The Companions to the History of Architecture

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Harry Francis Mallgrave

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THE COMPANIONS TO THE HISTORY OF ARCHITECTURE

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Volume I

Renaissance and Baroque Architecture

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Monumental Domed Sanctuaries in the Ottoman Empire and Renaissance Italy

Gülru Necipoğlu

This chapter aims to elucidate the connectedness of architectural cultures in the Eastern Mediterranean basin, with a particular focus on monumental domed churches and mosques in Italy and the Ottoman empire from the fifteenth through the sixteenth centuries, the era conventionally labeled the Renaissance. By the early sixteenth century, the eastern half of the sea effectively became the "Ottoman Mediterranean," in contradistinction to its western part dominated by the Spanish Habsburgs. That is why in his "Book of Navigation" the Ottoman admiral Piri Reis (d.1553) called the Eastern Mediterranean the "Ottoman Sea" (*Bahr-i Rūm*: Roman Sea) and its western counterpart the "Spanish Sea" (*Bahr-i İsbāniye*).[1] This division into two zones was noted by Fernand Braudel: "The story of the Mediterranean in the sixteenth century is in the first place a story of dramatic political growth, with the leviathans taking up their positions."[2] While Portugal and France were important players in the game, Braudel conceded that "the rise of empires in the Mediterranean means essentially that of the Ottoman Empire in the East and that of the Habsburg Empire in the West."[3]

The capture of Byzantine Constantinople by the Ottomans in 1453 and the fall of Nasrid Granada to the Catholic kings in 1492 were symptoms of changes to come. The seizure of Mamluk Syria and Egypt by the Ottomans in 1516–17 that opened up territories in Africa to their expanding tri-continental empire, and the subsequent Spanish Habsburg victory over Valois France in 1525, would redraw the

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Mediterranean map. The consolidation of the twin superpowers under Charles V (crowned Holy Roman Emperor by the Pope) and Sultan Süleyman I (allied with the French king, Francis I) triggered rival claims for the title of Roman world emperor and concomitant attempts to possess Italy.[4] This meant that the two great Mediterranean empires "beat with the same rhythm" and that the "whole sea shared a common destiny." As Braudel observed, Venice grew increasingly dependent on the Ottoman empire, from which it drew sustenance "as the ivy draws its nourishment from the tree to which it clings." On the other hand, "the empire that compensated Genoa for her losses in the East at the end of the fifteenth century was built up in Spanish territory."[5]

My chapter reveals that this realignment around the "liquid continent" not only politically unified the formerly fragmented Mediterranean basin, but also engendered multiple interactions contributing to the emergence of architectural cultures with a common language of power and aesthetics rooted in Roman antiquity, despite religious and stylistic differences. I primarily concentrate on Istanbul and Rome, the two former capitals of the Eastern and Western Roman empires, dwelling to a lesser degree on relevant monuments in other cities. In Rome, the focus will be on the New St. Peter's, which served as the premier training-ground for major architects and the primary locus of architectural innovations under the patronage of successive popes for over 150 years. A series of imperial mosques built during the same period for individual sultans represented gradual steps in the maturation of Ottoman architectural ideals. The aim in examining these mosques in parallel with the protracted construction process of St. Peter's, which essentially evolved on the design boards, is to unveil architectural dialogues that have been overlooked because the monuments in question are normally treated separately. Another objective is to go beyond parallels toward a better understanding of what makes each tradition unique and different.

The relatively insular treatment of the Ottoman and Italian Renaissance architectural traditions has persisted in the scholarship, despite the longstanding recognition of intriguing similarities. This is largely due to disciplinary boundaries and the traditional east-west divide in global histories of world architecture.[6] Such parallels have furthermore been obscured by the internal discourses of Ottoman and Italian writers during the Renaissance, each stressing an architectural origin in a different historical past. The Italian humanist preoccupation with a pure Greco-Roman classical pedigree and the Ottoman emphasis on an Islamic dynastic tradition gave rise to exclusivist discourses, which contain little hint of shared aesthetic sensibilities and cross-cultural exchanges.

The Ottoman receptiveness to Italian Renaissance architectural innovations is more readily recognized because of documented invitations to artists and architects from Italy.[7] Imagining the possibility of a more fluid, two-way traffic in architectural concepts has been doubly hindered by the lack of written evidence and the traditional conceptualization of the Renaissance as the sole carrier of the classical Mediterranean heritage in the early modern period until quite recently. Although revisionist studies in the last decade have started to reorient the Renaissance

between east and west, architecture only features marginally in this burgeoning cross-cultural approach where portable objects and images occupy center stage.[8]

We shall see that the monuments themselves point to a more connected universe of architectural cultures in the Eastern Mediterranean space. So do the bird's-eye-view city maps that illustrate the codices of Ptolemy's *Geography*, produced in Florence after 1453, which hardly reflect the political structure of this region after the fall of Constantinople. To be sure, these idealized representations that downplay Islamic architectural markers project onto Levantine geographies a latent European desire to repossess the once *mare nostrum*.[9] Yet they do capture the relative visual unity of the Eastern Mediterranean, where cityscapes are in actuality distinguished by a larger presence of domed sanctuaries in comparison to western regions, in which Gothic churches and mosques with pitched outer-roofs prevail. In these codices, representations of Italian and Islamic metropolises, such as Rome, Venice, Constantinople, Adrianople (Edirne), Alexandria, Damascus, Cairo, and Jerusalem comprise similar urban landscapes whose predominant domed churches and mosques embody an architectural Lingua Franca: a visual common wealth unifying the Eastern Mediterranean.

The dome was arguably the most coveted status marker in Renaissance Italy and the Ottoman empire. The simultaneous appearance of centrally planned and composite longitudinal domed sanctuaries in both regions entailed the concurrent revival of a collective Roman-Byzantine architectural heritage and cross-references to comparable iconic models, such as the Pantheon (126) in Rome and Hagia Sophia (532–37) in Ottoman Constantinople (Kostantiniyye, also known as Istanbul, from the Greek *eis tēn polin*). Smaller models included centrally planned mausoleums, martyriums, and late-Roman/early-Byzantine domed churches like San Lorenzo in Milan (370), Saints Sergius and Bacchus in Constantinople (527–36), and San Vitale in Ravenna (526–47).

Among the shared aspects of early modern Mediterranean architectural cultures were the commonality of dome construction technologies, the fascination with engineering feats, eclectic translations of the past, the prestige of expensive ashlar stone masonry, and the taste for spolia, especially multicolored antique marble revetments and monolithic columns. The knowledge each culture had of one another was an equally important factor contributing to the similarity of plan types that occasionally triggered subtle architectural dialogues. These dialogues were activated by the circulation of architectural knowledge through diverse agents and modes of exchange, ranging from diplomacy to commerce, travel, pilgrimage, and war.

Renovatio Urbis: Constantinople/Istanbul and Rome

Sultan Mehmed II's (r. 1444–46, 1451–81) aspiration to revive the ancient fame of Constantinople as the Muslim heir of the Eastern Roman empire is a well documented project that overlapped with the renewal of Rome by the popes. Prints

and drawings show the ruinous character of antiquities in both cities well into the mid-sixteenth century. The remodeling of each metropolis required the infrastructural rehabilitation of ancient waterworks, aqueducts, bridges, road networks, and ceremonial avenues, as well as the selective preservation or demolition of ancient monuments, with which new edifices competed in magnificence. Monumental domed sanctuaries commissioned by the popes and sultans merged references to unsurpassed antique prototypes with quotations from admired medieval monuments in the construction of a sense of place.

According to Mehmed II's Greek historian, Kritovoulos, it was the sultan's plan to restore the city's ancient glory as a cosmopolitan center of the arts, sciences, and trades "as it used to be long ago" before its late-Byzantine decline, and to "construct great edifices," which should "vie with the greatest and best of the past."[10] The groundwork for this ambition had been laid by early Ottoman experiments with domed constructions over the past century and a half. It was not, however, until the tenure of the chief architect Sinan between 1539 and 1588 that a more mature architectural idiom came to be realized.[11]

Mehmed II articulated the continuity with the Eastern Roman imperial tradition by renovating, with only minimal changes, the Hagia Sophia (now called Ayasofya) as Istanbul's first and foremost imperial mosque, even leaving its admired mosaics uncovered (see Figure 20.3a–b).[12] The mosques of subsequent sultans would engage in a meaningful dialogue with Hagia Sophia to stress a collective dynastic genealogy and imperial iconography. The building that initiated this dialogue was the vast socio-religious complex built for Mehmed II (1463–78), in conjunction with the Topkapı Palace near Hagia Sophia (Figure 20.1a).[13]

The mosque-centered complex, comprising the sultan's posthumously constructed domed mausoleum and that of his wife, replaced the derelict Church of the Holy Apostles and its martyrium enshrining the bodies of the city's Christian founder, Constantine, and his immediate successors, including Justinian I and his wife Theodora. Constructed by Constantine (or Constantius II) and rebuilt by Justinian, the demolished church had a centralized Greek-cross plan. It was the largest domed sanctuary of Constantinople after Hagia Sophia and constituted the model of St. Mark's in Venice.[14] Interestingly, the mosque of Constantinople's second founder was competitively erected in the course of a prolonged Ottoman-Venetian war (1463–79), concluded by a peace treaty obliging the Signoria to surrender prized territories. The mosque's new architectural idiom translated quotations from the late-Roman/early-Byzantine tradition of brick construction into contemporary Ottoman forms in ashlar masonry. Its ground plan followed that of Mehmed II's father in the former capital Edirne, known as Üç Şerefeli (1438–47), which featured a large hemispherical central dome and four minarets around an atrium-like paved forecourt with a fountain in the middle, encircled by domical arcades on marble columns. The mosque in Edirne reinterpreted the late-antique layout of the Umayyad Great Mosque in Damascus (705–15), which had replaced the Church of St. John. The Mediterranean imperial iconography of the Üç Şerefeli thus found

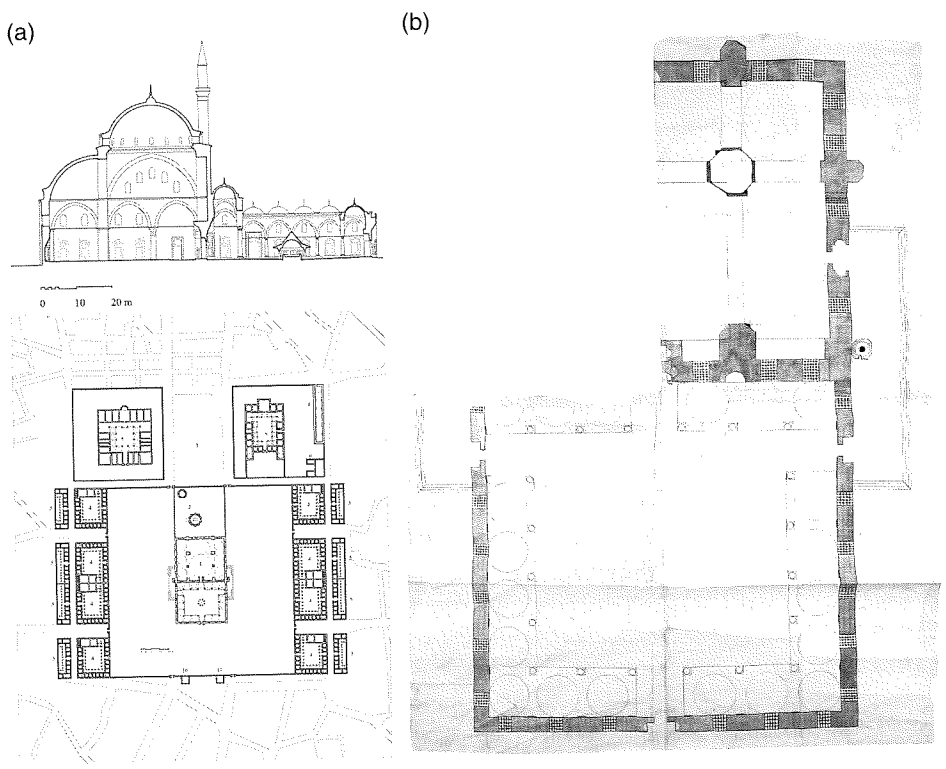


Figure 20.1 (a) Reconstruction plan and elevation of Mehmed II's mosque complex, Istanbul (drawn by Zeynep Yürekli, after Necipoğlu, *Age of Sinan*, 85, Figure 59); (b) Fragment of a rejected plan for the mosque of Mehmed II, early 1460s, black ink and red watercolor on paper, TSMA, E. 9495/8. Courtesy of the Topkapı Palace Museum Archive.

an uncanny parallel in Hagia Sophia, composed of an atrium and basilica, punctuated by a central dome flanked by two half-domes.[15]

Citations in Mehmed's mosque from Hagia Sophia were limited to structural elements foreign to Ottoman architecture. These included the single half-dome over the mihrab, and the tympanum arches perforated by windows, on which the main dome with its ring of windows was now raised to an unprecedented height, over a more luminous inner space. A discarded project plan on Italian paper for Mehmed's mosque, which I have dated to the 1460s on the basis of its watermark, proposes an alternative design with a central dome surrounded by three half-domes (Figure 20.1b). The closeness of its drafting conventions to Italian Renaissance counterparts (such as the incised squared grid, wall thicknesses colored red, domes and half-domes drawn by compasses, and columns indicated by a circle inscribed in a square) reveals that portable ground plans would have been easily legible whichever direction they traveled.[16]

The Italianate flavor of this fragmentary mosque plan testifies to an early experimentation with centralized schemes that would subsequently be elaborated by Sinan. It was rejected in favor of a design that incorporated two monolithic porphyry columns along the mosque's lateral aisles (Figure 20.1a): a pan-Mediterranean signifier of imperial status not previously featured in sultanic mosques, whose domes had been raised on stocky piers. Mehmed's innovative mosque, with its collection of antique columns removed from the demolished church itself and hauled with difficulty from distant sites, was praised by a Venetian observer in 1573 as a *bellissima moschea* occupying the "most beautiful site of Constantinople" and exquisitely "ornamented with the most beautiful columns one can find in the whole world, of which it has an infinite quantity."[17] The shared value attached to the materiality of stones is affirmed in the first Renaissance architectural treatise, written by Leon Battista Alberti (1452) and modeled on that of the Roman architect-engineer Vitruvius. Its author declares that valuable stones and columns are what make a monument impressive, "especially if the stone comes from abroad and has been conveyed along a difficult route."[18]

The layout of Mehmed's mosque complex would have been appreciated by Alberti, whose treatise recommended the principal temple of a city to be centralized in plan, isolated in the center of a square, and raised on a podium to enhance its sacred dignity. Spiro Kostof remarked that "nothing so early in the Western Renaissance has this grandeur" and that the complex trumpeted Mehmed's "modernism" by embracing the "authority of ancient Rome."[19] The axiality and bilateral symmetry of the orthogonally designed immense compound, built on a platform raised on vaulted substructures, had no precedent in the Islamic or Byzantine architectural traditions. Its rectilinear composition is generally compared to the ideal plan of the Ospedale Maggiore in Milan, included in the architectural treatise of Antonio Averlino, known as Filarete (1460–64/66), who intended to visit Istanbul in 1465. We do not know whether his trip materialized or not. Since the complex had already been designed by 1463, it has been postulated that the sultan's diplomatic contacts with Rimini and Milan in the early 1460s could have provided access to Filarete's and Alberti's theories.[20] Another possible channel of access was the mediation of prominent Italian merchant-bankers residing in the Pera district of Istanbul, a former Genoese colony also known as Galata. The vassal city-state of Ragusa (Dubrovnik) also functioned as an "open window to the West," fulfilling the Ottoman court's orders for books, luxury artifacts, and later on stone masons for the constructions of pashas in Bosnia-Herzegovina.[21]

The selective translation of ancient Roman-Byzantine and contemporary Italian design concepts into predominantly Ottoman architectural forms, decorated in a regional variant of the international Timurid-Turkmen mode of Iran and Central Asia, underscored the heterogeneous affiliations of the new "Constantinopolitan" esthetic. In his chronicle of Mehmed's reign, Tursun Beg judged the sultan's

mosque as a novel synthesis, fusing the artistic legacies of the city's old and new orders. It was a:

> Great Mosque based on the plan of Ayasofya, which besides encompassing all the arts of Ayasofya, attained, in accordance with the practices of the Moderns, a fresh new idiom and an immeasurable beauty, and whose luminosity is manifest like the miracle of the white hand [of Moses].[22]

Much like Italian Renaissance attempts to correct and update ancient models, Mehmed's mosque is perceived here as a response to its celebrated late-antique prototype, modified by contemporary improvements. A similar goal was expressed in Giorgio Vasari's 1550 description of Donato Bramante (1444–1514) as a Renaissance architect who translated the Roman architectural heritage into a modern idiom through new inventions.[23]

Mehmed's interest in Italian architecture is evident in his ineffective invitations to the Bolognese engineer/architect Fioravante in the 1470s and to a master builder from Venice in 1480. Later that year, his ambassador to Florence requested the services of "masters of carving and wood and intarsia" in addition to "bronze sculptors," who were promptly dispatched to Istanbul. It has plausibly been hypothesized that the woodworkers were probably architectural decorators.[24] Appreciation of Italian Renaissance architecture and engineering did not die out during the reign of Mehmed's son-and-sucessor, Bayezid II (r. 1481–1512). This sultan unsuccessfully sought the services of first Leonardo da Vinci and then Michelangelo for the construction of a bridge from Istanbul to Pera/Galata, spanning the Golden Horn, and for unspecified "other works." The sketch for that bridge in Leonardo's notebook is complemented by the Turkish translation of Leonardo's letter (circa 1502–03) addressed to the sultan, where he blatantly promotes his design for the bridge and other engineering projects.[25]

A marginal annotation made to a copy of Ascanio Condivi's *Life of Michelangelo* (1553) by a later assistant of the artist confirms that he had been invited by Bayezid II for the same bridge project: "It was true, and he told me he had already made a model." This probably happened before 1506, when Michelangelo fled to Florence from Rome upon Pope Julius II's (r. 1503–13) decision to postpone his tomb project at St. Peter's, which he had commissioned from the artist in 1505. Because Julius II insisted on his return (probably to paint the Sistine Chapel), Michelangelo, "fearing the wrath of the Pope, thought of going away to the Levant, chiefly as the Turk sought after him with the most generous promises." But the *gonfaloniere* of the Florentine Republic (Piero Soderini, r. 1502–12) dissuaded Michelangelo from this idea, "saying that he should prefer to die going to the pope than to live going to the Turk!"[26] The bridge was not built, but the sultan's invitation to these two famous Florentine artists testifies to his discriminating taste and global outlook.

This episode brings us back to Rome, where Julius II's architects began to prepare projects for New St. Peter's just when Bayezid II's mosque (1501–05/06) in

Figure 20.2 Mosque of Bayezid II, Istanbul. Credit: Reha Günay, after Necipoğlu, *Age of Sinan*, 89, Figure 67.

Istanbul was completed (Figure 20.2). Since both sanctuaries were designed around the same time, André Chastel raised the possibility of an exchange of ideas between the two cities, with their "revival" of the central-plan.[27] I would add that the invitations extended by the sultan to Leonardo and Michelangelo during the construction of his mosque make this conjecture all the more likely. With its two half-domes abutting a central dome, Bayezid II's square mosque, featuring projecting lateral wings, reinterpreted Hagia Sophia's longitudinal rectangular plan.[28] The Pope's initial contemplation to demolish the old basilica of Constantine to make room for New St. Peter's, intended as the site of his own tomb, evokes the precedent set by Mehmed II's mosque-and-mausoleum complex, which required the demolition of another early Christian church associated with Constantine. The sultan's complex, designed as a grand center of higher learning with eight colleges, had proclaimed the cultured image of the Muslim emperor of "New Rome." Similarly, the renovated St. Peter's would express the Papacy's magnificence under Julius II, who sought to emulate the imperial grandeur of ancient Rome, with his own tomb occupying a principal place in the rejuvenated center of Christendom.

This grand church was probably designed by Bramante according to a centralized Greek-cross plan or, as some have suggested, a "modified" central or "composite" plan.[29] If the architect's initial proposal was indeed a Greek-cross plan, it could have alluded to the memory of Constantine's funerary church demolished by Mehmed II in the course of an Ottoman-Venetian war. The sixth-century historian Procopius had praised the domed central core of the Holy Apostles church as resembling that of Hagia Sophia, though smaller in scale.[30] The similarity of

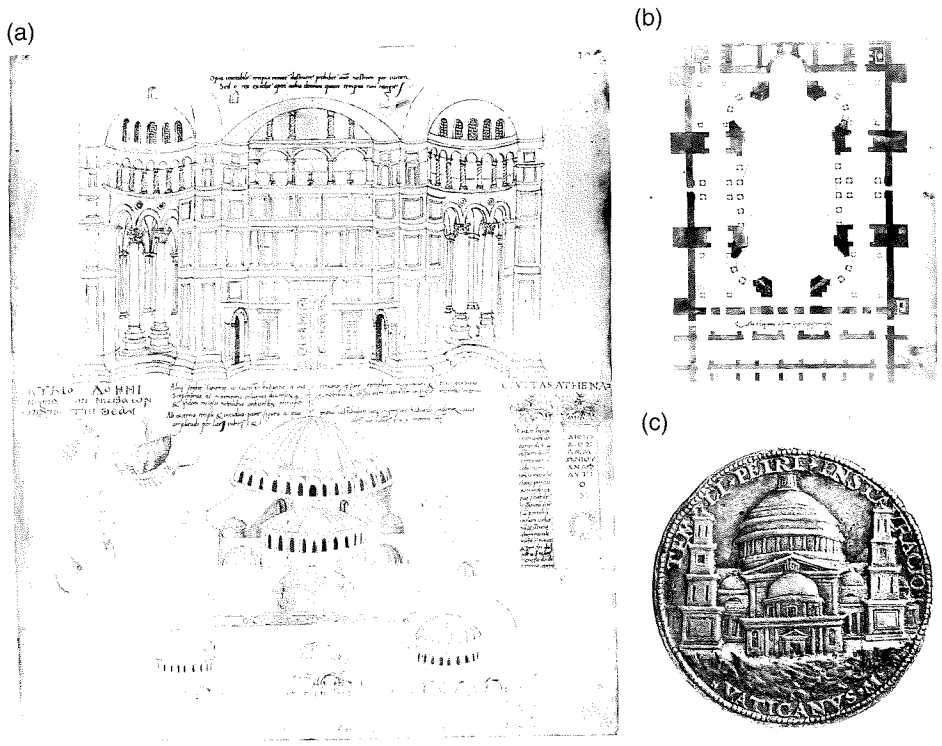


Figure 20.3 (a) Giuliano da Sangallo, circa 1494–1500?, after Ciriacus of Ancona, Hagia Sophia, interior west wall and exterior from the west, Vatican, Codex Vat. Barb. Lat. 4424, fol. 28r. Credit: S. Huelson, *Il libro di Giuliano da Sangallo*, Leipzig, 1910; (b) Probably Giuliano da Sangallo's son, Francesco, circa 1510–14?, ground plan of Hagia Sophia, Vatican, Codex Vat. Barb. Lat. 4424, fol. 44r. Credit: S. Huelson, *Il libro di Giuliano da Sangallo*, Leipzig, 1910; (c) Cristoforo Foppa, called Caradosso, bronze foundation medal of New St. Peter's, 1506/06. Courtesy of Gabinetto Numismatico e Medagliere, Raccolte Artistiche del Castello Sforzesco, Milano.

Bramante's New St. Peter's – as depicted on Caradosso's foundation medal of 1505/06, with hemispherical domes, half-domes, and minaret-like twin towers – to Istanbul's three imperial mosques is too striking to ignore: namely, Hagia Sophia (Ayasofya) and those of Mehmed II and Bayezid II (Figure 20.3c). The ongoing Italian interest in Hagia Sophia after the fall of Constantinople is exemplified by drawings of the church in Giuliano da Sangallo's (d.1516) Barberini Sketchbook, copied from originals by Cyriacus of Ancona (probably 1440s), which Bramante could have seen in Rome (Figure 20.3a–b).[31] This is not unlikely, given the remarkable resemblance between Hagia Sophia's external elevation in Sangallo's drawing and the foundation medal's representation of St. Peter's, with the exception of its added bell towers. The image on the medal, in turn, closely corresponds to Bramante's celebrated half-plan of St. Peter's.

The architect's design deliberately combined elements from the Western and Eastern Roman empires, as a "gesture of Papal supremacy." His models included not only the Pantheon but also Hagia Sophia, the millennial "symbol" of the Greek Orthodox Church, anchored in the architectural tradition of Eastern Rome.[32] Hagia Sophia was, in fact, declared the ideal model for Pavia Cathedral in a letter written in 1487 by the *operai* to Cardinal Sforza in Rome. They asked permission to demolish Pavia's old basilica to rebuild it in the form of Rome's most famous churches and "Sanctae Sophiae," the principal temple of Constantinople. The following year, Bramante was summoned from nearby Milan to Pavia as a consultant for that project.[33] Before St. Peter's, this was the foremost example of a remodeled cathedral in Renaissance Italy, with its composite plan combining a basilica and centralized octagonal domed crossing.

It is not surprising, then, that Bramante's design for New St. Peter's, as represented in Caradosso's medal, bears a striking familial resemblance to Hagia Sophia, and hence to Istanbul's imperial mosques (Figure 20.3c). Unlike the pagan Pantheon in Rome, Hagia Sophia was a celebrated early Christian church founded by Constantine and rebuilt by Justinian as the new Temple of Solomon. In 1507, the papal preacher Egidio da Viterbo theologically legitimized the renovation of St. Peter's by acclaiming it as the new Temple of Jerusalem rebuilt by Julius II, whom he compared to Solomon. This comparison had already been made in Manetti's chronicle of Pope Nicholas V (d.1455), who initiated the renewal of Old St. Peter's, a recurring theme that set the tone for future rebuilding projects by such popes as Paul III (d.1549), whom Vasari declared a successor to Solomon.[34] As we shall see, the Solomonic theme was a leitmotif on the Ottoman side too, this time in the Süleymaniye Mosque built by Sinan during Michelangelo's tenure as architect-in-chief of New St. Peter's.

Surely Julius II was not unaware of Hagia Sophia's conversion into the foremost Muslim sanctuary of Istanbul and its emulation in imperial mosques. Its apparent inclusion among the illustrious models of St. Peter's, as if it had never been lost to Christianity, can be interpreted as a competitive response to this challenge. Julius II, nicknamed "The Warrior Pope," was determined to personally lead a crusade against the infidel Turks to reclaim both Constantinople and Jerusalem in succession for a united Christendom. Egidio da Viterbo's 1507 sermon, delivered in the Pope's presence at St. Peter's, included an appeal for a campaign against the Turks and the recovery of holy places as preconditions for the promised "golden age," heralded by the recently laid foundations of the "new church."[35] To that end, Julius II commissioned many galleys in 1509, and hoped to celebrate Mass in Constantinople within a year, no doubt in Hagia Sophia.[36] Shortly before the fall of the city, the Latin and Greek churches had briefly been reunited in 1452 during a ceremony held at Hagia Sophia, the center of the Orthodox Patriarchate for over a millennium. Attempts to repossess this cathedral church therefore constituted a leitmotif of several failed Renaissance crusade plans. By merging the imperial iconographies of the Pantheon and Hagia Sophia (perhaps also the Holy Apostles) in New St. Peter's, the Pope may

have aspired to reclaim the combined architectural heritage of Old Rome and Constantinople, founded as a "New Rome" and "New Jerusalem." Interestingly, Constantinople is still labeled "Nova Roma" in the frontispiece of a Greek Gospel Lectionary (1511–12), which portrays Julius II receiving this deluxe manuscript, whose overseas journey to Rome from two Ottoman cities, Constantinople and Trebizond, is depicted in its lower half.[37]

Although "The Warrior Pope" failed to fulfill his plans for a crusade, he gave monumental expression to the ecumenical ambitions of the autocratic papal monarchy by commissioning New St. Peter's as the grandest church of Latin Christendom, which would not be inaugurated until 1626. After his death, the indecision between centralized or modified Greek-cross and longitudinal Latin-cross plans proposed by various architects was eventually resolved in favor of Michelangelo's central-plan. The new architect-in-chief (1546–64) prepared a now-lost wooden model in 1546–47, followed by a new model for the dome in 1558–61.[38] During this revision process Michelangelo studied the colossal domes of the Pantheon and of Florence Cathedral in his hometown, and most probably Hagia Sophia.[39]

I would suggest that attempts to emulate Hagia Sophia in Renaissance Italy may have been mediated by a study of contemporary Ottoman dome construction techniques, since the most monumental hemispherical domes at that time were being built in Istanbul. If so, Michelangelo could have learned about these domes from his Florentine merchant contacts affiliated with the Ottoman court, or even craftsmen like the masters of intarsia who were sent to Istanbul in 1480. He was unsuccessfully invited not once, but twice by Ottoman sultans through the mediation of letters and Fransican friars, with promises that the Florentine Gondi bank would cover his travel costs and that an escort would be provided from Ragusa to Istanbul. The second invitation was made through the merchant-banker Tommaso da Tolfo, who wrote Michelangelo a letter from Edirne in 1519, urging him to join post haste the court of Sultan Selim I (d.1520). The letter reminded the artist of their conversation about 15 years ago at Gianozzo Salviati's house, where Tommaso dissuaded Michelangelo from going to Istanbul because Bayezid II disliked the figural arts. But now things were different; his currently reigning son had just paid 400 ducats for a mediocre antique statue of a reclining female nude.[40]

As chief architect for nearly two decades, Michelangelo may have gathered practical information about dome construction methods in Sinan's masterworks in Istanbul, particularly the Süleymaniye mosque complex (1549–57, dependencies completed in 1559), which was preceded by the mosque complex of Şehzade Mehmed (1543–48) (Figure 20.4). The design for Michelangelo's drum at St. Peters had been decided in 1554, but following the 1557 collapse of the southern apse's vault, rebuilt by 1558, the new wooden dome model was created (1558–61), soon after the Süleymaniye Mosque's inauguration in 1557. Carving the interior drum capitals had stopped between 1557 and 1561 "perhaps due to a deviation of

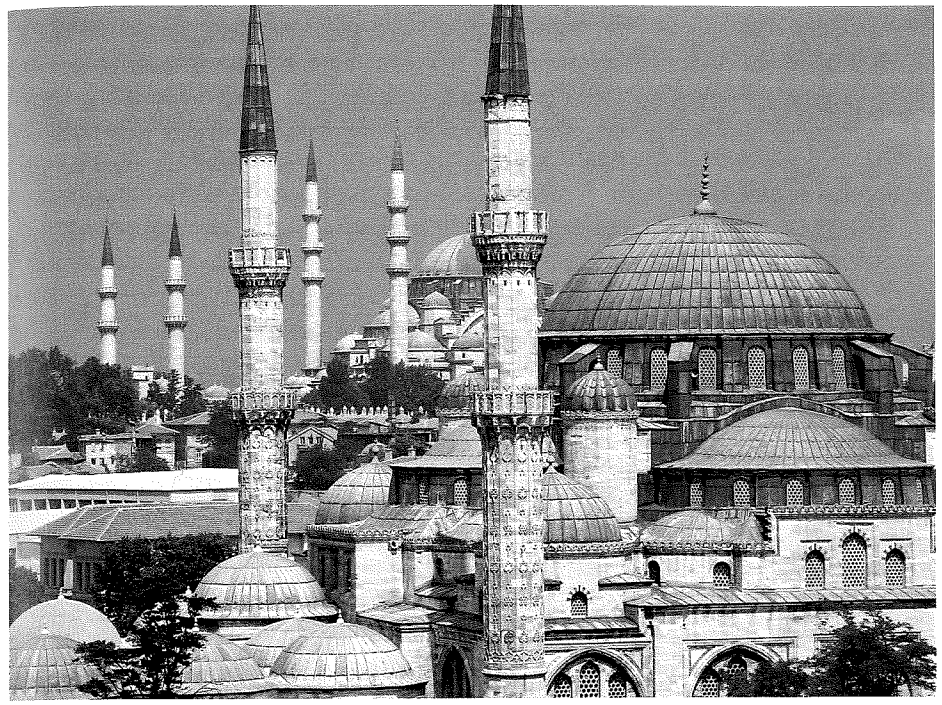


Figure 20.4 Aerial view of the Şehzade Mehmed and Süleymaniye mosques, Istanbul. Credit: Reha Günay, after Necipoğlu, *Age of Sinan*, 198, Figure 160.

thoughts to the model," comprising a hemispherical double-shell dome.[41] My conjecture that Michelangelo perhaps cast a sideway glance at the Süleymaniye's dome is not implausible because his wooden dome model comes closer to Constantinopolitan prototypes than do the proposals of his predecessors. His drum, completed during the year of his death in 1564, features spur-like buttresses fronted by paired columns that alternate with large rectangular windows, not unlike the drums of Hagia Sophia and Sinan's domes whose buttresses alternate with round-arched rectangular windows. By contrast, Bramante's single-shell hemispherical dome and Antonio da Sangallo the Younger's double-shell dome, with a pointed inner shell like that of Florence Cathedral, featured cylindrical drums with circular windows and continuous colonnades.

After Michelangelo's death, his dome model was modified with a pointed profile and his ground plan was transformed by the addition of a nave, which undermined his conception of a light-filled centralized space. The initial resemblance of Bramante's design to Hagia Sophia and to Istanbul's imperial mosques was also downplayed by the omission of peripheral spaces, apse ambulatories, and towers in Michelangelo's downsized project for a more compact St. Peter's dominated by the central dome, as recorded in engravings published by Étienne Dupérac in 1569 (see Figure 20.7b).[42] Even after these modifications, the Roman traveler

Pietro della Valle (1614) was struck by the similarity between Istanbul's imperial mosques and New St. Peter's:

> These hilltop mosques, which are truly beautiful to look at, are well built in marble and differ little in architecture from one another, being in the form of a temple composed of a domed square, like the design of St. Peter's in Rome by Michelangelo; and I believe they have taken Hagia Sophia as their model.

Della Valle promised to bring to Rome drawings of Hagia Sophia and these imperial mosques, which he hoped Italian architects would emulate. Joseph Connors has shown that Borromini did make a drawing of Hagia Sophia when he was designing St. Ivo alla Sapienza (1642), a drawing for which he probably consulted Della Valle in Rome.[43]

This was not the only example of a major architect conducting historical research before unrecognizably transforming his sources. Sir Christopher Wren (d.1723), for instance, consulted his merchant friends about contemporary dome construction techniques used in Istanbul and Smyrna (Izmir), as well as the Ottoman method for covering cupolas with lead sheets. In the 1680s, Wren explained in his second tract on architecture that for the vaulting of St. Paul's Cathedral in London, he followed the dome building technique used at Hagia Sophia, which is "yet to be found in the present Seraglio [namely the Topkapı Saray]." Drawings of Hagia Sophia, associated with Wren's workshop, were probably based on Grelot's now lost sketches and his published travelogue of Constantinople (1680) owned by Wren, which features not only drawings of Hagia Sophia but also major mosques.[44]

The examples of Borromini and Wren point to the likelihood of earlier architectural exchanges and instances of technology transfer that are not recorded in the written sources. In fact, such cross-cultural exchanges would necessarily have remained veiled because by the mid-sixteenth century the Ottoman and Italian polities had established their own distinctive architectural idioms. This was accompanied by an "anxiety of influence" that found expression in exclusivist discourses on architecture, which deliberately masked borrowings and convergences. The Renaissance humanist disdain for the uncivilized Turkish barbarians would have further prevented any admission of transcultural artistic dialogues.[45] Even della Valle, who admired Istanbul's imperial mosques, downplayed the Ottoman agency in their design by describing them as copies of Hagia Sophia. Likewise, the architectural treatise of Vincenzo Scamozzi (Venice, 1615), who was the foremost student and successor of Andrea Palladio, effusively praised Ottoman mosques in Constantinople that seemed to him like a second Rome, and criticized Gothic cathedrals in Milan and Paris. Nevertheless, he could not help but add the following condescending remark: "Thus one sees clearly that even foreign and barbaric nations, which were once uncultivated in construction, have come to appreciate the ancient Greeks and Romans and to emulate the currently most civilized Italians."[46]

Circulation of Architectural Knowledge

The 1540s saw the rise to prominence of three major architects, who likely knew of each other's achievements from professional gossip and oral accounts by travelers: Michelangelo, Palladio, and Sinan. That European visitors to Istanbul did on occasion interact with Ottoman architects is indicated by three bath plans I discovered in a picture album compiled for an Austrian Habsburg embassy in the 1570s. Two of these plans were executed by an anonymous Ottoman architect, probably one of Sinan's assistants, if not the chief architect himself. They are annotated with Turkish explanations of the functions of each hall for a curious foreign audience unfamiliar with this building type. The third plan is an Austrian Habsburg copy of one of those plans, whose annotations have been translated into German.[47]

Such learned diplomats as the Venetian *bailo* (bailiff) Marcantonio Barbaro, who resided in Istanbul between 1568 and 1573, seem to have played a role in the transmission of architectural knowledge. A member of the Venetian oligarchy, Marcantonio was the brother of Daniele Barbaro, whose Italian commentary on Vitruvius' architectural treatise had been published in 1556 with illustrations by the architect Andrea Palladio. Marcantonio was a close friend and patron of Palladio. His special artistic sensibility as an amateur architect is exemplified by his design for a spiral staircase illustrated in Palladio's architectural treatise (Venice, 1570). Given their mutual passion for architecture, Marcantonio may have presented a copy of that treatise to his "great friend" (*amico óptimo*), Sokollu Mehmed Pasha, who was one of Sinan's foremost patrons. Marcantonio's correspondence with the Venetian Senate praises as "most superb buildings" (*superbissime fabriche*) some of Sinan's complexes with central-plan mosques, those of Sokollu in Istanbul and Lüleburgaz, and the Selimiye in Edirne.[48] Upon returning to Venice, he probably informed Palladio about Sinan's domed mosques and mausoleums, echoes of which have been detected in the architect's church of the Redentore in Venice and the chapel he was commissioned by Marcantonio at Villa Barbaro in Maser.[49]

Like Palladio's domed churches in Venice, Sinan's major mosques in Istanbul were conceived as monumental accents enhancing the city's water-oriented panoramic silhouette, always in dialogue with natural landscapes and seascapes. Regardless of whether or not the two architects knew about each other's works, the affinity between their approach to architectural design and poetics embodies a strong sense of place-making and Mediterraneity. Their design practice was anchored in the variation of versatile building types guided by decorum, a concept that occupies a central place in Ottoman and Italian Renaissance architecture alike.[50] Both architects shared similar concerns, such as the blending of beauty and effective engineering, the sensitivity to siting, the aesthetic value attached to distant views, and the visual impact of the silhouette. Differing from inward-looking mosques in other Islamic lands, Sinan's outward-oriented mosques with classicizing internal and external marble colonnades came close in spirit to palatial architecture. Another often-noted affinity between Palladio's and Sinan's domed

sanctuaries was their emphasis on geometric clarity and their creamy white interiors flooded with light. These cheerful spaces departed from the heavily decorated and relatively dim medieval interiors of the mutual Byzantine architectural heritage of Venice and Istanbul. They could not have been more different from the mystery spaces of Hagia Sophia and San Marco, flickering with gold mosaics and indirect lighting from above.

After Sinan codified his distinctive architectural idiom in the 1550s, the earlier Ottoman receptivity to Italian architectural innovations diminished considerably. Nonetheless, his preoccupation with global fame almost certainly induced him to follow contemporary developments in the Italian architectural scene through prints, published treatises with illustrations, and descriptions by travelers. As the chief architect of a multinational empire whose western territories extended to Vienna and included recently conquered Italian islands such as Chios (1566) and Cyprus (1570–71), he most likely had access to contemporary European architectural publications. We do not know what languages he could read, or what he read, but finding translators would have been easy if he wanted to.[51] Given his charge to collect ancient marble columns and spolia from across the Mediterranean for the Süleymaniye, conducted as a veritable archaeological expedition, it is almost inconceivable that Sinan would have stopped short of finding out more about Renaissance architecture.[52]

The visit by a group of Ottoman travelers to the construction site of St. Peter's, probably in the time of Paul III (d.1549), who had formed an anti-Ottoman Holy League in 1538, is recounted in Francesco de' Marchi's treatise on military architecture (completed by 1546, but published posthumously). The "Turks" who inspected the church expressed enthusiasm for its completion and perhaps saw the huge wooden model of the architect-in-chief Antonio da Sangallo the Younger (1520–46), prepared by his pupil Antonio Labacco between 1539 and 1546:

> The temple of S. Pietro in Rome is the most magnificent in all Christendom, and when it is built according to the design and model none other like it will be found anywhere. … and certainly all men on earth desire that this temple should be completed and seek to aid and favor its completion, even including the Turks, enemies of the true faith. I spoke with some of them in Rome, who desired that this Church may be finished [as planned] according to its beautiful and marvelous beginnings.[53]

This is not to suggest that those visitors described what they saw to Sinan. It is highly likely, however, that he was informed about projects for the church, whose widely disseminated iconic image based on Sangallo's model appeared on the papal medals of Paul III (1546–47, 1549) and Julius III (1550). Projects for St. Peter's were also advertised by the new medium of engraved drawings, such as those of Bramante, Peruzzi, and Raphael published in Serlio's treatise (Venice, 1540); those of Sangallo's model published by Antonio Salamanca after drawings by Labacco (1546–49); and the aforementioned engravings by Dupérac (1569).[54] Howard Burns has even suggested that the four innovative piers of the Süleymaniye's central dome, cut at an angle, may have been inspired by the Labacco engravings.[55]

Sixteenth-century Ottoman sources refer to architectural knowledge as a science (*'ilm*), combining theory with practice, and rooted in mathematics and engineering. Although the copy of a Latin manuscript of Vitruvius' architectural treatise entered Sultan Süleyman's library after the capture of Buda in 1526, and its illustrated printed versions circulated widely, Ottoman court culture did not develop a written discourse on architectural theory comparable to the Renaissance counterparts of Vitruvius' treatise.[56] However, the unprecedented autobiography Sinan dictated in the 1580s to his poet friend Mustafa Sa'i, who was a painter/calligrapher, is comparable to the lives of architects published in Italy, particularly those of Michelangelo written by his faithful pupil Condivi (1553) and by Vasari (1550, revised in 1568). Condivi's biography was dedicated to Pope Julius III (r. 1550–55), Michelangelo's supportive patron at St. Peter's against his rivals. It is considered an autobiography composed at the architect's behest, "from the oracle of his speech." Sa'i's text was likewise based on Sinan's "blessed" words reflecting "the wisdom of [the sage] Lokman." It recounts how rivals gossiped about his inability to complete the Süleymaniye's dome, vindicated by his patron's rewards during its inauguration. Echoing the literary genre of saint's lives, the lives of both architects portray them as being touched by divine genius with their extraordinary powers of invention. The earlier *vita* of Brunelleschi by his pupil Antonio di Tuccio Manetti (1480s) similarly portrayed him as possessing "a marvelous genius."[57]

Whether Sinan was inspired by Michelangelo's biographies or not, his autobiography surviving in several versions reflects the same acute self-consciousness and that proud sense of individualism, associated with the Renaissance idea of the artist, which is generally assumed to be missing in the Islamic world. Unlike Italian architects, Sinan was the chief of a large corps of royal architects. He thus had to negotiate his individualism with the collective identity of the bureaucratic corps that he headed. The collaborative nature of architectural production explains why he only signed one monument with his name, the Büyükçekmece Bridge.[58]

Sinan's "authorship anxiety" was compensated by his autobiography, through which he shaped his personal legacy for posterity by listing hundreds of monuments, whose plans he drew, as his own works. He thus participated in the Renaissance discourses on artistic genius and the equation of architecture with design (*disegno*). Sinan's autobiographical memoirs glorify his divinely bestowed mental powers of invention thanks to which he claims to have contributed to the evolutionary progress of civilization with matchless architectural masterpieces. They narrate the skills he displayed in his three principal imperial mosques, the Büyükçekmece Bridge, the Kırkçeşme aqueducts, and the waterworks in Istanbul, each of which involved a contest with the ancient architectural heritage of Constantinople from what he calls the times of the "unbelievers." The Roman-Byzantine building tradition is thus associated with a non-Muslim past that lacks the cultural connotations it held in the Italian humanist context, with its cult of antique revival. Yet,

much like his colleagues in Italy, who intently study the ruins of Rome, Sinan eagerly examines the late-antique vestiges of Constantinople and critically ventures to improve them.

New Temples of Solomon: Süleymaniye, St. Peter's, and the Escorial

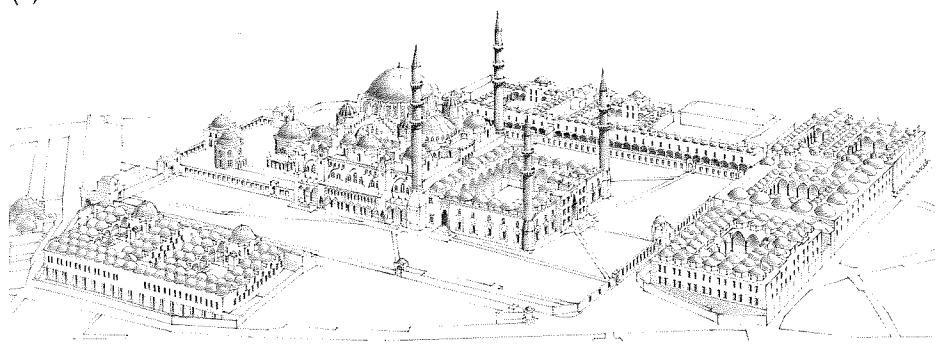
The three major imperial mosques, singled out in Sinan's autobiographies as the milestones in his career, were all created while the New St. Peter's in Rome was undergoing construction. The first one, commissioned by Sultan Süleyman to commemorate the deceased crown prince, Şehzade Mehmed (1543–48), has a perfectly centralized square plan with a large dome surrounded by four half-domes. It thus comes close to the "ideal Renaissance temple" plans designed by Bramante and others (Giuliano da Sangallo, Peruzzi, Michelangelo) for St. Peter's, that were echoed in smaller churches with Greek-cross plans in Rome and Todi.[59] The Şehzade Mosque's layout, conceived just before Michelangelo's plan for St. Peter's (1546–47), was a natural development of half-domed schemes that emerged under Mehmed II and Bayezid II. Four half-domes had already been used in some provincial monuments, such as Bıyıklı Mehmed Pasha's mosque (1516–20) in Diyarbakır, which Sinan had seen. He modified the latter's plan by eliminating its projecting side wings, which freed up the Şehzade's lateral façades for architectonic elaboration with unprecedented domical arcades and window groupings.

Sinan's autobiography describes the Şehzade where he refined the archaic style of Istanbul's imperial mosques with a pyramidally massed superstructure and harmonious proportions, as an experiment paving the way for the Süleymaniye (1549–57) (Figure 20.4). He proudly identifies these two mosques as the pioneers of a more graceful Ottoman aesthetic that perfected the Hagia Sophia-inspired style of previous imperial mosques:

> Although [formerly] buildings constructed in the style/manner (*ṭarz*) of Ayasofya did not possess refinement, I perfected the mosque of Şehzade Mehmed, which in turn served as a model for the noble mosque of Sultan Süleyman, where numerous beautiful artworks were designed with utmost refinement (*nezāket*).[60]

The Süleymaniye complex was meant to surpass in scale and magnificence all of its predecessors (Figure 20.5a–b). The plan of the mosque revised that of Bayezid II, featuring two half-domes like Hagia Sophia (Figure 20.2). Although Justinian's church was the primary model for the Süleymaniye, perhaps Sinan was also responding to the construction of St. Peter's with renewed vigor under Michelangelo's supervision. The latter's patron, Paul III (d.1549), like Julius II, saw himself as the restorer of Solomon's temple, but with the intention of finishing it.[61] The colossal

(a)



(b)

Figure 20.5 (a) Axonometric projection of the Süleymaniye mosque complex, Istanbul. Drawn by Arben Arapi, after Necipoğlu, *Age of Sinan*, 206, Figure 168; (b) Süleymaniye mosque complex, Istanbul, from the northwest with the Golden Horn and Galata in the background. Credit: Reha Günay, after Necipoğlu, *Age of Sinan*, 208, Figure 170.

red granite columns that support Süleymaniye's central domed baldachin (originating from Constantinople, Alexandria, and Baalbek) emulated Justinian's deployment of spolia in Hagia Sophia, described in late-fifteenth-century Persian and Turkish translations of Greek texts on its semi-mythical construction history, which recorded Justinian's boast: "Solomon I have surpassed thee!" (Figure 20.6).[62]

Sinan critically revised the longitudinal layout of Hagia Sophia with a more centralized spatial conception, without attempting to compete with it in size. Unlike the severe cubical massing of Hagia Sophia, built in brick with monumental projecting buttresses, the stone façades of the Süleymaniye feature elegantly stepped buttresses concealed by two-tiered columnar arcades and complex window

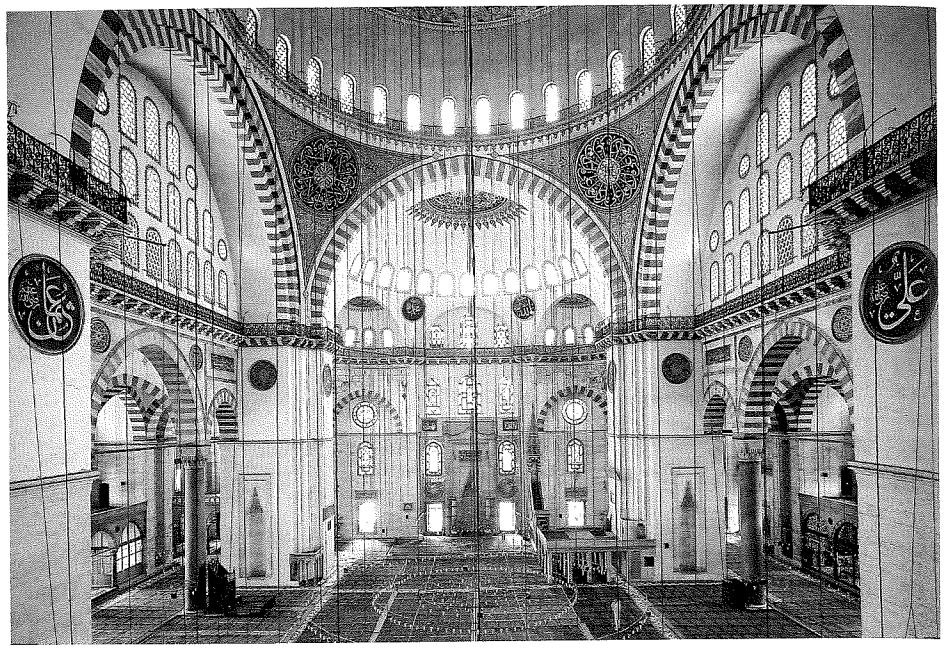


Figure 20.6 Süleymaniye mosque complex, Istanbul, interior toward qibla wall. Credit: Reha Günay, after Necipoğlu, *Age of Sinan*, 214, Figure 179.

arrangements that externally express the composition of inner space. In his autobiography, Sinan explains that he opened doors from the minarets and created several "upper domes for the scrutiny of experts, an artifice not previously accomplished by any master." I interpret this as a reference to the doors that provide access from two minarets to the mosque's roof terrace, and the four domical belvederes with windows atop the stepped buttresses.[63] The unprecedented terrace, bordered by stone parapet railings, acted as a viewing platform from which connoisseurs could examine the mosque's superstructure and gaze at the complex, surrounded by a stunning cityscape and seascape.

Sinan's roof terrace recalls that of a contemporary church in Genoa, Santa Maria in Carignano, designed in 1549 by Galeazzo Alessi (d.1572) with a Greek-cross plan soon after the establishment of Michelangelo's project for St. Peter's.[64] Perhaps Alessi's and Sinan's viewing terraces were inspired by galleries protected by balustrades in Sangallo's model, and Labacco's prints based on it. Completed in 1603, the central dome of the smaller church in Genoa, whose architect was closely connected to Rome, is encircled by four mini domes and two façade towers (instead of the originally planned four, as in some unrealized proposals for St. Peter's). Its roof belvedere surrounded by stone balustrades commands spectacular vistas of the urban landscape and the Mediterranean port of Genoa, which maintained commercial ties with the once Genoese colony of Galata/Pera in Istanbul. Perched on

hilltops, both Alessi's church and Sinan's mosque were designed as prominent urban landmarks, simultaneously meant to be seen and to see from.

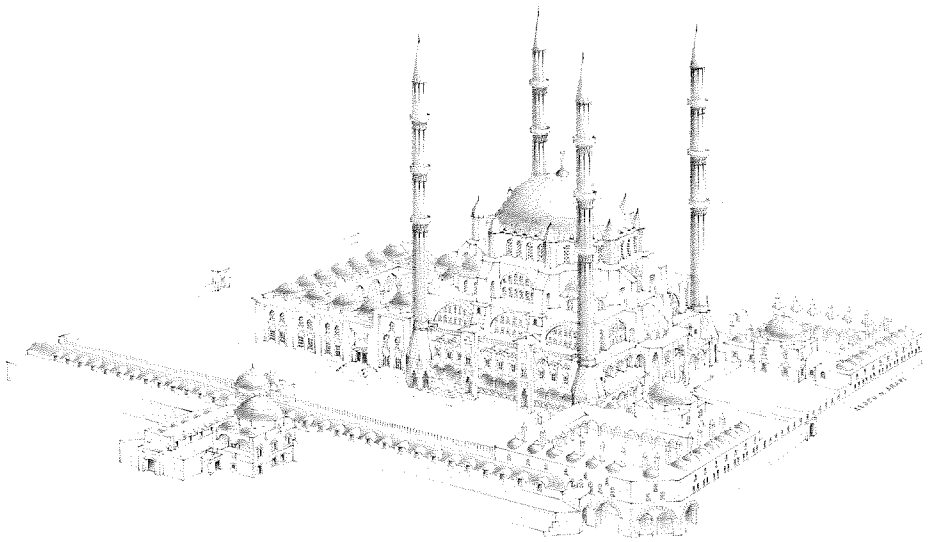
The construction of Süleyman's multifunctional complex, comprising his mausoleum and that of his wife, overlapped with the sultan's renovation of the Dome of the Rock in Ottoman Jerusalem, built on the site of Solomon's Temple. Süleyman's adopted title, "Second Solomon," was enhanced by Süleymaniye's recognizable allusions to Hagia Sophia, created by Justinian to outdo the Temple of Solomon.[65] As mentioned above, the sultan's contemporary, Paul III, also claimed the Solomonic title as the restorer of St. Peter's. Another roughly contemporaneous monument that cross-referenced Solomon's Temple was the Escorial near Madrid, commissioned by the Spanish Habsburg king, Phillip II, who too adopted the title "Second Solomon." He moreover referred to himself as "King of Jerusalem," a symbolic title he inherited in 1554 from his father Charles V, who was the archrival of Sultan Süleyman, the actual ruler of Jerusalem. Conceived as Solomon's rebuilt temple, the monastic complex of Escorial combined a palace and temple with several dependencies in a funerary context. The domed church at its core incorporated the sepulcher of Phillip II's illustrious father who passed away in 1558 and subsequently became the Spanish Habsburg dynastic funerary pantheon.[66]

Although its foundations were laid in 1563, the Escorial was conceived in 1557 to commemorate Phillip II's defeat of Henry II of France in the Battle of Saint-Quentin, the very year the Süleymaniye Mosque was inaugurated. The Habsburg victory over Valois France, a longtime ally of the Ottomans, reawakened Spanish dreams of universal monarchy. Embracing the Roman imperial legacy, the Escorial aspired to rival the New St. Peter's and perhaps Süleymaniye. Initially designed with a Latin-cross plan by Juan Bautista de Toledo (d.1567), who had assisted Michelangelo at the papal church in Rome, it was completed in 1584 by Juan de Herrera with a Greek-cross plan, thus coming closer to that of Michelangelo.

These uncannily resonant building projects – with overlapping allusions to the ancient Roman imperial legacies of Rome, Constantinople, and Jerusalem – can be interpreted as architectural dialogues across a Mediterranean divided between the Ottomans and Habsburgs, the latter allied with the Catholic Papacy. If not envisioning long-distance dialogues, the three Temples of Solomon – Süleymaniye, St. Peter's, Escorial – were nonetheless talking the same Mediterranean architectural language of universal sovereignty, with their flexible classicism inflected by regional dialects.

The construction of Sinan's third and last great imperial mosque, the Selimiye in Edirne (1568–74), overlapped with two naval confrontations in the Mediterranean: the victorious Ottoman campaign against Venetian Cyprus, followed by the Lepanto debacle inflicted by the Holy League of Catholic maritime states. According to Sinan's autobiography, in the Selimiye he took up the challenge of his European colleagues, thereby fighting his own architectural battle (Figure 20.7a). He scorns the "so-called architects of the unbelievers," who wounded his heart (apparently after the Süleymaniye's completion) with their incorrect presumption that a

(a)



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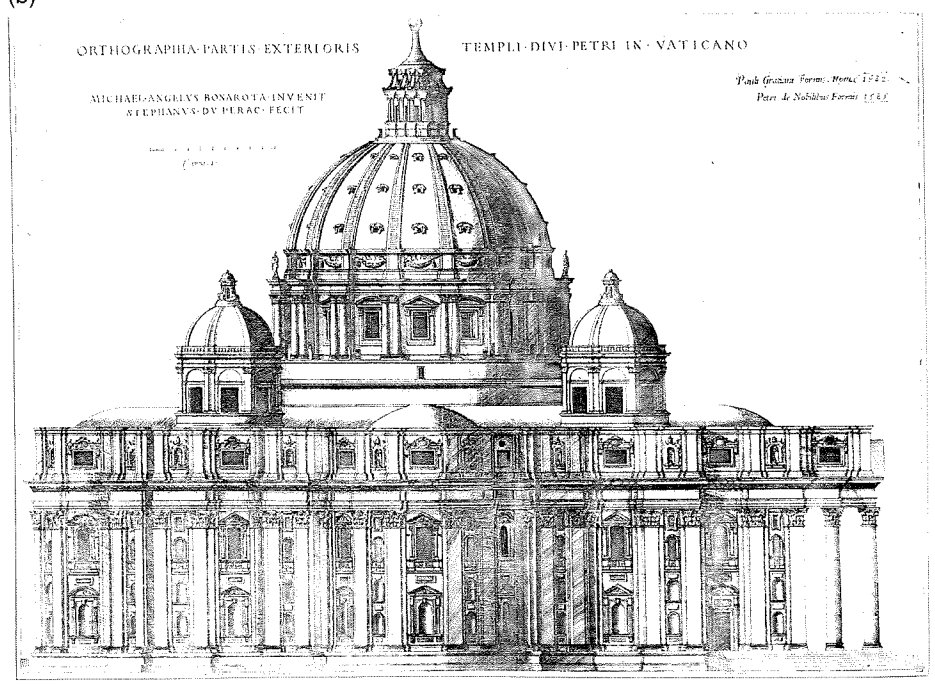

Figure 20.7 (a) Axonometric projection of the Selimiye mosque complex, Edirne. Drawn by Arben Arapi, after Necipoğlu, *Age of Sinan*, 240, Figure 210; (b) Étienne Dupérac, engraving based on Michelangelo's designs, 1569, Elevation of New St. Peter's from the south. Courtesy of Castello Sforzesco, Milan, Civica Raccolte delle Stampe "Achille Bertarelli," ALBO H.56–2, tav. 96. Credit: Fabio Saporetti.

dome as large as that of Hagia Sophia could not possibly be built by the Muslims, for otherwise they would have built it. Sinan boasts to have disproved that presumption by constructing an even larger and more magnificent dome at the Selimiye, which "both in terms of utmost refinement and overall design is the ultimate realization of art." The mosque proves Sinan's architectural triumph by setting up a new standard of its own as an inimitable paragon: "No dome like it has been built or can ever be built on earth,/It is a non-pareil equaled only by the sky!"[67]

Having reached the peak of his career, Sinan steered away from paraphrasing the layout of Hagia Sophia in the Selimiye, where he more freely explored his own creative imagination. With its centralized octagonal baldachin, this mosque differs from all previous imperial mosques in Istanbul, whose square dome baldachins echo that of Hagia Sophia. The pyramidal cascade of smaller domes and half-domes, seen earlier in the Şehzade and Süleymaniye, is entirely abandoned here to accentuate the upward crescendo of four rocket-like minarets framing a gigantic single dome, slightly bigger with its over 31-meter diameter than Hagia Sophia's higher dome. One wonders whether the novel sculptural plasticity of the Selimiye's taller façades may not have been another response to the so-called architects of the "unbelievers," perhaps inspired by Dupérac's engravings of St. Peter's (1569) (Figure 20.7b). Moreover, the unusual muezzin's tribune, uniquely situated over a fountain in the middle of Selimiye's domed space, curiously recalls the high altar's position at the very center of Michelangelo's Greek-cross plan, published by Dupérac. Primarily intended for export, these prints and other architectural publications could have been consulted by Sinan, who was driven to surpass himself by the real or imagined critique of his European colleagues at the Selimiye. After all St. Peter's was the principal church of Latin Christendom, certainly a worthy counterpart to Hagia Sophia, the foremost Greek Orthodox cathedral lovingly embraced as the premier imperial mosque of Istanbul.

None of this should, of course, diminish the significance of the Islamic-Ottoman architectural traditions within which Sinan's autobiography self-consciously situates his oeuvre. In it, the octagonal domed baldachin of the Selimiye is compared with that of the Dome of the Rock, after which Sinan had modeled Sultan Süleyman's posthumously built mausoleum (1566–68) at the Süleymaniye complex, completed just before the Selimiye's foundations were laid. Doğan Kuban has convincingly speculated that the Islamic models of the Selimiye included the mausoleum of the Mongol-Ilkhanid ruler Uljaytu in Sultaniya (1307–13), which Sinan had seen during a victorious Iranian campaign of Sultan Süleyman in 1534.[68] With its grand octagonal dome, encircled by eight turrets like that of the Selimiye, this was the largest Islamic imperial mausoleum ever built, with its 25-meter diameter.

The pointed double-shell dome of Uljaytu's mausoleum brings us full circle back to Italy and to the conclusion of my chapter. It is thought that this Iranian dome may have inspired the double-shell late-Gothic pointed dome of Florence Cathedral, initially conceptualized around the mid-fourteenth century and eventually completed by Brunelleschi (1420–36).[69] Brunelleschi's dome, in turn, exerted a

decisive influence on the double-shell dome of St. Peter's, finally built with a pointed profile by Giacomo della Porta (1588–90) because "it would be more beautiful as well as stronger."[70] By contrast, Sinan displayed a steadfast commitment to hemispherical single-shell domes, which ironically brought him closer to ancient Roman ideals than his Italian contemporaries, who were equally attracted to "Gothic" domes. His colleagues in Italy focused more attention on the classical orders and pedimented façades with sculptural ornament, often recladding inherited medieval churches with classicizing outer shells. Nevertheless, Sinan's devotion to spoliated monolithic column shafts, provided with Ottoman capitals, permeated the human proportions of his classicizing architecture.

Unhampered by liturgical constraints placed on central-plan churches in the Latin West, Sinan was freer to execute his innovative designs for centralized domed mosques than Italian architects, who left behind numerous unrealized projects. He nonetheless remained bound by the traditional quadrangular format for mosques. Never using round forms at ground-level, he focused instead on the kaleidoscopic variation of curvilinear domed superstructures, balanced on diverse support systems. This duality was also expressed by his use of "Islamic" pointed arches in the lower zones of mosques, beneath their domical superstructures featuring "Roman" round arches. Commanding the vast financial, material, and human resources of an empire at the height of its power, Sinan was able to complete his projects in a remarkably short time, whereas the construction processes of churches in the West generally outlived their original architects and patrons.[71]

The Selimiye transcended the former limits of the Ottoman architectural tradition by boldly reclaiming the ancient Roman-Byzantine and Islamic roots of that tradition, and perhaps also making an indirect reference to contemporary Italian Renaissance architecture. Sinan's desire to address an international audience is captured by his autobiography, which describes the Selimiye as a matchless tour de force of world architecture, "worth being seen by the people of the world."[72] Whatever his global sources of inspiration were, Sinan's breakthrough in central-plan mosque design profoundly transformed and concealed his sources of inspiration by unrecognizably filtering them through the lens of canonical Ottoman forms, which he perfected.

To sum up, this chapter has sought to unveil some of the architectural dialogues that swept across the Mediterranean, which were carried out between architects, patrons, buildings, and representations, in conversation with one another. The great domed sanctuaries I have considered expressed the mutual conviction that monumental sacred spaces represented the pinnacle of architectural values. This conviction, articulated in Vitruvius' treatise, was reiterated by Alberti:

> There does not exist any work which requires greater talent, care, skill and diligence than that needed for building and decorating the temple. Needless to say, a well-tended and ornate temple is without doubt the foremost and primary ornament of the city.[73]

The same idea was taken up again in Palladio's treatise and in Sinan's autobiographies, which rank the domed great mosque as the premier building type. Clearly, then, architectural parallels in the early modern Eastern Mediterranean were not just limited to formal aspects, prompted by transcultural exchanges and cross-fertilizations of mutual models. They were also informed by shared cultural values across a sea that both "unites and divides."[74]

Notes

1. Pîrî Reis, *Kitab-ı Bahriye*, 2 vols (Istanbul: Istanbul Research Center, 1988), vol. 1, 82–5.
2. Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Phillip II*, 2 vols (New York: Harper Colophon Books, 1973), vol. 2, 660.
3. Ibid., vol. 2, 657–61.
4. Gülru Necipoğlu, "Süleyman the Magnificent and the Representation of Power in the Context of Ottoman-Hapsburg-Papal Rivalry," *Art Bulletin* 71 (1989): 401–27.
5. Braudel, *The Mediterranean*, vol. 2, 678; vol. 1, 342–3.
6. Exceptions include Spiro Kostoff, *A History of Architecture: Settings and Rituals* (New York: Oxford University Press, 1985).
7. Gülru Necipoğlu, "Visual Cosmopolitanism and Creative Translation: Artistic Conversations with Renaissance Italy in Mehmed II's Constantinople," *Muqarnas* 29 (2012): 1–81.
8. See studies cited in ibid., 53n.4. Exceptions include Deborah Howard, "Venice between East and West: Marc'Antonio Barbaro and Palladio's Church of the Redentore," *Journal of the Society of Architectural Historians* 62, no. 3 (2003): 306–25; Deborah Howard, *Venice and the East: The Impact of the Islamic World on Venetian Architecture 1100–1500* (New Haven: Yale University Press, 2000).
9. Naomi Miller, *Mapping the City: The Language and Culture of Cartography in the Renaissance* (London: Continuum, 2003), 27–83, 129–31.
10. Charles T. Riggs, trans., *History of Mehmed the Conqueror by Kritovoulos (1451–1467)* (Princeton: Princeton University Press, 1954), 139–42, 148–9; Necipoğlu, "Visual Cosmopolitanism," 22–30; Çiğdem Kafescioğlu, *Constantinopolis/Istanbul: Cultural Encounter, Imperial Vision, and the Construction of the Ottoman Capital* (University Park, PA: Pennsylvania State University, 2009); Doğan Kuban, *Istanbul, An Urban History: Byzantion, Constantinopolis, Istanbul* (Istanbul: Economic and Social History Foundation, 1996).
11. Gülru Necipoğlu, *The Age of Sinan: Architectural Culture in the Ottoman Empire* (London: Reaktion Books, 2005, 2nd ed. 2011); Doğan Kuban, *Ottoman Architecture*, trans. Adair Mill (Woodbridge: Antique Collector's Club, 2010); Doğan Kuban, *Sinan's Art and Selimiye* (Istanbul: Economic and Social History Foundation, 1997); Aptullah Kuran, *Sinan: The Grand Old Master of Ottoman Architecture* (Washington DC: Ada Press, 1987); Godfrey Goodwin, *A History of Ottoman Architecture* (London: Thames & Hudson, 1971).
12. Gülru Necipoğlu, "The Life of an Imperial Monument: Hagia Sophia after Byzantium," in *Hagia Sophia: From the Age of Justinian to the Present*, ed. Robert Mark and Ahmet Çakmak (London: Cambridge University Press, 1992), 195–225.

13. Gülru Necipoğlu, *Architecture, Ceremonial and Power: The Topkapı Palace in the Fifteenth and Sixteenth Centuries* (Cambridge, MA: MIT Press, 1991); Necipoğlu, *Age of Sinan*, 82–8; Kafescioğlu, *Constantinopolis/Istanbul*, 66–96.
14. Constantius II built Hagia Sophia and the Holy Apostles in Constantinople, and probably St. Peter's in Rome according to Glen W. Bowersock, "Peter and Constantine," in *St. Peter's in the Vatican*, ed. William Tronzo (Cambridge: Cambridge University Press, 2005), 9–12.
15. Necipoğlu, *The Age of Sinan*, 79–82.
16. Gülru Necipoğlu, "Plans and Models in Fifteenth- and Sixteenth-Century Ottoman Architectural Practice," *Journal of the Society of Architectural Historians* 45, no. 3 (1986): 224–43; Necipoğlu, *Age of Sinan*, 84–7.
17. "Aurelio Santa Croce al séguito del *bailo* Marcantonio Barbaro, Notizie da Costantinopoli (1573)," in *Relazioni di ambasciatori Veneti al Senato*, vol. 14: *Constantinopoli, Relazioni inedite (1512–1789)*, ed. Maria Pia Pedani-Fabris (Padua: Ausilio Aldo, 1996), 190–1.
18. Leon Battista Alberti, *On the Art of Building in Ten Books*, trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, MA: MIT Press, 1989), 25, 163.
19. Kostof, *History of Architecture*, 459.
20. Julian Raby, "El Gran Turco: Mehmed the Conqueror as a Patron of the Arts of Christendom" (D.Phil. thesis, Oxford University, 1980), 17–29, 261–3, 285; Marcell Restle, "Bauplannung und Baugesinnung unter Mehmed II. Fâtih," *Pantheon* 39 (1981): 362–6.
21. Necipoğlu, "Visual Cosmopolitanism," 3–22; Gülru Necipoğlu, "Connectivity, Mobility, and Mediterranean 'Portable Archaeology': Pashas from the Dalmatian Hinterland as Cultural Mediators," in *Dalmatia and the Mediterranean: Portable Archaeology and the Poetics of Influence*, ed. Alina Payne (Leiden: Brill, 2014), 313–81.
22. Tursun Bey, *Târîh-i Ebü'l-Feth*, ed. Mertol Tulum (Istanbul: Baha Matbaası, 1977), 70–2.
23. Giorgio Vasari, *The Lives of the Painters, Sculptors and Architects*, ed. William Gaunt, 4 vols. (London: Dent; New York: Dutton, 1963), vol. 2, 183.
24. See references in Necipoğlu, "Visual Cosmopolitanism," 27, 30.
25. For sources on Bayezid II's contacts with Italy, see ibid., 45–48; Friedrich Sarre, "Michelangelo und der türkische Hof," *Repertorium für Kunstwissenschaft* 32 (1909): 61–6; Franz Babinger and Ludwig H. Heydenreich, "Vier Bauvorschläge Lionardo da Vinci's an Sultan Bajezid II (1502–03)," *Nachrichten der Akademie der Wissenschaften in Göttingen, I. Philologisch-Historische Klasse* 1 (1925): 1–20.
26. Ascanio Condivi, *The Life of Michelangelo*, trans. Alice Sedgwick Wohl, ed. Hellmut Wohl (University Park, PA: The Pennsylvania University Press, 1999), 37, 94, 131n.50.
27. André Chastel, *Renaissance méridionale, Italie, 1460–1500* (Paris: Gallimard, 1965), 18–24.
28. Necipoğlu, *Age of Sinan*, 88–9.
29. For unresolved debates, see essays in Tronzo, *St. Peter's in the Vatican*; A. Bruschi et al., *San Pietro che non c'è: Da Bramante a Sangallo il Giovane*, ed. Cristiano Tessari (Milan: Electa, 1996); Horst Bredekamp, *Sankt Peter in Rom und das Prinzip der produktiven Zerstörung* (Berlin: Verlag Klaus Wagenbach, 2002).
30. Necipoğlu, "Visual Cosmopolitanism," 23.

31. Peter Murray, "Observations on Bramante's St. Peter's," in *Essays in the History of Architecture Presented to Rudolf Wittkower*, ed. Douglas Fraser et al. (London: Phaidon, 1967), 55.
32. Murray, "Bramante's St. Peter's," 53–59. On the allusion to Hagia Sophia, see also: James S. Ackerman, *The Architecture of Michelangelo* (Chicago: University of Chicago Press, 1986), 197; Silvia Foschi, "Santa Sofia di Costantinopoli: Immagini dall'Occidente," *Annali di architettura* 14 (2002): 7–33; Hubertus Günther, "Leitende Bautypen in der Planung der Peterskirche," in *L'église dans l'architecture de la Renaissance*, ed. Jean Guillaume (Picard, Paris, 1995), 41–78.
33. Foschi, "Santa Sofia," 8; Murray, "Bramante's St. Peter's," 55–6.
34. Christof Thoenes, "Renaissance St. Peter's," in *St. Peter's in the Vatican*, 73–4, 85.
35. John W. O'Malley, "Fulfillment of the Christian Golden Age under Pope Julius II: The Text of a Discourse of Giles Viterbo, 1507," *Traditio* 25 (1969): 272–5.
36. D. S. Chambers, *Popes, Cardinals & War: The Military Church in Renaissance and Early Modern Europe* (London: I.B. Taurus, 2006), 130–1.
37. Helen C. Evans, ed., *Byzantium: Faith and Power (1261–1557)*, exh. cat. (New York: Metropolitan Museum of Art; and New Haven: Yale University Press, 2004), 514, 542–3.
38. Henry A. Millon, "Michelangelo to Marchionni, 1546–1784," in *St. Peter's in the Vatican*, 93, 95.
39. Millon and Smyth, *Michelangelo*, 655.
40. Sarre, "Michelangelo und der türkische Hof," 61–6. On artistic contacts with Italy under Bayezid II, Selim I, and Süleyman I: Necipoğlu, "Visual Cosmopolitanism," 45–52.
41. Millon, "Michelangelo to Marchionni," 96–7.
42. The towers subsequently reintroduced and built by Bernini no longer exist.
43. Della Valle quoted in: Joseph Connors, "Borromini, Hagia Sophia, and S. Vitale," in *Architectural Studies in Memory of Richard Krautheimer*, ed. Cecil Striker (Mainz: P. von Zabern, 1996), 43–8.
44. Lisa Jardine, *On a Grander Scale: The Outstanding Life of Sir Christopher Wren* (New York: HarperCollins, 2002), 336, 414–5.
45. Nancy Bisaha, *Creating East and West: Renaissance Humanists and the Ottoman Turks* (Philadelphia: University of Pennsylvania Press, 2004).
46. Quoted in Hubertus Günther, *Was ist Renaissance?* (Darmstadt: WBG, 2009), 279.
47. Necipoğlu, "Plans," 225–7; Necipoğlu, *Age of Sinan*, 84–7.
48. Necipoğlu, *Age of Sinan*, 99–100, 331–68.
49. Howard, "Church of the Redentore"; Deborah Howard, *Venice Disputed: Marc'Antonio Barbaro and Venetian Architecture* (New Haven: Yale University Press, 2011); Howard Burns, "Dialoghi mediterranei: Palladio e Sinan," in *Palladio*, exh. cat., ed. Guido Beltramini and Howard Burns (Venezia: Marsilio, 2008), 236–43.
50. On decorum: Necipoğlu, *Age of Sinan*, 21, 115–24.
51. Sinan was a Christian from the Kayseri region of central Anatolia but the debate on his ethnicity, whether Greek, Armenian, or Turkic, is not resolved. See, Necipoğlu *Age of Sinan*, 13–4, 127–31; Gülru Necipoğlu, "Creation of a National Genius: Sinan and the Historiography of 'Classical' Ottoman Architecture," *Muqarnas* 24 (2007): 141–83.

52. On the search for spolia, see Necipoğlu, "Portable Archaeology," 357–73.
53. Transcribed and cited in Romeo De Maio, *Michelangelo e la Controriforma* (Rome: Laterza, 1978), 322n.64; Howard Burns, "Building against Time: Renaissance Strategies to Secure Large Churches against Changes to their Design," in *L'architecture de la Renaissance*, 124n.111.
54. Henry A. Millon and Vittorio Magnano Lampugnani, eds., *The Renaissance: From Brunelleschi to Michelangelo*, exh. cat. (Milan: Bompiani, 1994), 631, 644–5.
55. Burns, "Building against Time," 124–5.
56. Alina A. Payne, *The Architectural Treatise in the Italian Renaissance: Architectural Invention, Ornament, and Literary Culture* (Cambridge: Cambridge University Press, 1999).
57. Gülru Necipoğlu, "Sources, Themes, and Cultural Implications of Sinan's Autobiographies," in *Sinan's Autobiographies: Five Sixteenth-Century Texts*, ed. and trans. Howard Crane and Esra Akın (Leiden: Brill, 2006), vii–xvi, cited on xii; Necipoğlu, *Age of Sinan*, 127–47; Lisa Pon, "Michelangelo's Lives: Sixteenth-Century Books by Vasari, Condivi and Others," *The Sixteenth Century Journal* 27, no. 4 (1996): 1015–37; *The Life of Brunelleschi, by Antonio di Tuccio Manetti*, ed. Howard Saalman, trans. Catherine Enggass (University Park, PA: Pennsylvania State University Press, 1970), 40, 52.
58. Necipoğlu, *Age of Sinan*, 127–86.
59. Examples in Rome are S. Eligio, SS. Celso e Giuliano, and S. Biagio.
60. Necipoğlu, *Age of Sinan*, 139.
61. Thoenes, "Renaissance St. Peter's," 85.
62. Necipoğlu, "Portable Archaeology," 357–73.
63. Necipoğlu, *Age of Sinan*, 139, 213.
64. W. Lotz, *Galeazzo Alessi e l'architettura del Cinquecento: Atti del convegno internazionale di studi: Genova, 16–20 aprile 1974* (Genoa: Sagep, 1975).
65. Gülru Necipoğlu, "The Dome of the Rock as Palimpest: ʿAbd al-Malik's Grand Narrative and Sultan Süleyman's Glosses," *Muqarnas* 25 (2008): 17–105.
66. Marie Tanner, *The Last Descendant of Aeneas: The Hapsburgs and the Mythic Image of Emperor* (New Haven, Yale University Press, 1993), 162–82; Agustín Bustamante García, *La octava maravilla del mundo: Estudio histórico de El Escorial de Felipe II* (Madrid: Alpuerto, 1994).
67. Necipoğlu, *Age of Sinan*, 144–5, 238–56.
68. Kuban, *Sinan's Art*, 127.
69. Piero Sanpaolesi, "La cupola di S. Maria del Fiore ed il Mausoleo di Olgieitu a Soltanieh," in *Forschungen des Kunsthistorischen Instituts in Florenz*, 1973.
70. Henry A. Millon and Craig Hugh Smyth, *Michelangelo Architect: The Facade of San Lorenzo and the Drum of the Dome of St. Peter's* (Milan: Olivetti, 1988), 96.
71. Burns, "Building against Time."
72. Necipoğlu, *Age of Sinan*, 144.
73. Arnaldo Bruschi, "Religious Architecture in Renaissance Italy from Brunelleschi to Michelangelo," in *Brunelleschi to Michelangelo*, 123.
74. Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History* (Oxford: Blackwell, 2000).

Bibliography

Ackerman, James S. *The Architecture of Michelangelo*. Chicago: University of Chicago Press, 1986.

Alberti, Leon B. *On the Art of Building in Ten Books*. Translated by Joseph Rykwert, Neil Leach, and Robert Tavernor. Cambridge, MA: MIT Press, 1989.

Babinger, Franz and Ludwig H. Heydenreich. "Vier Bauvorschläge Lionardo da Vinci's an Sultan Bajezid II (1502–3)." *Nachrichten der Akademie der Wissenschaften in Göttingen, I. Philologisch-Historische Klasse* 1 (1925): 1–20.

Bisaha, Nancy. *Creating East and West: Renaissance Humanists and the Ottoman Turks*. Philadelphia: University of Pennsylvania Press, 2004.

Bowersock, Glen W. "Peter and Constantine." In *St. Peter's in the Vatican*, edited by William Tronzo. New York: Cambridge University Press, 2005.

Braudel, Fernand. *The Mediterranean and the Mediterranean World in the Age of Phillip II*. 2 vols. New York: Harper Colophon Books, 1973.

Bredekamp, Horst. *Sankt Peter in Rom und das Prinzip der produktiven Zerstörung*. Berlin: Verlag Klaus Wagenbach, 2002.

Bruschi, Arnaldo et al. *San Pietro che non c'è: Da Bramante a Sangallo il Giovane*, edited by Cristiano Tessari. Milano: Electa, 1996.

Burns, Howard. "Dialoghi mediterranei: Palladio e Sinan." In *Palladio*. Exhibition catalogue, edited by Guido Beltramini and Howard Burns, 236–43. Venezia: Marsilio, 2008.

—— "Building against time: Renaissance strategies to secure large churches against changes to their design." In *L'église dans l'architecture de la Renaissance*, edited by Jean Guillaume, 107–31. Paris: Picard, 1995.

Chambers, David S. *Popes, Cardinals & War: The Military Church in Renaissance and Early Modern Europe* New York: I.B. Taurus, 2006.

Chastel, André. *Renaissance méridionale, Italie, 1460–1500*. Paris: Gallimard, 1965.

Condivi, Ascanio. *The Life of Michelangelo*. Translated by Alice S. Wohl, edited by Helmut Wohl. University Park, PA: Pennsylvania University Press, 1999.

Connors, Joseph. "Borromini, Hagia Sophia, and S. Vitale." In *Architectural Studies in Memory of Richard Krautheimer*, edited by Cecil Striker, 43–8. Mainz: P. von Zabern, 1996.

De Maio, Romeo. *Michelangelo e la Controriforma*. Rome: Laterza, 1978.

Evans, Helen C., ed. *Byzantium: Faith and Power (1261–1557)*. Exhibition catalogue. New York: Metropolitan Museum of Art, 2004.

Foschi, Silvia. "Santa Sofia di Costantinopoli: immagini dall'Occidente." *Annali di architettura* 14 (2002): 14, 7–33.

García, Agustín B. *La octava maravilla del mundo: Estudio histórico de El Escorial de Felipe II*. Madrid: Alpuerto, 1994.

Goodwin, Godfrey. *A History of Ottoman Architecture*. London: Thames & Hudson, 1971.

Günther, Hubertus. "Leitende Bautypen in der Planung der Peterskirche." In *L'église dans l'architecture de la renaissance*, edited by Jean Guillaume, 41–78. Paris: Picard, 1995.

—— *Was ist Renaissance?* Darmstadt: WBG, 2009.

Horden, Peregrine and Nicolas Purcell. *The Corrupting Sea: A Study of Mediterranean History*. Oxford: Blackwell, 2000.

Howard, Deborah. *Venice and the East: The Impact of the Islamic World on Venetian Architecture 1100–1500*. New Haven: Yale University Press, 2000.
—— "Venice Between East and West: Marc'Antonio Barbaro and Palladio's Church of the Redentore." *Journal of the Society of Architectural Historians* 62, no. 3 (2003): 306–25.
—— *Venice Disputed: Marc'Antonio Barbaro and Venetian Architecture*. New Haven: Yale University Press, 2011.
Jardine, Lisa. *On a Grander Scale: The Outstanding Life of Sir Christopher Wren*. New York: HarperCollins, 2002.
Kafescioğlu, Çiğdem. *Constantinopolis/Istanbul: Cultural Encounter, Imperial Vision, and the Construction of the Ottoman Capital*. University Park, PA: Pennsylvania State University, 2009.
Kostoff, Spiro. *A History of Architecture: Settings and Rituals*. New York: Oxford University Press, 1985.
Kuban, Doğan. *Istanbul. An Urban History: Byzantion, Constantinopolis, Istanbul*. Istanbul: Economic and Social History Foundation, 1996.
—— *Sinan's Art and Selimiye*. Istanbul: Economic and Social History Foundation, 1997.
—— *Ottoman Architecture*. Translated by Adair Mill. Woodbridge: Antique Collector's Club, 2010.
Kuran, Aptullah. *Sinan: The Grand Old Master of Ottoman Architecture*. Washington, DC: Ada Press, 1987.
Lotz, W. *Galeazzo Alessi e l'architettura del Cinquecento: Atti del convegno internazionale di studi: Genova, 16–20 aprile 1974*. Geneo: Sagep, 1975.
Miller, Naomi. *Mapping the City: The Language and Culture of Cartography in the Renaissance*. New York: Continuum, 2003.
Millon, Henry A. "Michelangelo to Marchionni, 1546–1784." In *St. Peter's in the Vatican*, edited by W. Tronzo, 93. Cambridge: Cambridge University Press, 2005.
—— and Vittorio M. Lampugnani, eds. *The Renaissance: From Brunelleschi to Michelangelo*. Ex cata. Milan: Bompiani, 1994.
—— and Craig H. Smyth. *Michelangelo Architect: The Façade of San Lorenzo and the Drum of the Dome of St. Peter's*. Milan: Olivetti, 1988.
Murray, Peter. "Observations on Bramante's St. Peter's." In *Essays in the History of Architecture Presented to Rudolf Wittkower*, edited by Douglas Fraser, Howard Hibbard, and Rudolf Wittkower, 53–9. London: Phaidon, 1967.
Necipoğlu, Gülru. "Plans and Models in Fifteenth- and Sixteenth-Century Ottoman Architectural Practice." *Journal of the Society of Architectural Historians* 45 (1986): 224–43.
—— "Süleyman the Magnificent and the Representation of Power in the Context of Ottoman-Hapsburg-Papal Rivalry." *Art Bulletin* 71 (1989): 401–27.
—— *Architecture, Ceremonial and Power: The Topkapı Palace in the Fifteenth and Sixteenth Centuries*. Cambridge, MA: MIT Press, 1991.
—— "The Life of an Imperial Monument: Hagia Sophia after Byzantium." In *Hagia Sophia: From the Age of Justinian to the Present*, edited by Robert Mark and Ahmet Çakmak, 195–225. London: Cambridge University Press, 1992.
—— *The Age of Sinan: Architectural Culture in the Ottoman Empire*. London: Reaktion Books, 2005, 2nd ed. 2011.

—— "Sources, Themes, and Cultural Implications of Sinan's Autobiographies." In *Sinan's Autobiographies: Five Sixteenth-Century Texts*, edited with preface by Gülru Necipoğlu, critical editions and translations by Howard Crane and Esra Akn, vii–xvi. Boston, Leiden, 2006.
—— "Creation of a National Genius: Sinan and the Historiography of 'Classical' Ottoman Architecture." *Muqarnas* 24 (2007): 141–83.
—— "The Dome of the Rock as Palimpest: 'Abd al-Malik's Grand Narrative and Sultan Süleyman's Glosses." *Muqarnas* 25 (2008): 17–105.
—— "Visual Cosmopolitanism and Creative Translation: Artistic Conversations with Renaissance Italy in Mehmed II's Constantinople." *Muqarnas* 29 (2012): 1–81.
—— "Connectivity, Mobility, and Mediterranean 'Portable Archaeology': Pashas from the Dalmatian Hinterland as Cultural Mediators." In *Dalmatia and the Mediterranean: Portable Archaeology and the Poetics of Influence*, edited by Alina A. Payne, 313–81. Leiden: Brill, 2014.
O'Malley, John W. "Fulfillment of the Christian Golden Age under Pope Julius II: The Text of a Discourse of Giles Viterbo, 1507." *Traditio* 25 (1969): 272–5.
Payne, Alina A. *The Architectural Treatise in the Italian Renaissance: Architectural Invention, Ornament, and Literary Culture*. Cambridge: Cambridge University Press, 1999.
Pedani-Fabris, Maria P., ed. *Relazioni di Ambasciatori Veneti al Senato*, vol. 14, *Constantinopoli, Relazioni inedite (1512–1789)*. Padua: Ausilio Aldo, 1996.
Pîrî Reis. *Kitab-ı Bahriye*, 2 vols., Istanbul: Istanbul Research Center, 1988.
Pon, Lisa. "Michelangelo's Lives: Sixteenth-Century Books by Vasari, Condivi and Others." *The Sixteenth Century Journal* 27, no. 4 (1996): 1015–37.
Raby, Julian. "El Gran Turco: Mehmed the Conqueror as a Patron of the Arts of Christendom." D.Phil. thesis, Oxford University, 1980.
Restle, Marcell. "Bauplannung und Baugesinnung unter Mehmed II Fâtih." *Pantheon* 39 (1981): 362–6.
Riggs, Charles. T., trans. *History of Mehmed the Conqueror by Kritovoulos (1451–1467)*. Princeton: Princeton University Press, 1954.
Saalman, Howard., ed. Translated by Catherine Enggass. *The Life of Brunelleschi, by Antonio di Tuccio Manetti*. University Park, PA: Pennsylvania State University Press, 1970.
Sanpaolesi, Piero. "La cupola di S. Maria del Fiore ed il Mausoleo di Olgieitu a Soltanieh." In *Forschungen des Kunsthistorischen Instituts in Florenz*, 1973.
Sarre, Friedrich. "Michelangelo und der türkische Hof." *Repertorium für Kunstwissenschaft* 32 (1909): 61–6.
Tanner, Marie. *The Last Descendant of Aeneas: The Hapsburgs and the Mythic Image of Emperor*. New Haven: Yale University Press, 1993.
Thoenes, Christof. "Renaissance St. Peter's." In *St. Peter's in the Vatican*, edited by W. Tronzo, 65–7. Cambridge: Cambridge University Press, 2005.
Tronzo, William, ed. *St. Peter's in the Vatican*. Cambridge: Cambridge University Press, 2005.
Tursun Bey. *Târîh-i Ebü'l-Feth*. Edited by Mertol Tulum. Istanbul: Baha Matbaası, 1977.
Vasari, Giorgio. *The Lives of the Painters, Sculptors and Architects*. Edited by William Gaunt. 4 vols., New York: Dent, London and Dutton, 1963.