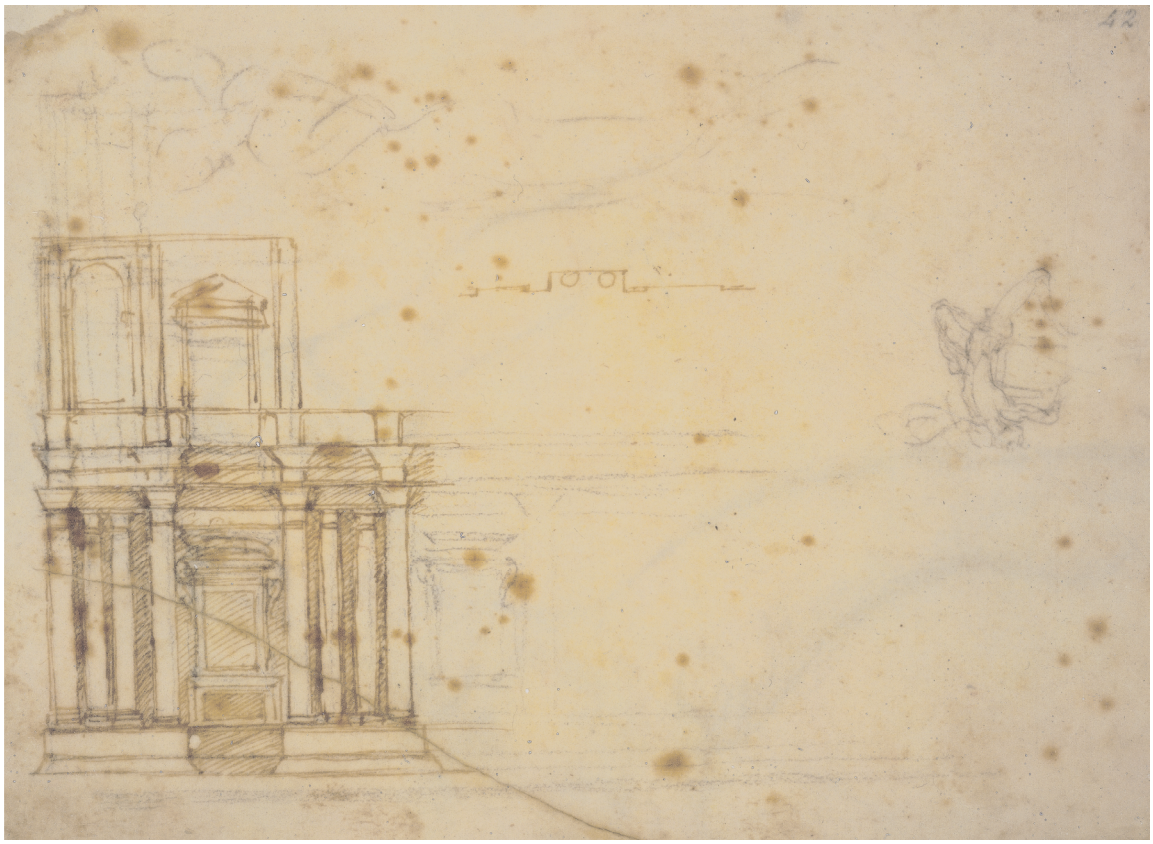
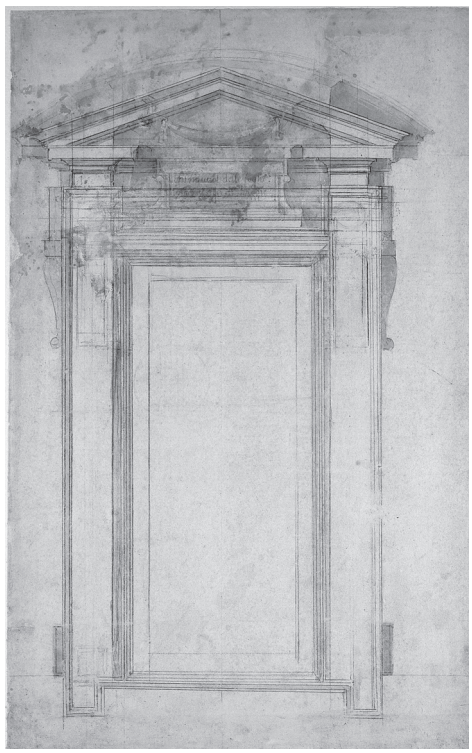


Figure 2 Michelangelo, Casa Buonarroti 42A, ca. 1537, facade sketch of Palazzo dei Conservatori, with plan detail of paired recessed columns framed by pilasters (center), black chalk and brown ink

Figure 3 Michelangelo, Parker 332 recto, ca. early 1560s, study for the portal to the archive room and the niche on the landing of the Palazzo dei Conservatori staircase, chalk and wash



ric of the Campidoglio.[19] These included major alterations to the Palazzo Senatorio and the rebuilding of the Palazzo de' Banderesi as the Palazzo dei Conservatori. The Palazzo de' Banderesi, built in the late fourteenth century, originally housed the Captains of the City Militia, the Banderi, who were keepers of the banners of the several *rione* of Rome. During the Pontificate of Innocent VII (1404–17), the functions the building housed were expanded to include offices for magistrates and mercantile offices for the various guilds of Rome.[20]

The quattrocento Palazzo dei Conservatori was a simple three-story courtyard palace that followed the typology of late medieval/early Renaissance Italian civic palaces. It was built to serve two primary functions: on the *piano nobile* it provided large ceremonial meeting rooms and a library for the conservators and the chief magistrates of Rome, while the ground floor contained mercantile regulatory

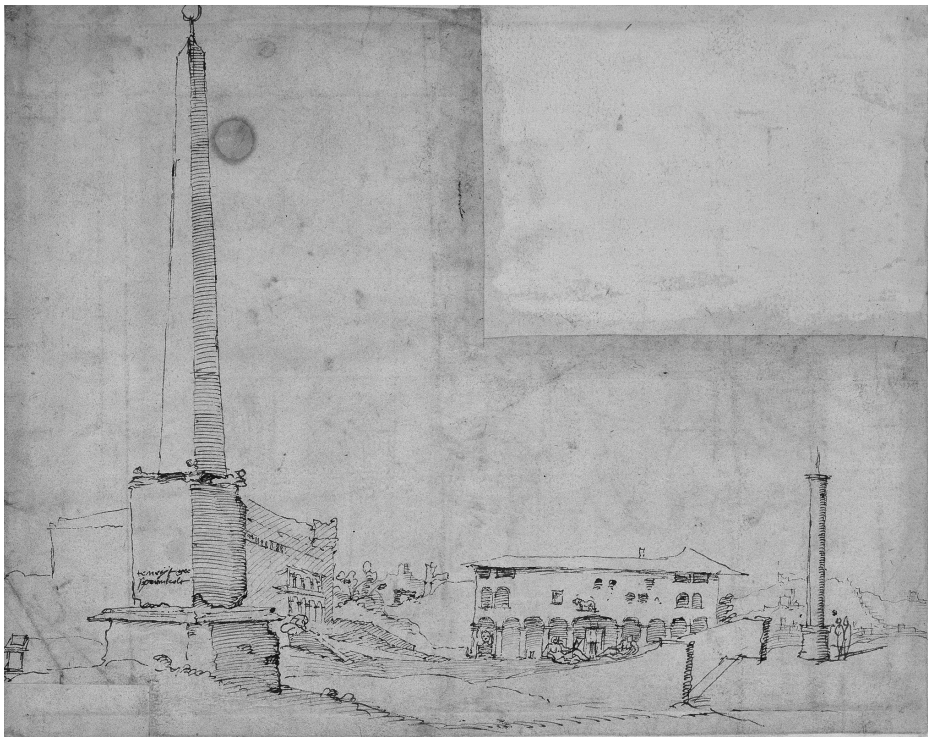


Figure 4 Maartin van Heemskerck, sketch of Piazza del Campidoglio, ca. 1535

offices for the various guilds of the city.[21] It was built northwest of the Palazzo Senatorio, with its principal facade facing northeast toward the thirteenth-century Church of the Aracoeli on the Arx, the northeastern summit of the Capitoline Hill. The pope's architects did not build the new palace at a right angle to the Palazzo Senatorio as might be expected, but at an acute 81-degree angle. This odd angle, which may have been due to the orientation of the Palazzo de' Banderesi—it was probably built on the foundation of an ancient structure—would have important implications for Michelangelo's eventual design.[22]

In the mid- to late quattrocento, as the reforms of Nicholas V and Sixtus IV eroded the political autonomy of the city, the Capitoline was slowly transformed from the true seat of the municipal government to what was primarily a scenographic stage set and civic museum celebrating the glory of Rome's past. During this period, the site became a repository for numerous ancient sculptures, potent symbols of ancient Roman virtue and triumph donated by various popes.[23] Although their symbolic importance grew in the late quattrocento and early cinquecento, the buildings and piazza were all but neglected.

There are few surviving images of the quattrocento Palazzo dei Conservatori, and most show its dilapidated state in the 1530s and 1540s, just prior to Michelangelo's involvement or shortly after construction of his project commenced. Some of these images provide an invaluable record of the construction of the project. Scholars have not adequately analyzed or discussed these depictions despite the wealth of visual information they contain.[24] The images include a sketch from the mid-1530s by the Dutch artist Maarten van Heemskerck, Römische Skizzenbucher, II, fol. 72r, which illustrates the piazza from the steps in front of the west transept of Santa Maria in Aracoeli looking toward the Palazzo Senatorio and Palazzo dei Conservatori (Figure 4). The sketch shows a ten-bay loggia on the ground floor of the Palazzo dei Conservatori. The Nile and Tigris river gods that Pope Leo X had moved to the Capitoline flank the asymmetrically placed main entrance, which appears to be on axis with a column. One can see the bronze statues that Sixtus IV had moved to the Capitoline in 1471, including the famous bronze she-wolf, the Lupa Capitolina, over the entry arch and the giant bronze bust of Constantine located in the southern most bay of the loggia.[25] Another important image of the piazza is the anonymous engraved view of the Capitoline, datable to about 1544 and published by Hieronymous Cock in the *Operum Antiquorum Romanorum Reliquiae* (Figure 5). Though full of proportional distortion and obvious inaccuracies, it provides a view of Michelangelo's design for the stair of the Palazzo

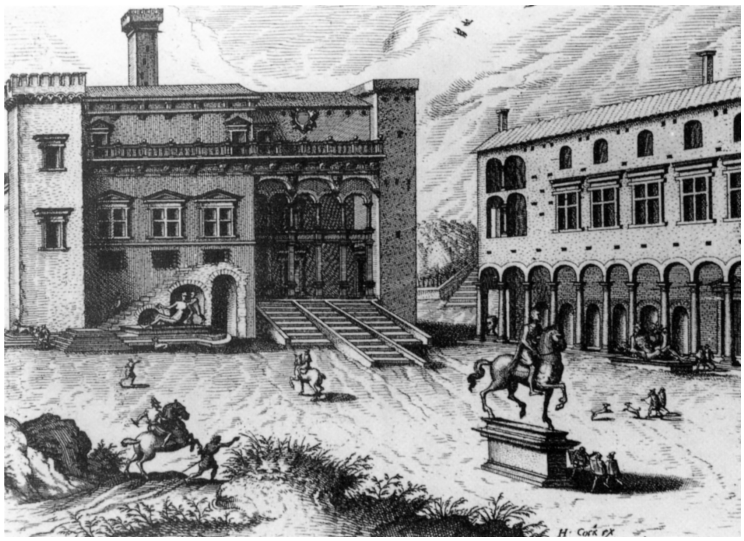


Figure 5 Anonymous, engraved view of the Campidoglio, ca. 1544, published by Hieronymous Cock, *Operum Antiquorum Romanorum Reliquiae* (1562)

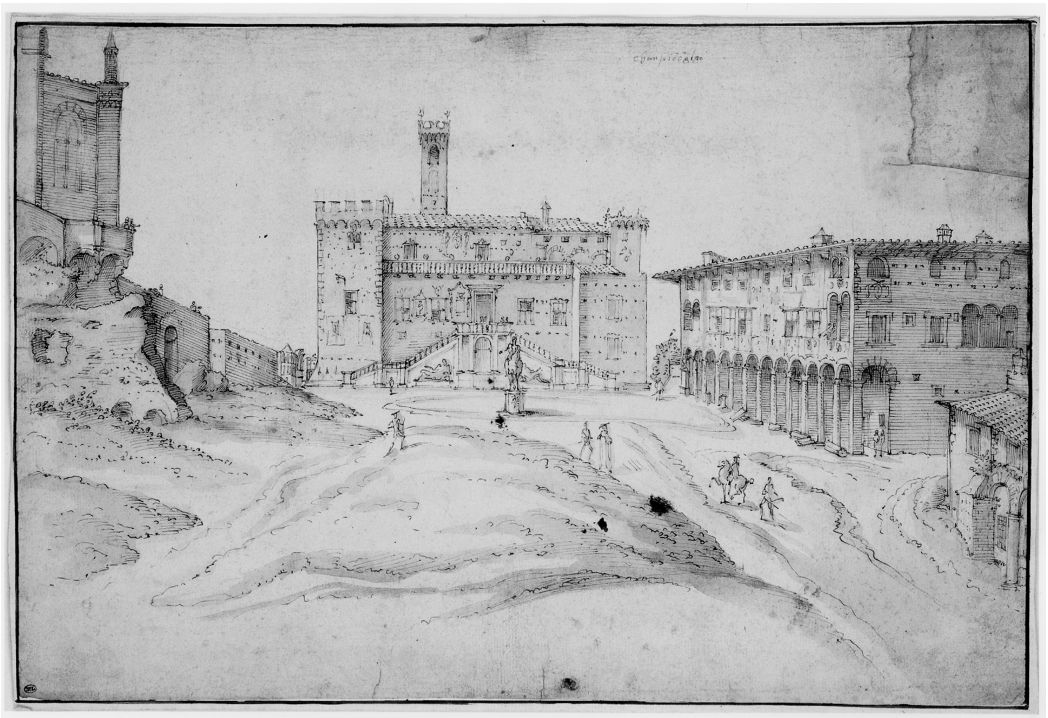


Figure 6 Anonymous, Louvre Inv. 11028, view of the Capitoline Hill, ca. 1555

Senatorio under construction as well as a raking view of the Palazzo dei Conservatori. An anonymous sketch in the Louvre provides a view of the Capitoline Hill complex under construction in the mid-1550s (Figure 6). The Louvre drawing depicts the entire piazza, including the Palazzo Senatorio with Michelangelo's completed stair and the fifteenth-century Palazzo dei Conservatori before Michelangelo's work had commenced. Another image is a fresco that can be seen today in the palazzo itself, which depicts the Palazzo dei Conservatori from across the piazza.[26]

The old facade was very simple: the ground-floor loggia featured round arches carried on square piers at the ends of the facade and Ionic columns in the intermediate bays. The *piano nobile* consisted of six irregularly spaced, rectangular square-crossed windows (similar in form to the quattrocento windows of the nearby Palazzo Venezia) that were flanked by two-bay loggias at the extreme ends of the façade. The low attic story consisted of simple rectangular windows under the projecting wood brackets and eaves of the hipped roof.[27]

Figure 7 Computer model reconstruction of Michelangelo's proposed Campidoglio design, based on the 1568–69 engravings of Etienne Dupérac

Discrepancies in images of the quattrocento palazzo make it difficult to determine aspects of its form. For example, the number of bays across the facade ranges from ten in Van Heemskerck's sketch to sixteen bays in the palazzo fresco. The most reliable image of the group is probably the anonymous Louvre drawing; the perspective construction is accurate, and architectural forms such as the Palazzo Senatorio façade and staircase closely resemble what exists on the hill today (Figure 7; see Figure 6). The drawing illustrates a twelve-bay loggia across the front of the Palazzo dei Conservatori. An even number of bays is rather unusual for an early Renaissance loggia. However, the façade is depicted at a very acute angle with the bays tightly compressed in deep perspective, so the artist may have simply missed one bay. The palace may indeed have had a thirteen-bay loggia.[28] If we consider the accuracy of the drawing in other regards and accept the artist's depiction of a twelve-bay loggia, the 52-meter length of the facade and the 7.3-meter ground floor-to-floor height produces typical bays that are approximately 1 to 1 in proportion below the springing of the arches, which is fairly typical for an early Renaissance palace.[29] Any number of bays less than twelve produces arches of greater width and height, which would result in unusually stout columns and wide bays. The reconstruction drawing presented here depicts the likely appearance of the old Palazzo dei Conservatori with a twelve-bay loggia (Figure 8). It is the product of comparative analyses of all available sources, following the principal plan dimensions and floor-to-floor heights of the existing Palazzo dei Conservatori (Figure 9).

The plan of the quattrocento Palazzo dei Conservatori consisted of a simple block with a *cortile*, open to the southwest above the level of the ground floor. A single range of small rooms used as guild offices were located behind the loggia of the main façade. However, unlike Michelangelo's final design, the images of the quattrocento palazzo suggest there were no doors accessing each of the six guild offices from the loggia. Rather, only two entrances from the loggia are visible. The main entrance, which connected through an *androne* to the *cortile*, appears to have been located off center, perhaps in the eighth bay from the left or between the seventh and eighth bay, and may have been on axis with a column (see Figures 8, 9).[30] One can see the second entrance to the palazzo in the second bay from the left in the fresco in the Palazzo dei Conservatori.[31] The Hieronymous Cock engraving also suggests there was a series of sculpture niches in the south side of the loggia (see Figure 5).

The *cortile* of the old palazzo featured a large exterior stair against its southeast side that led in a single flight to the *piano nobile*, which was fairly typical of medieval and early Renaissance palazzi. The northwest side had a loggia with pointed arches carried on stout Ionic columns, fragments of which one can still see today.[32] Their lack of congruity with the semicircular arches of the exterior facade suggests these fragments are a remnant of the medieval Palazzo dei Banderesi, which would have been demolished had the *cortile* been finished according to Michelangelo's design.[33]

The *piano nobile* of the front wing of the palace consisted of two principal ceremonial spaces: a large room with

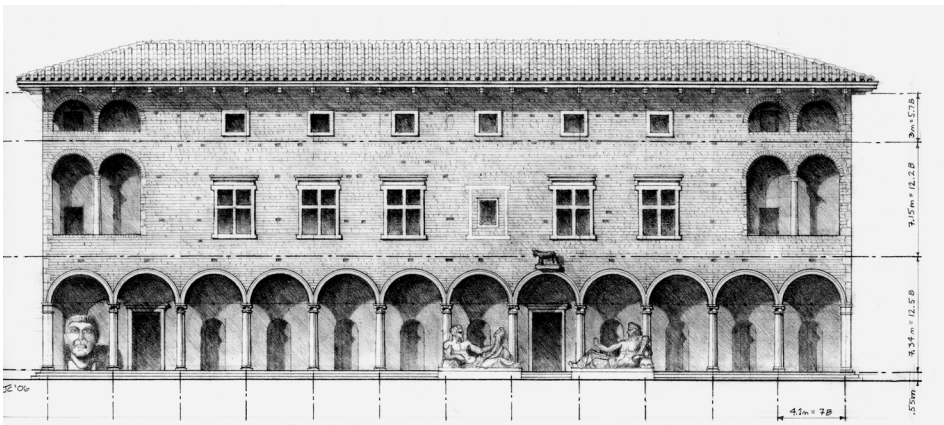


Figure 8 Palazzo dei Conservatori facade, ca. 1530

Figure 9 Computer model reconstruction of Michelangelo's proposed Palazzo dei Conservatori design, based on the 1568–69 engravings of Dupérac

four windows, known today as the Sala degli Orazi e Curazi, and an adjacent smaller room with two windows, the Sala dei Capitani. To either side of these rooms were located the two-bay loggias at either end of the façade that appear in most of the images of the quattrocento palazzo (see Figures 4–6).[34] The first floor and the wings on the north and south sides of the building housed offices for various guilds and magistrates. Although Michelangelo maintained the general location and function of these rooms, his final design has little in common with the quattrocento façade, with the exception of the 7.3-meter floor-to-floor height of the *piano terra* (see Figures 8, 9). This implies he demolished the entire front of the old building to a depth of about 4 meters to make way for the new façade. While Michelangelo maintained the floor-to-floor height of the *piano terra* of the old palazzo in his final design, he raised the ceiling height of the *piano nobile* above the front range of rooms, thus eliminating the attic level that can be seen in the various historic images. However, this attic level still exits behind the front rooms and in the south wing of the palazzo. There the *piano nobile* floor-to-floor height of the old palazzo is preserved, measuring 7.15 meters.

The new front wing of the palazzo was built in stages. As Frommel suggests, the depth of the new trabeated loggia was deep enough to allow the old arcaded loggia to remain standing while the new piers of the final scheme were constructed bay by bay, thus allowing the day-to-day functions of the palazzo to continue with minimum disruption for the duration of the reconstruction period.[35] However, scrutiny of the sketches on the Parker 332 verso sheet and comparison to the fifteenth-century fabric of the palazzo suggests that in this early scheme, Michelangelo initially intended to utilize as much of the fabric of the old palace façade as possible.

Parker 332 verso: An Early Scheme for the Palazzo dei Conservatori

Parker 332 verso, a very rough, stained, and damaged sheet, consists of at least five sketches of superimposed subjects, all of which are probably related to the Palazzo dei Conservatori (see Figure 1).[36] Michelangelo drew with red chalk in the initial studies, but in the process of developing his ideas, he switched to black chalk. Scrutiny of the original

sheet suggests he drew the most clearly legible of the drawings, the large-scale plan, after the other subjects.[37] This unusual plan illustrates a series of three complete bays and two partial bays that consist of small rooms behind a heavily articulated exterior façade. Tolnay linked this sketch to the Campidoglio simply because no other projects by Michelangelo incorporate spaces such as those depicted.

More recently, Andrew Morrogh has examined in considerable detail the sketches on both the verso and recto sides of the sheet and other related drawings.[38] Following De Angelis d'Ossat, he identifies the drawing on Parker 332 recto as a source for the design of both the niche on the landing of the main stair and the archive room portal on the *piano nobile* of the Palazzo dei Conservatori, which were built by Giacomo della Porta after Michelangelo's death in 1564 (see Figure 3). Morrogh dates both the verso and recto drawings to the early 1560s, primarily on the style of the recto niche drawing, noting the degree to which Michelangelo reworked the drawing, which was typical of his late period. However, despite the reworking, the draftsmanship is much more precise than other architectural drawings from that period, such as the Porta Pia drawing on Casa Buonarroti 106A recto.[39] Furthermore, one cannot date the plan on the verso on purely stylistic grounds, nor should it be dated based on the style of the drawing on the recto. In terms of drawing style, the verso plan and elevation are similar to several rapid studies carried out by Michelangelo in the 1520s for projects such as the Medici Chapel, the Laurentian Library, and the Florence fortifications, many of which are similarly rough.[40]

Another study by Michelangelo of a window or a niche survives on the sheet Parker 333 recto.[41] Similar in style and form to Parker 332 recto, it is traditionally linked to the Palazzo Farnese *piano superiore cortile* windows.[42] However, Morrogh argues that this drawing is an earlier study for the same niche as Parker 332 recto, which is found on the landing of the Palazzo dei Conservatori.[43] Like Parker 332 recto, the drawing is a palimpsest of superimposed ideas in a variety of media. What is probably the first layer, drawn roughly in black chalk, depicts a relatively simple aedicular window consisting of two Doric columns on pedestals carrying an entablature with *ressauts* over the columns, and a segmental pediment with a large oval form filling the center of its tympanum. Gregory Hedberg argues convincingly that this layer is actually an early study for the *piano nobile* windows of the Palazzo dei Conservatori, which Michelangelo subsequently reworked for the Palazzo Farnese windows.[44] Hugo Chapman, noting the lack of precision in the black chalk layer, argues Michelangelo drew it subsequently.[45] However, scrutiny of the original drawing suggests that the lines related to the Palazzo Farnese windows pass over the black chalk lines.

Morrogh does not mention the black chalk layer but notes the similarity of the Parker 332 recto niche drawing to the window, portal, or niche on Parker 333 recto. He dates the Parker 333 drawing to the 1560s, mainly because of rapid sketches on the verso depicting the attic and drum of St. Peter's and partial plan sketches of what might be San Giovanni dei Fiorentini.[46] However, he concedes that Michelangelo could have carried out the St. Peter's studies on the recto anytime from 1546 to 1561, while the drawings of San Giovanni must date from after 1559. Morrogh argues that the Parker 333 recto window/niche drawing, which has more complex forms than the Palazzo Farnese windows, does not predate the Palazzo Farnese windows, but rather that Michelangelo was "making use of ideas that had already been developed there."[47] This indeed may be the case, but one cannot ignore the black chalk layer and, in doing so, exclude the possibility that the black chalk drawing was a study for the Palazzo dei Conservatori windows—which Michelangelo subsequently reworked for the Palazzo Farnese windows, and later reworked again for the Palazzo dei Conservatori niche. Nonetheless, Morrogh's argument that the Parker 332 recto portal/niche drawing was the source for the Palazzo dei Conservatori staircase landing niche and the archive room door is thoroughly convincing, even if it cannot help in dating the plan and elevation studies on Parker 332 verso. Indeed, the very presence of this specific and detailed design drawing on the recto of the same sheet as the loose, conceptual plans and elevations suggests Michelangelo drew it long after. It is inconceivable that he would have designed such a site-specific and detailed architectonic element for the Palazzo dei Conservatori before he had worked out a conceptual design for the entire building. If one considers the many long pauses in the design and construction of the project, and Michelangelo's frugal habit of using every available blank source of paper, it supports the probability that he drew the portal/niche drawing on Parker 332 recto long after the plan/elevation studies on the verso.[48] More evidence for dating the Parker 332 verso studies is provided below.

The most obvious difference between the plans on Parker 332 verso, the quattrocento palazzo, and the final design for the Palazzo dei Conservatori is the lack of a loggia facing the piazza (see Figures 1, 8, 9). Apparently, in this scheme Michelangelo intended to fill in the old loggia with a series of small rooms. The exterior wall surface, which is to the left side of the plan, features paired columns set into rectangular recesses in the wall, with either windows or doors at the center of each walled bay. If they are doors, it

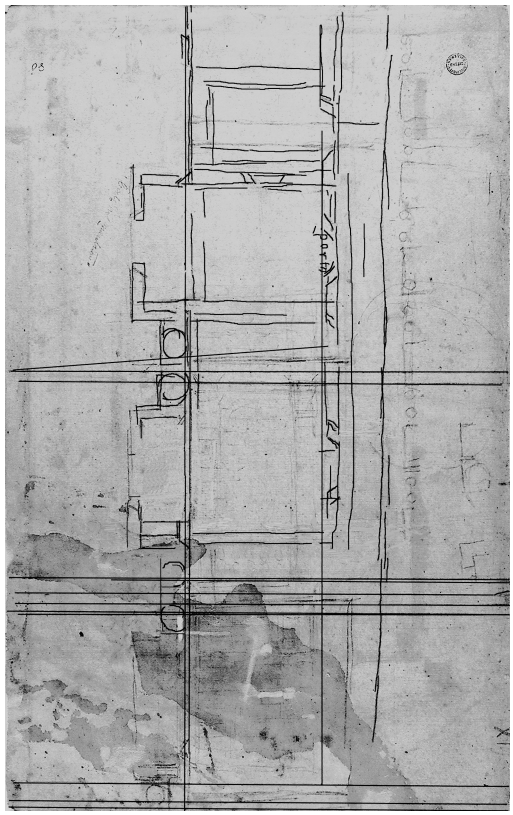


Figure 10 Michelangelo, Parker 332 verso, with lines associated with initial plan darkened; manipulations by James G. Cooper

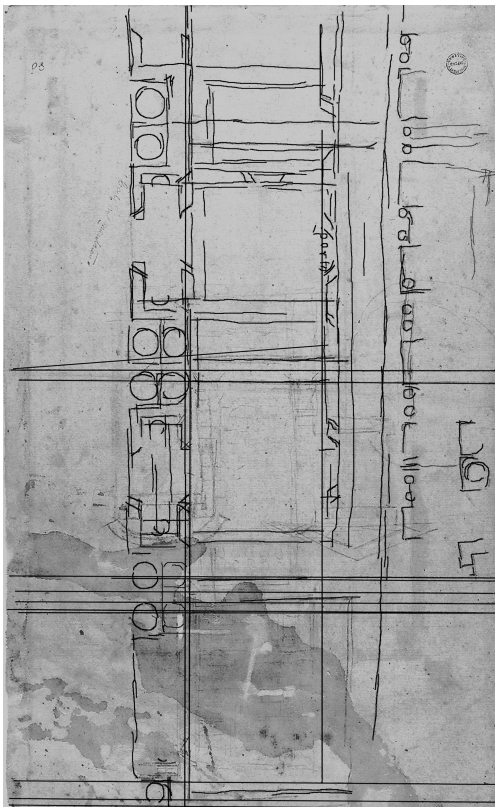


Figure 11 Michelangelo, Parker 332 verso, with lines associated with second plan and the diagrammatic plan darkened; manipulations by Cooper

is possible Michelangelo was planning for new individual entrances to guild offices directly from the piazza, as he did in the final design.[49] Scrutiny of the large plan shows that it consists of two layers. The initial, more tentative layer, drawn lightly in red chalk, includes two pairs of columns located along the left side of the sheet that are further recessed from the exterior wall than the subsequently drawn other pairs, as well as the exterior walls of the two bays immediately to either side (Figure 10). However, due to age and the fragility of Michelangelo's medium, one cannot see the second pair of columns on the original drawing today (see Figure 1). Close inspection of the facsimile of Parker 332 verso that was published by Tolnay indicates that Michelangelo drew this second pair of columns in line with and one bay below the pair that is clearly visible today (see Figure 10).[50] Michelangelo also drew in red chalk a series of what might be transverse walls, in line with the reentrant walls of the walled bays between the paired columns, extending to the right from the exterior wall to the interior wall of the old loggia. For the second version of this plan, Michelangelo switched to black chalk. He adjusted the location of the pairs of columns, placing them further to the left by the dimension of one column diameter, such that their leading edges are roughly coplanar with the walled bays to either side. He also redrew the walled bays with greater authority as well as the rest of the plan, which includes transverse walls extending back from the centerlines of the paired columns to the interior wall of the old loggia (Figure 11). The resulting small rooms would have presumably formed vestibules leading into the existing range of rooms behind the old loggia of the palazzo. Indeed, one can clearly see that Michelangelo has written "porta" on the rear wall of the second bay from the top of the sheet, which is probably the second of the two loggia entrances located in the second bay from the southeast end of the quattrocento palazzo (see Figures 1, 8).[51]

It is clear from the forms and articulation of the Parker 332 verso plan that Michelangelo's source for these early ideas was his own Laurentian Library *ricetto* in Florence, his most recent architectural project. Immediately recognizable

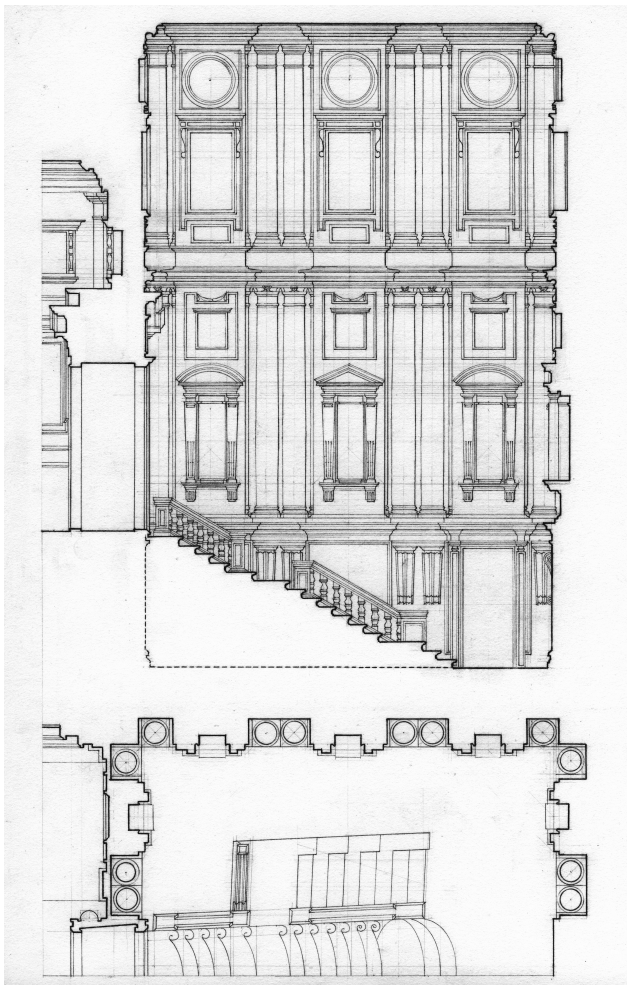


Figure 12 Michelangelo, Laurentian Library, Florence, mid-1520s, *ricetto* section/west interior elevation and partial plan as it appears today

are the pairs of columns set back into recesses between solid walled bays, with windows or doors in the place of the *ricetto*'s sculpture niches (Figure 12; see Figure 1). In many other projects, Michelangelo also initiated his design process by drawing from his previous projects as well as the work of others, which he then developed and transformed by rapidly working from drawing to drawing.[52]

Parker 332 verso includes a façade study that is difficult to see in facsimile because of its coincidence with the subsequently drawn partial plan.[53] It consists of a single bay elevation with two stories of approximately equal height and a low attic, sketched in red chalk. Analysis of the elevation sketch and its relationship to the plan helps confirm the identity of both as the Palazzo dei Conservatori. For the sake of clarity and analysis, the elevation is presented here with specific line-types darkened (Figure 13).[54] Michelangelo's first step in carrying out the drawing was to lay down a series of measured, ruled guidelines in black chalk, which provided a general proportional scheme.[55] We will see that these proportions appear to follow the dimensions of the existing building. Two sets of vertical lines delineate the width of the bay (labeled "L, R," on Figure 13). Across the bottom of the sheet, three ruled horizontal lines represent steps (labeled "1, 2, 3," on Figure 13).[56] Four closely spaced ruled horizontal lines, located approximately one-quarter the height of the sheet, delineate the architrave, frieze, and cornice of an entablature located at the top of the ground floor (labeled "4, 5, 6, 7," on Figure 13). Directly above the top line of the cornice one can see a balustrade, which suggests this line is the *piano nobile* floor level. Another cornice, at the top of the *piano nobile*, is suggested by two ruled horizontal lines, about half way up the sheet (labeled "7, 8, 9," on Figure 13). To the right of the left vertical ruled guideline ("Line L"), one can see a range of freehand horizontal lines approximately the same distance apart, drawn in red chalk. Most of these lines are short, extending across about one-quarter the width of the bay, while some lines, especially toward the bottom of the drawing, extend further to the right. At first glance, these lines appear as though they could represent rusticated masonry. However, the fact that they are drawn from the bottom of the elevation all the way to the top suggests they are instead a module, which Michelangelo drew freehand between the measured and ruled measured lines to better understand the scale and proportion of the forms he was considering.

A comparison of the built Palazzo dei Conservatori and the various dimensions and modules indicated on Parker 332 verso helps to confirm the identity of the subjects represented. For this purpose, a high resolution scan of the sheet was enlarged and digitally superimposed onto a 1-to-100 metric scale drawing of the built palace, as well as the 1-to-100 reconstruction drawing of the quattrocento façade presented earlier in this article (Figure 14; see Figure 8).[57] The Parker 332 verso elevation was enlarged such that the line representing the ground floor level on the sketch ("Line 3") is justified with the *piano terra* level of the existing palazzo, and the upper most line of the lower entablature on the sketch ("Line 7") is justified with the *piano nobile* floor level. With this degree of enlargement, the ruled line on the Parker sketch representing the attic floor level corresponds exactly to the attic floor level of the old palazzo. Although Michelangelo eliminated this attic above the front range of rooms in his final design, it still exists above the smaller rooms immediately behind and in the rear wings of the palazzo. The units of the vertical spacing of the free-

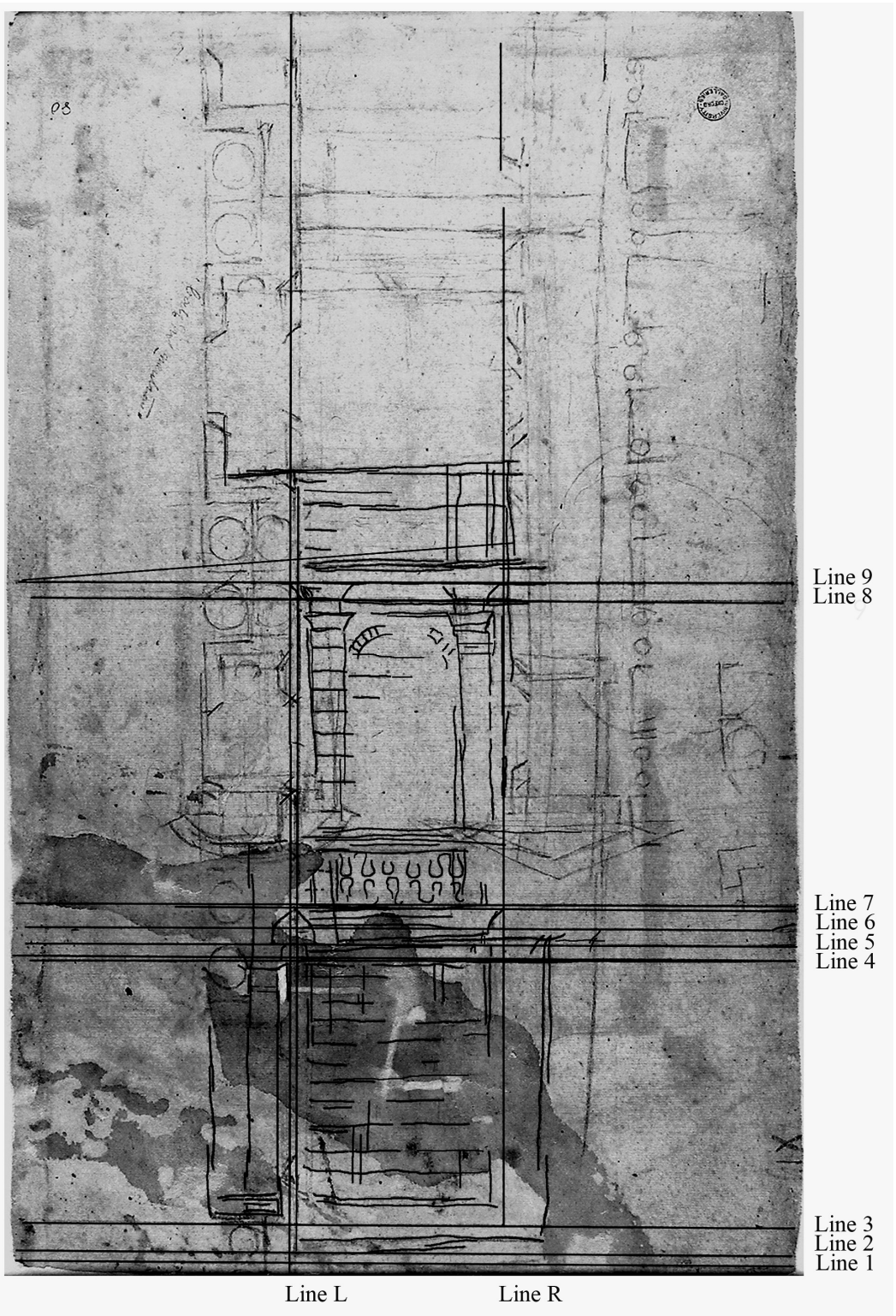


Figure 13 Michelangelo, Parker 332 verso, with numbered ruled lines, freehand scale lines, and elevation study lines darkened; manipulations by Cooper

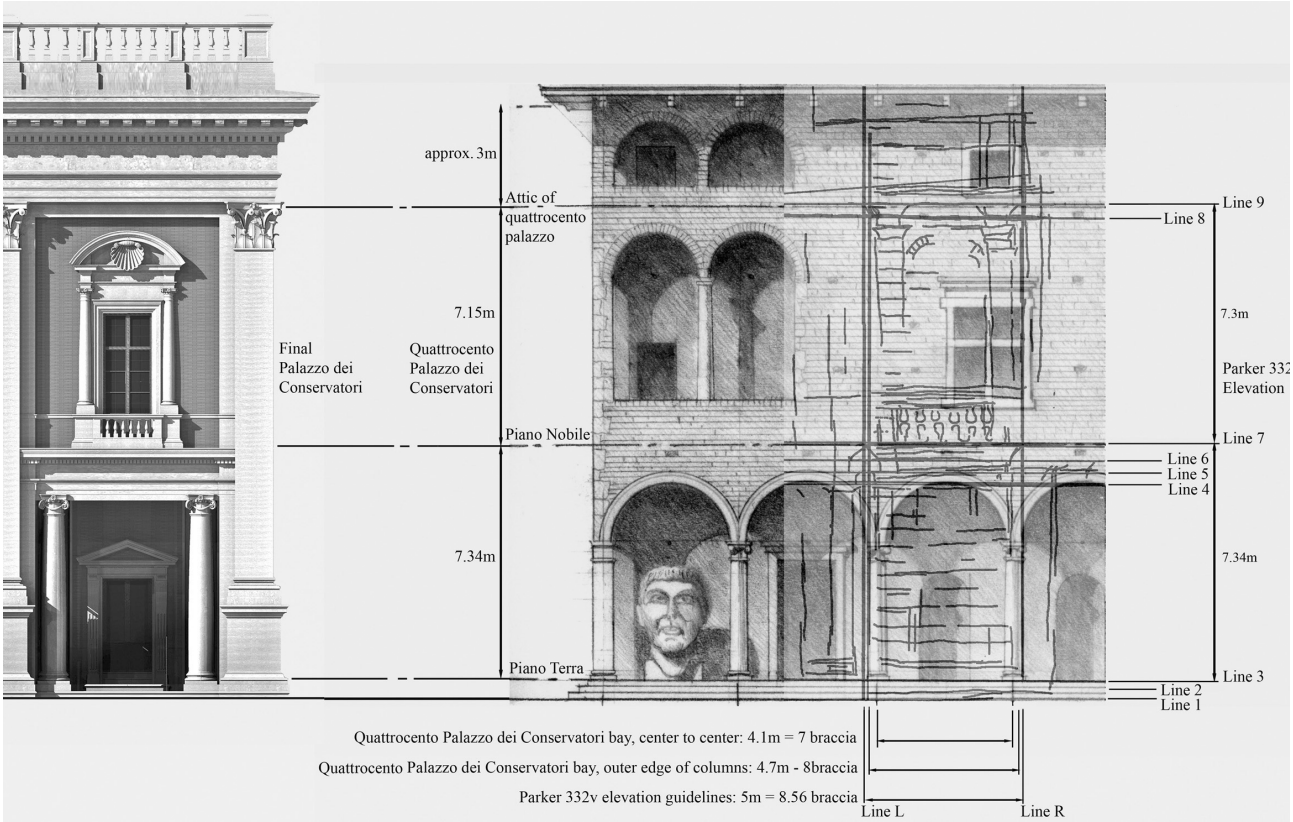


Figure 14 Parker 332 verso elevation superimposed on reconstruction drawing of quattrocento Palazzo dei Conservatori, compared with computer model reconstruction of Palazzo dei Conservatori

hand horizontal lines correspond to Florentine *braccia*, which equals .584 meters (Figure 15; see Figures 13, 14).[58] Many of Michelangelo's other scaled architectural drawings use *braccia* as the unit of measure.[59]

With the Parker 332 verso sketch enlarged to the scale of the 1-to-100 measured drawing, one can also measure and compare the dimensions between the horizontal ruled lines on the sheet to those indicated by Michelangelo's freehand scale as well as the actual floor-to-floor heights of the existing palazzo (see Figure 14). The ground floor-to-floor height in Michelangelo's sketch, as indicated by the ruled lines, measures 7.3 meters, which equals 12.5 *braccia*. Michelangelo's freehand scale between the ruled lines also indicates a dimension of approximately 12.5 *braccia*, while the actual dimension on the quattrocento facade and the built palace equals 7.34 meters, or 12.56 *braccia*. The *piano nobile* floor-to-floor height in the sketch, indicted by the ruled lines, measures 7.3 meters, or 12.5 *braccia*. Michelangelo's freehand scale between the ruled lines is here slightly less accurate, indicating a dimension of about 13.5 *braccia*, while the actual dimension on the quattrocento and built palace equals 7.15 meters, or 12.2 *braccia*. The size and position of the minor order entablature of the final, built Palazzo dei Conservatori corresponds exactly to the entablature indicated by the four ruled lines on Parker 332 verso (see Figure 14). Significantly, this implies that the ground floor-to-floor height of the old palazzo established for Michelangelo the height of the ground floor columns for both this early scheme and the minor order of Ionic columns in the final project (the height of the Ionic columns in the final, built design are 5.75 meters and .7 meters in diameter). The height of the Palazzo dei Conservatori minor order also determined the size of the paired Doric pilasters of the Palazzo del Senatore's staircase center bay, which was one of the first elements of the Campidoglio project constructed under Michelangelo's supervision in 1544.[60]

At this point in the investigation, it is instructive to reexamine the plan component of Parker 332 verso in con-

junction with the elevation study and the quattrocento palazzo, which helps to confirm the subject depicted (see Figure 14). The horizontal dimensions of Michelangelo's elevation and plan sketches also correspond to those of the old Palazzo dei Conservatori. He set the width of the bay for the elevation sketch with a series of ruled, vertical guidelines: three closely spaced lines are clearly visible on the left side of the bay, and one is visible on the right side (labeled "L, R," on Figures 13, 14). The horizontal dimension between the ruled lines of the elevation sketch corresponds to the distance between the recesses containing the paired columns or the walled bays of the plan, which Michelangelo drew freehand (see Figure 14). The distance between the ruled lines of the elevation is about 5 meters, or 8.5 *braccia*, while the average width of the solid bays of the plan is approximately 5.2 meters, or 8.9 *braccia*. If the quattrocento palazzo was twelve bays wide, as seems most likely, each bay would have been approximately 4.1 meters—or 7 *braccia*—wide, measured to the center of the columns.[61] The height of these Ionic columns would have also been about 4.5 meters, or 7.7 *braccia*, which implies the column diameter would have been about .584 meters, or 1 *braccia*, such that the intercolumniation dimension was approximately 3.5 meters, or 6 *braccia*.[62]

The correspondence of these dimensions, and the architectural forms Michelangelo was considering, suggests he intended to utilize as much of the existing fabric of the old palace loggia and façade as possible by wrapping and buttressing the old mid-quattrocento fabric with new masonry and forms.[63] In the Parker 332 verso scheme, it appears he intended to wrap every second bay and its flanking columns with new walls and place his new recessed paired columns in line with the alternating bays, thus effectively reducing the number of bays from twelve to seven. His diagram of a seven-bay plan, located to the upper right side of the sheet, appears to confirm this intention (see Figures 1, 11). The minimum width of the new walled bays would have had to be equal to the width of the old bays measured from the outer edge of the columns (4.7 meters, or 8 *braccia*) plus the width of the two masonry reentrant walls adjacent to the new recessed columns (perhaps .25 meters), for a total of about 5.2 meters, or 9 *braccia*. The dimensions of the Parker 332 verso plan and elevation closely correspond: the dimension between the vertical ruled lines on the elevation study is 5 meters, or 8.56 *braccia*, while the width of the walled bays on the plan is about 5.2 meters, or 8.9 *braccia* (see Figures 13, 14). However, Michelangelo would have faced a compositional problem if the quattrocento palace had a twelve-bay loggia. These alterations would not have resulted in a perfect seven-bay façade but rather one with a walled bay at one end and a paired-column bay at the other, without an opening on the center axis. He would have had to extend the façade by one bay to achieve symmetry and a bay on axis. If this was indeed the case, it might have been one reason he eventually abandoned the scheme. If the old façade had thirteen bays, the scheme would have worked well with a symmetrical seven bays, with walled bays at the ends and an entrance on axis.

The architectural forms and their relationships to one another in the layered drawings on Parker 332 verso shed light on Michelangelo's working method, suggest precedents from which he drew, and presage important formal ideas found in his final design for the Palazzo dei Conservatori as well as other projects. The forms depicted also help to identify the subject of the freehand façade study on Casa Buonarroti 42A. In reading these forms, it is important to note that these sketches are not presentation drawings intended for the patron. They are rapid, exploratory drawings constructed solely for the efficient development of ideas, and Michelangelo intended them for his eyes only. To facilitate the development of ideas, he used what one could describe as a personal shorthand method of representation for certain architectural forms.[64] For example, he typically abstracted the profile of an entablature with a short angled line representing the architrave, followed above by a short vertical line for the edge of the frieze, followed by another short angled line for the cornice. Michelangelo used this technique in the elevation sketch on Casa Buonarroti 42A. There, the entablature above the ground floor features *ressauts* that project over the pilasters below. Where the projections of these *ressauts* occur, Michelangelo has reduced the complex profiles of the fascia of the architrave and the cornice to single, angled lines (see Figure 2). The presence of these abstracted profiles and the projections and recessions they represent are important, as Michelangelo's entablatures rarely follow a straight line in plan; they usually recede or project above columns or pilasters, and he uses these shorthand marks to indicate where this happens.[65] One can see similarly abstracted entablature *ressaut* profile lines on the Parker 332 verso elevation, suggesting the presence of intended columns or pilasters that are obscured by the subsequent studies on the sheet, or not entirely drawn. The elevation component of Parker 332 verso is presented here with the ruled guidelines, freehand scale, and other lines associated with the elevation isolated from the plans (Figure 15).[66] An interpretive reconstruction drawing of the elevation is also presented for the sake of clarity and to better understand the subsequent analysis of Michelangelo's composition and design process (Figure 16).

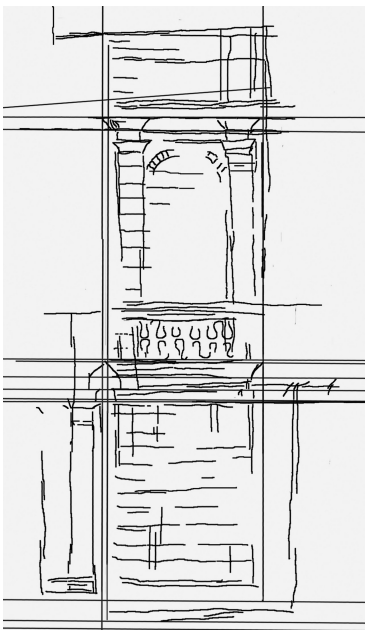


Figure 15 Parker 332 verso, with lines associated with elevation isolated; manipulations by Cooper

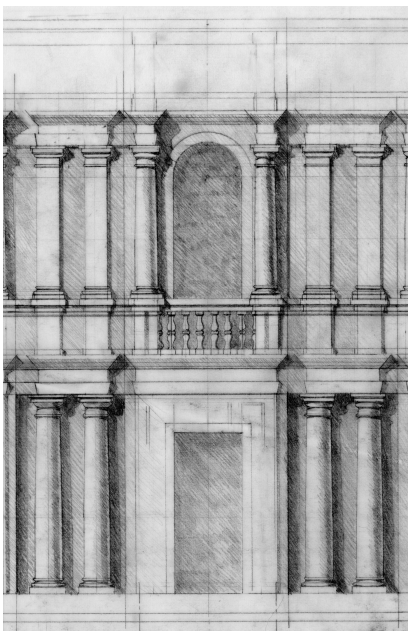


Figure 16 Interpretation drawing of Parker 332 verso elevation

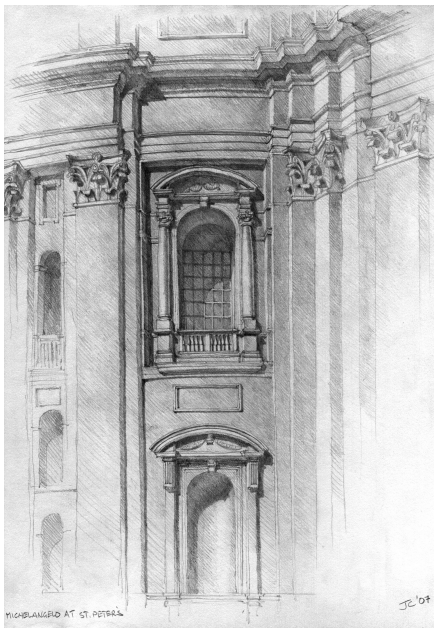


Figure 17 Michelangelo, St. Peter's Basilica, Rome, designed and built ca. 1547, upper level aedicular window, south transept

Michelangelo drew elements of the *piano nobile* elevation more completely than that of the ground level. On the *piano nobile*, Doric columns flank a centrally placed, arched window. Michelangelo centered this grouping of elements on the walled bay, which has boundaries delineated by the vertical ruled guidelines to either side (see Figures 13–15). These columns stand on projecting bases that are part of a continuous horizontal socle above the ground floor entablature. Prophesying the final Palazzo dei Conservatori *piano nobile* windows, the socle becomes an open balustrade between the column bases and below the window opening, where one can discern the oval forms of six balusters between the column pedestals. The columns carry an entablature overhead that breaks forward over the columns and continues to the left and right, beyond the vertical guidelines. In the center portion of the bay, the arch over the window interrupts the entablature.

As depicted on Parker 332 verso, the composition of the *piano nobile*—with its arched window, flanking columns, and entablature with *ressauts*—bears a strong resemblance to the second-level aedicular windows found on the wide bays of the exterior hemicycles of St. Peter's, as well as the aedicular windows of the final Palazzo dei Conservatori (Figures 17, 18; see Figure 16). The configuration also resembles the lower story of Michelangelo's Chapel of the King of France in the east transept of St. Peter's, which was partially complete when Michelangelo took over the project after Antonio da Sangallo's death in 1546 (Figure 19). Michelangelo redesigned the chapel and the exterior facades of the hemicycle in 1547, and construction began in 1548.[67] His reconfiguration of the chapel was clearly inspired by and probably followed his final design for the Palazzo dei Conservatori (see Figures 18, 19). Both consist of a giant Corinthian order flanking a minor order of columns, whose entablature appears to weave behind the giant order.

The *piano terra* of the Parker 332 verso elevation is less developed than the *piano nobile*. The center of the bay is largely blank, with the exception of Michelangelo's freehand scale and some tentative vertical lines that might represent the edges of a portal (see Figures 13, 15). In order to ascertain Michelangelo's intentions for the *piano terra* facade, we must look to the plan on the same sheet, which indicates doors or windows in the center of the walled bays flanked by paired, recessed columns (see Figures 11, 14). In the Parker 332 verso elevation, Michelangelo has drawn one complete column to the left of the walled bay, with the telltale markings of the entablature breaking forward over the right edge of the capital (see Figure 15). The loose lines to the immedi-

Figure 18 Michelangelo, Palazzo dei Conservatori, designed and built ca. 1547, typical bay

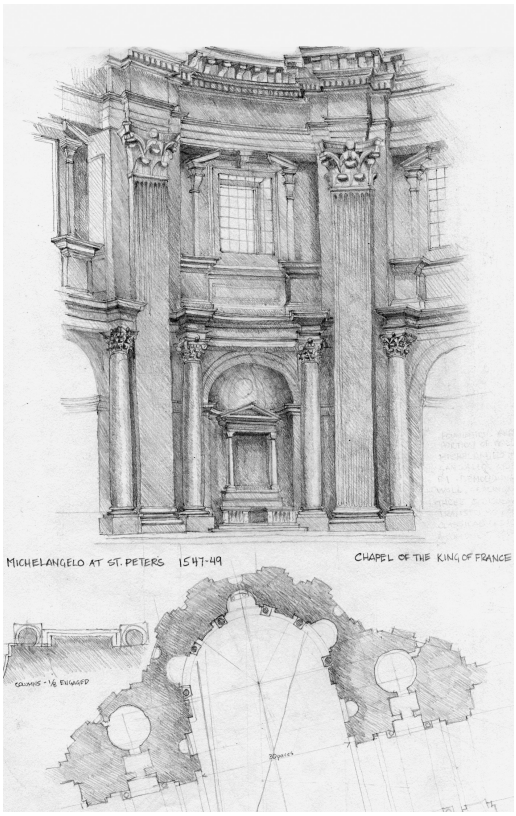


Figure 19 Michelangelo, St. Peter's, Chapel of the King of France, facade begun by Michelangelo, 1564, completed 1584 by Giacomo della Porta

ate left of the column are undoubtedly for the other column of the pair, but these lines are obscured by the subsequently drawn plan. The pair of loose lines to the right of the vertical ruled line "R" probably represent edges of the other pair of columns. However, the loose line to the right of these three, which at first appears to be the right edge of the second column, extends almost the length of the page and therefore must be associated with the subsequently drawn plan (see Figure 13). The placement of these columns is relatively consistent with their location in the plan, except that they are more closely spaced in the elevation.

To clarify Michelangelo's intentions for the façade study, it is instructive to look at other examples of two-story projects that incorporate a similar arrangement of paired columns and/or pilasters. His design for the facade of San Lorenzo consisted of alternating wide and narrow bays defined by paired columns on the lower story and corresponding paired pilasters on the upper story, with a socle or mezzanine between. In his final scheme for the Laurentian Library *ricetto*, the interior facades consist of paired recessed columns between walled bays with aedicular sculpture niches on the lower level and corresponding paired pilasters overhead between the clerestory windows (see Figure 12). On the Campidoglio itself, the center bay and proposed baldachino of the Palazzo Senatorio staircase features paired pilasters on the lower level and would have included corresponding paired columns on the baldachino above (see Figure 7). Given the frequency and configuration of this motif in his oeuvre, one can confidently speculate how Michelangelo would have completed the Parker 332 verso elevation. Undoubtedly, he would have placed paired pilasters to either side of the walled bay on the socle of the *piano nobile*, directly above and in line with the recessed paired columns below (see Figures 15, 16). The overall composition of the Parker 332 verso scheme is very similar to another well-known elevation sketch by Michelangelo on a sheet at the Casa Buonarroti.

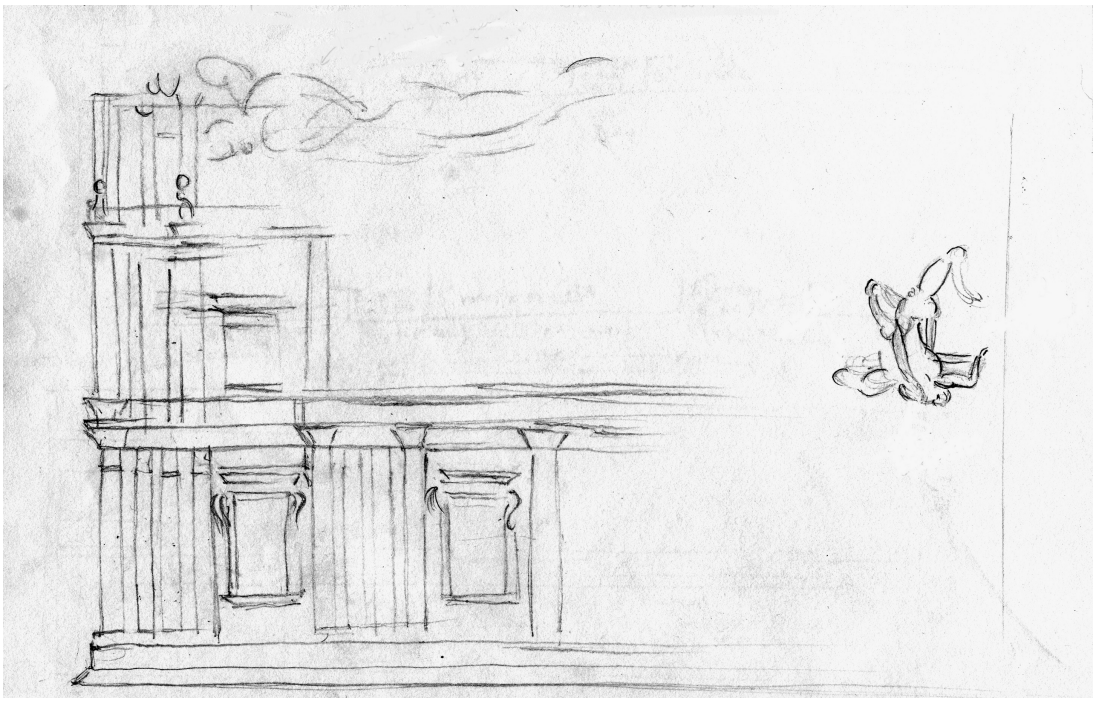


Figure 20 Michelangelo, Casa Buonarroti 42A, black chalk underdrawing

Casa Buonarroti 42A: A Preliminary Sketch for the Palazzo dei Conservatori

The design ideas indicated on Parker 332 verso are almost identical to those found on Casa Buonarroti 42A, which is identified here as an partial elevation study for the Palazzo dei Conservatori (see Figure 2).[68] Michelangelo probably drew the freehand sketch before the Parker 332 verso studies. An examination of this study in conjunction with the elevation and plans on Parker 332 verso helps to understand the evolution of Michelangelo's design ideas.

The brown ink elevation sketch on Casa Buonarroti 42A is most commonly identified as an early elevation study for the reading room of the Laurentian Library.[69] However, this is unlikely as the drawing clearly depicts the exterior profile of a building along its left side (see Figure 2). Furthermore, inspection of the drawing reveals that Michelangelo initially sketched, in black chalk, four and a half bays of what is clearly a three-story building, with a ground floor and *piano nobile* of approximately equal height, and a low attic. I have copied the black chalk underdrawing in Figure 20.[70] Paul Joannides suggested that it is an exterior elevation of an early Laurentian Library scheme for an alternate site, which would have necessitated a façade on the south flank of Piazza San Lorenzo. More recently, Frank Salmon corroborated Joannides's identification.[71] While the presence of this underdrawing does not rule out the possibility that the façade study is an exterior façade for the Laurentian Library, its general forms and proportions are remarkably similar to the quattrocento Palazzo dei Conservatori (see Figures 8, 20). On the right side of the sheet, Michelangelo rapidly sketched a small figure that supports this identification.

On the right side of the sheet, a male figure appears to be falling from the sky in a contorted, upside-down position (Figure 21; see Figures 2, 20). Michelangelo sketched the figure using the same black chalk he used for the facade underdrawing. This figure bears a strong resemblance to the central figure in a series of three presentation drawings Michelangelo carried out in 1533 depicting the *Fall of Phaeton* from Ovid's *Metamorphoses*.[72] In particular, it is similar to the Phaeton on a sheet in the British Museum collection (Figure 22).[73] Michelangelo's source of inspiration for these drawings was an ancient Roman sarcophagus with a sculptural relief depicting the same scene from Ovid's *Metamorphoses*. Significantly, the sarcophagus was located within the transept of Santa Maria in Aracoeli on the Capitoline Hill, suggesting Michelangelo sketched the initial Palazzo dei Conservatori elevation as well as this Phaeton figure on-site.[74]

Figure 21 Michelangelo, Casa Buonarroti 42A, detail of figure on the right side of sheet, black chalk

Michelangelo's Design Development Process from Casa Buonarroti 42A through Parker 332 verso

Michelangelo began the Casa Buonarroti 42A elevation sketch in black chalk, drawing four and a half bays of a two-story façade with a low attic. He then switched to brown ink, sketching variations directly over the black chalk. The ink overlay is exploratory and incomplete: he did not draw the attic or the fourth bay to the right (see Figures 2, 20).[75] Both the chalk and ink versions depict a palazzo façade with alternating bays of equal width with forms clearly derived from Michelangelo's design for the *ricetto* of the Laurentian Library (see Figure 12). The first and third bays of the ground level incorporate paired columns recessed from the outer plane of the façade, while the intermediate bays consist of walls flanked by pilasters, with aedicular windows capped by segmental pediments. These pilasters and the paired, recessed columns carry a continuous entablature that projects slightly forward over the pilasters. A plan detail located at the center of the sheet confirms the relationship between the recessed paired columns and the walled bays with their flanking pilasters, and its similarity to the Laurentian Library *ricetto*. Michelangelo's study for the west wall of the *ricetto* on Casa Buonarroti 48A includes a nearly identical detail (Figure 23). The *piano nobile* level of both the chalk underdrawing and the ink overlay of the Casa Buonarroti 42A façade study incorporates a socle over the ground floor entablature. In the chalk underdrawing, the basic armature of the *piano nobile* is similar to the *piano terra*. As in previous and subsequent projects, paired pilasters stand on the *piano nobile*, directly above and in line with the paired recessed columns below.

In the superimposed ink version, Michelangelo explores related but alternative ideas for the *piano nobile*, most notably a sculpture niche in the place of the paired pilasters. This element, located directly over the paired columns of the ground floor, is similar to the configuration of Raphael's Palazzo Branconio dall'Aquila (1515–17). In both cases, there is a similar reversal of structural logic, with sculpture niches on the *piano nobile* placed directly over engaged Tuscan Doric columns on the ground floor. Although Michelangelo did not develop further this sketch for the Palazzo dei Conservatori, the similar arrangement of forms suggests he was familiar with Raphael's architecture and did not hesitate to borrow directly from it.[76] However, the variations in the ink scheme were probably in response to compositional problems Michelangelo encountered in attempting to apply ideas from his Laurentian Library *ricetto* to the new project.

Figure 22 Michelangelo, *Fall of Phaeton*, ca. 1533, from Ovid's *Metamorphoses*, black chalk, held in the British Museum, London

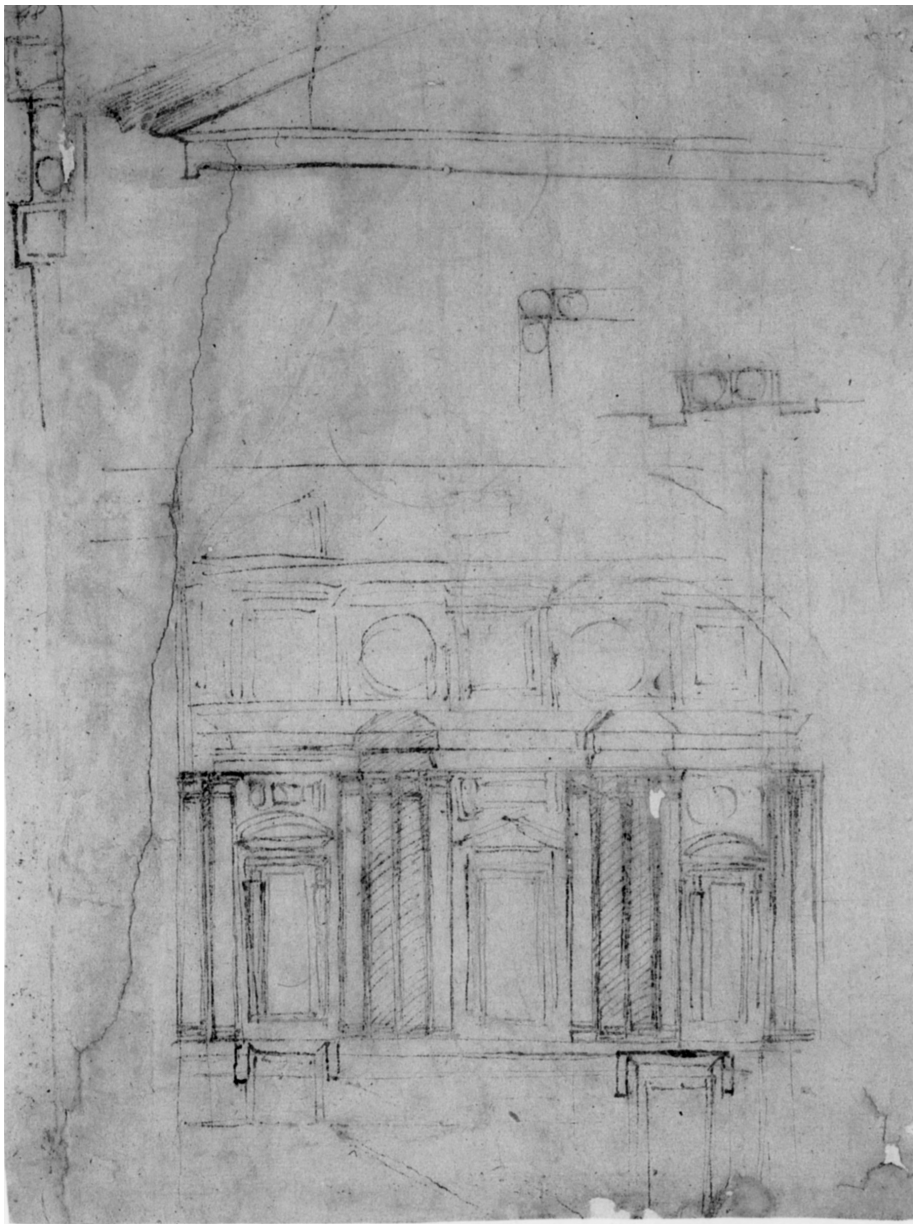


Figure 23 Michelangelo, Casa Buonarroti 48A recto, 1525, elevation study for the west wall of the Laurentian Library *ricetto*, and plan details with paired, recessed columns flanked by full pilasters (upper right corner)

Michelangelo's Palazzo dei Conservatori sketch on Casa Buonarroti 42A closely resembles the sketch he did for interior west wall of the Laurentian Library *ricetto* on Casa Buonarroti 48A. This elevation study probably represents his penultimate scheme for the *ricetto* (see Figure 23). It consists of a high socle, a primary story articulated in a similar manner to the final scheme, and a low attic. The probable source of inspiration for the arrangement of the main story was the interior elevation of the Pantheon in Rome.[77] Both consist of walled bays fronted by aedicular sculpture niches, terminated by full pilasters, and set between exedrae screened by pairs of columns of the same order. On Casa Buonarroti 48A, Michelangelo has simply compressed the width and depth of the Pantheon's exedrae to the point where there is just enough space to accommodate the pair of columns. In his final design for the *ricetto*, he compressed the pilasters flanking the exedrae in order to accommodate columns of greater height and diameter.[78]

Like the final version of the *ricetto*, the quattrocento Palazzo dei Conservatori also had two main stories. However, rather than follow the final, two-story version of the *ricetto*, the Casa Buonarroti 42A *piano terra* follows the Casa Buonarroti 48A one-story version, with full pilasters at the angles of the recesses containing the paired columns, as confirmed by the small plan detail located on the sheet (see Figure 23). On the *piano nobile* of the Casa Buonarroti 42A underdrawing, Michelangelo drew paired pilasters directly above the *piano terra*'s paired recessed columns as one would expect. However, the presence of the pilasters that flank the columns on the *piano terra* below compelled him to also draw corresponding pilasters directly above on the *piano nobile*, which resulted in the unfortunate condition of two pilasters flanking two pilasters (see Figure 20).[79] This compositional problem undoubtedly inspired Michelangelo to abandon the black chalk sketch and draw the brown ink version, in which he substituted the paired pilasters of the *piano nobile* with a sculpture niche.

Michelangelo probably drew the elevation and plan studies on Parker 332 verso after the Casa Buonarroti 42A. Evidently dissatisfied with the Casa Buonarroti 42A niche idea, it does not appear on the Parker 332 verso. There, he followed more closely his final, two-story version of the Laurentian Library *ricetto* (see Figure 12), eliminating the full pilasters that wrap the corners of the walled bays of the lower level. They do not appear in the elevation or the plan of Parker 332 verso as they do in the plan detail on Casa Buonarroti 42A. Michelangelo was then free to place paired pilasters over the recessed paired columns as in the Laurentian Library *ricetto* and other projects without having to flank them with pilasters (see Figure 2).

As we have seen, the center bay of the Parker 332 verso *piano nobile* elevation features a pair of columns framing the centrally placed arched window, which appears to be engaged to or stand against the mural wall surface behind (see Figures 15, 16). In order to provide a ledge on which to place the column bases, Michelangelo must have intended to recess this upper wall surface from the plane of the wall immediately below. This would have produced a condition nearly identical to the aedicular windows on the wide bays of the exterior hemicycles of the transepts of St. Peter's (see Figure 17). However, at the Palazzo dei Conservatori, stepping back the *piano nobile* wall plane would have implications for the paired pilasters to either side and the corresponding paired columns below. In order to maintain the vertical alignment of the paired pilasters of the *piano nobile* with the paired columns below, either the pilasters above would have had to project considerably forward from the wall surface, or the columns below would have had to retract from the adjacent outer wall surface. This problem of alignment may explain why Michelangelo experimented with the placement of the paired columns in the plan component of Parker 332 verso (see Figures 10, 11).[80]

Michelangelo drew the large-scale plan on Parker 332 verso in order to develop the ideas he was studying in elevation. To do so, he rotated the sheet 90 degrees clockwise to draw it, probably because there was inadequate space at the base of the sheet to project the plan directly below the elevation. In his initial plan, he used the left vertical guideline of the elevation study as a datum for the recessed wall surface behind the paired columns. In red chalk, he initially drew two pairs of columns, at the center of the sheet against this datum, and the adjacent walled bays (see Figure 10). As expected, these walled bays project considerably forward beyond the front edge of the columns in order to provide a base for the *piano nobile* Doric columns above.

Evidently dissatisfied with the pairs of columns so deeply recessed behind the adjacent walled bays, Michelangelo then switched from red chalk to black chalk and superimposed a new plan, moving the pairs of columns farther out, such that their front edges are in line with the walled bay. He also redrew the adjacent bays with greater confidence and extended the plan to include bays to either side. He then drew key elements of the *piano nobile* plan superimposed onto this partial plan of the *piano terra* (see Figure 11). The pairs of pilasters on the *piano nobile* are represented by squares drawn around the paired recessed columns. Set back slightly from the corners of both walled bays of the *piano terra* plan, one can clearly see circular elements that cannot be associated with any recognizable architectonic element of the *piano terra* façade or the interior spaces. These circles probably represent the two Doric columns framing the window of the *piano nobile*, which Michelangelo has reduced in size from the elevation study, prophesizing the scale of the aedicular windows in the final design (note the alignment of the circles on the plan with the *piano nobile* columns above; see Figure 14).[81] The two horizontal lines that connect the columns across the bays probably represent the tops of the balustrades between the column pedestals. Behind the columns, Michelangelo has drawn the wall surface of the *piano nobile*, initially with openings as wide as the spacing of the columns, and then narrower, with doors opening out onto small balconies above the projecting ground floor, presaging the configuration of the aedicular windows of the final, built Palazzo dei Conservatori (see Figures 17, 18).[82]

At this point, it appears Michelangelo abandoned the sketches on the sheet; with so many superimposed, interrelated ideas already on the sheet, it could not sustain any

more.[83] He probably abandoned this scheme for the façade of Palazzo dei Conservatori soon after as well. Once the commission had expanded to include the Palazzo Senatorio and the piazza as a whole, he realized the need to develop designs that would link and unify the disparate facades with common elements and proportions. He would have had difficulty applying the ideas represented on Casa Buonarroti 42A and Parker 332 verso to the façade of the Palazzo Senatorio. In addition, the scheme did not accommodate what apparently had become a programmatic necessity, the ground floor loggia of the Palazzo dei Conservatori. Michelangelo's eventual decision to demolish the front of the quattrocento palazzo to the depth of the loggia granted him far greater freedom; his new design would only be constrained by the existing length of the old palace and its floor-to-floor height (see Figures 7, 14). While he could justify the demolition of the entire front of the Palazzo dei Conservatori, it was not possible to demolish the facade of the fortresslike three-story Palazzo Senatorio. Only the early quattrocento loggia appended to the right side of the facade could be easily removed: the lower story of the palace incorporated the massive tufa foundations of the ancient Tabularium, and the fortified medieval corner towers consisted of solid masonry up to two meters thick. For these reasons, Michelangelo's adaptations to the Palazzo Senatorio could only be largely additive and not subtractive, and the design ideas that he would develop would have to be applicable to the Palazzo dei Conservatori and vice versa. The common forms, dimensions, and proportions of the facades strongly suggest that, logically, Michelangelo developed the subsequent designs for both facades simultaneously.[84]

Conclusion

Although Michelangelo abandoned the scheme represented on Casa Buonarroti 42A and Parker 332 verso, these sketches are nonetheless important, as they represent a "missing link" between his earlier Florentine architectural designs and his later Roman architecture. Michelangelo clearly drew many of his ideas for this early scheme for the Palazzo dei Conservatori from the San Lorenzo façade project and the Laurentian Library *ricetto*, and many would find their way to the final design for the Campidoglio as well as other projects, such as the exterior and interior apses of St. Peter's.

These sketches are also valuable for understanding Michelangelo's working method. He relied on a relatively limited repertoire of elements and motifs that he recycled and transformed from one project to another. In each composition, ideas evolved from earlier projects into forms with new and appropriate meaning. In most cases, Michelangelo's initial ideas rarely have much in common with the final design, suggesting he understood his early sketches to be merely the starting point of an inevitable design evolution.

In the case of Parker 332 verso, it is significant that Michelangelo appears to have superimposed an exploratory plan over an elevation study that he had not completed, and then drew elements related to the floor above directly over the incomplete ground-floor plan. This superimposition appears to be the means Michelangelo used to explore and resolve complex three-dimensional relationships between architectural forms in his projects, which resulted in the harmonious and organic spatial quality found in his late architecture. The sophisticated cross-spatial alignments and connections between Michelangelo's robust architectural elements, both horizontally and vertically, contribute to the clear reading of defined or implied spaces, resulting in the impression that Michelangelo sculpted negative space as much as the architectural forms themselves. This is especially true within the individual bays of the Palazzo dei Conservatori and Palazzo Nuovo loggias, as well as in one of Michelangelo's last projects, the Sforza Chapel. There the remarkable plan of the chapel and the upper half of the transverse section are nearly identical, suggesting Michelangelo developed that design in a similar manner to the Palazzo dei Conservatori, with phenomenal mental agility and drawing dexterity, and the deliberate manipulation and superimposition of standard architectural drawing conventions.

Notes

I wish to thank my former professors and dissertation advisors, Carroll William Westfall and Paul Barolsky, for their enthusiastic encouragement, guidance, and advice. Thanks are also due to my friends and colleagues Gudrun Wagner, Christine O'Malley, Sally Butler, and Maya Krause for their help and support.

1. For an overview of the construction chronology of the Campidoglio, see the catalog component of James Ackerman, *The Architecture of Michelangelo*, rev. ed. (London, 1986), 312. This text has appeared in many editions since its initial publication in 1961. References here are made to the unabridged 1966 catalog as well as the 1986 text and abridged catalog.

2. Only three sheets of drawings by Michelangelo have been associated with the Campidoglio facades. One of these sheets, Parker 332 verso, Ashmolean Museum, Oxford, is examined here. The second Campidoglio sheet, Casa Buonarroti F19 recto, includes a study of what most scholars believe to be the exterior staircase of the Palazzo Senatorio. See Giulio Carlo Argan and Bruno Contardi, *Michelangelo Architect*, trans. Marion L. Grayson (New York, 1993), 253–54, fig. 357. See also Charles de Tolnay, *Corpus dei Disegni di Michelangelo* (Novara, Italy, 1980), pl. 368. The third Campidoglio sheet is Parker 333 verso, Ashmolean Museum, Oxford, which includes a partial elevation study that Ackerman suggests is a façade study for the Palazzo dei Conservatori. See Ackerman, *Michelangelo* (1986), 312. However, it could also be a sketch for the drum of the dome of St. Peter's Basilica: note the similarity of the forms with the more finished study of the dome of St.

Peter's on the sheet at Lille, Musee d'Art et d'Histoire, inv. 93–94. The recto side of Parker 333 includes a window/niche study also linked to the Palazzo dei Conservatori, which is discussed below (186). For Parker 333 recto, see Tolnay, *Corpus*, pl. 589.

3. Tolnay was the first to tentatively link Parker 332 verso with the Conservatori, and scholars of Michelangelo have since generally accepted this identity. However, Tolnay only briefly described the sheet. See Tolnay, "Unknown Sketches by Michelangelo: Projects for St. Peter's and the Palazzo dei Conservatori," *Burlington Magazine* XCVIII (1956), 379–80. See also Ackerman, *Michelangelo* (1986), 312. For a thorough analysis and hypothesized dating of the sketches on the recto and verso of Parker 332 and related sketches, see Andrew Morrogh, "The Palace of the Roman People: Michelangelo at the Palazzo dei Conservatori," *Römisches Jahrbuch der Bibliotheca Hertziana* 29 (1994), 151–53. Morrogh's analysis is discussed in the present work (186). For high quality reproductions of Parker 332 recto and verso, see Tolnay, *Corpus*, pl. 605.

4. Guglielmo De Angelis d'Ossat and Carlo Pietrangeli, *Il Campidoglio di Michelangelo* (Milan, 1965), 106–9.

5. James Cooper, "The Genesis and Design of Michelangelo's Campidoglio" (PhD diss., University of Virginia, 2002), 139–40. Parker 332 recto and verso was recently on public display in the exhibition *Michelangelo e il disegno di architetttura* at the Centro di Studi di Architettura Andrea Palladio (Vicenza, Palazzo Barbaran da Porto, 17 Sept.–10 Dec. 2006; Firenze, Casa Buonarroti, 15 Dec.–19 Mar. 2007). The obscured elevation study on Parker 332 verso is identified and briefly discussed in the text of the exhibition and the catalog. See Caroline Elam, "21v. Progetti di pianta per il Palazzo dei Conservatori e altri Schizzi Architettonici," in *Michelangelo e il disegno di architettura* (Venice, 2006), 204.

6. For supporters of the reading room identification, see Alessandro Cecchi and Antonio Natali, *Michelangelo. I Disegni di Casa Buonarroti* (Florence, 1985), 134. See also Ackerman, *Michelangelo* (1966), 102; and Rudolf Wittkower, "Michelangelo's Biblioteca Laurenziana," *Art Bulletin* XVI (1934), rpt. in Wittkower, *Idea and Image* (London, 1978), 22.

7. See Paul Joannides, "Review of J. Wilde, Six Lectures," *Burlington Magazine* 123, no. 943 (1981), 620. See also Frank Salmon, "The Site of Michelangelo's Laurentian Library," *JSAH* XLIX (Dec. 1990), 407–29. The identification of Casa Buonarroti 42A as an exterior elevation of the Laurentian Library is discussed in the present work (p. 21).

8. De Angelis d'Ossat and Petrangeli, *Il Campidoglio*, 100, also suggest Casa Buonarroti 42A could be an early scheme for the façade of Palazzo dei Conservatori. However, there is no supporting discussion or mention of Parker 332 verso.

9. Richard Ingersoll, "The Ritual Use of Public Space in Renaissance Rome," (PhD diss., University of California, Berkeley, 1985), 385.

10. Ackerman, quoting Lanciani, *Michelangelo* (1966), 50.

11. For example, see Charles L. Stinger, *The Renaissance in Rome* (Bloomington, 1985), 258. See also Howard Hibbard, *Michelangelo* (New York, 1974), 291. Ingersoll argues the imperial procession was steered away from the Campidoglio because it was the symbol of Republican Rome. See Ingersoll, "Public Space," 39, 392. Ackerman suggests it was likely a combination of embarrassment over the Capitoline's dilapidated state as well political motivation. He argues it may have been decided that the Holy Roman Emperor should be prevented from appearing to act out the climax of an ancient triumph on the Capitoline Hill, as it had been only nine years since imperial troops sacked the city of Rome. See Ackerman, *Michelangelo* (1986), 152.

12. For the Capitoline papal villa of Paul III, see Jacob Hess, "Die päpstiche Villa dei Aracoeli, En Beitrag zur Geschichte der kapitolineschen Bauten," *Miscellanea Bibliothecae Hertziana (*1961), 239–54. See also Stinger, *Renaissance*, 257.

13. Lucilla B. Ciulich, ed., *I Contratti di Michelangelo* (Firenze, 2005), 213. See also Ludwig von Pastor, *History of the Popes*, vol. XII (London, 1923), 552.

14. Charles Burroughs, "Michelangelo at the Campidoglio: Artistic Identity, Patronage and Manufacture," *Artibus et Historiae* 14, no. 28 (1993), 91. Burroughs notes that Lanciani referred to Manetti as the "Baron von Haussman of sixteenth-century Rome." For documentation on the formation of the committee, see Pio Pecchiai, *Il Campidoglio nel Cinquecento. Sulla Scorta dei Documenti* (Rome, 1950), 36–37.

15. Ackerman, *Michelangelo* (1966), 51.

16. Ibid.

17. The Marcus Aurelius, which Michelangelo placed in its present position before any other construction commenced in the piazza, sits precisely at the crossing of the major and minor axes of the elliptical depression in the piazza. The dimension of the ellipse's short axis equals the distance between the corners of the as-built Palazzo dei Conservatori and Palazzo Nuovo at the northwest (narrow) end of the piazza, while the long axis equals the length of the lateral palaces, which Michelangelo determined from the length of the existing quattrocento Palazzo dei Conservatori (rotated 9 degrees, as to be parallel to the center axis of the piazza, which itself Michelangelo determined as an extension of the center axis of the Palazzo Senatorio). The records of construction for the Campidoglio are scant. For the known dates of construction, see Pecchiai, *Il Campidoglio*; and Ackerman, *Michelangelo* (1966), 51. The original Marcus Aurelius was moved indoors in the 1980s and a replica installed in its place in the early 1990s. Harmen Thies argues that the form of the elliptical base and placement of the Marcus Aurelius is proof that Michelangelo had worked out a conceptual design for the entire project by 1539, a view shared by Ackerman. See Thies, *Michelangelo. Das Kapitol* (Munich, 1982); and Ackerman, *Michelangelo* (1986), 152, 313. The base was raised in 1564 in order to reinforce its foundation. See Ackerman, *Michelangelo* (1986), 310.

In his recent book, *Michelangelo e l'arte della città. Storia della Via Nova Capitolina* (Roma, 2005), Francesco Andreani argues that the Marcus Aurelius was originally positioned by Michelangelo a few meters further southeast of its present location and was relocated to its present position in 1564 by Giacomo della Porta. Andreani suggests that in the late 1530s Michelangelo planned to build the Palazzo Nuovo at a more acute angle relative to the Palazzo Senatorio, such that its northwest corner would have been considerably closer to the northeast corner of the Palazzo dei Conservatori opposite, resulting in a shift to the southwest of the main axis of the piazza as we know it. According to Andreani, Michelangelo determined this alignment not by extending the center axis of the existing Palazzo Senatorio, but by extending the axis of the misaligned street that was originally planned to connect the piazza to what is today Piazza del Gesu. Andreani argues that the layout of the existing piazza is the result of significant adjustments made by Giacomo della Porta in 1563.

Andreani's discussion of the earlier history and planning of the street and Il Gesu, and Giacomo della Porta's later role in their execution, is interesting and compelling. However, his conclusions with regard to Michelangelo's early planning of the piazza itself, and the placement of the Marcus Aurelius and the original Cordonata, are difficult to accept given the existence of well-known evidence that Andreani has not adequately considered. Michelangelo built the retaining wall against the slope below the Aracoeli between 1539 and 1544. One can see this retaining wall in certain sixteenth-century images of the piazza, and its position clearly anticipates the angle of the Palazzo Nuovo as it was built many years later. For example, see the anonymous sixteenth-century view of the Capitoline in the Herzog Anton-Ulrich Museum, Brunswick, Print Department; Argan and Contardi, *Michelangelo*, 254, fig. 353 (see n. 2); and Fig. 6 in the present work.

Michelangelo built this retaining wall on the line of what today is the rear wall of the offices entered from the loggia of the Palazzo Nuovo. Furthermore, the stairs to the southeast of the Palazzo Nuovo, which were completed by 1544, were built against and parallel to the return of the retaining wall to the northeast toward the transept of the Aracoeli. The southeast façade of the Palazzo Nuovo eventually would be built on the line of this wall. See Andreani, *Michelangelo e l'arte della città*, esp. 55–70. For the history and discussion of the program of the Palazzo Nuovo, see Klaus Güthlein, "Der Palazzo Nuovo des Kapitols," *Römansiches Jahrbuch für Kunstgeschichte* 22 (1985), 85–189; and for the retaining wall, ibid., 99,100. See also Simona Benedetti, "La Fabrica del Palazzo Nuovo di Campidoglio, le principi tappe costruttive del cantiere seicentesco," in *Il Palazzo dei Conservatori e il Palazzo Nuovo in Campidoglio* (Pisa, 1996), 71–83. For a summary of the construction dates of the retaining wall, the steps, and loggia to the south of the Palazzo Nuovo, see Ackerman, *Michelangelo* (1966), 51, 52. In a recent essay, Ackerman discusses Michelangelo's concept and the chronology of the Palazzo Nuovo project. As in his book *The Architecture of Michelangelo* (1986), Ackerman continues to argue that Michelangelo had worked out a conceptual design for the entire piazza by 1539, and he discusses the evidence supporting this claim. See James Ackerman, "Gathering the Given: Michelangelo's Redesign of the Campidoglio," *Harvard Design Magazine* 23 (Fall 2005/ Winter 2006), 24–47.

18. Ackerman, *Michelangelo* (1966), 51, also suggests the timing of the ceremony granting Michelangelo citizenship was not coincidental, as does Burroughs ("Campidoglio," 88).

19. Nicholas V was well aware of the potential of architecture to represent the church and his authority; in his testament, he declared that one of his principal duties had been to restore the buildings of the church. Nicholas's alterations and additions to the Capitoline complex were but one component of a grand urban and architectural renewal project for the city of Rome, which involved the consultation of the Renaissance architect and theorist Leon Battista Alberti. Although Alberti might have been a consultant on many projects at the master planning level, the low quality of the Palazzo dei Conservatori's design suggests he was not directly involved. See Carroll William Westfall, *In This Most Perfect Paradise: Alberti, Nicholas V and the Invention of Conscious Urban Planning in Rome, 1447–55* (University Park, Pa., 1974), 19, 33, 167–84.

20. Sergio Guarino, "Il Palazzo dei Conservatori tra Quattro e Cinquecento," in *Il Palazzo dei Conservatori e il Palazzo Nuovo in Campidoglio* (Pisa, 2000), 43. The city of Rome is comprised of nineteen *rione* or regions.

21. Burroughs, "Campidoglio," 91.

22. Most scholars agree that the odd angle between the Palazzo Senatorio and the Palazzo dei Conservatori was due to existing site conditions, with the exception of Thies, who argues that the angle was actually chosen by Michelangelo as part of a very complicated geometric construct devised by him for the piazza and buildings. See Thies, *Das Kapitol*, 62–83. While there is no question Michelangelo employed sophisticated geometries in his laying out of the piazza, Thies's fanciful geometric constructions involve the locations of unimportant components of the design. The loggias of Michelangelo's Palazzo dei Conservatori and Palazzo Nuovo provide deep spatial views to the Palatine and the Forum Romanum respectively, which is due to the coincidence of the alignment of the loggias with the side elevations of the Palazzo Senatorio (which extend away from the main façade facing the piazza at approximately 81-degree angles). It is tempting to speculate that the architect of the original Palazzo dei Conservatori chose to build the palace at 81 degrees relative to the façade of the Palazzo Senatorio in order to exploit the same view from its loggia.

23. For the sculptures placed on the Campidoglio in the late quattrocento, early cinquecento, and during the pontificate of Pope Paul III, and a discussion of their meaning and political symbolism, see Tilman Buddensieg, "Zum Statuenprogram im Kapitolsplan Pauls III," *Zeitschrift Für Kunstgeschichte* 32 (1969) 177–228. For the importance and symbolism of the original Marcus Aurelius in Michelangelo's project, see Wolfgang Liebenwein, "Antikes Bildrecht in Michelangelos Area Capitolina," *Mitteilungen des Kunsthistoriches Institut in Florenz* 28 (1984), 1–32. Liebenwein wrote this article shortly after the original Marcus Aurelius was removed from its base for restoration and many years before the copy was installed in its place. See also Stinger, *Renaissance*, 255–56 (see n. 11).

24. These images are reproduced in many publications. For example, see Argan and Contardi, *Michelangelo*, figs. 350–52, 354–55. Nonetheless, the authors do not discuss their implications at any length. An exception is Ackerman, who discusses each drawing in considerable detail but does not comment on their implications regarding the design and construction process or the attribution of specific elements to Michelangelo or his successors. See Ackerman, *Michelangelo* (1966), 50–68.

25. Buddensieg, "Statuenprogramm," 179.

26. The fresco, attributed to Cristofano Gherardi, ca. 1455, can still be seen in the Sala delle Aquille on the *piano nobile*. For a reproduction, see Angelo Salvioni, ed., *Marco Aurelio. Storia di un monumento e dal suo restauro* (Milano, 1989), fig. 122.

27. Westfall notes a similarity between the Palazzo of Nicholas V and the Palazzo Communale in the town of Viterbo, which was at that time within the Papal States. It was built a few years later and may have used the Palazzo dei Conservatori as its model. See Westfall, *Paradise*, 96.

28. Christoph Lutpold Frommel argues that the quattrocento Palazzo dei Conservatori had a thirteen-bay loggia. See Frommel, "Il Palazzo dei Conservatori. Forma e struttora," in *Il Palazzo dei Conservatori e il Palazzo Nuovo in Campidoglio* (Pisa, 1996), 22. Nonetheless, the differences in the dimensions of the individual bays of a twelve- or thirteen-bay loggia are minimal.

29. Examples include Brunelleschi's Ospedale degli Innocent in Florence and Bernardo Rosselino's civic loggia in Pienza.

30. The Van Heemskerck sketch suggests the main entrance of the quattrocento Palazzo dei Conservatori was in line with a column that was subsequently removed; see Fig. 5.

31. Morrogh provides an analysis and description of the likely form of the quattrocento palazzo that is similar to the one presented here. See Morrogh, "The Palace of the Roman People: Michelangelo at the Palazzo dei Conservatori," 152 (see n. 3).

32. The form of the quattrocento Palazzo dei Conservatori courtyard can be deciphered in Pirro Ligorio's engraved 1552 aerial view of Rome. See Morrogh, "Palazzo dei Conservatori," fig. 38. The courtyard and exterior stair configuration was typical of many courtyard buildings of the late middle ages, in both municipal buildings such as the Palazzo del Ragione in Verona and domestic palaces such as the Palazzo Davanzati in Florence.

33. Morrogh argues convincingly that Michelangelo was responsible for the designs of the stair, the courtyard, and the principal interior spaces of the palazzo and not Giacomo della Porta, as is commonly believed. Morrogh suggests that the role of della Porta was largely confined to that of construction supervisor. His study is based on a careful examination of a partial plan drawing, Rom 29, at the Albertina, Vienna, which was probably copied from an original drafted in the studio of Giacomo della Porta between 1565 and 1570. Morrogh convincingly argues that the precise continuity and congruency between the forms, spaces, and their dimensions of the exterior façade, loggia, grand stair, and the courtyard, which had the loggia continuing all the way around, suggests the Albertina Rom 29 plan must have been developed at one time by one architect, namely Michelangelo. The courtyard was never completed according to the Albertina drawing. See Morrogh, "The Palace of the Roman People," 165–66.

34. In the final design, the wall between the southeast Loggia della Madonna and the Sala degli Orazi e Curazi would be demolished, increasing the size of the latter, while the northwestern loggia would be closed in, forming what is today called the Sala dei Trionfi di Mario. The front wall of these rooms would be entirely rebuilt and the ceilings raised to incorporate the space that had been the attic of the quattrocento palazzo. For a more detailed account of the changes to these rooms, see Morrogh, "The Palace of the Roman People," 160–61.

35. Frommel, "Il Palazzo dei Conservatori," 21–22.

36. The reproduction of Parker 332 verso here is rotated 180 degrees relative to the orientation found in most other publications, such that the obscured single bay elevation study can be seen right side up.

37. Close scrutiny of the original sheet suggests that the red and black chalk lines of the plan drawing appear to cross over the faint red lines of the obscured elevation.

38. See n. 3.

39. For a reproduction and discussion of Casa Buonarroti 106A recto, see Cammy Brothers, "23. Studio per Porta Pia e Studio di Figura," in Elam, *Michelangelo e il designo di architettura*, 207 (see n. 5).

40. For examples, see Tolnay, *Corpus* (see n. 2); Harlem, Teyler Museum 33v, elevation study for the west wall of the Laurentian Library *ricetto*, pl. 52; Casa Buonarroti 89A verso and recto, pls. 26, 27; and Casa Buonarroti 27A verso, studies for the fortifications of Florence, pl. 567.

41. Ibid., pl. 589.

42. For example, see Ackerman, *Michelangelo* (1986), 312 (see n. 1).

43. Morrogh, "The Palace of the Roman People," 151 (see n. 3).

44. Gregory Hedberg, "The Farnese Courtyard Windows and the Porta Pia: Michelangelo's Creative Process," *Marsyas, Studies in the History of Art* V, no. XVf (1970–71), 64, figs. 1, 3.

45. See Hugo Chapman, *Michelangelo Drawings: Closer to the Master* (London: 2005), exhib. nos. 103, 275.

46. Parker 333 recto also includes the partial elevation study that Ackerman identifies as a study for the Palazzo dei Conservatori (see n. 2).

47. Morrogh, "The Palace of the Roman People," 151.

48. In terms of construction, little was done after the Marcus Aurelius was placed in 1538 and the retaining wall was built below Santa Maria in Aracoeli in 1544. From 1544 to 1555, there was construction activity on the site, primarily focusing on the Palazzo Senatorio staircase and the two sets of lateral stairs and loggias adjacent to the Palazzo dei Conservatori and the retaining wall on the future site of the Palazzo Nuovo. Apparently, little was built during the pontificate of Paul IV, from 1555 to 1559. See Ackerman, *Michelangelo* (1986), 308–13.

49. This interpretation is shared by Ackerman, *Michelangelo* (1966), 62 (see n. 1). Morrogh also argues in favor of doors because of the presence of what he interprets as small "porch"-like spaces that can be seen immediately behind the doors. See Morrogh, "The Palace of the Roman People," nn. 107, 152. An alternate interpretation of what Morrogh sees as porchlike spaces is provided here (197).

50. Tolnay, *Corpus*, fig. 605. The presence of two pairs of columns, deeply recessed from the exterior wall surfaces of the intermediate bays, eliminates the possibility that Michelangelo may have drawn in error the one pair that we can still see today.

51. This interpretation is shared by Ackerman, *Michelangelo* (1966), 62.

52. We know well that Michelangelo's designs for his two previous architectural projects, the San Lorenzo façade (1516–19) and the Medici Chapel or New Sacristy (1519–34), borrowed heavily from the work of others. Michelangelo's initial inspiration for the facade was a scheme for the same project by Giuliano da Sangallo the Elder, while he based the chapel on Brunelleschi's Old Sacristy at San Lorenzo. Michelangelo's design method, which involved rapid sketching and the evolution of ideas that he drew from specific precedents, is the subject of a future article by this author focusing on the Laurentian Library.

Other scholars have studied Michelangelo's process of design and his frequent borrowing and recycling of ideas. For example, see Andrew Morrogh, "The Magnifici Tomb: A Key Project in Michelangelo's Architectural Career," *Art Bulletin* LXXIV (Dec. 1992), 567–98. See also David Hemsoll, "The Laurentian Library and Michelangelo's Architectural Method," *Journal of the Warburg and Courtauld Institute* LXVI (2003), 29–62

53. See n. 5.

54. A facsimile of the original was scanned at high resolution (300 dpi). Using Adobe Photoshop, the image was scrutinized and the various lines were traced in different colors on separate layers. Michelangelo drew the two primary studies, the elevation and the plan on the sheet, with red and black chalk, which helped determine which lines belong to which study. However, for some lines, it is virtually impossible to determine their affiliation.

55. Michelangelo often used a straightedge in his architectural studies. However, as Golo Maurer points out, these lines are not always parallel, even if they are straight. Maurer adds that although some drawings suggest sloppy draftsmanship, Michelangelo was certainly capable of producing carefully drafted architectural drawings even late in his old age. He notes that Michelangelo's use of a straightedge was more frequent in his later career. See Maurer, *Michelangelo. Die Architekturzeichnungen, Entwurfsprozes und Planungspraxis* (Regensburg, 2004), 43. Maurer's book provides a thorough analysis and discussion of Michelangelo's practice of architecture in general, with emphasis on of the role of sketching and drawing in his design process.

56. To the south of the main entrance, the ground floor of the palazzo is raised two steps above the level of the piazza, while to the north it is raised three steps.

57. Accurate measured drawings of the Campidoglio are found in De Angelis d'Ossat and Pietrangeli, *Il Campidoglio di Michelangelo* (see n. 4).

58. For the modifications of the heights of the rooms across the front of the palazzo, see Morrogh, "The Palace of the Roman People," 161.

59. Michelangelo often constructed an armature of scaled, ruled lines when drawing his design development studies. He would then sketch his ideas freehand over the armature. For other examples, see Casa Buonarroti 126A recto, a study for the ceiling of the Laurentian Library reading room, in Tolnay, *Corpus*, 542 (see n. 2). See also Casa Buonarroti 51A recto, a section of the facade of San Lorenzo, in Tolnay, *Corpus*, 504. Maurer notes that Michelangelo frequently laid down ruled guidelines over which he sketched in freehand. In his Florentine period, he often used pen and brown ink or a stylus for guidelines, but he preferred chalk in his later Roman architectural career, as is the case with Parker 332 verso. See Maurer, *Michelangelo*, 43, 44.

60. The height and diameter of the Palazzo dei Conservatori minor order precisely equals the height and width of the paired pilasters of the center bay of the stair of the Palazzo Senatorio. The never-realized baldachino above these paired pilasters would have incorporated paired columns and an entablature also corresponding to these dimensions. This implies Michelangelo had determined important design parameters for both the Palazzo dei Conservatori and Palazzo Senatorio façade by 1544, the year construction on the staircase began. The correspondence in size between the columnar order of the Parker 332 verso façade scheme, the Palazzo Senatorio pilasters, and Palazzo dei Conservatori minor order suggests Michelangelo may have established these parameters as early as 1538.

61. If the old Palazzo dei Conservatori had a loggia with thirteen bays, each would have measured 3.85 m column center to center.

62. Frommel hypothesizes that the columns of the old Palazzo dei Conservatori had a diameter of about .59 m and column height of 4.45 m. See Frommel, "Il Palazzo dei Conservatori," 22 (see n. 28).

63. A few years later in Vicenza, Andrea Palladio's approach to the renovation and aggrandizement of the Palazzo Ragione/Basilica was similar. Many of the vaults within the loggias of the basilica most likely are medieval, and many of the columns that supported the medieval arcading around the building probably are buried within Palladio's new piers. It appears Palladio removed every second medieval column, wrapped the remaining ones with his piers, and added the smaller order of columns and smaller arched spans between. In doing so, he stabilized the old fabric and provided the classical dignity and level of decorum his patrons desired.

64. Maurer discusses what he describes as Michelangelo's "pictograms" for certain architectonic elements such as door frames and column capitals with reference to his early Florentine drawings. He suggests that Michelangelo's formal abstractions were influenced to a degree by the characteristics of the brown ink Michelangelo commonly used at that time. He also suggests that in Michelangelo's later Roman period, after he had switched from ink to chalk as his medium of choice, his architectonic elements became more realistic. See Maurer, *Michelangelo*, 45. However, Michelangelo continued to abstract certain elements such as the three components of an entablature with relative consistency in his Roman period, as can be seen in Parker 332 verso. Not surprisingly, it seems to depend on the size and nature of the drawing in question (see n. 65).

65. For examples of projects with projecting and receding entablatures over columns or pilasters, see Argan and Contardi, *Michelangelo* (see n. 2): San Lorenzo façade drawings and the San Lorenzo façade model, figs. 88, 167, 168; drawings for the Laurentian Library *ricetto* and the completed *ricetto*, figs. 127–44, 192; the central *piano nobile* window of Palazzo Farnese, figs. 243, 246; and the apses, interior, and exterior of the drum of St. Peter's, figs. 283, 288–96.

66. There are many other examples of this form of abstraction for an entablature in Michelangelo's architectural sketches, including Casa Buonarroti 48A recto, for the Laurentian Library *ricetto* (see Fig. 14). See also Haarlem, Teylers Museum inv. A 29, studies for the dome and lantern of St. Peter's, reproduced in Tolnay, *Corpus*, 596.

67. Before Michelangelo took over, Sangallo's design for the lower level of the Chapel of the King of France consisted of three bays with independent aediculae modeled closely on those of the Pantheon, framed by a giant order of Corinthian pilasters. Sangallo's aediculae framed arched entrances that were to provide access to his outer ambulatory that he had begun to construct, but Michelangelo demolished it after he took over the project in 1546. Michelangelo retained the arched portals, the pairs of freestanding granite columns that were to support the simple entablatures and pediments of Sangallo's aediculae, but completely transformed the composition. Rather than retaining the columns as components of three isolated, classical aediculae, he united the columns and their flanking giant Corinthian pilasters into a more organic compositional whole by returning the straight entablatures of Sangallo's aedicule back to the wall surface between the columns to create *ressauts*. Michelangelo then extended the entablatures of the three aediculae across the wall surface to either side to meet the return edges of the giant pilasters, such that the entablatures appear to connect behind the pilasters. As a result, each aedicular bay of the chapel bears a remarkable resemblance to the Parker 332 verso elevation study, and when considered with the flanking giant pilasters, each full bay of the chapel resembles a typical bay of the built Palazzo dei Conservatori. For a detailed account of the design and construction process, see Argan and Contardi, *Michelangelo*, 327. See also Henry Millon and Craig. H. Smyth, "Michelangelo and St. Peter's: Observations on the Interior of the Apses, a Model of the Apse Vault, and Related Drawings," *Römisches Jahrbuch fur Kunstgeschte* XVI (1976), 137–206.

68. For a high-quality reproduction of Casa Buonarroti 42A, see Tolnay, *Corpus*, 541.

69. See n. 6.

70. In March 1999, I examined many of Michelangelo's original drawings at the Casa Buonarroti and at the Ashmolean Museum in Oxford. In June 2005, I again examined the sheets Casa Buonarroti 42A and 48A at the Casa Buonarroti in Florence. In October 2006, I further examined Parker 332 verso and recto, and other sheets, at the Centro Internazionale di Studi di Architettura Andrea Palladio at the Palazzo Barbaran da Porto in Vicenza, on display as part of the exhibition *Michelangelo e il disegno di architettura* (see n. 5). As a means of studying and understanding Michelangelo's sketches, I carefully copied each sketch, line by line, into a sketchbook. In the case of Casa Buonarroti 42A, I copied the black chalk drawing without the ink overlay.

71. Joannides, "Review of J. Wilde, Six Lectures," 620 (see n. 7). See also Salmon, "The Site of Michelangelo's Laurentian Library," 407–29 (see n. 7). De Angelis d'Ossat and Petrangeli briefly suggest Casa Buonarroti 42A could be an early scheme for the façade of Palazzo dei Conservatori, but there is no discussion or analysis, nor any mention of Parker 332 verso. See De Angelis d'Ossat and Petrangeli, *Il Campidoglio di Michelangelo*, 100.

72. For a discussion of the three Phaeton drawings, see Michael Hirst, *Michelangelo and His Drawings* (New Haven, 1989), 113–16. Tolnay notes a similarity in pose to the figure of Isacco on Casa Buonarroti 70F if the sheet is rotated 90 degrees clockwise. See Tolnay, *Corpus*, 62, nn. 342–43. Paola Barocchi also tentatively identifies the figure with *Sacrificio di Isacco*; see Barocchi, *Michelangelo e la sua scuola I* (Firenze, 1962), nn. 78, 100. However, the figure more closely resembles the Phaeton figure in the British Museum drawing.

73. Casa Buonarroti 42A also includes another lightly drawn figure sketched in black chalk directly above the façade drawing, which bears a likeness in pose to some of the figures Michelangelo incorporated in his *Last Judgment* studies and fresco—in particular, the flying angel holding a drapery in the upper right lunette. For a general discussion of the *Last Judgment*, see Hibbard, *Michelangelo*, 240–54 (see n. 11).

74. Hirst, *Michelangelo*, 114. See also Frederick Hartt, *The Drawings of Michelangelo* (London, 1971), 250, 251. The sarcophagus is now on display in the Uffizi, Florence.

75. Curiously, Wittkower admits that the existence of the attic story in the original black chalk sketch is problematic, but he then dismisses it and proceeds to argue that the drawing does indeed represent the Laurentian Library reading room. See Wittkower, "Laurenziana," in *Idea and Image*, 22 (see n. 6). However, this does not allow the many supporters of the Laurentian Library reading room identification to ignore the presence of the attic in the black chalk drawing.

76. For the architecture of Raphael and the Palazzo Branconio dall'Aquila, see Roberto Stefano, *Raphael Architetto* (Rome, 1974); and Christoph L. Frommel, Stefano Ray, and Manfredo Tafuri, *Raphael Architetto* (Milan, 1984).

77. Cooper, "Campidoglio," 103 (see n. 5). Hemsoll has more recently noted the resemblance of Casa Buonarroti 48A to the Pantheon; see Hemsoll, "Laurentian Library," 45 (see n. 52).

78. In the final version of the *ricetto*, Michelangelo added a second story in order to accommodate clerestory windows, and adjusted the overall proportions by increasing the height of the main story and its columns, which resulted in correspondingly larger column diameters. In order to accommodate these larger columns, Michelangelo reduced the width of the front faces of the flanking pilasters to a few centimeters. To accomplish this, he pulled the stucco surface of the walled bays to either side forward, such that

the pilasters no longer wrap the corners but engage the return walls of the exedrae and face the sides of the columns, so one can only see their depth of a few centimeters frontally. On the new second level of the *ricetto*, Michelangelo placed paired pilasters above the paired columns below, on a wall surface just slightly recessed from the walls to either side, in a configuration reminiscent of the unbuilt San Lorenzo façade. See Cooper, "Campidoglio," 103 (see n. 5). For a thorough discussion of the reception of Michelangelo's Florentine architectural forms, and its relationship to subsequent literary discussions concerning the Tuscan language, see Caroline Elam, "'Tuscan Dispositions': Michelangelo's Florentine Architectural Vocabulary and its Reception," *Renaissance Studies* 19, no. 1 (2005), 46–82. For a detailed analysis of Michelangelo's architectural details and a discussion of their sources, see Stefan W. Krieg, "Das Architekturdetail bei Michelangelo," *Römisches Jahrbuch für Kunstgeschichte* 33 (1999/2000), 103–256.

79. This condition did not exist in the final two-story version of the *ricetto* because there Michelangelo had already eliminated the full pilasters below.

80. Michelangelo's use of giant pilasters on the transepts of St. Peter's produced a considerably simpler composition in comparison to the otherwise similar condition in the Parker 332 verso scheme. However, he probably developed the idea of the giant order embracing two equal stories for the Palazzo Senatorio and Palazzo dei Conservatori before St. Peter's, and the compositional problems he encountered in the Parker 332 verso scheme may have prompted him to do so.

81. The placement and dimension of these circular marks suggest they could also represent the old columns of the *piano terra* loggia of the quattrocento palazzo, but it is more likely they represent the *piano nobile* columns (see Fig. 17). The center-to-center dimensions range from about 3.8 m (6.4 *braccia*) to 4.5 m (7.7 *braccia)*, which correspond roughly to the 4.1 m (7 *braccia*) bays of the twelve-bayed quattrocento palace. If these do represent the columns of the old loggia, their presence further supports the argument that Michelangelo intended to retain the fabric of the existing loggia and facade.

82. Michelangelo drew the *piano nobile* wall surface too far back: it should be in line with the front edges of the initial pairs of columns below. There are a number of transverse lines drawn in red chalk from the outside wall across the depth of the old loggia, which appear to be related to the first plan. However, when viewed with the sheet rotated 90 degrees *counterclockwise*, the alignment of these lines with the columns and the reentrant corners of the projecting walled bays suggest they could be part of a tentative elevation study of the ground floor of the palazzo, which Michelangelo projected upward from the initial plan. With the sheet rotated 180 degrees, one can discern a roughed-out partial elevation in dark brown chalk with two alternating segmental and triangular pedimented windows, which Michelangelo drew directly over the larger four-bay plan. Tolnay interprets these windows as studies for the drum of the dome of St. Peter's because there are no other built projects by Michelangelo with alternating window pediments. However, this seems unlikely; if this indeed were an exploration sketch for the drum, one would expect to see the paired columns of the drum drawn between the windows, just as they appear on other sketches of that subject by Michelangelo. These windows could just as easily be studies for the *piano nobile* windows of the Palazzo dei Conservatori. See Tolnay, "Unknown Sketches," 379–80 (see n. 3).

83. A significant difference between the Parker 332 verso scheme and Casa Buonarroti 42A elevation sketch is the articulation of the terminal bays of the façade. In the plan diagram to the right of Parker 332 verso, the facade terminates with walled bays, while in the Casa Buonarroti 42A elevation sketch, the end bays are paired column bays with a single pilaster turning the corner. This pilaster corresponds to those that normally flank a walled bay. Michelangelo drew the terminal bays of the Parker 332 verso elevation as walled bays probably because he had eliminated the pilasters all together on the ground level and realized that turning the corner on a column would not have been satisfactory. In addition, if the quattrocento palazzo had thirteen bays, the center bay of the Parker 332 verso scheme would be a walled bay, where one would expect to find the main entrance to the palazzo. In the Casa Buonarroti scheme, the center bay would have necessarily been a paired column bay. If the old palazzo had twelve bays, the compositional problems of both schemes would have been insurmountable unless Michelangelo intended to add a bay to the façade, but this is unlikely. In addition, in the Casa Buonarroti 42A sketch, it appears Michelangelo followed the example of the quattrocento palazzo by not providing doors opening directly from the piazza to each of the small rooms. By the time he carried out the Parker 332 verso studies, it appears he decided that it was more appropriate to have doors on every bay.

84. The subsequent evolution of Michelangelo's designs for the Palazzo dei Conservatori and Palazzo Senatorio facades will be the subject of a future article by this author.

Figure Credits

Figures 1, 3, 10, 11, 13, 15. Ashmolean Museum, Oxford

Figures 2, 21, 23. Casa Buonarroti, Florence

Figures 4, 6, 22. Art Resource Inc., New York

Figure 5. Hieronymus Cock, *Operum Antiquorum Romanorum Reliquiae* (1562)

Figures 7, 9. Computer model reconstructions by James G. Cooper

Figure 14. Computer model reconstruction, graphite reconstruction drawing, and manipulations in Photoshop by James G. Cooper; original drawing held by the Ashmolean Museum, Oxford

Figures 8, 12, 16–20. Graphite drawings and sketches by James G. Cooper; Fig. 20: drawn from Casa Buonarroti 42A at Casa Buonarroti, Florence