THE BUILDING OF THE VATICAN
THE PAPACY AND ARCHITECTURE

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THE METROPOLITAN MUSEUM OF ART
Throughout the centuries the Vatican has become one of the world’s most remarkable ensembles of architecture and art. The splendors of the basilica of Saint Peter’s, Bernini’s colonnades, and the papal palaces, the magnificent works in the Vatican Museums and libraries, and the delightful gardens have made the Vatican, and Rome, a magnet for artists, scholars, and other travelers for generations. Michel de Montaigne wrote in his travel diary of 1580–81 that Rome was “a place where foreigners at once feel themselves the most at home,” and he set about “studying every part of Rome in detail.” He found its many attractions “bad for the feet and good for the head”—an antidote to “ennui and idleness.” Montaigne viewed statues “framed in niches in the Belvedere, and the fine gallery of paintings that the pope is collecting from all parts of Italy.”

On Christmas Day 1580 Montaigne attended Mass at Saint Peter’s and he mentioned the basilica several other times, but unfortunately he never described it. He called Pope Gregory XIII (1572–85) a “great builder,” which he would be considered today had he not been succeeded by Sixtus V (1585–90), the greatest builder of all the popes. It is tantalizing to think of the observations Montaigne might have made had he been in Rome when Sixtus was pope: in 1586 when the Vatican obelisk was moved or between 1588 and 1590 when—at long last—the great dome was being raised over Saint Peter’s.

No matter. Montaigne gives us the flavor of late sixteenth-century Rome, and contemporary prints and drawings display the architecture. In conjunction with The Vatican Collections: The Papacy and Art, the unprecedented exhibition of Vatican treasures at The Metropolitan Museum of Art, this Bulletin describes the history of the building of the Vatican through prints and drawings of the fifteenth through eighteenth centuries. Much as the history of the papal collections can be traced through works in the exhibition, so can the building programs of the popes be traced through these prints and drawings, of which some document buildings now destroyed, some record projects envisioned but not executed, and some show buildings very much as they are today.

Of the forty-nine prints and five drawings selected by the author, Suzanne Boorsch, Assistant Curator of Prints and Photographs, only the drawings and three prints come from other collections. Her compilation in its comprehensiveness truly demonstrates the universality of the Metropolitan’s collection of prints and illustrated books. Among the sources used for this publication are the Nuremberg Chronicle of 1493, Antoine Lafrery’s sixteenth-century Speculum Romae Magnificentiae, Domenico Fontana’s Della trasportazione dell’obelisco vaticano, and prints by Falda, Vasi, and Piranesi—all of which are distinguished works of art as well as fascinating documents of the most dynamic centuries in the creation of the architecture of the Vatican.

Philippe de Montebello
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OLD SAINT PETER’S

Saint Peter’s and the Vatican, the grand, imposing, unified complex that is one of the prime symbols of the Roman Catholic faith, was built over a period of centuries by perhaps as many as two dozen architects. The most important era for building was the two-hundred-year span from the mid-fifteenth to the mid-seventeenth century: of what is now standing in the Vatican, little was built before the time of Nicholas V (1447–55) and most was completed before the death of Alexander VII (1655–67). The most significant contributions were made by four architects—Bramante, Michelangelo, Madero, and Bernini; without the work of any one of them, the Vatican today would have a substantially different appearance.

More than a thousand years before these architects lived, however, and long before any of the structures now extant were erected, a basilica was constructed in the Vatican area by Constantine (280–337), the first emperor to embrace Christianity. The original Saint Peter’s Basilica was built over the place that since at least the second century was venerated as the tomb of Saint Peter, the first apostle of Christ and thus considered the first pope. Saint Peter, who was martyred in the seventh decade of the Christian era—in the Circus of Nero, according to tradition—had been buried near the circus in a simple grave at the foot of the Vatican hill, across the Tiber from the main part of Rome. Over the years a large necropolis grew up in the area. A small structure was built during the second century to mark the tomb of Peter.

After the emperor Constantine defeated Maxentius at the Milvian Bridge, a victory he attributed to the help of the Christian God, he put the power and wealth of the Roman Empire at the service of Christianity. First he built a basilica in the Lateran district; now called San Giovanni in Laterano, it has been the cathedral church of Rome ever since. He then turned his attention to the site of Saint Peter’s tomb, and in about the year 320 he began construction of a huge basilica there. The engraving at the left from a seventeenth-century book shows, superimposed, the plans of the Circus of Nero, the Constantinian basilica, and the present Saint Peter’s as it had been built in the sixteenth and seventeenth centuries. North is to the right: Saint Peter’s had, and still has, its entrance at the eastern end and its altar at the western, as opposed to the orientation of most Christian churches. Seventeenth-century scholars thought that what were actually the southern foundations of the Constantinian basilica had been the northern walls of the circus. This belief has since been proved wrong, but that there was a circus in the area is certain.

To build the basilica necessitated leveling a vast site on the slope of the Vatican hill, which rose from south to north. The foundations, and perhaps more of the structure, were apparently completed about 333 and most of the building finished before Constantine’s death in 337. Over 350 feet long and with a gabled roof over 100 feet high at the center, the basilica had a central nave and two aisles on each side, divided by rows of columns (twenty-two in a row, not twenty-three as shown on the plan), all of which were spoils from earlier buildings. The structure, whose transept extended beyond the width of the rest of the
building, was the first basilica to be built in the shape of a cross. An apse at the western end served as a background for a marble shrine above the Tomb of Saint Peter in the center of the transept, the sacred monument that since the second century has stood in this place, where it remains today.

During the sixth century, an atrium with three entrance doors was built in front of the basilica (see the engraving above). Of an area equal to about half that of the nave and aisles, it was called the Garden of Paradise, for on its eastern wall (not visible in the engraving) were depicted palms, cedars, olives, and other trees. In this atrium pilgrims slept and merchants sold their wares; contrary to the clean-swept look of this engraving, it must always have been a bustling place, full of people and activity. In its center stood a fountain whose principal element was a classical pine cone of gilded bronze, sheltered within a small structure with columns, and with bronze peacocks and dolphins above. (The pine cone and the peacocks are now in the Belvedere.)

On the outer wall of the basilica were thirteenth-century mosaic images of Christ in Glory with Pope Gregory IX (1227–41), who ordered the work to be done, and Saints Peter and Paul, the Four Evangelists, and the Elders of the Apocalypse. The atrium was thought to have been surrounded by an arcade, although only the section along the façade itself existed by the early seventeenth century, the time of the drawing from which this engraving was made. (The drawing was one of a series done to record the appearance of the old basilica just before it was torn down.) To the north, on the right, is part of the Apostolic Palace; opposite is the Church of the Holy Sacrament, which was destroyed at the same time as Old Saint Peter’s.

For twelve centuries the basilica gradually gained
in importance, eventually becoming the major pilgrimage church in Rome. In the medieval period papal coronations began to take place there, and in 800 Charlemagne was crowned Holy Roman Emperor by Pope Leo III (795–816), beginning a tradition that was carried on for centuries. The interior of Saint Peter’s became richly decorated with statues, hangings, and other furnishings, and tombs, altars, and side chapels were added. The exhibition The Vatican Collections: The Papacy and Art includes fragments of an eighth-century mosaic and a thirteenth-century fresco that were part of the fabric of Old Saint Peter’s and also portions of a tomb and an altar of the fifteenth century from the building.

Unfortunately, the earliest documentary views of Saint Peter’s were not made until the sixteenth century.

The Dutch artist Maarten van Heemskerck spent several years in Rome in the 1530s, producing a notebook of topographical sketches that are among the prime visual records of the city. The sketch shown above is a copy of one of these. In it a feeling of the dimensions and a trace of the character of Old Saint Peter’s are preserved. Visible in the foreground at both right and left are four columns of the nave, which support an entablature and a wall above that has painted or mosaic decoration. This colonnade and wall are interrupted, however, by the huge piers of the new structure—only as much of the old basilica had been demolished as necessary to make room for the new. In the center of the drawing is the structure built by Donato Bramante early in the sixteenth century to house and protect the altar of the old basilica.
Drawings specifically to record the appearance of Old Saint Peter’s were not made until it was decided to tear down what remained of the old basilica early in the seventeenth century. The engraving at right was based upon one of these (as was the engraving of the atrium on p. 5). Unfortunately, these images are reliable only to give a general idea of the structure—the details must be viewed skeptically. The profile of the building, for instance, is inaccurate; the clerestory wall of the nave rose much higher above the roof over the side aisle than is indicated here, and the windows were both longer— their height was twice their width—and farther from the roof. The image is probably correct in showing the nave colonnade with its entablature and the side aisles with arches between the columns. The walls above the side aisles were made lighter by arched openings. The nave and aisles probably had ceilings during much of the existence of the church; here they may have been omitted to show the construction of the roof.

Since the drawing was made when the Constantinian basilica had already been partially torn down, it shows a wall just beyond the two-story monument on the right (this monument is also visible in the drawing after Heemskerck, opposite, showing the basilica before the construction of the wall). The engraver, however, made his image as though the building were of its original length. The shrine over the Tomb of Saint Peter is visible at the far end of the nave, under a great triumphal arch. The engraver did not add to the collection of tombs, altars, and other monuments all in the front section of the church in the drawing; the haphazard character of their placement is probably accurate.

One of the latest views of Old Saint Peter’s— only about half of the original structure then remained—is in the engraving below depicting the moving in 1586 of the obelisk that stood on the southern side of the basilica at the center of the Circus of Nero. The obelisk had been standing at that point since it was brought from Egypt by Caligula in A.D. 41. The medieval bell tower, whose top had been altered in 1571, is at the far right; to its left the wall of the atrium is visible and then the old basilica itself, with the cross at the peak of the gabled roof and its arched top-story windows. The round structure with a gaping hole was built as a mausoleum, probably in the third century; subsequently it was used as a church. In the papacy of Gregory XIII (1572–85) it became the sacristy of Saint Peter’s. The hole had to be made so that the huge obelisk could be lowered into a horizontal position. At the far left the new Saint Peter’s can be seen.

Detail, Old Saint Peter’s in 1586. Natale Bonifacio after Giovanni Guerra, 1586
NEW SAINT PETER’S

The old basilica of Saint Peter’s underwent continual refurbishing and repairing—sometimes on a grand scale, notably after the city was sacked in 846, and sometimes simply as embellishment or maintenance. The first new construction, however, was undertaken by Pope Nicholas V (1447–55). Nicholas, a humanist, worked with the theorist and architect Leon Battista Alberti in the first of a number of extraordinary and fruitful collaborations between pope and architect that stimulated the bursts of building activity during the Renaissance and Baroque periods. Alberti had a plan for remaking the city of Rome, with Saint Peter’s at the center. Saint Peter’s itself was to be enlarged—the nave would stand, but the other three arms would be rebuilt, of equal lengths, and a dome was to cover the crossing.

Nicholas V had Bernardo Rossellino begin building, and in 1452 he started a choir at the western end, outside the wall of the apse of Old Saint Peter’s. Unfortunately—as was to happen again and again in the history of Saint Peter’s and the Vatican—when the pope died, the impetus for building died with him. After the death of Nicholas, although some construction was done under Paul II (1464–71), another half-century went by before major work on Saint Peter’s was resumed.

Julius II (1503–13) and Donato Bramante were the pope and architect whose collaboration was most consequential for the architecture of the Vatican. If Nicholas V had wanted to rebuild Rome on rational and humanist principles in service of the prestige of the Church, Julius wanted to restore it to the grandeur of the imperial age. He was a decisive, war-making pope, whose emulation of the ancient Roman emperors began with his choice of papal name and had its greatest and most enduring expression in his building program.

Bramante was the perfect match for Julius. Thirty years old when called into service upon the pope’s election in 1503, the architect responded to Julius’s ambitious ideas with comprehensive and grandiose plans. Although Bramante died only eleven years later, he set both the scale and the general plan for the entire Vatican complex, for in addition to Saint Peter’s, Bramante planned the immense Cortile del Belvedere (Belvedere Courtyard), linking the Apostolic Palace, close to the basilica, with the Palazzetto del Belvedere at the far north of the Vatican hill (see pp. 48–57).
Bramante’s final ideas for Saint Peter’s will probably never be known. But if the details are uncertain, the audacity and scale of his design are not. The grandeur of Bramante’s conception was such that, even though construction was barely begun when he died in 1514, all subsequent architects were bound by what had been built. On April 18, 1506, the foundation of the first of four colossal piers was laid, and twelve impressions of a commemorative medal by Caradosso were placed with the foundation stone. The print by Veneziano (opposite, above) reproduces the medal and its inscription—TEMPLI PETRI INSTAURACIO, VATICANUS M—and adds the date 1506. The word instauracio is significant, for it means “restoration,” and it was the word used by Julius in referring to the whole program for Rome—the “restoration” of the Rome of the emperors.

Bramante apparently first designed a church in the form of a Greek cross, with an immense dome over the center (see opposite). If the building as shown on medal and engraving was to have been symmetrical, it would have had eight subsidiary domes—one at front, back, and each side—and four filling out the corners of a square around the base of the dome. Thus the plan would have united the cross, the square, and the circle to symbolize perfect unity, the harmony of heaven and earth. The Greek cross in Neoplatonic thought reached out to the four quarters of the earth and in this context also had a more specific reference to Saint Peter’s as a martyrion, since it was the site of the tomb of Christ’s first apostle and predecessor to all the popes. The idea of the church as martyrion also conformed with another project commissioned by Julius II in the early years of his papacy—his own tomb. In March 1505 Julius summoned the young Michelangelo from Florence to make a design that, according to Vasari, would “surpass all antique and imperial tombs.” The need for a suitable setting for the tomb of Julius, in fact, was at least one inspiration for the rebuilding of Saint Peter’s.

Various drawings of plans associated with Bramante survive, some showing a Greek cross and some the Latin cross. It may well be that the final plan for the basilica was not agreed upon when construction began in 1506; the sixty-three-year-old Julius would have been impatient to see actual building on this, his most ambitious project, and the piers to support the dome could have been started before the final plan was worked out—the placement of the dome was dictated by the location of Peter’s tomb. In any case, Julius died in 1513 and
Front elevation for Saint Peter’s by Antonio da Sangallo. Anonymous, published 1548

Opposite: Longitudinal section for Saint Peter’s by Antonio da Sangallo. Anonymous, published 1548

Plan for Saint Peter’s by Antonio da Sangallo. Anonymous, published 1549
Bramante the following year, and after its extraordinarily fast beginning, work on Saint Peter’s slowed down, even coming to a virtual halt, for nearly two decades.

After the death of Bramante, Giuliano da Sangallo, Fra Giocondo, and Raphael were together charged by Leo X, who had succeeded Julius II, with continuing the construction of Saint Peter’s. Little was done, however, and work came nearly to a standstill under Popes Adrian VI (1522–23) and Clement VII (1523–34). The Sack of Rome in 1527 created disarray throughout the city, and when the drawing on p. 9 was made, in the 1540s, Bramante’s piers themselves looked like some ruin of antiquity.

In this view from the north Old Saint Peter’s can be seen at the far left, newly walled at the back, although with a large arch left open. The obelisk on the south side of Old Saint Peter’s is also visible. In the foreground an interior wall of the north transept of the old basilica is directly under Bramante’s two huge coffered arches connecting the piers at east and west. The arched piers to right and left of the old wall are part of the new fabric. Through a square opening in the altar house built by Bramante is a glimpse of one of the twisted columns of the old shrine over the tomb of Peter. The choir with Doric pilasters, begun by Rossellino and continued by Bramante, is at the western end of Saint Peter’s, at the far right.

Of all the projects for Saint Peter’s, that of Antonio da Sangallo, appointed in 1534 by Paul III (1534–49), is known with the most certainty—ironically, for little of what he did build remains. Sangallo’s wooden model for the church—which took seven years and an immense sum of money to build—still exists, and engravings of the plan (opposite), two elevations (see opposite, above), and a longitudinal section (above), all made from the model, were published. These prints bear the papal coat
of arms and the legend CUM GRATIA ET PRIVILEGIO, signifying a copyright privilege.

Sangallo's plan presented a major cross and four lesser crosses, all surrounded by domes. Three ends of the cross became apses; in front of the fourth, flat, side Sangallo added a short nave and a façade—his plan is a compromise between a Greek and a Latin cross. Bell towers at the ends of the façade rose to the same height as the dome, and there were smaller towers at the four corners of the square. The main body of the building had three stories, the first with Doric columns and pilasters, the third with Ionic, and the intermediate story with flat pilasters, all applied to the surface rhythmically, either singly or in pairs, giving the structure a busy and bewildering appearance. The entire plan was extremely complex, with three naves, ambulatories with chapels through the apses, and numerous subdivisions.

Sangallo constructed the barrel vaults on the east and the south, and he finished the outer wall of the southern apse up to the top of the first story. His model would have been relatively easy to follow to the basilica's completion, if his successor had so desired. But such was not to be the case.

After Sangallo's death in 1546, Paul III asked Michelangelo to take over the architecture of Saint Peter's. Already seventy-one years old, Michelangelo protested that he was not an architect and that he wanted only to be allowed to finish the tomb of Julius II, begun nearly forty years before. But Paul III prevailed.

Michelangelo assumed his post in January of 1547. After studying Sangallo's model, he wrote a letter—now well known—to the prefect of the deputies disparaging Sangallo's project:

One cannot deny that Bramante was as skilled in architecture as anyone since the time of the ancients. He it was who laid down the first plan of St. Peter's, not full of confusion, but clear, luminous and detached in such a way that it in no wise impinged upon the Palace. It was held to be a beautiful design, and manifestly still is, so that anyone who has departed from Bramante's arrangement, as Sangallo has done, has departed from the true course.... He, with that outer ambulatory of his, in the first place takes away all the light from Bramante's plan; and not only this, but does so when it has no light of its own, and so many dark lurking places above and below that they afford ample opportunity for innumerable rascalties, such as the hiding of exiles, the coining of base money, the raping of nuns... so that at night, when the said church closes, it would need twenty-five men to seek out those who remained hidden inside, whom it would be a job to find.

He went on to complain that if Sangallo's church were built following the model, it would be so big that "the Pauline Chapel, the Offices of the Piombo, the Ruota and many other buildings would have to be demolished; nor do I think that the Sistine Chapel would survive intact."

Michelangelo sought and received papal permission to do whatever he wished with the existing structure, and he ordered the offending outer ambulatory of Sangallo's hemicycle demolished. Michelangelo's plan (above left), as compared with Sangallo's, shows that essentially he eliminated the outer wall, thereby, in Vasari's famous phrase, "diminishing its size, but increasing its grandeur." In Michelangelo's plan the forms of cross and square are melded, simplifying Sangallo's and Bramante's idea of a major cross and four subsidiary ones.

The engraving of the plan above, left, is inscribed EX ESEMPLARI MICHAELIS ANGELI BONAROTI ("after the model by Michelangelo"). It is virtually certain, however, that Michelangelo did not design a model that included an eastern façade. It is not known who designed the façade as shown here.

After tearing down Sangallo's outer wall, Michelangelo began building on the southern apse. On what became the exterior—what would have been the inner wall of Sangallo's outer ambulatory—Michelangelo was bound by the height and placement of the piers and vaults that had been built and by the position of openings. He also wanted his design to be harmonious with Rossellino's choir on the west, finished by Bramante—ironically, this part was torn down in the 1580s and rebuilt to match what Michelangelo designed.
The southern façade as built substantially conforms to Michelangelo’s design, which can be seen on the print published by Luchino (below). This print, like those of the Sangallo project, bears the papal arms and privilege. Wider bays that contain two windows—only the upper of which is an actual opening—alternate with narrower bays that have three superimposed arched niches. The framing of the large windows in turn alternates between triangular and segmental forms. Between the bays are colossal Corinthian pilasters backed by plain strips; these pilasters and strips double up at all the points where hemicycle and diagonal walls and diagonal and right-angle walls meet, creating a prodigious variety of projections and angles and an ever-changing play of light on the surface. Nevertheless the solidity of the structure is manifest; because of the amount of plain stone that is visible, and despite the variety of surface detail, the effect is one of unity and strength, and upward surge.

The attic story of the apse had, simply, three windows above the three wide bays of the lower stories. These windows were placed in deeply recessed arches, coffered in the vaults. The inspiration for this design may have come in part from the third-century mausoleum, which in the sixteenth century was the Church of Santa Maria della Febbre, adjacent to the area where the new building was under way (see the illustration on p. 7), and perhaps also from the Rossellino-Bramante choir; it provided a link between old and new, and it was a soothing, quiet surface to counter the movement and upward thrust of the walls below.

Before Michelangelo died in 1564, the southern hemicycle had been completed to his design as shown in the Luchino print, and the northern hemicycle had been built up into the second story. Like Sangallo before him, Michelangelo had created a design to which his succes-

*Elevation of one side of Saint Peter’s after Michelangelo. Published by Vincenzo Luchino, 1564*
South elevation for Saint Peter's after Michelangelo and others. Etienne Dupérac, 1569 or later
sor could have adhered—what had been built on the south of the basilica would have been enough to follow for the northern arm. But again, as had happened after Sangallo’s death, changes were made.

Just what occurred next, however, is unclear. The architect and antiquarian Pirro Ligorio, already supervising other architectural projects in the Vatican, was charged with continuing work on Saint Peter’s, but shortly he was dismissed, apparently for suggesting changes in Michelangelo’s plan. Giacomo Barozzi, called Vignola, succeeded him in 1567. In 1569 the plan on p. 12 was published, with, as has been noted, an eastern façade that was not of Michelangelo’s design. A south elevation (left) and a longitudinal section, both inscribed Michael Angelus Bonarota Invenit, were made by the same engraver, Etienne Dupérac, probably soon after the plan. The striking difference between the Luchino print and the Dupérac elevation, apart from the fact that the Dupérac shows the basilica entire, is in the attic story. Although the southern hemicycle was already built through the attic as shown on the Luchino print, the Dupérac engraving shows an attic with horizontal windows rather than vertical arched ones over the wide bays below, niches with candelabra over the narrow bays, and pilasters and strips continuing those below. This is the design that was built on the north side after Michelangelo’s death and that eventually was built on the attic all around.

For four centuries the entire flank of the basilica was admired as the work of Michelangelo, but in 1969 evidence was published supporting the thesis that the attic design is not his—although some scholars disagree. In the Dupérac engraving, serious flaws in the roof and at the corners betray a lack of comprehension of the design as a whole. Further, it is certain that the two small domes were designed not by Michelangelo but by Vignola. The three Dupérac prints, unlike the one published by Luchino, never bore the papal arms and privilege, but Michelangelo’s name inscribed on them nonetheless gave legitimacy and authority to the design for generations.

Construction of the drum to support the dome of Saint Peter’s proceeded simultaneously with work on the lower stories. The drum was built to Michelangelo’s design, with paired columns and windows with alternating triangular and segmental pediments echoing the paired pilasters and alternating window pediments of the lower stories. Begun in 1557, it was nearly finished during his lifetime, but it remained without a dome for twenty-four years after his death.

The engraving on pp. 16–17 showing a pope, probably Pius V (1566–72), blessing crowds from the three-story benediction loggia built in the second half of the
Saint Peter’s piazza. Anonymous, 1570s
fifteenth century is a copy—with one major change—of an engraving published in 1567. The change is in the top of the bell tower: the 1567 engraving showed the pointed spire built in the 1540s (which in turn replaced the medieval top visible in the drawing on pp. 40–41). The domed top seen here was put on in 1571, but no other change in the architecture is reflected in this print, made after that date and presumably before the minor dome was built over the so-called Cappella Gregoriana, at the northeast corner of the basilica, about 1583.

Michelangelo’s drum remained the same, and the view of the piazza was as it had been at the beginning of the century—except for the bell tower and, of course, new Saint Peter’s rising in the background. The eastern

Methods suggested for transporting the obelisk.
Natale Bonifacio after Domenico Fontana, published 1590
half of Old Saint Peter’s still stood; its pediment with a new rose window is visible behind the atrium wall with its three doors. The easternmost wall of the new structure, also with a gabled roof, can be seen behind Old Saint Peter’s. To the north of the benediction loggia the buildings of the Apostolic Palace began; the main entrance was an archway built in the time of Innocent VIII (1484–92). The Sistine Chapel and Bramante’s façade with its loggias (see pp. 40–43) can be seen behind and to the right of the entranceway. Thirty-five steps, in five groups of seven—mostly obscured by the crowd in this image—led up to the ground level of the buildings. (The Vatican hill sloped upward from south to north, as has been noted, and also from east to west.) Colossal statues of Saints Peter and Paul marked the bottom of the steps.

Saint Peter’s piazza was not to remain unchanged much longer. In 1586 the obelisk that had stood for over fifteen centuries at the point marking the center of the Circus of Nero, at the south side of Saint Peter’s, was moved eastward into the piazza. Of the numerous obelisks brought from Egypt by the ancient Romans, only the one in the Vatican was still
The moving of the obelisk. Natale Bonifacio after Giovanni Guerra, 1586

standing in the sixteenth century. Three hundred years after the obelisk had been raised in the center of the Circus of Nero, Old Saint Peter’s was built, slightly to the north of it, with the third-century mausoleum standing between the two (see plan on p. 4). In the sixteenth century the obelisk still stood in the same place, its base and pedestal beneath the ground level, which had risen from inundations of the Tiber and because the area had been used as a dumping ground.

The possibility of moving the obelisk had been under consideration since the time of Pope Nicholas V (1447–55), and in 1583 an engineer named Camillus Agrippa published his specific proposal for how the move could be accomplished, but his ideas were not workable. When Sixtus V (1585–90) was elected pope, one of his first actions, in August 1585, was to appoint a council to study the problem. Five hundred mathematicians, engineers, and others came to Rome to present their proposals. Domenico Fontana, a forty-two-year-old architect and engineer who had built a villa for Sixtus V when he was a cardinal, won the competition. After the successful “transportation,” he published a book illustrated with engravings after his own drawings, relating all the details of the operation—making this
engineering feat the best documented of the Renaissance.

Various methods of moving the obelisk were suggested. Fontana charmingly illustrates (see p. 17) some of the other proposals: B shows the obelisk being moved by levers, in C it is on a half-wheel, and in G it is lowered in a cogwheel. In E the obelisk is to be moved at a 45-degree angle. The letter A represents Fontana’s own winning recommendation (the putti, of course, are not part of the means of transportation).

Fontana’s plan called for first encasing the obelisk in a wooden sheath and then building a wooden tower of scaffolding around it. The obelisk would then be lifted by means of ropes and windlasses onto a sixty-foot-long carriage, upon which it would be lowered to a horizontal position. Finally, the carriage would be rolled along a causeway the 260 yards eastward to the chosen position, and the obelisk raised.

By papal edict, Fontana was given the right to gather materials and raze buildings, and for several months he made his preparations. He received permission to cut a hole in the wall of the sacristy of Saint Peter’s to put three windlasses inside. On April 30, 1586, everything was ready.

The workmen were placed at their appointed posts, two foremen were assigned to each windlass, their orders being to start turning at the sound of a trumpet and to stop at the sound of a bell. I signaled the trumpeter and the 5 levers, 40 windlasses, 907 men and 75 horses went into action. The earth seemed to tremble and the Tower creaked ominously under the weight as all the lashings became taut. The Obelisk as it first stood was inclined two spans towards the Choir of St. Peter where services are now held. It now righted itself. Despite the great creaking it was found that the Tower had not given in any way and no one had been hurt so we all took courage and the bell signaled a halt. One of the iron bands that held the sheathing, the first nearest the tip, had sprung. This was repaired... In twelve movements the Obelisk was raised spans two and three-quarters [slightly more than two feet] just enough to allow the carriage to be run under it and to permit the removal of the metal feet. The Obelisk was propped at the corners with the strongest possible timbers

The obelisk standing near Old Saint Peter’s; its transportation; the obelisk standing
and wedges of wood and metal. All was finished at the 22nd hour of the same day and at a signal from the Tower all the artillery fired a great salvo as a signal of jubilation.

On May 7 work began on lowering the obelisk; again by 10 o’clock at night the job was done, and the obelisk lay on its side. That night Fontana was “escorted home to the music of drums and trumpets.” Over the summer the causeway was built, the tower re-erected at its end, and the obelisk on the carriage slid under the structure. On September 10, using the same signals of trumpet to start and bell to stop, and with as much public excitement, the obelisk was raised. At its top, symbolizing the triumph of Christianity over paganism, was a gilt-bronze cross; supporting the cross was the pope’s device of mountains and eight-pointed star. On September 28, barely a year after Fontana had received the commission, a ceremony was held to consecrate the cross and “to exorcise and bless the Obelisk.”

Sixtus V is justly known as the greatest builder among the popes. In his papacy of only five years he had Fontana move the obelisk around to the front of Saint Peter’s; he commissioned Fontana and Giacomo della Porta to build the dome crowning the great basilica; he engaged Fontana to build a new wing for the Apostolic Palace (see p. 44) and the library (see pp. 56–57); and he had another palace erected, streets widened, and aqueducts and fountains provided for the city of Rome. Had he lived only ten years longer, he might well have demolished what was left of Old Saint Peter’s, built a façade on new Saint Peter’s, and finished the piazza on a grand scale. As it happened, not until some seventy-five years after his death were these things accomplished.

If Sixtus V had lived, Saint Peter’s might look today as it does in a print of 1587 documenting the ceremony consecrating the cross on top of the obelisk (p. 22). (This was held on September 28, 1586, although the date given in the engraving is September 26.) The print is inscribed: FORMA NOVAE BASILICAE D. PETRI IN VATICANO QUAM OMNES SPERANT (“the design of the new basilica of Saint Peter’s, the hope of all mankind”). The view conforms with what were thought to have been Michelangelo’s intentions, as published in the three Dupérac prints—the plan dated 1569, the section, and the elevation; since no façade elevation had been published, the façade was a projection from the information available. In the print, the basilica is built on a central plan around the core of Bramante’s great piers. The façade has a portico supported by eight colossal Corinthian columns to right and left of a two-story central door; the two innermost columns of the ten on the Dupérac plan have been omitted. Projecting forward from the portico is a triangular pediment supported by four more Corinthian columns and surmounted by orb and cross, as actually was the triangular pediment of the façade of Old Saint Peter’s. Statuary has been placed liberally at the points between the bays, all around a balustrade above the attic story, and around the bases of the domes, major and minor. A Risen Christ stands at the very top. Inside the pediment, two genii or angels support the arms of Sixtus V. Old Saint Peter’s is gone, as are the other buildings to north and south, and a huge open area, covered with checkered paving, surrounds the basilica.

Sixtus V did have the pleasure of seeing the dome crowning Saint Peter’s built under his direction. Characteristically, it was he who dared to go ahead with the tremendous task of engineering, after the completed drum had been without a dome for more than twenty years—the pope is said to have complained that the building looked like a body without a head. He gave his approval to Giacomo della Porta’s design in 1586, calling on the favored Domenico Fontana, now famous as the “Cavaliere della Guglia” (Knight of the Obelisk),
Consecration of the cross on the obelisk, with Saint Peter's projected as complete. Natale Bonifacio after Giovanni Guerra, 1587
to work with della Porta. Construction began in 1588.

Because the Dupéray engravings have been shown to be unreliable with regard to Michelangelo’s intentions (see p. 15) and scholars disagree about who created the wooden model of the dome that still exists, it is unclear how close the dome as constructed may be to what Michelangelo would have built. Because of the Dupéray engravings, the hemispherical shape was thought to have been Michelangelo’s final design, but della Porta elongated the profile of the dome, giving it the dynamic rising movement now associated with the Baroque. The heavy external ribs continue the lines of the double columns of the drum and seem almost to restrain this rising tendency.

At least six hundred men worked virtually without pause, and the dome—138 feet in diameter, 390 feet in height on the interior, and 435 feet on the exterior—was completed in less than two years. The lantern was built in two more, and the orb and cross at the top of the entire structure were in place before the end of 1593.

Any other plans Sixtus V may have had for Saint Peter’s, however, were unrealized at the time of his death in 1590. In 1593, Antonio Tempesta published a large bird’s-eye view of Rome, from the south (p. 24), which is one of few images showing both new Saint Peter’s with its dome and lantern and part of Old Saint Peter’s still standing. The attic story as built by Michelangelo is still on the southern hemicycle. The northeast chapel, with della Porta’s cupola, is finished but the southeast one is not. The sacristy wall, having been cut open for the moving of the obelisk, is closed again. In the piazza, the obelisk stands on—or very close to—the central axis of the old and new basilicas. The fountain beyond it, built in the fifteenth century and redesigned by Bramante, is still where it was earlier in the century (see pp. 40–41).

In 1605, within months of his election to the papacy, Paul V (1605–21) made the decision that had perhaps been inevitable for a century, since the foundation for the first of Bramante’s huge piers was laid on April 18, 1506: despite the objections of some cardinals, he gave the order to demolish what was left of Old Saint Peter’s. The principal justification given for doing so was that the old basilica was falling down. A competition was held to design the new façade, and even at this time the question of the final plan—whether the church would be finished on the plan of a Greek cross or whether a nave would be built, giving it the plan of a Latin cross—was undecided. Reverence was still accorded to Michelangelo and what was assumed to be his intention to finish the church on a central plan, but to do so would have left some of the sacred area of Old Saint Peter’s uncovered. Paul V seems to have favored a nave, and finally the decision was made to build one.

The engraving on p. 25 shows Maderno’s façade as he completed it in 1612, additions that he was enjoined to make, and other additions that were never built. In 1612 Maderno completed a façade seven bays wide, the portion that carries the inscription IN HONOREM PRINCIPIS APOST. PAULUS V BURGHEISIUS ROMANUS PONT. MAX. AN. MDCXII PONT. VII. (It has often been pointed out that although the words honor Saint Peter, the first apostle, their placement puts the name of Paul V on the central, protruding section.) In the very center is the benediction loggia, replacing the fifteenth-century one destroyed at the same time as the old basilica. From there the pope would bless the faithful gathered in the piazza on the holiest days of the calendar. Directly under the loggia is a relief of Christ Giving the Keys to Peter, an important theme in the Counter-Reformation, symbolizing the authority of the papacy.

Maderno’s design shares some features with what were understood at the time to be Michelangelo’s intentions (see, for example, the engraving opposite): it has a projecting pediment supported by four Corinthian columns (although the projection is less than that on the
Dupérac plan), with a row of columns supporting an entablature behind; steps go up from front and sides to the level of the base of the columns; statues stand atop the balustrade above the attic; and papal arms adorn the pediment. Maderno’s façade of course was designed to harmonize with what had already been built: the colossal Corinthian order supporting a wide entablature, the Ionic order framing the openings, and the alternation of wider and narrower bays and of triangular and segmental window pediments were all elements of Michelangelo’s exterior wall; the niches are nearly identical with Michelangelo’s; and the attic story is close to that built on the north side shortly after Michelangelo’s death (the attic story on the south was changed to match that on the north early in the seventeenth century).

Only after Maderno’s original façade was completed were the two outermost bays (the parts with no inscription) constructed. These were meant to be the bases of bell towers. Maderno protested against adding to the façade but Paul V insisted, so the architect designed and constructed the outermost bays, but only up through the attic level. It is unclear what design for the top of the towers, if any, was accepted by Paul V. The presence of the papal arms in the upper left-hand corner of this engraving may imply papal approval for this design, assumed to be by the architect and engraver Martino Ferrabosco, who also made the plate. Paul V, however, died in 1621 before any construction on the tops of the
towers was done. Maderno has been criticized for the present façade on the grounds that it is too wide for its height; but, as can be seen in this print, if the belfries had been built, the proportions would have made more sense and the towers would have been differentiated from the façade proper.

It is only from behind the façade that Maderno’s tower bases can be seen projecting from the side of the basilica. The view of Saint Peter’s from the southwest on pp. 26–27 also clearly defines the outline created by Michelangelo’s plan of a square within a Greek cross, with the progression of hemicyle, diagonal, square corner, diagonal, and hemicycle, and it shows how the dome soars over the crossing. The design of the attic story first built on the north side has been extended all around. To the east, where Old Saint Peter’s had stood, is the nave built by Maderno. Of the old buildings that are visible in the illustrations of the moving of the obelisk (pp. 17–21), only the Roman mausoleum, then serving as the sacristy (at “2”) remains; this too was later demolished, in 1777.

In 1623, after the short papacy of Gregory XV, Maffeo Barberini was elected pope, choosing as his name Urban VIII. He and the young sculptor Gianlorenzo Bernini had long been friends, and his election put Bernini, then only twenty-four, in a position of artistic supremacy in Rome. He maintained this standing for nearly twenty years, until the death of Urban VIII, lost influence while Innocent X was pope (1644–55), but achieved even greater eminence during the pontificate of Alexander VII (1655–67). A well-known story has it that Urban VIII said to Bernini, “It is your great fortune, oh Cavalier, to see Cardinal Maffeo Barberini Pope, but much greater is our own that the Cavalier Bernini lives during our pontificate.”

After the death of Maderno in 1629, Bernini was named architect of Saint Peter’s. His first strictly architectural work on the basilica, however, was a near-disaster and was one of the factors that caused his temporary disgrace. In the mid-1630s he addressed himself to the question of the bell towers, unresolved after the death of Paul V in 1621, and in 1637 he presented...
Saint Peter's from the southwest. Giovanni Battista Piranesi, 1748
a design, which was accepted, for twin three-story towers to be built on Maderno’s bases. Construction was begun on the south tower, but cracks developed in the structure, which had to be repaired; underground springs made the foundation shaky, for which reason Maderno had built the base of this tower considerably wider than that of the northern one. A full-size model for the third story was built in place in 1641, but it was removed almost as soon as it went up. The first two stories remained for several years, however, until 1645, but after the death of Bernini’s protector, Urban VIII, the tower was pulled down. No other was ever built.

The view by Israel Silvestre (above) can thus be dated in the early 1640s. The fountain in the foreground had been in the square since at least the fifteenth century and had been redesigned by Maderno. The lack of symmetry—Bernini’s two-story bell tower on the south and Ferrabosco’s clock tower on the north were both unmatched—made Saint Peter’s piazza still an informal, haphazard space. It would keep this character for some fifteen years more.

Alexander VII succeeded Innocent X to the papacy in 1655, and one of his first acts as pope was to commission Bernini to enclose the piazza in front of Saint Peter’s. The irregular area was filled with crowds on ceremonial occasions, and while the space was not unpleasing, it lacked the imposing quality thought appropriate to its function as the approach to the central church of Christendom, the entrance to the Vatican palaces, and the place where pilgrims could come to receive blessing from the most holy pontiff. Crowds gathered as they still do today for papal benediction from one of two places: ordinarily, from a window in the Apostolic Palace to the north of the square, and on the holiest days from the benediction loggia in the middle of the façade of Saint Peter’s.

Bernini received the commission on the last day of July 1656, and less than three weeks later he presented a plan to be judged by the papal congregation. Although it is not known in detail, it appears to have been a relatively simple proposal to erect two matching straight arcades on the north and south sides of the space, equidistant from the obelisk and diverging slightly toward the basilica. In other words, the arcades would form the sides of a trapezoid—open at the top and the bottom—with the obelisk at its center, or simply the sides of an avenue that broadened as one approached the basilica. This plan was criticized on various grounds, one being that the crowds would be held too far from the window of the Apostolic Palace. In the spring of 1657 Bernini submitted another design, this time with two arcades forming the short ends of a transverse oval, again centered upon the obelisk, again open toward the basilica, but now with a third section of arcade closing the easternmost end of the piazza. An arcade on a curved plan, however, is problematic, since the outer perimeter is larger than the inner, and soon the arcade became a colonnade.

In the final design (see opposite), the columns are four deep, creating three aisles—the center, wider, one for carriages and the outer two for pedestrians. The col-
Plan and elevation of the colonnade in Saint Peter’s piazza. Giovanni Bonacina, 1659

Saint Peter’s Basilica and piazza. Giuseppe Vasi, published 1786
Saint Peter's Basilica and piazza. Giovanni Battista Piranesi, 1748
ums are placed as though on spokes of a wheel, so that if one stands at the center of either of the two intersecting circles that form the oval—that is, at a point roughly halfway between the obelisk and either fountain—the three outer colonnades are lined up and invisible behind the innermost one (except for a slight deviation at the outer ends).

The engraving published in 1659 to publicize the new piazza (p. 29, top) slightly misrepresents the shape of the colonnade. The large plan of one arm shows its outline as an arc of a circle, whereas in actuality the very ends of the colonnade depart from the circumference of the circle, widening to form the oval. The two small representations of the ensemble, the plan at upper left and the bird’s-eye view in the center, show a third colonnade closing its eastern end, but as had happened before in the building of Saint Peter’s, the death of the pope who had promoted a phase of construction caused activity to be suspended. The final form of this structure was undecided at the death of Alexander VII in 1667 and the third arm was never built.

Alexander VII did live to see both colonnades and the northern corridor leading to the façade completed and the southern corridor begun. Bernini made designs for ninety statues to go over the curved colonnades; these and some fifty others over the straight corridors were erected beginning in 1662. Bernini had a second fountain made to match the one Maderno designed, and the two were placed symmetrically, on the axis of the obelisk and on a line connecting the pilasters next to the last column of each colonnade. Later, the square was paved in a radial pattern that divides the piazza into eight sections.

Piranesi’s view of 1748 (left) shows the piazza in its final state. The long, relatively low colonnade succeeds in Bernini’s stated aim of making Maderno’s façade look higher, and the colonnades come forward from the basilica, in Bernini’s famous simile, “like the arms of the Church, which embrace Catholics to reinforce their belief, heretics to reunite them with the Church, and agnostics to enlighten them with the true faith.” In a line are the obelisk, topped by a cross symbolizing the triumph of Christianity over paganism; the door to the church commemorating the first vicar of Christ; and the dome, with the cross at its pinnacle dominating the entire edifice. Better than any other artist, Piranesi recorded Bernini’s intention and his success—the creation of an immense space that is nonetheless enclosed and orderly, a vast and monumental space that is nonetheless subordinate to Saint Peter’s itself, a space that in fact adds to the grandeur of the building and in so doing enhances the power and authority of the Church.
THE INTERIOR

Maderno’s entrance portico to new Saint Peter’s (below) provides a transition between exterior and interior, an interim space where pilgrims can prepare for entry into the sacred basilica. It also served as a passageway to the Scala Regia, the stairway leading to the Apostolic Palace (see pp. 38–39)—to the left of the equestrian statue of Constantine visible in the distance in this engraving. The portico, 162 feet deep and 850 feet across, is reminiscent of the narthex in the Constantinian basilica, which had been among the parts standing into the seventeenth century. The five entrance doors to the basilica itself, which correspond to the three larger and two smaller doors of the façade, are capped by the alternating triangular and segmental pediments as first seen on Michelangelo’s exterior and repeated on the windows of the façade. The door at the far right, in front of which pilgrims are shown kneeling, is the Porta Santa, the Holy Door, opened only once every twenty-five years.

When Maderno began construction of the nave of Saint Peter’s in 1609, the church on a central plan had been completed as far east as the dividing wall between the new edifice and Old Saint Peter’s. The four arms of equal length were barrel-vaulted, and the chapels in the square corners on the eastern side were completed, with small domes built over them (see the illustration on p. 24, where only the dome over the northern chapel has been built). Maderno added to the existing church a nave three bays long, barrel-vaulted, with arches leading to a number of side chapels. To differentiate his addition from the older part of the basilica he made the nave and vault slightly wider and higher than the original arms, as can be seen in the etching on pp. 34–35. (The floor also was originally somewhat lower, but repaving later in the century made the level the same throughout.) Windows in the vault and above the side chapels provide strong lighting and further differentiate Maderno’s addition from the rest. Maderno’s design on the whole, however, created a unified interior—the arches and paired Corinthian pilasters are like those in the rest of the structure, and the slight narrowing and darkening of the last bay before the crossing could be interpreted as an intentional device to emphasize the focal point of the church, the altar over the Tomb of Saint Peter.

Before Bernini began work on the exterior of Saint Peter’s, he made one of his two famous monuments that dominate the interior of the basilica. Bernini’s very first commission from Urban VIII (1623–44) was for a structure to be placed over the altar at the crossing of the basilica, which in turn was over the Tomb of Saint Peter (at the time believed also to hold the remains of Saint Paul). The structure at this most holy place had two specific functions, that of a ciborium, a receptacle for the Eucharist, and that of a monument over the tombs of the first Christian martyrs. More generally, it marked the focal point of the Christian world, the center—if no longer literally since the addition of the nave, then still figuratively and functionally—of Christianity’s prime church.

Bernini’s design for the Baldacchino evolved over nearly ten years, beginning in 1624, from a number of sources. Early in the pontificate of Paul V (1605–21) a new high altar had been built to the west of the crossing,
at the entrance to the principal apse, and a new flight of steps was projected to descend to the apostles' tomb. A ciborium was built over the new altar and a baldachin over the one at the crossing. A baldachin is a canopy of rich material held over the head of a bishop—the pope is bishop of Rome—on ceremonial occasions or over the Sacrament or relics during a procession. It was therefore an appropriate form for this altar, which primarily marked a kind of reliquary, the tomb of the first pope.

At some point early in the papacy of Urban VIII, however, it was decided to re-establish the papal altar in the original position over the crossing. By this time the idea of using a baldachin had taken root, and so the baldachin was then combined with the traditional form of a ciborium on columns. The shape of the columns themselves imitates that of the twelve marble spiral ones—brought, according to tradition, by Constantine from the Temple of Solomon in Jerusalem—of the medieval monument marking the tomb. The design of the Baldacchino thus brilliantly fuses the two functions.

Bernini's first idea had been to crown the structure with a figure of the Risen Christ atop two intersecting arches—the arches were also reminiscent of the medieval shrine—but this concept was abandoned. About 1631 the present design, as seen in the print on p. 36, was arrived at: the traditional orb and cross are supported on four groups of three volutes; the twisted columns are entwined with Barberini laurel and the tasseled lappets ornamented with Barberini sun and bees; an angel with palms looks out from each corner; and putti, seem-
The nave of Saint Peter's. Giovanni Battista Piranesi, 1748
ingly hovering in air, hold the papal tiara and keys. (Since the Baldacchino is more or less bilaterally symmetrical, the engraver of this print did not take the trouble to reverse the image that was his source—whether a drawing or a print is unknown—so left and right are reversed: the putto holding the tiara should be on the left.) The whole edifice, of gilt bronze, fuses architecture and sculpture, tradition and innovation, temporary and permanent, into a structure that, towering ninety-three feet over the crossing, matches Bramante’s classical piers in scale and boldness but speaks a different language—the idiom of the Baroque.

The Baldacchino. Anonymous, 17th century

If the Baldacchino is a monument over a reliquary—the tomb of Saints Peter and Paul (as it was thought)—Bernini’s other piece of architectural sculpture in Saint Peter’s, the Cathedra Petri, actually holds a relic. The chair of Peter had been venerated in the baptistery of the old basilica, and once Old Saint Peter’s was torn down, it had to be given a new setting. The throne of Saint Peter is actually a rectilinear oak chair with ivory panels, on which the saint was believed to have sat. In 1630 Bernini designed a setting for the chair in a baptismal chapel in the new nave. But only twenty-six years later Pope Alexander VII (1655–67) decided that the chair should be moved to a position of much greater prominence, in the western apse. The change reflected the symbolic importance of the chair in Counter-Reformation thought: it represented the authority of the pontificate, the legitimacy of succession of popes from Saint Peter onward, and the primacy of the Roman church.

Again, Bernini’s design evolved over a period of time, and the work lasted about a decade—coinciding with the design and construction of the piazza—from 1656 to January 1666, when the chair was unveiled in the new location. At first Bernini designed a monument the height of the first story, to fit between the pilasters of the central niche in the western apse. The design already had many of the elements of the final one: four Doctors of the Church—Saints Ambrose, Augustine, Athanasius, and John Chrysostom—supported the chair, which was to be encased in bronze; putti were near its top; and an angel in glory held the papal tiara and keys. But in 1658 Bernini produced a second design, larger, with putti now holding the tiara and keys, and the dove of the Holy Spirit—symbolizing the will of God—in glory above. By 1660 a full-scale model of the Cathedra was built in place in Saint Peter’s. It was still larger than the previous design, but its height was limited by the window of the second story. The final monument, as Domenico Bernini wrote in his biography of his father, “converted this defect to an advantage”: Bernini enlarged the scale of the structure to extend beyond the height of the window, leaving an oval opening so that natural light would come through, in effect incorporating the window and the light of the sun itself into the monument and seeming to render insubstantial the fabric of the apse. The final size allows the Cathedra to be seen from a great distance. The visitor entering the basilica looks down the nave through the Baldacchino and sees the Doctors of the Church supporting the chair, the symbol of the papacy, which is protected and given authority by the dove of the Holy Spirit in glory, surrounded by angels.

The Cathedra Petri. François Spierre, 17th century
THE SCALA REGIA

The Scala Regia. Giovanni Ottaviani after Francesco Panini, 1765
Bernini also was the architect of the present Scala Regia (Royal Stairway) connecting Saint Peter’s and the Apostolic Palace. This also was commissioned by Alexander VII—in the engraving at the left his papal arms can be seen, flanked by figures of Fame, on the face of the arch above the stairway.

Until the new Scala Regia was built, the popes had to be carried down or up a narrow, dark passage. Bernini broke the lower part of the stairway in two and put a window on the landing at the left; another window admitted more light at the second landing, where the stairs turn (see the plan above). (The upper part of the stairway, beyond the turn, remained narrow and was little changed.) The space in which the stairway was fit was an irregular one. Rather than making the stairway all the same width—which would have had to be that of the narrowest point—Bernini made it wider at the bottom but disguised the irregularity by his placement of columns. The Ionic columns that line the stairway and support a barrel vault have been placed far from the side walls at the bottom and progressively closer to the walls as the stairway mounts. Further, the vault has been made lower and the columns shorter between the first and second landings, so the narrowing of the staircase appears to the observer below as the normal result of perspective.

According to the inscription on the print by Panini at the left, the well-known series of tapestries after Raphael depicting the Acts of the Apostles Peter and Paul was put on public view on the Feast of Corpus Christi. Parts of four of them are visible in the print; The Miraculous Draught of Fishes, adjacent to the statue of Constantine, is included in the exhibition The Vatican Collections.
The popes, of course, did not confine their building activities to Saint Peter's. The Vatican palaces, the Cortile del Belvedere, and the Casino of Pius IV were all built before the end of the sixteenth century, under the direction of the same popes and following the genius of the same architects as had built Saint Peter's.

The Vatican was not always the residence of the popes. Until the twelfth century they lived near the cathedral church of Rome, San Giovanni in Laterano. It was Innocent III (1198–1216) who first built a papal residence near Saint Peter's, and Nicholas III (1277–80) completed two wings of a palace in the same area before his death. (Three fragments of a frieze that was part of the original decoration of this palace are in the exhibition The Vatican Collections.) Little building went on during the fourteenth century; from 1305 to 1376, the popes lived in Avignon, in France, and during the Great Schism, from 1377 to 1417, rival popes in Avignon and Rome claimed primacy.

Finally, the papacy was restored to Rome and the popes established the Vatican as the official residence and the seat of church government. Under Nicholas V (1447–55) a north wing was added to the palace of Nicholas III. The view of Rome at the right from the so-called Nuremberg Chronicle, an encyclopedia of history and geography published in 1493, shows, however crudely, the Apostolic Palace ("Palatium Pape") with its fortified

THE APOSTOLIC PALACE

40
According to Vasari, Bramante had a plan for totally remaking the buildings of Saint Peter’s and the Vatican, and along with his design for Saint Peter’s Basilica and for the Cortile del Belvedere (see pp. 48–57) Bramante most probably had or was evolving a grand idea for the palace. Although—as has been said—Bramante’s ideas set the scale and largely formed the plan of the Vatican as it has remained to our time, what he actually built is a small proportion of the fabric today. One of the few structures he actually saw finished—or at least almost finished, as it is said to have been completed by Raphael after Bramante’s death—is the new facing for the eastern side of the palace (the
same side shown in the Nuremberg Chronicle view), a three-story series of loggias, possibly intended to overlook a new Renaissance piazza. The loggias are clearly visible in the sketch by Maarten van Heemskerck on pp. 40–41, done in the 1530s. They now are famous for Raphael’s paintings of biblical scenes that ornament the ceiling of the second-story loggia.

The most famous of all the buildings that make up the Apostolic Palace complex is the Sistine Chapel, although it is renowned for its decoration and for its function as the setting for the election of popes rather than for its architecture. The best-known part of its decoration is the ceiling, painted by Michelangelo between 1508 and 1512.

The chapel is named for Sixtus IV (1471–84), the pope under whose reign it was built. Sixtus commis-
sioned portraits of the popes to be painted in the spaces between the windows and scenes from the lives of Moses and Christ in sixteen rectangular fields below the windows. Commissioned by Julius II, Michelangelo painted the ceiling and also the lunettes, spandrels, and pendentives with scenes of the Old Testament, prophets and sibyls, and other figures.

More than twenty years after completing the ceiling, Michelangelo received another commission to work in the Sistine Chapel, to paint the Last Judgment on the altar—the western—wall (the axis of the Sistine Chapel is parallel to that of Saint Peter’s, and its altar, too, is toward the west). He completed this fresco in 1541. In the engraving at the left, only the fresco of the Last Judgment is shown distinctly enough to read the image. The eighteenth-century engraving after Panini (above) shows the architecture and painted decoration in much more detail.

While Antonio da Sangallo was overseeing the construction of Saint Peter’s (see p. 11), he also was charged with the reconstruction of the Sala Regia, the room in the Apostolic Palace used for papal audiences with royalty. (The Scala Regia built by Bernini in 1666 now leads to the room.) Sangallo demolished two intermediate floors and opened the room to the full height of the building, covering it with a richly coffered barrel vault across its nearly twenty feet of width. Stucco panels were made by Perino del Vaga, and under the Medici pope
Pius IV (1559–65) some painting was done in the room. The engraving above, which depicts the ceremony of the crowning of the grand duke of Tuscany in February of 1570, was made before the decoration of the room was completed in 1573, under Gregory XIII, but the sumptuous character of the room is already evident.

The relative placement of the early palace buildings can be seen in the top illustration opposite. At the center, left, is the northernmost wing built by Nicholas V (1447–55); to its right is the so-called Borgia Tower, built by Alexander VI (1492–1503); and a side wall of the Sistine Chapel is further right and set back. Shortly after this print was made in 1565, Pius V (1566–72) built the so-called Pia Tower immediately to the chapel’s north, obscuring the view of it from this direction. At the far right is new Saint Peter’s under construction.

The façade toward Rome of the palace complex designed by Bramante remained the easternmost reach of the palaces through much of the sixteenth century. But Gregory XIII (1572–85) had a new wing built, stretching farther eastward from the corner of Bramante’s loggias and with a façade that matched Bramante’s. In the view looking north across the piazza (a detail of one of the engravings depicting the moving of the obelisk in 1586; opposite, below), the wing of Gregory XIII is the large building just to the left of the obelisk.

Sixtus V (1585–90) had Domenico Fontana build the last major addition to the palace. Abutting the wing built by Gregory XIII, farther east still, was constructed a large square building, thus creating a three-sided courtyard, the Cortile di San Damaso. The façade on the courtyard again matched Bramante’s. This wing, begun in 1589, has remained the papal residence for the nearly four centuries since it was built. It is here that the pope gives his blessing on Sundays, and when Bernini was designing the piazza colonnade in the 1650s, he had to provide a space near the benediction window for the crowds to gather. The transverse oval of his final design created an amphitheater, one.
Detail, Apostolic Palace from the north. Master HCB, 1565

Detail, Palace of Gregory XIII. Natale Bonifacio after Giovanni Guerra, 1586
end of which is under the windows of the palace. The bird’s-eye view at the left shows the palace in relation to Saint Peter’s; the Cortile di San Damaso, open on the side toward the piazza; and the piazza with Bernini’s colonnade (although numerous features of the colonnade are inaccurate).

The three wings that make up the Cortile di San Damaso are shown in the lithograph at the lower left. Bramante’s façade is at the left, the palace of Gregory XIII is the far side, and the palace of Sixtus V is at the right. By the time this print was published, the openings of the loggias had been glassed in to protect the paintings behind them, changing significantly the feeling of the courtyard.

By the mid-seventeenth century the Apostolic Palace buildings were essentially as they are today. Another bird’s-eye view by Falda (below), from the east, clarifies the relationships among them. The Sistine Chapel is at the top, with the Sala Regia closer to the viewer, and perpendicular to it. The next courtyard (now called the Cortile del Pappagallo), still closer to the viewer and to the right, is formed by the medieval palaces; the Cortile di San Damaso comes next (marked “1”) and then the square of the palace of Sixtus V with its own small courtyard. The hemicycle is visible at the southern end of the Cortile del Belvedere.

Saint Peter’s and the Apostolic Palace.
Giovanni Battista Falda, 1667–69

The Cortile di San Damaso.
Published 1864

Detail, Apostolic Palace, bird’s-eye view.
Giovanni Battista Falda, published 1670 (?)
THE CORTILE

To the north of the Apostolic Palace stretches the Cortile del Belvedere. Like Saint Peter’s and the Apostolic Palace, this area of the Vatican had its beginnings in the fifteenth century, was given a grandiose plan by Bramante under Julius II in the early 1500s, and was definitively changed under Sixtus V during his brief papacy between 1585 and 1590.

When the Palazzetto del Belvedere was built, it sat alone at the northeastern corner of the Vatican hill. Begun in 1485 under Pope Innocent VIII (1484–92), it was meant to be a refuge where he could relax and enjoy the view over the countryside. (“Belvedere,” freely translated, means “beautiful view.”) The woodcut below from the Nuremberg Chronicle, published in 1493, is reliable for a general idea of the palazzetto’s location and form if not for details. The Belvedere, at the upper right, is isolated—completely disconnected from the Apostolic Palace buildings, those labeled “Palatium Pape,” although the crenelated fortification wall does enclose the palazzetto within the Vatican confines.

The dual character of the fifteenth-century building is shown by a view (right) of the Belvedere from

Detail, The Apostolic Palace and the Palazzetto del Belvedere. Published 1493
The Palazzetto del Belvedere from the north. Copy after a Maarten van Heemskerck drawing of the 1530s
The Cortile del Belvedere from the west. Hendrick van Cleve, 1550

The Laocoön. Marco Dente, before 1527

the north, copied after one of the sketches of the 1530s by Maarten van Heemskerck. Abutting the wall of the Vatican precinct on both sides, on high foundations and with projecting towers and crenelations, it looks like a fortified castle. But the two stories of arcaded loggias attest to its function as a villa, and the cypress garden to the west was meant for pleasurable strolling.

It was Julius II (1503–13) and his architect Bramante who devised a grand plan for making the Belvedere an integral part of the palace complex. Rather than considering one building at a time, Julius and Bramante thought in terms of overall organization of open spaces and the relationships among structures. Their plan for the Belvedere was inspired by classical antiquity—as were all Julius’s plans—in both outlook and scale; it may well have derived from some of the ideas of Nicholas V (1447–55) for rebuilding Rome.

The Belvedere project called for the creation of a huge open-air ensemble of theater and gardens, all embellished with fountains, on the hillside between the palace and the new villa built by Innocent VIII. The hill was to be terraced and the space enclosed between two parallel corridors, which would provide covered, pro-
ected passage between the palace and the villa. Early in Julius’s pontificate the Belvedere became the site of the famous statue court, and there was a need for easy and dignified access to this area.

As with construction of Saint Peter’s, work proceeded quickly while Julius II and Bramante were alive, but after their deaths the pace dropped dramatically. The view from the west by Hendrick van Cleve (opposite), although not entirely accurate, suggests the state of the courtyard in 1550. Much of what it shows had been built before Bramante died in 1514. The palace is at the far right—the eastern corridors, of which two stories were finished by Bramante—have reached their full height, and the upper level is shown with a fountain in place.

At the left, behind a roofed apartment block and Bramante’s semicircular exedra, van Cleve shows, although incorrectly in some details, the Belvedere statue court. This open-air museum, made in imitation of the antique viridarium, or garden, sheltered the antique statues that became the foundation of the Vatican collections. To create the court, a new façade was placed in front of the old building on the eastern wall (the far side in this view). The court was roughly square—a loggia, whose back wall closed the court and which van Cleve did not show, actually went from the exedra at the right to the façade of the villa at the left. Niches, probably decorated to look as though planted with greenery, were made in the corners and along the walls.

It is uncertain just when the statues were first placed in the court, but by 1510 the Apollo Belvedere (on view in the exhibition The Vatican Collections), the Laocoön (see opposite, bottom), the Venus Felix, and other statuary were set up. By 1512 the so-called Cleopatra (really Ariadne) and the river god Tiber had been added, and in 1513 the Nile. These two river gods, nude reclining

The Cortile del Belvedere from the south. Bartolommeo Ammanati (?), 1552–53
The Cortile del Belvedere from the north.
Master HCB, 1565
The Cortile del Belvedere from the south. Etiene Dupérac, 1565
The Cortile del Belvedere and Vatican gardens. Mario Cartaro, 1574

males, can be seen in the engraving near the center of the court. Near them and behind or under some of the other sculpture, water was piped in, creating numerous fountains. The Belvedere Torso, also included in the exhibition The Vatican Collections, was probably added to the garden after 1527.

The area of the Belvedere was to be terraced into three levels: the top one at the ground level of the Belvedere villa; a small intermediate one about halfway between the others; and the lowest and largest one, meant to serve as a theater, at the ground level of the existing palace. Seating was to be in a hemisphere at the south and on colossal steps at the north end of this theater.

The drawing of 1552 or 1553, from the south (p. 51), shows the Cortile del Belvedere looking far less finished than in the van Cleve engraving although the drawing was made two or three years later. The engraving showed the statue court, behind the right half of the building at the upper level, and the gardens in front of it, neither visible here. In the foreground of the drawing is the lowest level, with some construction material scattered about but little activity taking place. The stairs to the intermediate level and the ramp to the top have been built, and Bramante’s nymphaeum, the recessed area with niches on the second level under the ramp, is clearly visible. But the colossal steps and the corridors to the west (the left side of the drawing) have not been begun.

On March 5, 1565, the Cortile del Belvedere was presented to the public on a day of festivities—which was also the culmination of marriage celebrations for a papal nephew—complete with a medieval tournament in the lower court, or theater, and fireworks. During the sixteenth century the courtyard was called the Atrio del Piacere (Hall of Pleasure), and on this occasion the name was appropriate. Two views—one looking north toward the Palazzetto del Belvedere, probably from the Stanze painted by Raphael, the best vantage point (left), and the other south toward the theater hemicycle, the Apostolic Palace, and the unfinished dome of Saint Peter’s (pp. 52–53)—not only show the tournament, acrobats, fireworks, and crowds, but also record the great progress made since the time of the drawing on p. 51. Most of the work had been done since 1561, under the direction of Pirro Ligorio, who was named palace architect by Pope Paul IV (1555–59) and retained by Pius IV (1559–65). Ligorio’s major contribution was the great Nicchione, which rose three stories above the level of the upper court; a year after its completion, he
added a semicircular loggia on top, from which the fireworks erupt in the engraving on p. 54.

The corridors on the west have risen to a height of two stories from the lower court. The corridors on the east—the part of the courtyard actually largely completed by Bramante—only await stuccoing. The colossal steps, used for seating, flank the stairway between the lower and the intermediate courts, and the hemicycle at the south end with steps for spectators is also complete.

In a view of 1574, from the east (p. 55), the three levels of the courtyard can clearly be seen. The third, final, story of the western corridor is complete, and the Pia Tower, at the southwestern corner of the courtyard, has risen to five stories (six are erroneously shown), masking the Sistine Chapel. Saint Peter's is still without its dome. The stairs and colossal steps at the northern end of the inner court, which had been crowded with spectators in the engraving of 1565, are more clearly visible here, as are the parterre gardens on the two upper levels. This print identifies (at “L”) the topiary garden seen in the 1565 engraving on p. 54 as the “secret garden of Paul IV.” This view also clearly delineates the western edge of the Vatican territory, enclosed by the medieval wall.

The foreground shows the eastern exterior of the Cortile del Belvedere. At the left are various papal apartments built during the sixteenth century. The fortification wall seen coming in from the east makes a corner and becomes the eastern corridor; there are windows at the highest level of the lower court. At about the point where the intermediate court begins, fortifications built by Sangallo in the 1540s jut eastward, and inside these is a garden. The tower at the far right enclosed Bramante’s famous spiral staircase, which be-

*The library in the Cortile del Belvedere. Natale Bonifacio after Domenico Fontana, published 1590*
fore the fortifications were built was an entrance to the statue court. The statue court itself is here seen from the opposite side and more accurately than in the van Cleve print of 1550 (p. 50).

Sixtus V, the pope who ordered the moving of the obelisk, the completion of the dome of Saint Peter’s, and the building of the final block of the Apostolic Palace, also changed forever the Cortile del Belvedere by deciding to have a library built across it. Domenico Fontana was given the task of designing the building, on the site of the colossal steps and stairs between the lower and intermediate courts. The south façade (left) repeated the orders of the corridors but as a whole was much more cluttered and fussy than anything Bramante would have designed.

More important than the departure in surface style from Bramante, however, was the repudiation of his concept for the Cortile del Belvedere. The theater, the pleasure gardens, and the harking back to classical ideals all seemed inappropriately worldly and pagan to Sixtus V. The library could have been built almost anywhere in the large expanse to the west of the courtyard, but to do so would not have accomplished Sixtus’s purpose. By the one relatively small addition of the library, Sixtus V—more effectively than if he had torn anything down—destroyed Julius’s Atrio del Piacere.

After the construction of the library, each of the three levels of the Cortile del Belvedere took on more of an individual identity. The court still was called the teatro (see the view on pp. 60–61) but never again would a performance like the tournament be enjoyed by spectators massed along the full length of the courtyard, nor would the Palazzetto del Belvedere be visible from the palace. It is said that Pope Paul V (1605–21) considered destroying the library to restore the original unbroken expanse, but he did not do so. He did embellish the Cortile del Belvedere as much as possible, especially by adding and reinstalling fountains (see pp. 60–63). And it was he who placed the Pigna, the huge bronze pine cone that had stood in the atrium of the old basilica, on a platform at the top of Michelangelo’s steps in front of the Nicchione (see above). In the early nineteenth century another building, the Braccio Nuovo, was put across the Cortile del Belvedere, on the site of the ramps between the intermediate and upper courts. It houses part of the Vatican collections of Greek and Roman antiquities. Today the upper court is called the Cortile della Pigna, the second one the Cortile della Biblioteca; the lowest level, the court farthest removed from the original villa with its beautiful view, is now called the Cortile del Belvedere.
THE CASINO OF PIUS IV

In 1558, when much of the work on the apartments of Paul IV (1555–59) at the north end of the Cortile del Belvedere had been completed, and while Michelangelo was directing the building of Saint Peter's, the pope turned his attention to a new architectural project—a fountain and retreat in the wooded area to the west of the Cortile del Belvedere. It was reported by the Florentine ambassador that Paul “spent two thirds of his time in the Belvedere [the entire area was called the Belvedere], where he has begun a fountain in the wood.” This fountain was designed by Pirro Ligorio.

Beginning with Innocent VIII (1484–92), most of the popes had constructed personal villas as places for recreation, but the Belvedere was the only one within the Vatican enclosure. Paul IV seems to have built his fountain and also a one-story loggia close by, higher up the steep hillside. After the death of Paul IV, Pirro Ligorio continued as the architect of the project. Whether Paul IV or Pirro had a large ensemble in mind from the beginning is unknown, but under Pius IV (1559–65) the retreat became much more elaborate; the fountain gained a story and the loggia gained two, two small entrance portals were created, and an oval court united the four small buildings. The whole ever since has been known as the Casino of Pius IV.

The earliest published view of the Casino is in the Cartaro engraving of 1574 (p. 55, see “N”), but it is inaccurate in scale, configuration, and orientation. The Falda bird’s-eye view (pp. 60–61, see “10”), shows the placement of the Casino more correctly. The Vasi engraving to the right, though made nearly two centuries after the Casino was built, is the best record of its appearance. Because the ensemble as a whole backs into a hillside, the fountain house stands both in front of and a complete story below the larger building. The lower façade behind the fountain is highly three-dimensional. Originally four figures of Pan projected from the wall, flanking three statues—Cybele in the center, and
Modesty and Youth on either side—set into niches. A basin extended forward from and around the sides of
the fountain house.

Staircases lead up and slightly around the perimeter of the ensemble to twin portals, and these open onto
the oval court, with the three-story structure and the loggia above the fountain facing each other across the
short axis. The four structures present façades intensively decorated in stucco, and the “room” thus created
is open to the sky yet enclosed, small yet extremely rich in decoration. Furthermore, under Pius IV the building
was adorned with a great quantity of antique statues, but these were removed as inappropriate to a papal resi-
dence by his successor Pius V (1566–72). The Casino in its preciosity and delicacy remained, however, a small
gem of Mannerist architecture, and even in about 1670, when the Falda view of the gardens (left) was published,
its elegant, secluded quality had not changed. Today, much of the fountain statuary is gone, but the stuccoes
have been restored and the building, with a small addition on the uphill side, houses the Pontifical Academy
of Sciences.

*The Casino of Pius IV in the Vatican gardens.*
Giovanni Battista Falda, published 1670 (?)
The Vatican palace and gardens, bird’s-eye view. Giovanni Battista Falda, published 1670 (?)
FOUNTAINS

Gardens cover about half of the area of the Vatican, mostly west of the Cortile del Belvedere. The Casino of Pius IV is situated among them, as are numerous delightful fountains. Paul V (1605–21), the pope who commissioned Maderno to complete Saint Peter’s by adding the nave and façade, embellished the Vatican by the lavish addition of fountains. Under Sixtus V (1585–90), aqueducts had been rebuilt, and for the first time since antiquity Rome had a plentiful water supply. Paul V had an aqueduct of Trajan reconstructed at considerable expense, and renamed Acqua Paola; its outlet to the Vatican was meant primarily for fountains. He commissioned Maderno to rebuild the fountain in the piazza, first made under Innocent VIII and then changed by Bramante. (Bernini later provided one to match Maderno’s, and placed the two symmetrically between the obelisk and the arms of the colonnade.) Paul V did not restore the integrity of the original Cortile del Belvedere by tearing down the library, as he reportedly considered doing, but he tried to bring back its function as a place of recreation by liberally adding and reconstructing fountains. In the engraving opposite, three that he restored or had newly

The Fontana delle Torre. Giovanni Francesco Venturini, published late 17th century
built in the Belvedere are visible—those in the lower and upper courts as well as one at the northern end of the western corridor. Three more in the gardens (“8,” “11,” and “12”) are seen closer up in the illustrations on these pages.

The first fountain built by Paul V, dated by its inscription in the fourth year of his pontificate, was the Fontana delle Torre (p. 61; “11” in the Falda engraving), now called Fontana del Sacramento because it has the form of an altar. The rustic, grottolike fountain proper is set within the more formal architectural elements of a niche—reminiscent of the way the works in the Belvedere statue court were in niches decorated with fictive greenery—flanked by towers, with volutes and pediment on the back wall. A dragon, emblem of the Borghese, the family of Paul V, spouts water from the center of the fountain, and two more sit atop the towers. The papal coat of arms, surmounted by a putto bearing the papal tiara, is within the pediment above.

The designer of this and the other fountains shown here remains unknown. The inscriptions in the engravings attribute them to Maderno, but it has also been suggested they are the work of Jan van Santen, called Vasanzio, papal architect after 1613.

Like the rest of the architecture of the Vatican, the fountains have undergone numerous changes, the one called La Galera (The Galley) perhaps more than any other. It backs onto the eastern outside wall of the Belvedere near the entrance to Bramante’s spiral stair (“8” in the Falda engraving). Known as La Peschiera (The Fishpond; see “F” in the Cartaro

*The Fontana della Galera. Giovanni Francesco Venturini, published late 17th century*
The Fontana dello Scoglio. Giovanni Francesco Venturini, published late 17th century

engraving, p. 55), it had existed in the first half of the sixteenth century, and it was probably remodeled under Julius III (1550–55) to look as it did in the Cartaro view. Under Paul V, it was remodeled again, giving it the appearance represented in the engraving opposite. This fountain has been delighting visitors ever since it was built—in 1622 an Englishman wrote in his travel diary: “There is a rare ship at one of the fountains which has twenty-five little ordnances on a side, and with turning a cork do discharge water and make good reports, as if there were powder.” The eagle, also a heraldic device of the Borghese family, can be seen crowning the rockwork. Under Pius VI (1775–99), considerable changes were made in the part of the fountain against the wall, but the ship has remained its prime focus.

Borghese heraldic dragons, spouting water, are also seen on the large Fontana dello Scoglio (Fountain of the Cliff), which was formerly also called Il Diluvio (The Flood) and is now mostly known as L’Aquilone after the Borghese eagle that tops the fountain (see above and “12” in the Falda view). Made around 1611–12 and set in the wooded area in the western section of the Vatican gardens, the fountain with its rough rockwork around cavelike openings is completely rustic in character. Quite overgrown today with mosses, ferns, and vines, it provides an effective transition from the man-made architecture of Saint Peter’s and the Vatican to the natural beauty of the gardens.