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The Evolution of the Design of Orvieto Cathedral, ca. 1290 – 1310

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This paper focuses on the choir, transepts, and nave of the cathedral of Orvieto. This early part of the cathedral is generally assumed to have been executed in a single uninterrupted campaign of construction lasting from 1290 until about 1308. During this time the builders are thought to have followed a predetermined master plan. The elegant late Gothic façade is usually supposed to have been started about 1310 as a completely separate project by a new architect, Lorenzo Maitani. Based primarily on visual analysis of the fabric, this essay challenges some of these assumptions, suggesting that the design for the choir, transepts, and nave evolved during the course of construction and that the architect and the sculptors who completed the nave probably had a hand in the design and execution of the façade.

BECAUSE THE DUOMO OF ORVIETO (Figs. 1–4) has escaped the kind of close analysis that scholars have devoted to the cathedrals of Florence and Siena, it remains the least understood of these three important central Italian Gothic cathedrals. Earlier historians have assumed the existence of a master plan for the Orvieto Duomo that guided construction of the choir, transepts, and nave from the founding in 1290 until the completion of the nave in about 1308.¹ In their critical assessments, these historians have held these early parts of the building to be a work of exceptional artistic cohesiveness, while nevertheless excusing as refinements such jarring incongruities in the plan as the displacement of the side chapels from the transverse axes of the bays. At the same time, the obvious stylistic break between the bold, nearly Romanesque forms of the nave of the cathedral and the delicate Gothic aspect of the façade is regularly represented in the

My research on the cathedral of Orvieto has been supported by the American Academy in Rome and the Getty Grant Program. For help in preparing this paper, I am grateful to Katherine J. Gill and Marvin Trachtenberg. Unless otherwise specified, all translations are my own.

1. Renato Bonelli, *Il Duomo di Orvieto e l'architettura italiana del duecento trecento*, 2d ed. (Rome, 1972), 61, is especially insistent on this point: "Il Duomo è veramente un blocco unitario, sorto di getto e in breve tempo, seguendo sempre a fedelmente lo stesso piano." Subsequent authors have accepted this view, for example, Enzo Carli, *Il Duomo di Orvieto* (Rome, 1965), 9; John White, *Art and Architecture in Italy 1250–1400*, 2d ed. (Harmondsworth, 1989), 47–51.

scholarly literature as resulting from a decisive change in the artistic leadership at the Duomo.²

In this paper I will dispute the accepted wisdom on the Duomo of Orvieto. First I will advance an explanation of the placement of the side chapels based on reasonable assumptions regarding the Orvietans' formal ambitions.³ Then I will suggest that the design of the early parts of the building evolved during the course of construction. I will also briefly explore the implications of these changes for the cathedral's iconography. Finally, I will try to show that the later parts of the nave are much more closely linked to the façade than has generally been assumed.

My analysis suggests that while construction proceeded swiftly and perhaps even without major interruptions, nevertheless the design evolved as construction progressed. There were apparently three distinct phases in the evolution of the building's design, each of which contributed its own distinctive forms to the final building. During phase one, the original choir, the transepts, and first pair of nave piers took shape. During phase two, the second and third pairs of nave piers were completed, but according to a design different from the one laid out during phase one. Phase three saw the completion of the last three nave bays and a further modification of the design of the nave. Phases one and two probably took place under the direction of a single architect, a local master, perhaps, whose aim was apparently to bring the local building traditions into step with developments in late-thirteenth-century Siena. Phase three reveals the hand of another designer, whose fondness for delicate Gothic forms contrasts with the more robust tastes of the first architect. The change is reflected only in a stylistic change in the nave capitals, but it is a significant one nonetheless. Both in detail and in spirit, the new capitals are so close to the style of the Orvieto façade as to allow me to speculate that this second architect was the same one who designed the façade.

2. For example, Bonelli, *Il Duomo*, 48.

3. The Duomo of Orvieto has been a magnet of formalist criticism; see especially Bonelli, *Il Duomo*, 34–45; and Angiola Maria Romanini, "Arnolfo di Cambio e l'architettura del Duomo di Orvieto," in *Storia e arte in Umbria nell'età comunale, Atti del VI convegno di studi umbri* (Gubbio: 26–30 May 1968), 2 vols. (Perugia, 1971), 1:43–72.



Fig. 1. Cathedral, Orvieto, ca. 1290–1308, interior. (Author)

Design phase one

Few records survive for the earliest phases of construction.⁴ Local chronicles recount the laying of the foundation stone by Nicholas IV on 13 November 1290 and the setting in place of the first roof beam in 1310.⁵ Construction of the choir and nave is usually supposed to have proceeded smoothly from 1290 until about 1308, when, as the nave was nearing completion, a crisis occurred.⁶ Apparently, the *Opera*, the office of works, began to have doubts about the choir's ability to support the projected rib vaults. The danger of collapse was felt to be so severe that a new architect, Lorenzo Maitani, was summoned to fortify the choir

4. Known records of a discussion to build a new cathedral church in Orvieto date no earlier than 1284, and a dispute between the bishop and the cathedral canons delayed the beginning of construction another six years. Carli's analysis of these events, *Il Duomo* (see n. 1), 1–2, leads him to the conclusion that the plan of the building was established as early as 1284–85.

5. For 1290 and 1310 see Luigi Fumi, ed., *Ephemerides Urbevetaeae*, *Rerum Italicarum Scriptores*, tome xv, part v (Città di Castello, 1903–), 162, 175. For additional early sources, see Luigi Fumi, *Il Duomo di Orvieto e i suoi restauri* (Rome, 1891), 175–77; see also Marilena Rossi Caponieri, "Il duomo e l'attività edilizia dei Signori Sette (1295–1313)," in Lucio Ricetti, ed., *Il duomo di Orvieto* (Bari, 1988), 29–80.

6. For the construction history of choir, nave, and transepts, see Fumi, *Il Duomo*, 5–9; and Bonelli, *Il Duomo* (see n. 1), 26–32.

walls with three pairs of massive buttresses. A document of 1310 in which Maitani is granted citizenship and is made *capomaestro* refers to these events retrospectively.⁷ It also suggests that he had by then completed the buttresses. However, while the document also notes that work began on the façade in 1310, it gives no indication of when the crisis occurred or how long Maitani had been in Orvieto by that time.⁸ This means that the date of 1308 as the completion date of the nave is a guess and no more, based on the unproven assumption that prior to 1310 Maitani's activities were confined to the buttressing of the choir, a job scholars estimate as having required about two years.⁹

Maitani's buttresses were the first of a series of fourteenth-century alterations to the original layout of the cathedral. When

7. The document is published by Fumi, *Il Duomo*, 21; for the best analysis, see John White, "The Reliefs of the Façade of the Cathedral of Orvieto," *Journal of the Warburg and Courtauld Institutes* 22 (1959): 260–64.

8. White, "The Reliefs," 261–64. We know almost nothing else about the progress of work before 1321, the beginning date of the *Opera*'s earliest surviving account books. The largest selection of documents for the entire period of construction was published by Fumi, *Il Duomo* (see n. 5). For a discussion of the account books see Lucio Ricetti, "La Banca Dati del Duomo di Orvieto. Considerazioni e prospettive," *Architettura Storia e Documenti* 1–2 (1989): 41–43.

9. As noted by White, "The Reliefs," 261.

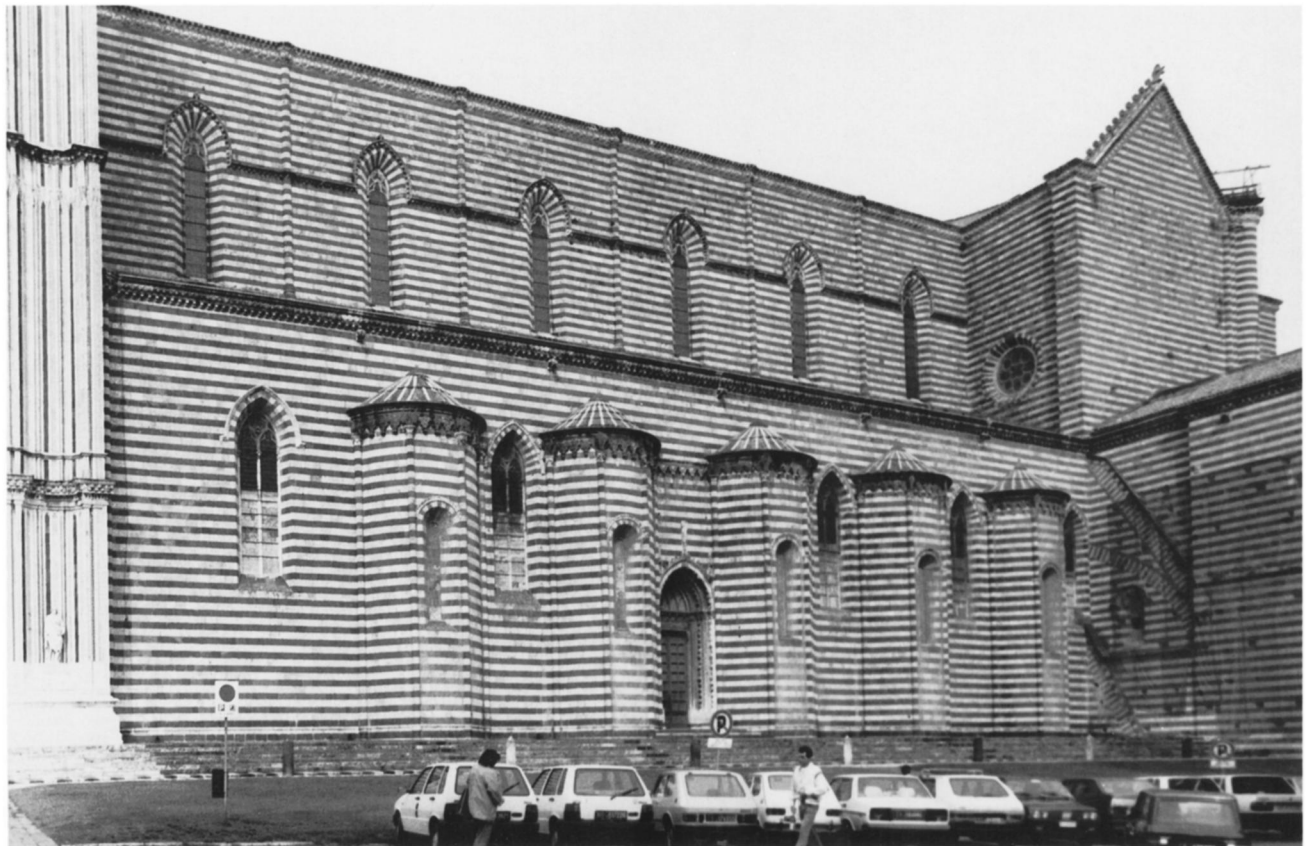


Fig. 2. Cathedral, Orvieto, ca. 1290–1308, south flank. The early trecento buttresses can be seen embedded in the transept wall at the right. (Author)

newly built, the choir was semicircular in plan, and the transepts did not extend beyond the side aisles (Fig. 5).¹⁰ The lowest courses of the original choir and of the original transept walls are still visible in basement-level chambers. In the mid-trecento the spaces between Maitani's buttresses were enclosed and vaulted to form the present rectangular choir and the two chapels, which extend like transepts away from the crossing. The choir, crossing, and transeptal chapels all carry ribbed vaults. The nave of the cathedral is covered with an open timber roof and flanked by a series of semicircular chapels (Figs. 1–3). Inside and out the walls and piers are built up in alternating bands of dark- and light-colored stone.¹¹ In the nave, all the piers are cylindrical in plan, except for the first pair, which are octagonal. Above, a corbeled *ballatoio* separates the semicircular arches from the alabaster-filled lancets of the clerestory.

The start of construction and the founding ceremonies in 1290 were possible only thanks to the resolution of a protracted disagreement within the city over the placement of the new cathedral. Although we know little about the previous buildings on the site, we do know that as early as 1285 the cathedral chapter

opposed the project because it threatened some of their property holdings, including a sacristy and a cemetery.¹²

The papacy also had an interest in the conflict. In the 1260s, on a site adjoining the cathedral, the commune had built a palace for the popes which in the 1290s would replace Viterbo's as the most frequented papal residence outside Rome.¹³ Nicholas IV spent more than a year there.¹⁴ On 6 September 1289, about a year before the official founding of the cathedral by Nicholas, Nicola di Trevi, a papal chamberlain and notary, drew up an agreement that announced a settlement between the commune and the chapter.¹⁵ Not only does this document outline the history of the conflict, but it also makes clear the intention that the new church

12. The clearest discussion is Carli's, *Il Duomo* (see n. 1), 1–2.

13. For the papal palace at Orvieto, see Luigi Fumi, "Il palazzo Soliano o de'papi in Orvieto," *Archivio storico dell'arte* 2d ser., 2 (1896): 255–68; D. A. Valentino, "Il restauro del palazzo papale di Orvieto," *Bollettino d'arte*, 5th ser., 60 (1975): 208–13; Gary M. Radke, "Medieval Frescoes in the Papal Palaces of Viterbo and Orvieto," *Gesta* 23 (1984): 27–38. For the papal sojourns in Orvieto, see Daniel Waley, *Mediaeval Orvieto* (Cambridge, 1952), 48.

14. Nicholas IV was in Orvieto from 13 June 1290 until 19 October 1291; see August Potthast, *Regesta Pontificum Romanorum inde ab 1198 ad 1304*, 2 vols. (London, 1874–75), vol. 2.

15. See Luigi Fumi, *Statuti e registi dell'Opera di Santa Maria di Orvieto* (Rome, 1891), 86–87.

10. As was noted first by Luigi Fumi, *Orvieto*, in vol. 83 of *Italia artistica* (Bergamo, n.d.) 46; see also Bonelli, *Il Duomo* (see n. 1), 26–32.

11. In the upper interior parts of the building the stripes are painted on.

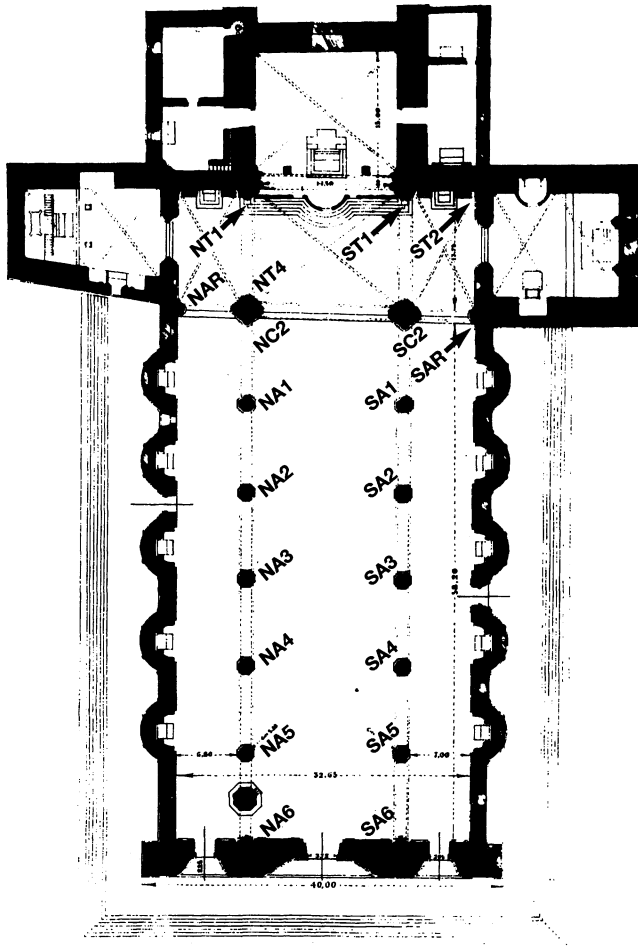


Fig. 3. Cathedral, Orvieto, ca. 1290–1308, plan showing locations of capitals discussed in text. (Fumi)

“should be constructed nobly and officially [solemnly] just like S. Maria Maggiore in Rome.”¹⁶

S. Maria Maggiore, in addition to sharing the Duomo’s Marian dedication, was Nicholas’s preferred church in Rome, the site of an important papal residence and of his own recent program of reconstruction and redecoration.¹⁷ As if anticipating the trecento aphorism, “Ubi papa, ibi Roma” [Where the pope is, there is Rome], Nicholas and the Orvietans may have sought to duplicate characteristics of the older palace church in Rome in the new one in Orvieto.¹⁸ In fact, many of the elements that link the cathedral of Orvieto to S. Maria Maggiore also connect it with the cathedral of S. Lorenzo in Viterbo (begun ca. 1200), another cathedral building that occupies a site adjacent to a non-Roman papal

16. “Quod ipsa Ecclesia, sicut predicatur, nobilis et solemnus ad instar S. Marie maioris de Urbe.” The passage has been noted by a number of scholars, including Julian Gardner, “Pope Nicholas IV and the Decoration of Santa Maria Maggiore,” *Zeitschrift für Kunstgeschichte* 36 (1973): n. 181.

17. *Ibid.*

18. Diana Wood, *Clement VI, the Pontificate and Ideas of an Avignon Pope* (Cambridge, 1989), 46 and 71 for the fourteenth-century perception of Avignon as “Nova Roma.”

palace.¹⁹ All three churches feature nonprojecting transepts, a semi-circular choir, and, in the nave, a corbel frieze or *ballatoio*, and a timber roof.²⁰ These connections seem to provide evidence of an interest, deriving from the pope or the Orvietans or both, in giving the new cathedral at Orvieto the characteristics of a papal basilica.

Literary sources date the official founding of the cathedral to 1290, and indeed it would appear unlikely that work commenced prior to the settlement of September 1289. Construction probably started at the east end on the framing wall of the structure, which would have forced the builders of the cathedral to decide at the outset on the shape of the choir, transepts, and all the engaged piers (Fig. 5). Not only was this procedure conventional, but the bases of the engaged transept piers provide good stylistic evidence that work began at the east. Unlike the torus-scotia-torus profile that forms the point of departure for most classical and medieval bases, the base profiles at positions NT1, NAR, ST1, and SAR consist of a right-angled molding, a cyma, and a large torus, and they have a heavy, almost awkward quality (Fig. 6). Similarly rugged, richly plastic detailing, sometimes spiky and sometimes rounded, was traditional in Orvieto all through the duecento, both in early works such as the abbey church of SS. Severo and Martirio and much later ones, such as the Palazzo del Popolo (begun 1281).²¹

Another important feature of the building that would have been decided upon at this early stage was the side chapels, the first pair of which originally projected from the walls of the transepts. Subsidiary chapels became popular in the late Middle Ages as a way of accommodating the increasing desire of the laity for involvement in church services, and the side chapels at Orvieto presumably respond to this same practical demand.²² However, the semicircular plan of the chapels at Orvieto is unusual. Most chapels of this period are rectangular in plan and abut one another along the aisle walls to form a flat, continuous exterior wall surface.²³ Rectilinear chapels flanking a nave fit unobtrusively into the staggered profile of the exterior elevations of a basilica

19. For S. Lorenzo, see Helen Manner Watterson, “Romanesque Architectural Sculpture in Viterbo” (Ph.D. diss., Yale University, 1977), 41.

20. For the plan of S. Maria Maggiore, see Richard Krautheimer et al., *Corpus Basilicarum Christianorum Romae*, 5 vols. (Vatican City, 1937–77), 3:31.

21. For the abbey, see Lorenzo Fiocca, “Chiesa e abbazia dei santi Severo e Martirio (fuori di Orvieto),” *Bollettino d’arte* 9 (1915): 193–208; for the Palazzo del Popolo in Orvieto, see Jürgen Paul, “Die mittelalterlichen Kommunalpaläste in Italien” (Ph.D. diss., Freiburg i. Br., 1963), 238.

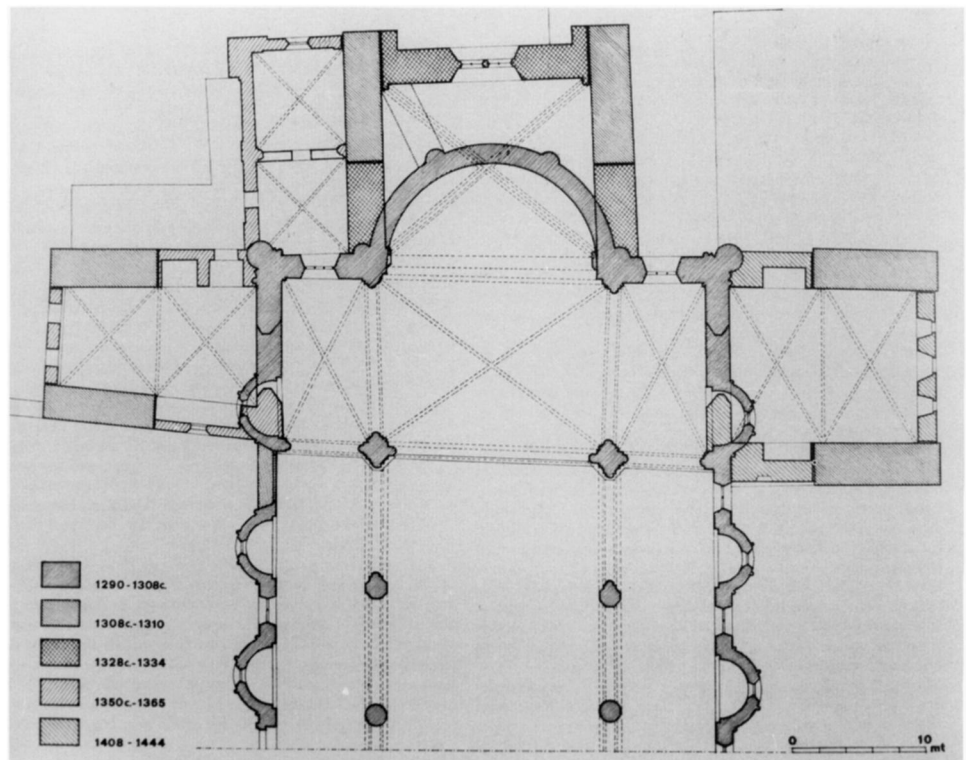
22. A. Hoeger, “Studien zur Entstehung der Familienkapelle und zu Familienkapellen und -altären des Trecento in Florentiner Kirchen” (Ph.D. diss., Bonn, 1976); K. L. Wood-Legh, *Perpetual Chantries in England* (Cambridge, 1965).

23. Generally, subsidiary chapels flank either the nave of the church or the transept and are either rectilinear or polygonal in plan. In vaulted buildings such as Notre Dame in Paris and S. Fortunato in Todi (to select two otherwise unrelated examples, the latter near Orvieto), the chapels are formed by walling in the space between the spur buttresses that project from the church flanks. In timber-roofed buildings like the church of S. Lorenzo in Naples large spur buttresses were not necessary, which meant that the walls between the side chapels could be thinner.



Fig. 4. Cathedral façade, Orvieto, begun ca. 1310. (Alinari)

Fig. 5. Cathedral, Orvieto, ca. 1290–1308, plan showing changes in the plan of the east end. The three pairs of early trecento buttresses eventually formed the side walls of the projecting transepts and of the rectangular choir (compare Fig. 3). (Bonelli)



and on the interior assume the appearance of a low side aisle. The Orvietan chapels project from the exterior wall surface of the aisles as independent semicylindrical forms (Fig. 2).

A striking but hitherto unexplained feature of the chapels is that they are displaced from the transverse axes of the bays (Fig. 3).²⁴ One reason why previous students of the cathedral may have neglected to address this problem is that the plan of the Duomo is pervaded by geometric irregularities, presumably unintended.²⁵ For example, the transverse axis of the building is not perpendicular to the longitudinal axis. Likewise, the west walls of the two transeptal chapels are not perpendicular to the north and south walls of the nave.²⁶ Some of these irregularities may have been forced upon the builders by extant or partially extant structures on

24. Bonelli, *Il Duomo* (see n. 1), 27–28, notes but offers no explanation of this displacement of the chapels; White, *Art and Architecture* (see n. 1), 23, implies that it was intended to enhance the interior's "visual counter-rhythms," but this is not convincing. Bonelli, *Il Duomo*, 63, also notes the irregular spacing between the chapels. Marvin Trachtenberg, review of White, *Art and Architecture*, *JSAH* 29 (1970): 278, suggests that the displacement of the chapels may have been the result of a possible change in plan, though without evidence.

25. White, *Art and Architecture* (see n. 1), 50–51, expresses uncertainty about whether the displacement of the chapels was intended or not; see Bonelli, *Il Duomo* (see n. 1), 66–67, for measurements of the building. The most pronounced irregularities are in the plans of the Cappella Nuova (the right chapel) and the Cappella Corporale (the left chapel), for which see Bonelli, *Il Duomo*, 63–64.

26. In this particular case, however, it would be mistaken to regard the irregularities in the handling of the trecento chapels as necessarily related to planning undertaken in the late duecento. In fact it probably has to do with Lorenzo Maitani's placement of the buttresses at odd angles to the aisle walls.

the site. Others may have been accidental, though the case of the displacement of the side chapels is slightly different. Most of these problems in the design will probably remain unexplained because of our lack of information about the cathedral's construction history. Here as usual we lack written records on which to base an explanation. Thus we must turn to the structure itself, which yields some useful hints about the placement of the chapels.

An important clue to the treatment of the chapels is that despite their strange appearance in plan, the chapels harmonized well with the original appearance of the building's exterior elevations. Prior to the replacement of one semicircular chapel from each flank by the present transeptal chapels, the chapels formed a neatly symmetrical composition on each side of the building, roughly equidistant from one another and, as a group, centered on the whole expanse of the lower wall (Fig. 7).²⁷ Analysis of the plan produces the important conclusion that the architect was able to achieve this symmetrical placement of the chapels on the exterior only at the expense of the displacement of the chapels on the interior.

At Orvieto the decision to build a basilica with nonprojecting transepts made it difficult to integrate semicircular chapels into the plan. As a result, the flanks of the aisle walls at Orvieto originally extended over the lower story of the transepts, disguising the fact that on the interior the transept is deeper than the nave bays. Of course, the disparity between the depth of the transept

27. As noted by Bonelli, *Il Duomo* (see n. 1), 28; and Carli, *Il Duomo* (see n. 1), 11.

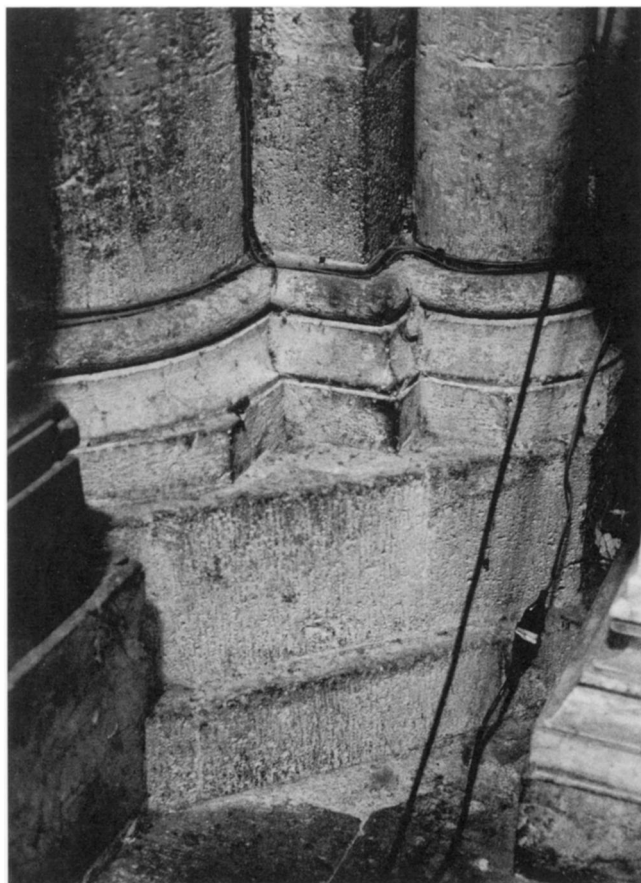


Fig. 6. Cathedral, Orvieto, ca. 1290–1308, bases in the south transept at position ST1. The sequence of moldings differs sharply from the conventional torus-scotia-torus combination. (Author)

and the depth of nave bays is evident in the upper story, where the transept arms rise above the aisle roofs (Fig. 7). However, as David Friedman has recently explained, Italian legislators and builders of the period were accustomed to viewing the lowest part of a public building's wall separately from the upper part, and, at least in the cases of houses facing onto major thoroughfares, their concern for appearances was confined to the ground floor.²⁸ At Orvieto, too, the continuous lower story wall of the aisle and transept remains visually autonomous and demands treatment as a single unit. The question was, should the chapels be positioned so as to honor the disparity between the depths of the bays and the depth of the transept, should they respect the clear expanse of the building's exterior, or was some compromise possible? The architect had four options from which to choose (Fig. 8).

Had the planners been willing to compromise on the positioning of the crossing piers, they might have achieved both a symmetrical placement of the chapels on the exterior and the axial placement of the chapels on the interior (Fig. 8A). This would have required a positioning of the crossing piers different from

28. David Friedman, "Palaces and the Street in Late-Medieval and Renaissance Italy," in J. R. W. Whitehand and P. J. Larkham, eds., *Urban Landscapes: International Perspectives* (London, 1992), 90–92.

the one finally chosen. In option A, the crossing piers are placed equidistant from the eastern transept walls and the first nave piers. This way the transept is no deeper than the bays and there is no conflict between placing the chapels on each cross-axis on the interior and the symmetrical arrangement of the chapels on the exterior. Another alternative, option B, would have been to accept a displacement of only the transept chapels so that the remaining chapels could occupy the transverse axes of the nave bays and all the chapels could appear symmetrically placed on the exterior wall. This too would have required a positioning of crossing piers different from the final one. In option B the distance of the crossing piers from the east transept walls is equal to roughly two nave intercolumniations, and the eastern-most side chapel is placed at a distance from the east end of the exterior wall equal to the distance of the western-most chapel from the west end.

Both of these options presented serious disadvantages, however. The problem with option A, the solution in which the piers are equidistant from one another, is that it results in a transept too shallow to accommodate the numerous clergy and dignitaries present in a building frequently used as a papal chapel. It also increases the number of chapels, from the present six, to seven per side. Option B, with the deep transept, is also flawed, because it requires a larger and much heavier transept vault than was finally built, and the Orvietan authorities would have rejected any plan which called for an even heavier transept vault than the one they eventually approved. In 1290, the Orvietans certainly knew they were planning what would be one of the tallest vaulted structures yet attempted in central Italy, and they were apparently uneasy about it. They called in Maitani to buttress the choir walls long before they were prepared to erect the vault itself.²⁹ Under these circumstances, the Orvieto planners would never have approved the deeper transept of option B.

Only two other options remained, each involving the placement of the crossing piers at a more conventional distance from the east transept walls (Figs. 8C, 8D). From the standpoint of design, option C was probably the more reasonable of the two. On the inside, all the nave chapels occupy the cross axes of their bays, and only the chapel in the transept is displaced. Meanwhile, on the outside, though the chapels are asymmetrically positioned with respect to the whole wall, still they are equidistant from one another. Option D, the solution finally adopted, was to accept the displacement of *all* of the chapels on the interior in order to achieve the symmetrical placement and the equal spacing of the chapels on the exterior.

The trade-off suggests that the interior displacement of the chapels was foreseen and therefore deliberate. To answer the

29. Bonelli, *Il Duomo* (see n. 1), 32, has emphasized that there is no evidence that the choir walls were failing, which strengthens the suggestion that it was *fear* of a collapse rather than any real signs of danger that motivated the building of the buttresses in 1310. Carli, *Il Duomo* (see n. 1), 9, notes that the buttresses are too low. See also White, "The Reliefs" (see n. 7), 261, on this point.

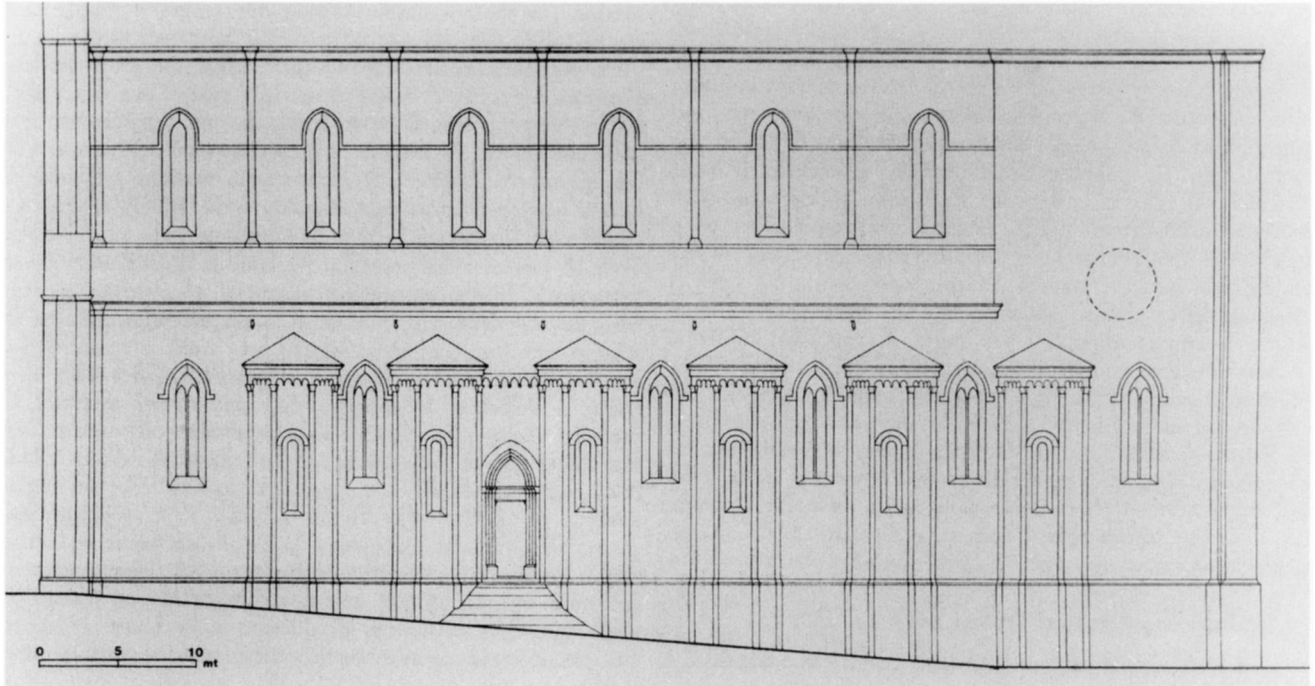


Fig. 7. Cathedral, Orvieto, ca. 1290–1308, reconstruction of the south flank prior to the addition of the Cappella Nuova showing the symmetrical disposition and equal spacing of the chapels. (Bonelli)

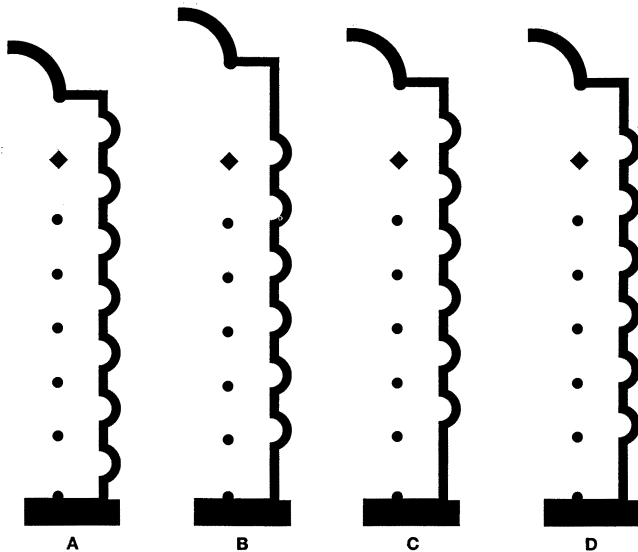


Fig. 8. Cathedral, Orvieto, ca. 1290–1308, sketch showing options available when integrating semicircular side chapels into a basilica with nonprojecting transepts. (Author)

question why the Orvietans preferred the option they selected to the others, we might consider visual priorities within the late-medieval communes, where Italian planners limited their concern with exterior appearances to the lower portions of buildings that faced onto public thoroughfares. Within this restricted visual frame, the main preoccupation of these planners was with regularity, a theme which pervades contemporary legislation

regarding the design of the streets themselves as well.³⁰ The planning of the side chapels at Orvieto seems to provide a striking example of just how far Italian designers and planners might go in their efforts to achieve this effect of the regularity of the street-level façade, while demonstrating a precocious sensitivity to the idea of an autonomous show façade.

Of course, the planners of the cathedral might have easily avoided these problems of integrating the chapels into the plan had they been willing to settle for chapels of square or rectangular plan. A flat wall surface with evenly spaced windows also would have satisfied a desire for a decorous street façade. The unusual, and, as we now see, inconvenient semicircular chapel plan has suggested to a number of scholars a further connection between Orvieto and the papal architecture of Rome. Trachtenberg, Semff, and others have proposed that the plan of the side chapels derives from Leo III's Consistorium, a state assembly hall attached to the popes' Lateran palace.³¹ The Consistorium is one of the very few earlier buildings in which semicircular side chapels

30. For the idea of the façade and its relation to public space in late-medieval Italy see Friedman, "Palaces and the Street" (see n. 28), 91–96. For streets, see Paula L. Spilner, "Ut civitas ampliatur: Studies in Florentine Urban Development, 1282–1400" (Ph.D. diss., Columbia University, 1987), 253–56.

31. Marvin Trachtenberg in Otto von Simson, ed., *Das Mittelalter II*, Propylaen Kunstgeschichte, vol. 6 (Berlin, 1973), 328; and Michael Semff, "Textiler Festschmuck in Stein?" *Münchener Jahrbuch der bildenden Kunst* 38 (1987): 97. For the Consistorium itself, see Caecilia Davis-Weyer, *Early Medieval Art 300–1150* (1971; reprint, Toronto, 1986), 88–90; Philippe Lauer, *Le Palais de lateran* (Paris, 1911), 481–84; Richard Krautheimer, "Die Decaneacubita in Konstantinopel. Ein kleiner Bei-

protrude from the flanks, and perhaps the only one known to late-medieval Orvietans. Although destroyed, it is familiar from a well-known fresco in the Vatican dating from 1588.³² Extending beside and in front of the principal south façade of the Lateran basilica, the Consistory was the most publicly prominent element of the popes' Roman palace and one of the main framing elements of the *campus Lateranensis*, the Lateran square that functioned as the Roman showcase of papal authority all through the late Middle Ages.³³ Thus the use of the semicircular side chapels enhanced the Duomo's resemblance to the popes' most prominent Roman palace complexes. This connection with Rome would have been especially apparent to beholders viewing the cathedral from the vantage point of the papal palace in Orvieto, that is, to that audience most likely to recognize the connection, the pope and the curia. Likewise, the neatly ordered arrangement of the chapels would have been seen to advantage from this perspective. Prior to the addition of the large transeptal chapels in the trecento, the flanks of the cathedral formed a harmonious composition strikingly similar to one of the most prominent views of the Lateran palace in Rome.

Design phase two

Despite past assumptions that work on the cathedral progressed according to a master plan, a change in the plan of the nave piers raises the question of a modification in the plan after work was under way. The first two piers are octagonal in plan with pilasters and half-columns attached to the sides facing the compound crossing piers (Fig. 1). Similar pilasters and half-columns are attached to the aisle walls and carry the responds for the arches of the crossing piers. The selection of an octagon-based plan for the nave piers is similar to the choice made by many late-thirteenth- and early-fourteenth-century central Italian architects, and octagonal piers would remain a popular choice for decades to come.³⁴ Nevertheless, some time before work began on the second pair of piers, the planners and the architect changed the plan from octagonal to circular.³⁵

trag zur Frage Rom und Byzanz," in Walter Nikolaus Schumacher, ed., *Tortulae* (Rome, 1966), 195–99.

32. See Richard Krautheimer, *Rome, Profile of a City, 312–1308* (Princeton, 1980), 121–22, for a reproduction of the fresco as well as further discussion of the building.

33. Ingo Herklotz, "Der Campus Lateranensis im Mittelalter," *Römisches Jahrbuch für Kunstgeschichte* 22 (1985): 33.

34. Octagonal piers occur in the rib-vaulted basilica of S. Francesco in Bologna, in the timber-roofed basilicas of S. Francesco in Gubbio and S. Croce in Florence, in the rib-vaulted hall church of S. Domenico in Perugia, and in the ground-floor *loggia* of communal palaces at Todi, Siena, and Florence; several of these works are illustrated by White, *Art and Architecture* (see n. 1), Figs. 6, 9, 137.

35. As the builders turned their attention from the framing wall of the structure to the internal supports, it would not have been difficult for them to modify the plan, especially the plan of the piers; see, for example, the changes in pier plan at S. Maria Novella in Florence.

This change in the design of the piers may have formed part of the original plan for the nave, or it could reflect an unanticipated transformation of the original plan. An examination of the fabric, and especially of the capitals, suggests that the latter alternative is more likely.

The Orvieto capitals are among the period's most original works of architectural sculpture.³⁶ Most central Italian capitals of the later duecento are variations on classical Corinthian or Composite capitals, with two tiers of acanthus leaves surrounding a more-or-less visible calathus. There is usually a distinction between small ornamental capitals, like the ones that decorate church furnishings and crown colonnettes, and monumental capitals, which surmount full-scale piers and columns. Designers of small capitals usually reduced the number and enlarged the size of the leaves with respect to the norm offered by classical models. This practice became widespread in central Italy following the introduction in the early thirteenth century of the Gothic Crocket capital in the architecture of the Cistercian order. Presumably, this use of a smaller number of larger leaves was intended to avoid the fussiness that would have resulted from simply miniaturizing classical capitals.³⁷ Giovanni Pisano's capitals for the pulpit at S. Andrea in Pistoia, completed in 1301, offer a good example of this synthesis of Gothic and classical elements (Fig. 9).³⁸ As in many small capitals, neither the volutes of a Corinthian capital nor the scrolls of a Composite capital appear, again probably in order to achieve a greater simplicity. When designing large-scale capitals, central Italian designers were likely to stick more closely to classical formulas, at least with respect to the size and number of leaves. In his capitals for the Siena Cathedral façade (Fig. 10), Giovanni Pisano employs all the elements typical of a classical Corinthian capital: two tiers of acanthus leaves and a third tier of volutes. Small but significant variations distinguish Giovanni's capitals from their classical models: the calathus flares more dramatically; the leaves are longer and shoot up with a jet-like Gothic energy; the folia themselves are lacy and interact with the light, almost like tracery forms.³⁹

The Orvieto transept capitals differ from most contemporary capitals in three important ways. First, they adapt the features of

36. The Orvieto capitals have in the past received only brief mention; see Fumi, *Il Duomo* (see n. 5), 309–10; Bonelli, *Il Duomo* (see n. 1), captions to plates 93–102; Watterson, "Romanesque Architectural Sculpture" (see n. 19), 268–70; and Trachtenberg, review of White, *Art and Architecture* (see n. 24), 278.

37. For the Orvietans, the most prominent local example of Cistercian architecture was the abbey church of S. Martino al Cimino, under construction by 1207, for which see Renata Wagner-Rieger, *Die Italienische Baukunst zu Beginn der Gotik*, 2 vols. (Graz-Köln, 1956–57), 2:232; and Joselita Raspi Serra, *La Tuscia Romana* (Milan, 1972), 106–16.

38. For the Pistoia pulpit see John Pope-Hennessy, *Italian Gothic Sculpture*, 2d ed. (London, 1972), 177; and Enzo Carli, *Giovanni Pisano e il pulpito di Pistoia* (Milan, 1984), for good photographs.

39. For the Siena façade capitals, see Antje Middeldorf Kosegarten, *Sienesische Bildhauer am Duomo Vecchio* (Munich, 1984), 103–5.



Fig. 9. Giovanni Pisano, pulpit capital, S. Andrea, Pistoia, completed 1301, capital. The format of Giovanni's capitals for the Pistoia pulpit are typical of duecento small-scale capitals in deriving from the Gothic Crocket capital. The acanthus leafwork, on the other hand, recalls classical models. (Author)



Fig. 10. Giovanni Pisano, façade detail, Siena Cathedral, begun 1284, capital. The format and, to a certain extent, the leafwork of the capitals for the Siena façade derive from classical models. (Author)

small ornamental capitals to a monumental scale. At positions NT1, NT4, and ST1 (Figs. 11–13) the capitals of each half-column have three rather than five whole leaves, with the center axis of the capital occupied by a leaf in the lower tier rather than a leaf in the upper tier. In fact, in NT1 and ST1 (Figs. 11, 13) the designer has not really arranged the leaves in successive tiers at all, instead, all three of the leaves sprout from the foot of the calathus. The second striking feature of the transept capitals is the wealth of ornamentation that occupies the horizontal impost zone immedi-

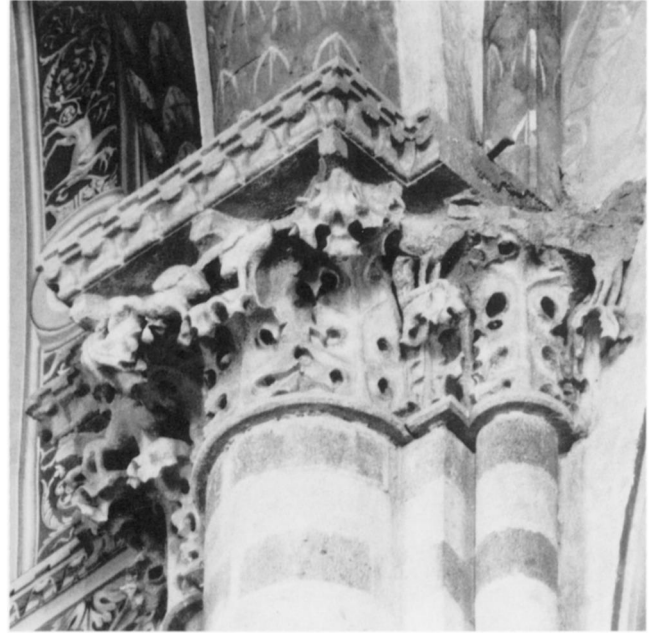


Fig. 11. Cathedral, Orvieto, ca. 1290–1308, capital in the north transept at position NT1. Though large in scale, the Orvieto transept capitals assume the format of such small-scale capitals as that illustrated in Fig. 9. (Author)



Fig. 12. Cathedral, Orvieto, ca. 1290–1308, capital in the north transept at position NT4. (Author)

ately above the abacus.⁴⁰ The third is the design of the leaf forms, which, while deriving from classical sources, reflects a much freer approach to those models than that reflected by the façade capitals

40. Richly decorated impostos, uncommon in contemporary Tuscan capitals, were likely inspired by the nave capitals of S. Lorenzo in Viterbo. Among the capitals carved by Nicola and Giovanni Pisano, the only examples having richly carved impostos, are those located beneath the centers of their three pulpits, where the enlarged impostos serve to support the planks of the pulpit floor. See also the modestly decorated impost zone of the Siena Cathedral façade. For S. Lorenzo in Viterbo, see Watterson, "Romanesque Architectural Sculpture" (see n. 19), 366. Among contemporary works, the cathedrals of Todi and Genoa display impostos similar to Orvieto's.



Fig. 13. Cathedral, Orvieto, ca. 1290–1308, capital in the south transept at position ST1. (Author)

at Siena.⁴¹ Although not unique to the Orvieto transept capitals, the bold projection of the leaf forms away from the core of the capital is nonetheless striking. As is especially clear in NT4 (Fig. 12), the chief result of these innovations is a capital notable for its enormous, dramatically expressive leaves.⁴²

41. With their protruding veins, circular perforations between the lobes, and numerous spiky tips, the folia in many of these capitals appear to derive from a Hellenistic type, sometimes called spiny acanthus, common in the architecture of the later Roman Republic, for which see Patrizio Pensabene, *I Capitelli*, Scavi di Ostia, vol. 7 (Rome, 1973), no. 198, pl. lxxix. According to Watterson, “Romanesque Architectural Sculpture” (see n. 19), 41, the type was long a favorite source of inspiration for the carvers of nearby Viterbo. When compared to surviving classical examples, however, the Orvietan capitals reveal a willingness to heighten these already pointed features: compared to the most commonly known models, the elongated, deeply undercut folia at Orvieto twist even more sharply away from the calathus, the holes between the lobes are enlarged, and the leaf tips are still spikier.

42. In part, the boldness and plasticity of the transept capitals, as well as their independence from both Tuscan and Cistercian models of sculpture, represent a continuation of the local building style. Granted, at least two late-duecento works in Orvieto reveal a familiarity with the smoother, more restrained approach to detailing favored by the Pisani during the period 1270–80: the capitals at S. Domenico in Orvieto and the portal of the church of S. Francesco. For S. Francesco in Orvieto, see Renato Bonelli, “La Chiesa di S. Francesco in Orvieto e S. Bonaventura,” *Doctor Seraphicus* 5 (1958): 53–65; and Giovanni Carbonara, “Trasformazioni posteriori,” in *Francesco d’Assisi, chiese e conventi* (Milan, 1982), 168–69. For S. Domenico, see Renato Bonelli “La chiesa di San Domenico in Orvieto,” *Palladio* 7 (1943), 139–51; and David M. Gillerman, “S. Domenico in Orvieto: The Date of Construction,” in Corrado Bozzoni, Giovanni Carbonara, Gabriella Villetti, eds., *Saggi in onore di Renato Bonelli*, 2 vols., *Quaderni dell’Istituto di Storia dell’Architettura* 15–20 (Rome, 1992), 1:181–86. Nevertheless, this awareness of the style of the Pisani did not immediately supplant the local fondness for stronger, starker forms.

Materials offer another explanation for the richness of the Orvieto capitals. The unharnessed classicism of the transept capitals was not new to southern Tuscany and northern Tuscia (modern-day Lazio). As Trachtenberg has observed in *The Campanile of Florence Cathedral* (New York, 1971), 148, sculptors from northern Tuscany working in the cathedral at Massa Marittima in southern Tuscany in the early duecento

Adapting these characteristics to the freestanding nave piers was one of the architect’s biggest challenges (Figs. 14–15). As previously mentioned, the choir and transepts at Orvieto were among the loftiest central Italian structures of the period, and an important motivation for the innovative features of the transept capitals was a desire to enhance their visibility.⁴³ In the nave of the building, however, the height of the capitals from the floor was less important than their huge diameter; Orvieto’s transepts were unusually lofty and its nave piers remarkably thick—1.68 m in diameter.⁴⁴ However, the architect did not at first appreciate this problem. Previous authors have assumed that the low, bandlike capitals that crown the cylindrical nave piers were intended from the start, but a closer analysis suggests that the architect adopted this format only after having tried unsuccessfully to transpose the forms employed in the transepts to the octagonal piers in the first nave bay.

In NA1 (Fig. 14), the architect adapted the design of ST1 (Fig. 13) to the plan of a freestanding pier. Due to the great diameter of the pier, the vertical accents of the leaves in NA1, despite their size, are overwhelmed by the horizontality of the massive impost, and the design of the arcade and its components becomes static. This problem might have been avoided, but for the boldly projecting leaves, which prevented the architect from allowing the calathus to flare outwardly toward the edge of the impost. In the contemporary capitals at S. Croce in Florence (Fig. 16), the folia are extremely flat, and the calathus flares sharply outward to produce a smooth transition from pier to arch.⁴⁵ At Orvieto, however, because of the deeply undercut folia, too much is visible

had responded to the region’s softer, more easily worked materials with a style notable for its bold plasticity and sharp contrasts of light and shadow. The style of the early Orvieto capitals is similar and may also be the work of transplanted Tuscan sculptors, as suggested by Kosegarten, *Siensische Bildhauer* (see n. 39), 43–48.

43. In the nave of Todi Cathedral closely related capitals crown much shorter supports. However, the planners of the Todi nave had their own good reasons for enlarged imposts and ornate capitals. At Todi, half the nave supports consisted of reused ancient column shafts, too small for the height of the nave. In this context, enlargement of the imposts, capitals, and bases became a way of making the columns seem taller. Although sometimes dated as early as the late twelfth century, for example, Renzo Pardi, *Monumenti medioevali umbri* (Perugia, 1975), 88, the Todi capitals cannot, due to their strict ties with the church of S. Fortunato in Todi (begun 1292) and the cathedral of Orvieto, date much earlier than the late-1280s, or much later than the mid-1290s.

44. Bonelli, *Il Duomo* (see n. 1), 66. At a time in central Italy when most newly constructed churches were commissioned by the friars, who rarely built churches with freestanding nave piers (that is, basilicas) and in any case shunned elaborate architectural sculpture, Orvieto’s nave posed a rare opportunity to design capitals for interior piers of monumental scale. In only a few other major churches of the time—the cathedrals of Todi and Genoa, for example—do nave capitals play such a prominent role.

45. Meanwhile, in a classical Corinthian capital the circular plan of the calathus picks up the circular plan of the column. Further continuity is guaranteed by the abacus, whose concave sides allow it both to rest squarely on the lip of the calathus and to extend forward at the corners to pick up the projecting forms of the volutes. In an octagonal pier this continuity is disturbed.



Fig. 14. Cathedral, Orvieto, ca. 1290–1308, capital in the north arcade at position NA1. Capital NA1 represents the architect's attempt to adapt the format of the transept capitals to a freestanding pier. (Author)

of the impost's blank soffit, and in this shadowed area the design breaks down.

In SA1 (Fig. 15) the architect tried to make horizontality a virtue. With its smaller and more numerous leaves, consoles, and rosettes, SA1 reads less like an assemblage of discrete elements than a continuous horizontal band of textured detailing. Also, Corinthianesque volutes are introduced to fill up the zone below and between the projecting corners of the abacus. But even here, the result is incoherent and lifeless compared to the brilliant transept capitals.

NA2 and SA2 (Figs. 17, 18), among the most imaginative capitals of the period, represent an attempt to develop further the idea, first put forth in SA1, of the capital as a continuous bandlike form. The key feature of these two capitals is a new approach to the design of the impost. With their curved sides, rounded corners, and delicate detailing, the imposts of NA2 and SA2 recall the capitals of S. Vitale in Ravenna, though the Orvieto architect probably arrived at these forms independently. To eliminate the blank shaded zone between the outer edge of the abacus and the outer edge of the impost that flaws NA1, the architect simply made the shape of the impost conform more closely to the shape of the abacus by giving them concave sides. A second measure,

making the imposts decagonal rather than octagonal and giving them rounded corners, served to produce an impost with shorter sides and a less visible soffit between their own projecting corners and the lip of the calathus.

Like SA1, but more successfully, NA2 and SA2 assume the character of continuous horizontal bands of textured detailing. As such, they conform to a type of capital called the band capital, widely used in northern Lazio and western Umbria during the late twelfth and early thirteenth centuries (Fig. 19).⁴⁶ Befitting their monumental setting, however, NA2 and SA2 exceed other known examples in the wealth and complexity of their ornamentation.⁴⁷ Traditionally, medieval Italian architects recognized an association between the band capital and the cylindrical pier, as in the Romanesque churches of S. Giovenale, S. Lorenzo, and S. Andrea in Orvieto.⁴⁸ The change in the plan of the piers in the

46. The typology of the Orvieto capitals has been noted by several authors, including Wolfgang Krönig, "Hallenkirchen in Mittelitalien," *Kunstgeschichtliches Jahrbuch der Bibliotheca Hertziana* 2 (1938): 21.

47. In the band capitals of S. Sisto in Viterbo, for example, the leaf forms are flattened out and adhere closely to the calathus. For Viterbo's band capitals, see Watterson, "Romanesque Architectural Sculpture" (see n. 19), 265–66.

48. Krönig, "Hallenkirchen" (see n. 46), 21.



Fig. 15. Cathedral, Orvieto, ca. 1290–1308, capital in the south arcade at position SA1. In SA1 the architect abandoned the format used in the previous capitals. The leaves are now much smaller with respect to the size of the capital as a whole. (Author)



Fig. 16. S. Croce, Florence, begun 1294–95, interior. The leafwork in the S. Croce capitals, which adheres closely to the calathus, contrasts with the much more three-dimensional treatment of the leaf forms in the Orvieto capitals. (Author)

Duomo at Orvieto could reflect the architect's understanding that the adoption of the band-capital format implied adopting the cylindrical pier plan as well. Alternatively, the progressive modification of the capitals may reveal the architect's attempt to adjust the plan of the piers from octagonal to circular.

Either way, the switch from octagonal piers with classically inspired capitals to cylindrical piers with band capitals was an important one both in terms of the cathedral's stylistic character and its iconography. As previously mentioned, a cathedral with a full set of octagonal piers would have invited comparison with a large number of churches and communal palaces recently begun or completed all over central Italy. But with cylindrical piers, band capitals, and semicircular arches, the Duomo's arcade relates to a much more restricted group of local structures, including two Orvietan examples, the churches of S. Giovenale and S. Lorenzo. With its more slender proportions, open interior, and unusual semicircular arch profiles, the Orvieto arcade bears an especially close resemblance to the arcade of the late-twelfth- and early-thirteenth-century church of S. Andrea in Orvieto (Fig. 20).⁴⁹

49. S. Andrea was apparently built in two discrete phases of construction, one accountable for the nave, probably dating to the twelfth century,



Fig. 17. Cathedral, Orvieto, ca. 1290–1308, capital in the north arcade at position NA2. The second pair of nave capitals, NA2 and SA2, is the first in the building to take the band-capital format as a point of departure. (Author)

Located on a prominent site in the Piazza del Commune, S. Andrea had for decades been the site of oaths of submission by subject territories, a function normally reserved for a commune's cathedral church.⁵⁰ Thus, the switch from octagonal to cylindrical piers served to reinforce the Orvietan character of the Duomo and to link it visually with the building most closely identified with the right and the might of the commune, though without detracting from the papal character of the structure. Where once the cathedral's iconography signaled an allegiance to the popes, now it began to lay a heavier emphasis on the commune itself.

and another accountable for the choir. This choir, incorrectly assigned by Krönig, "Hallenkirchen," 22, to the fourteenth century, actually belongs to the early duecento, as is clear from its heavy rib profiles and schematic Corinthian capitals. In the nave, surmounting the ancient monolithic column shafts, is a series of classical plaster capitals. The close links between S. Andrea and the Duomo were noted by Fumi, *Orvieto* (see n. 10), 44.

50. As noted by Élisabeth Carpentier, *Orvieto à la fin du xiii^e siècle* (Paris, 1986), 38–39. According to Carpentier, S. Andrea had become by the end of the twelfth century the heart of a religious and communal center in Orvieto considerably more important than the area around the old cathedral.

When did this change in the arcade take place? If work began in 1290, as all known documents indicate, and proceeded smoothly on the foundation, the exterior walls of the choir and transepts, and the first pair of nave piers, then perhaps the builders were preparing to begin work on the second pair of piers after the first three or four seasons of construction, around 1292–94.

Design phase three

The completion of the nave resulted in another change in the building. After completing the capitals at position 3, that is, NA3 and SA3 (Figs. 21, 22), the architect who had been in charge during phases one and two was apparently replaced by a new designer who, while retaining the band-capital format, completed the nave capitals in a very different style. Though not as exciting visually as the earlier capitals, these later capitals are important nonetheless because they lead to the style of the Orvieto façade. In the past, the basis for assuming that the departure of the first architect coincided with the completion of the nave has been the perception of a deep stylistic gulf between the nave and façade. Yet it is doubtful whether the gulf between the nave and the facade is as deep as that between the capitals at positions 3 and 4. We will



Fig. 18. Cathedral, Orvieto, ca. 1290–1308, capital in the south arcade at position SA2. (Author)



Fig. 19. S. Sisto, Viterbo, late-twelfth century, capital in choir. This capital is an example of the traditional band-capital type. (Author)

start by completing our analysis of the capitals in the eastern part of the building.

NA3 and SA3 (Figs. 21, 22), the last pair of capitals for which the first architect was responsible, reveal this designer experimenting further with the band-capital format. The two relate in an

interesting way to the earlier pairs of nave capitals. In NA1 and SA1 and in NA2 and SA2 (Figs. 14, 15, 17, 18), the architect observed a well-established regional tradition and created two cross-axial pairs.⁵¹ NA1 and SA1 (Figs. 14, 15) both have impostes with corbels and rosettes, and NA2 and SA2 (Figs. 17, 18) both have impostes with curved sides. Strictly speaking, NA3 and SA3 violate the principal of cross-axial pairing; their foliage and impostes are completely dissimilar. However, they may be understood to be paired according to a different, more sophisticated kind of rationale. Each represents an exploration of one of the two main components of the previous capitals: in SA3 (Fig. 22) the architect pursues the theme of the band-capital format, while in NA3 (Fig. 21) the classical elements of the capitals are stressed.

Capital SA3 (Fig. 22) is perhaps best understood as an attempt to push the idea of the traditional band capital to its limits according to the stylistic precepts manifested in the earlier capitals. In SA3, as in local, early duecento examples of the band-capital type such as the choir capitals of S. Sisto in Viterbo

51. Cross-axial pairing of capitals is common in the late-medieval churches of Rome; see R. E. Malmstrom "The Colonnades of High Medieval Churches at Rome," *Gesta* 14 (1975): 37–45. It also occurs in the Romanesque churches of Viterbo.

Fig. 20. S. Andrea, Orvieto, late-twelfth-early-thirteenth-centuries. Prior to the construction of the Duomo, S. Andrea served as the site of oaths of submission by subject territories, a function normally reserved for a commune's cathedral church. In the nave, surmounting the ancient monolithic column shafts, is a series of classical capitals. These capitals probably date from the fifteenth or the sixteenth century. Originally, however, the columns were probably surmounted by band capitals. The unusual semicircular archivolts in the arcade resemble those later employed in the arcade of the Duomo. (Author)



(Fig. 19), any attempt at naturalism is sacrificed to the idea of a continuous ornamental pattern, the abacus is suppressed and the impost merges with the lower part of the capital. The occurrence of differing types of folia in the separate tiers of the capital, the narrowness of the folia, and the regimental quality of the capital as a whole also make SA3 similar to the local band capitals. However, whereas local Romanesque band capitals generally have folia which lie flat against the surface of the calathus, the folia in SA3 burst outward, lending the capital the same intense plasticity of the transept capitals. In a striking dramatization of the guiding idea of the capital, the Orvieto designer has banded the larger leaves in the lower tier together with a bizarre midair molding.

Capital SA3 might be seen as the architect's attempt to produce as traditional a band capital as possible given the desire for a degree of plasticity which was traditionally foreign to the type. Capital NA3 (Fig. 21), on the other hand, could be understood as representing an effort to achieve as *classical* a capital as possible given the use of a capital format outside the classical pale, that is, the band capital. The wind-blown Corinthian capital recommended itself as the type of classical capital most easily adapted to the band-capital format because of its horizontality. Of course, in classical and even in most medieval wind-blown capitals, the wind rustles only the top of one side of each leaf. In NA3, however, the leaves join the calathus only at the stem and appear ready to tear away from the capital altogether. The use of square imposts, unparalleled in the Orvieto nave but obligatory in this self-conscious exercise in cross breeding, meant that the volutes had to be especially long, thus heightening the effect of excitement.

The deliberate contrast in SA3 and NA3 of a modernized band capital with a band capital *a l'antica* shows the designer of this first

part of the cathedral to be a remarkably individualistic figure in the history of late-medieval Tuscan architecture. Set beside contemporaries Arnolfo di Cambio and Giovanni Pisano, the Orvieto master, due to an ability to generate a sense of intense energy and movement, as well as a fondness for extreme visual effects, especially effects of plasticity, stands closer stylistically to Giovanni than to Arnolfo, although the Orvieto master's delight in fine classical ornament also compares with Arnolfo's De Braye tomb in the church of S. Domenico in Orvieto. Unlike both of these Tuscan architects, and indeed unlike most Tuscan architects of the late thirteenth and early fourteenth centuries, the Orvieto master seems to have felt little attraction for French Gothic forms. Rather, he fuses a vivid naturalism—most likely inspired by the example of Nicola Pisano—to an unbridled vitality comparable to Giovanni's, but lacking Giovanni's specifically Gothic elegance. Almost unique to the period, this combination of ingredients conveys an effect both spontaneous and ornate, closely related to that produced by the architectural sculpture of early- and mid-duecento Orvieto. Thus the Orvieto master was probably a person at home in this local style but at the same time eager to rejuvenate it through the introduction of the recent innovations of Nicola and Giovanni Pisano.

The transition from the third to the fourth bay of the nave coincides with a significant stylistic change in the Orvieto capitals.⁵² Characterized above all by a fondness for setting

52. The consoles in the *ballatoio* also register the change in style. In the eastern parts of the nave the consoles display uniformity of design, and so do those in the western parts, but between the second and the fourth pair of piers on both sides of the nave the consoles show considerable diversity.



Fig. 21. Cathedral, Orvieto, ca. 1290–1308, capital in the north arcade at position NA3. This and SA3 are the last capitals belonging to design phase one. (Author)

minute, highly refined detailing within a fine architectonic form, the style of the capitals at positions 4 and 5, that is, NA4, SA4, NA5, and SA5 (Figs. 23–26), is usually supposed to have appeared at Orvieto only with the initiation of the façade around 1310. One indication of the change in the Orvieto capitals is a new treatment of light and shadow. In NT1, ST1, NA1, and SA1 (Figs. 11, 13, 14, 15), the effects of light and shadow are bold, with deep gashes of shadow seeming to penetrate even beneath the surface of the underlying calathus. Farther west, however, the areas of shadow are shallower, forming intricate, abstract patterns, as in SA4 (Fig. 24). With respect to the projection of forms into space, the development follows a parallel pattern. In NA3 and SA3 (Figs. 21, 22), the excavation of the leaf forms is so extreme that the underlying calathus, rather than flaring outwardly toward the abacus, becomes nearly cylindrical. But at positions 4 and 5 (Figs. 23–26) the calathus retains its usual flaring profile, and excavations into the block become minute and complex. The use of ragged or spiky forms, while ubiquitous in the Orvieto capitals, also changes. In NT1, NT4, and ST1, not only the individual leaf forms, but also the profile of the entire capital is spiky or jagged, with sharply twisting and protruding forms that interrupt the

flow of line from pier to arch (Figs. 11, 12, 13). At positions 4 and 5, however, spiky or ragged leaf forms are set within smoother overall profiles.⁵³

The most likely explanation for the dramatic change in the style of the nave capitals would be the arrival of a new architect. How then would we account for the abrupt disappearance of the

53. Unlike those in the earlier parts of the building, the capitals at positions 4 and 5 also display a programmatic cohesiveness with respect to the treatment of impost profiles, the abacus, and the calathus. In all four capitals at positions 4 and 5 the impost profiles take the form of a fillet surmounting a cyma surmounting an astragal. The abaci in the four capitals display a similar uniformity, with three corners projecting beneath each side of the impost; and in all four the lip of the calathus carries a narrow band of ornament. Capitals NA6 and SA6 (not illustrated here) probably belong to the same design phase. Their profiles are closely related to those at positions 4 and 5, with the crowning fillet replaced by another astragal, and the cyma by a cavetto. To be sure, their elongated proportions, undecorated impost moldings, and smooth *foglie d'acqua* set SA6 and NA6 apart from the other capitals at the west end of the nave. However, in Viterbese churches with band capitals, it is not uncommon for the capitals set into the retro-façade to have taller proportions and simpler leaf forms than occur in the arcade. Thus the treatment of SA6 and NA6 could represent an additional effort to make the Orvieto Cathedral nave conform to traditional local models.



Fig. 22. Cathedral, Orvieto, ca. 1290–1308, capital in the south arcade at position SA3. (Author)

architect of design phases one and two? The most probable hypothesis requires us to abandon a traditional assumption about the cathedral's history. As has been mentioned, construction of the choir, transepts, and nave is supposed to have proceeded smoothly from 1290. The date of the completion of the nave is undocumented. By 1310 Lorenzo Maitani of Siena had been named *capomaestro*, and from a document of that year granting him Orvietan citizenship we gather that he had by then completed the choir buttresses. Most scholars now believe that Maitani took the façade project in hand in the same year.⁵⁴ The year 1308 has generally been chosen as a likely date for the completion of the nave. Bonelli assigns the same date to what he termed the “crisis” in the building's construction. At this point, Bonelli suggests, the *Opera* fell prey to doubts about the choir's ability to support the transepts' projected rib vaults and called in Maitani for the buttressing job.⁵⁵ However, the document of 1310 gives no indication of when work on the buttresses began or how

long Maitani had been in Orvieto by 1310, so the date of 1308 is purely speculative.⁵⁶

Conceivably, then, the crisis, rather than coinciding neatly with the completion of the nave, occurred at an earlier, less convenient moment when half the nave capitals and perhaps some of the superstructure remained incomplete. Were this the case, then the first architect certainly would have been blamed for the faults in the choir walls and would have been fired immediately, leaving Maitani well placed to take over the commission, perhaps even as early as 1300. Indeed, it is not too hard to imagine Maitani, having convinced the Orvietan authorities of his mastery of buttress design, trying to capitalize on his own high stock and angling for the job of completing the nave.⁵⁷ Then either he, or some

56. As noted by White, “The Reliefs,” 261.

57. He may have been employing the same tactics when in 1322 he delivered a devastating opinion of the trustworthiness of the still-unfinished walls of the *Duomo Nuovo* in Siena; see White, *Art and Architecture* (see n. 1), 234–35, for translation and analysis of this text. As we now know, Maitani was no great expert in the field of architectural technology, having built his buttresses at Orvieto too low to successfully abut the springing points of the interior vaults: Bonelli, *Il Duomo* (see n. 1), 64.

54. There have been few dissenters from this view since the publication of White's “The Reliefs” (see n. 7).

55. Bonelli, *Il Duomo* (see n. 1), 26–32.



Fig. 23. Cathedral, Orvieto, ca. 1290–1308, capital in the north arcade at position NA4. This, SA4, SA5, and SA6 belong to design phase two. Their smoother, less three-dimensional style contrasts with the more sculptural capitals in the eastern parts of the building. (Author)



Fig. 24. Cathedral, Orvieto, ca. 1290–1308, capital in the south arcade at position SA4. (Author)

member of his circle, would have come up with a new design for the remaining capitals.

This scenario becomes all the more likely once we see that the later nave capitals at Orvieto bear a close stylistic kinship to the lowest portions of the Orvieto façade, of which Maitani was likely the designer. On the level of sculptural detail, the later nave capitals at Orvieto exhibit a number of close stylistic links with the lower portions of the Orvieto façade. For example in both NA4 and the band of capitals that extends across the entire façade

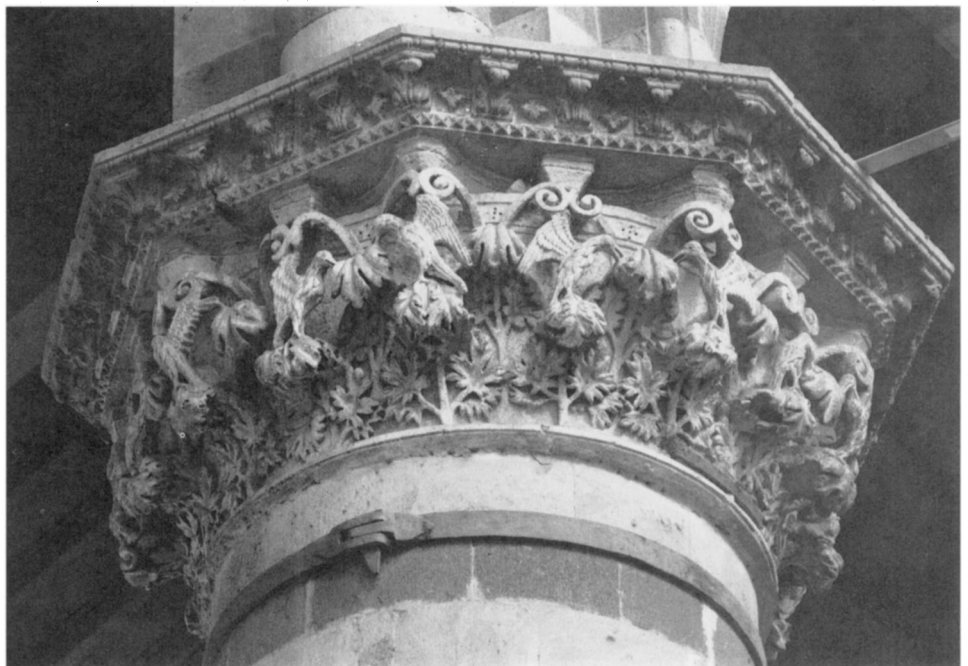
(Figs. 23, 27) the impostes take the form of a cyma decorated with overlapping, triangular leaves, while the acanthus leaves in both examples feature recoiling, upturned tips. Likewise, the plant that issues from Adam's grave is smooth and so deeply undercut as to appear completely hollowed out, much like the folia of NA5 (Figs. 28, 25).

The close relationship between the later parts of the nave and the lower parts of the façade extends to the level of underlying design precepts. The most distinguishing feature of the lower

Fig. 25. Cathedral, Orvieto, ca. 1290–1308, capital in the north arcade at position NA5. (Author)



Fig. 26. Cathedral, Orvieto, ca. 1290–1308, capital in the south arcade at position SA5. (Author)



portion of the Orvieto façade is that the three widely splayed portals merge with the relief panels to form a broad, unifying band, enlivened but never interrupted by the fine-spun web of ornament formed by the narrative relief scenes (Fig. 4).⁵⁸ As we have seen, a very similar aesthetic governs the western nave capitals at Orvieto.

58. For additional discussion of the façade, see Kosegarten, *Siensische Bildhauer* (see n. 39), 107; and David M. Gillerman, “La facciata: introduzione al rapporto tra scultura e architettura,” in Ricetti, ed., *Il duomo* (see n. 5), 81–100.

The stylistic linkages between the later nave capitals and the lower parts of the Orvieto façade require us to reconsider the façade’s relationship to the earlier parts of the building. As was mentioned, most scholars assume that Maitani’s activities prior to 1310 were limited to buttressing and roofing and that he undertook the façade as an entirely separate project in 1310.⁵⁹ Our analysis suggests, by contrast, that the architect and sculptors al-

59. For example, Bonelli, *Il Duomo* (see n. 1), 48: “La facciata diviene una composizione autonoma e quasi un corpo a sé.”



Fig. 27. Cathedral façade, Orvieto, ca. 1310–1330, capitals. The similarity of these capitals to NA4 suggests the linkages between the lower part of the façade and the western bays of the nave. (Author)



Fig. 28. Cathedral façade, Orvieto, ca. 1310–1330, detail of New Testament relief. (Author)

ready active on the site prior to 1310 may well have had a hand in the design, construction, and decoration of the façade. The document of 1310 also allows that buttressing was only one of the reasons for Maitani's presence in Orvieto before that date.⁶⁰ In fact one controversial passage in the document may finally be clarified by this hypothesis. It states that "he [Maitani] shall also be able at the expense of the said fabric to retain the disciples he shall have desired for the designing, figuration, and making of stones for the above mentioned wall [that is, the façade]."⁶¹ Since Maitani could have completed the buttressing and roofing jobs without the help of assistants who were skilled in the design and figuration of stones, then the fact that he wanted to *retain* them as work began on the façade indicates that he must have had another use for them prior to 1310. Conceivably, then, Maitani came to Orvieto for the buttressing job and then lead a team of his own in the completion of the nave and its capitals, after which he began work on the façade in a style first elaborated in the last four nave capitals, perhaps even before 1310.

Conclusion

Past historians of the early part of the cathedral have admired its unity and cohesiveness of design. Despite this cohesiveness, the design clearly evolved as construction progressed. The first

60. The document of 1310 also states that Maitani also came "for the building" of the cathedral: "Venit ad civitatem urbevitanam ad reparandam ipsam fabricam que quasi minabatur ruinam et ad hedificandam eandam quam ut reparavit et hedificavit in conspectu urbevitanu populi evidenter apparet. . ."; Fumi, *Il Duomo* (see n. 5), 21.

61. "Et quod possit etiam discipulos quod voluerit expensis dicte fabricae retinere ad designandum figurandum et faciendum lapides pro pariete supradicto." The translation is from White, "The Reliefs" (see n. 7), 263–64; see also n. 31 for White's refutation of the interpretation of the same passage offered by Martin Weinberger, review of Enzo Carli, *Le Sculture del Duomo di Orvieto* (Bergamo, 1947), in *The Art Bulletin* 34 (1952): 60–63.

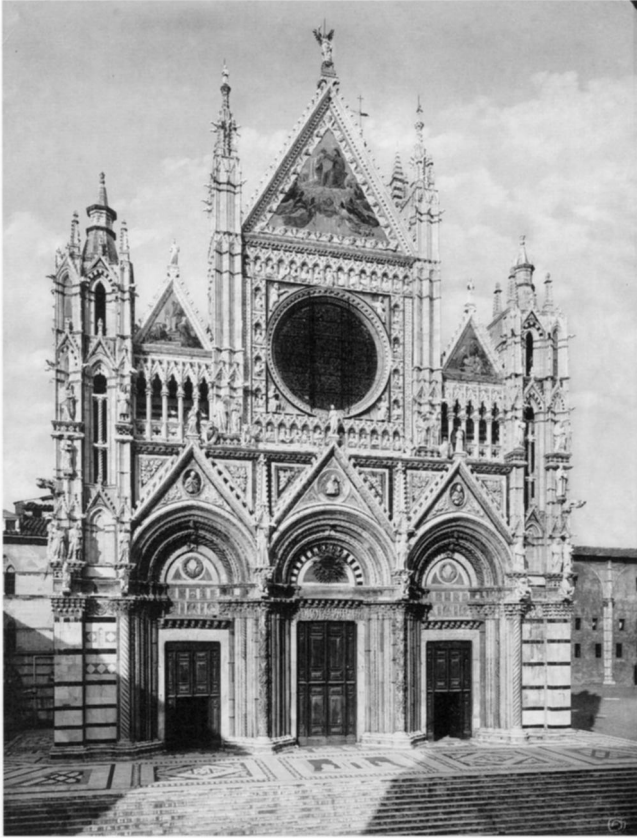


Fig. 29. Giovanni Pisano, façade, Siena Cathedral, begun 1284. The stylistic transition from the richly plastic style of the Siena Duomo façade to the smoother, more elegant style of the Orvieto façade is mirrored in the evolution of the Orvieto Cathedral capitals. (Alinari)

change in the plan has a significance chiefly for the cathedral itself. As construction commenced we hear of an interest in casting the cathedral in the mold of a papal basilica, but as the work entered the nave, the design assumed a more local flavor. The second change in the design is important as an indicator of the development of late-medieval architecture in central Italy at a key point in its history. The contrast between the spontaneous, three-dimensional style of the early capitals at Orvieto and the flatter, smoother, more intricate manner of the later capitals parallels the contrast between the explosive, richly textured style of Giovanni Pisano's design for the west façade of the Siena Duomo and the controlled, pictorial style of the Orvieto façade (Figs. 29, 4).⁶² In fact, the two main groups of nave capitals at Orvieto seem to form intermediate steps between the two façades. The façade of Orvieto Cathedral, one of the great masterpieces of the late Middle Ages, was not simply slapped onto the building, as we had thought, rather, it emerged organically from the ongoing project to complete the nave.

62. Kosegarten, *Siensische Bildhauer* (see n. 39), 103–5, describes as the originators of the Orvieto façade the local Siensese masters who, around 1296–97, collaborated with Giovanni Pisano and his workshop on the Siena Cathedral façade. According to Kosegarten, the planning of the Siena façade began as early as around 1280, and the earliest completed parts of the façade, with their free-wheeling classicism, are as closely related to Nicola Pisano as to his son Giovanni, who was appears in the documents by 1284 and by 1287 had been named *capomaestro*. Still, the Pisani did not have a lock on the façade, according to Kosegarten. In one of four foliate half-columns that originally flanked the cathedral portals, the northern one (Kosegarten, 107), sees a turning away from the “Pathos der Pisani” toward the more detailed, delicate, anecdotal style that formed the basis for the style of the Orvieto façade.