Bramante's Tempietto
Alberti, Leonardo,
and the Ideal Renaissance Church

The quest for the perfect Christian church obsessed Renaissance architects. How could Christian and humanist ideals be reconciled architecturally? Bramante's Tempietto (right) was an attempt to solve the problem. The aim—to achieve a complete Christian-humanist fusion—is manifest not only in such details as the combination of antique Roman Doric columns with, on the entablature, the keys of St Peter and the liturgical instruments of the Mass, but in the whole conception of the building. The traditional circular form of Early Christian martyrria was developed and transformed by Bramante by applying the Classical vocabulary and symbolism of Renaissance architectural theory. (The Tempietto is a martyrrium or commemorative chapel marking the spot where St Peter was believed to have been crucified.)

In considering possible shapes for an ideal church, the architect and theorist Alberti had begun with the circle as being that preferred by nature. He cited the globe, the Stars, the trees, animals and their nests and many other natural forms, and recommended nine basic geometrical figures, all determined by the circle (squares, hexagons, octagons, etc.) It is notable that the traditional type of Christian church, the basilica, was excluded. A basilica is planned along an axis, longitudinally, and not centrally. Alberti acknowledged the close relationship of the basilica to the temple or church functionally, as they were both seats of justice; but, he emphasized, of human and divine justice respectively. A church should clearly be superior as the seat of divine justice. Only a circular or centrally planned building crowned with a hemispherical dome like that of the Pantheon symbolizing the cosmos would, he thought, be appropriate.

How should the parts of such august buildings be proportioned? Vitruvius supplied the answer. His famous code of human proportions should be reflected in those of temples and churches. Vitruvius described how a well-built man fits with extended arms and legs into the most perfect geometrical figures, the circle and square. This simple concept seemed to contain some deep and fundamental truth and it haunted the imagination of architects and artists. Indeed it had been present, intermittently, in many minds since the Middle Ages. The Christian mystic, Hildegard of Bingen (1098-1179), for instance, referred to it and illustrations of it appeared in illuminated manuscripts of her works. But its importance for Renaissance architects was compelling and in about 1485-90 Leonardo made a drawing of it with a translation into Italian of Vitruvius' Latin text appended in his own hand (11.19). During these years he and Bramante were working for the Sforza duke of Milan, and Bramante presumably knew this drawing as well as the numerous projects for centrally planned and domed churches that Leonardo made at the same time. Though none foreshadows the Tempietto precisely, Bramante's debt to Leonardo is evident. Their association remained close after they both left Milan in 1500, and when Leonardo visited Rome in 1504 he may well have contributed to the conception of the Tempietto.

The strictly symmetrical concentric effect of Bramante's design came near to realizing Alberti's and Leonardo's ideal
Christian church: a free-standing, centrally planned building crowned with a hemispherical dome symbolizing the universe and reflecting celestial harmony in its proportions and geometry of pure forms. The effect was, however, partly lost by the design not having been fully carried out. The Tempietto was intended to stand in a square courtyard; it was to have been surrounded by a circular cloister of 16 columns corresponding to those of the colonnade. When approached through the cloister, the lucidity of the whole radial composition would have been vividly apparent. Moreover, by a subtle ocular effect, the Tempietto would have been made to look higher and wider and more monumental and the surrounding area more spacious. As a result, the sense of harmonious unity created by the concentric composition would have been increased, and with it that elevating and purifying effect required for an ideal Christian church.

In 1506 Pope Julius II embarked on 'renovating the very dilapidated church of St Peter the Apostle in Rome from its foundations up', as he wrote to King Henry VIII of England, and designs for another domed building on a centralized plan were submitted by Bramante and accepted. This time, however, it was to be on a gigantic scale. The design is known from a medal struck when the foundations were laid (right). Only one drawing in Bramante's hand survives, showing only one half of the Greek cross plan (left), but his design for the great hemispherical dome on a colonnaded drum was reproduced later in both plan and elevation because it had been such a 'great revelation to architects', as one of them said. Indeed, so overwhelming was Bramante's design that none of his successors at St Peter's, not even Michelangelo, could escape its influence. Very little was ever built and only the great piers supporting the dome survive in Michelangelo's structure.

Two years after the foundations of Bramante's St Peter's were laid, work began on a pilgrimage church just outside the small hill-town of Todi, north of Rome. The architect named in the contract, Cola da Caprarola (fl.1499-1519), is otherwise almost unknown. Nowhere, however, was the Christian-humanist ideal of Alberti, Leonardo and Bramante realized in purer form (11.22.). Crowned with a dome, standing in open ground and offering the same aspect on all sides, without windows at eye-level so that pilgrims and worshippers might not be distracted by the outside world, of a crystalline quality in its geometrical purity in both plan and elevation, S Maria della Consolazione epitomizes the simplicity and clarity of the sober, harmonious aspirations of the High Renaissance.

11.22 Cola da Caprarola, S Maria della Consolazione, Todi, Italy, begun 1508.
SAINT PETER'S BASILICA

The history of Saint Peter's in Rome is an interesting case of the effects of individual and institutional conceits on the practical congregational needs of a major religious monument. The original church (left) was built in the fourth century CE by Constantine, the first Christian Roman emperor, to mark the grave of the apostle Peter, the first bishop of Rome and therefore the first pope. Because this site was considered one of the holiest in the world, Constantine's architect had to build a monumental structure both to house Saint Peter's tomb and to accommodate the large crowds of pilgrims who came to visit it. To provide a platform for the church, a huge terrace was cut into the side of the Vatican Hill, in the midst of a cemetery across the Tiber River from the city. Here Constantine's architect erected a **basilica**, a type of Roman building used for law courts, markets, and other public gatherings. Like most basilicas, Saint Peter's had a long central chamber, or **nave**, with flanking side aisles set off by **colonnades**, and an **apse**, or large niche-like recess, set into the wall opposite the main door. To allow large numbers of visitors to approach the shrine a new feature was added: a **transept**, or long rectangular area at right angles to the nave. The rest of the church was, in effect, a covered cemetery, carpeted with the tombs of believers who wanted to be buried near the grave of the apostle. In front of the church was a walled forecourt, or **atrium**. When it was built, Constantine's basilica, as befitted an imperial commission, was one of the largest buildings in the world (interior length 368 feet; width 190 feet), and for more than a thousand years it was the most important pilgrim shrine in Europe.

In 1506 Pope Julius II (papacy 1503-1513) made the astonishing decision to demolish the Constantinian basilica, which had fallen into disrepair, and to replace it with a new building. That anyone, even a pope, had the nerve to pull down such a venerated building is an indication of the extraordinary sense of assurance of the age—and of Julius himself. To design and build the new church, the pope appointed Donato Bramante, who had only a few years earlier designed the Tempietto, a small, round, domed shrine at the site of Saint Peter's martyrdom. Bramante envisioned the new Saint Peter's as a grander version of the Tempietto: a central-plan building, in this case a Greek cross (one with four arms of equal length) crowned by an enormous dome. This design was intended to continue the ancient Roman tradition of domed temples and round martyria, which had been revived by Filippo Brunelleschi in Florence Cathedral. In Renaissance thinking, the central plan and dome also symbolized the perfection of God.
The deaths of both pope and architect in 1513-1514 put a temporary halt to the project. Successive plans by the painter Raphael, the architect Antonio da Sangallo, and others changed the Greek cross to a Latin cross (one with three shorter arms and one long one) in order to provide the church with a full-length nave. However, when Michelangelo was appointed architect in 1546, he returned to the Greek-cross plan. Michelangelo simplified Bramante's design to create a single, unified space covered with a hemispherical dome. The dome was finally completed some years after Michelangelo's death by the Baroque architect Giacomo della Porta, who retained Michelangelo's basic design but gave the dome a taller and slimmer profile.

By the early seventeenth century the needs of the basilica had changed. During the Counter-Reformation the Church emphasized congregational worship, so more space was needed for people and processions. Moreover, it was felt that the new church should more closely resemble Old Saint Peter's and should extend over roughly the same area, including the ground covered by the atrium. In 1606, therefore, more than a hundred years after Julius II had initiated the project, Pope Paul V commissioned the architect Carlo Maderno to change Michelangelo's Greek-cross plan to a Latin-cross plan. Maderno extended the nave to its final length of slightly over 636 feet and added a Baroque facade, thus completing Saint Peter's as it is today. Later in the seventeenth century the sculptor and architect Gianlorenzo Bernini monumentalized the square in front of the basilica by surrounding it with a great colonnade as shown in the photograph above.

NOTE: Your reading assignment continues with Michelangelo’s Architecture, Gardner’s, 754–760.