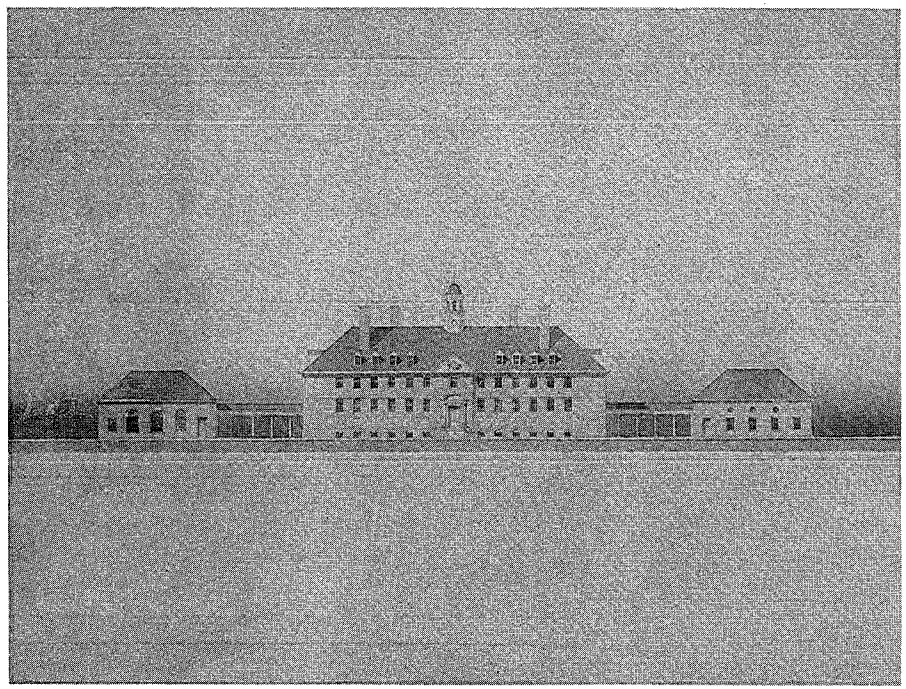
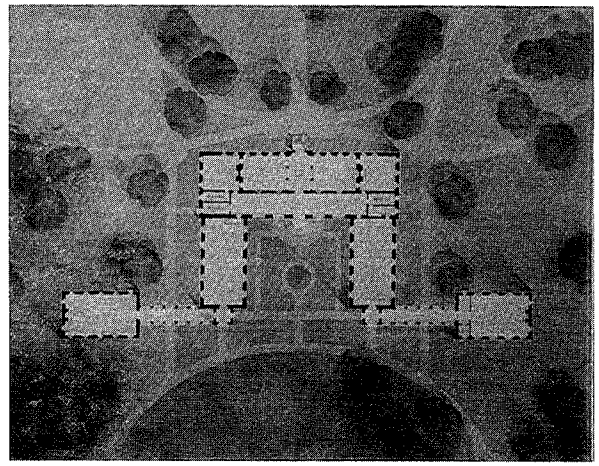
measured drawings of this structure in order to study a building whose cornerstone had been laid 232 years before (figure 34).

The earliest drawings made for what would be the fifth building (figures 35 and 36a–b) are possibly those conjectural studies done in 1928–1929 before the Bodleian Plate was found. Even at that early date, they reveal a decision to restore the second building. These earliest "restorations" show a somewhat cavalier attitude, for if the daguerreotype was already in hand, the evidence it presented was not fully utilized. It was an image of the building made a century and a half after the College had been reconstructed. This fact, when combined with no reasonably reliable image of the College from the period of its original construction, probably made the designers justifiably wary of the daguerreotype as definitive evidence. Hugh Jones's attribution of the design to Wren was apparently as much a guide to the initial restoration drawings as evidence from nineteenth-century sources. One elevation of the east façade shows a three-bay pedimented pavilion with a curvilinear pediment (figure 35); a related twin shows a triangular alternative pediment. Both sport pedimented aedicules at the entrance. No evidence whatever existed for these features and the elevation is appropriately marked "No evidence for this scheme. Not approved by Perry, Shaw, & Hepburn. May 13, '29." The designer did, however, follow the design of the cupola as shown in the daguerreotype.

An even more fanciful design shows a "restoration" where the proportions of the east elevation are more horizontal than even surviving seventeenth-century brickwork would indicate (figures 36a–b). While the 1705 frontispiece is incorporated (still based on nineteenth-century images), the pediment follows a lower, more classical proportion than is shown in the daguerreotype or will soon appear in the plate.





Figs. 36a–b. Perry, Shaw, and Hepburn, *Conjectural Elevation of East Façade and Conjectural Plan of the First Floor, The College of William and Mary*, drawings, 1929, Colonial Williamsburg Foundation.

The design is embellished further by colonnades, five bays in length on either side, which link to one-story dependencies of entirely fictitious or novel origin but which were probably legitimate efforts to amplify space. The same is

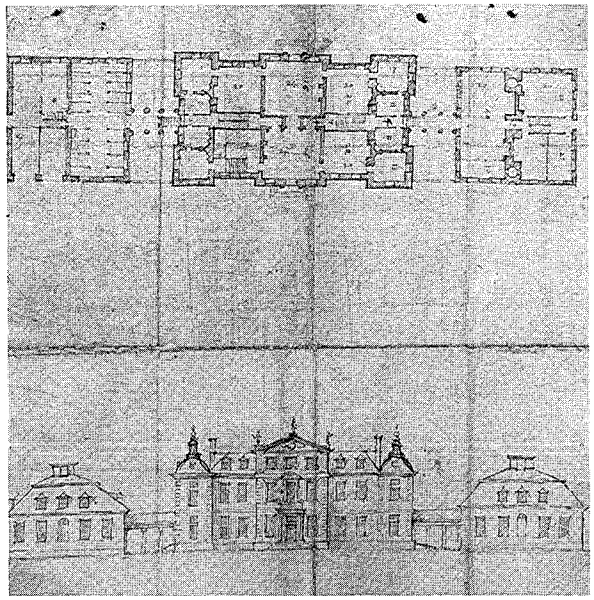


Fig. 37. William Talman (attribution), *Plan and Elevation, Design for a Country House*, drawing, c. 1690, The Warden and Fellows of All Souls College, Oxford.

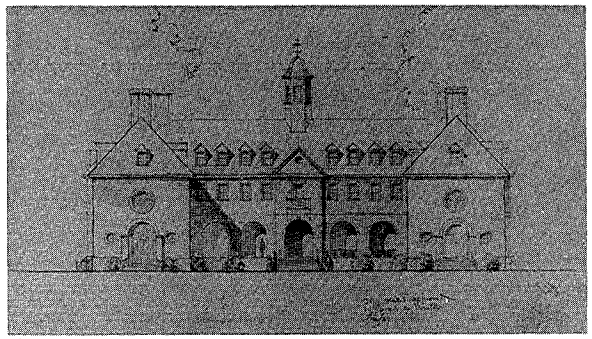


Fig. 38. Perry, Shaw, and Hepburn, *West Elevation before the location of the Bodleian Plate, The College of William and Mary*, drawing, 1929, Colonial Williamsburg Foundation.

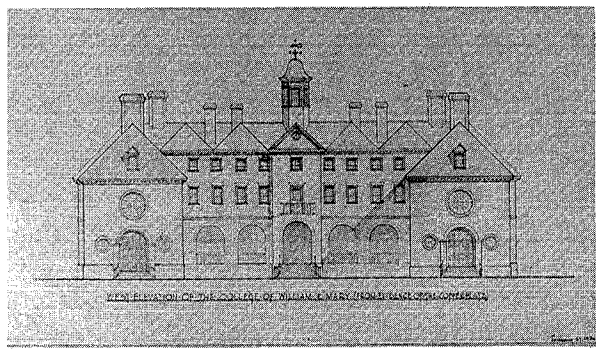


Fig. 39. Perry, Shaw, and Hepburn, *West Elevation after the location of the Bodleian Plate, The College of William and Mary*, drawing, 1930, Colonial Williamsburg Foundation.

true for the detailing of the cupola in this preliminary study. The colonnades linking the dependencies to the main pile terminate with porch chambers in front of the west entrances to Hall and Chapel. When the loggia was restored, its ends were utilized in order to accommodate both staircases. This removed them from the main block of rooms and from the central passage. The rooms adjoining the passage were opened to it by tripartite colonnades or arcades reminiscent of Pennsylvania's colonial statehouse, Independence Hall in Philadelphia. The colonnades and dependencies reflect, on the other hand, a number of designs for country houses by either Wren or William Talman. The house shown in figure 37 contains some of the same features. Clearly, restoration architects were consulting volumes of *The Wren Society* that contained designs either known to be by Wren or that were at least attributed to him.[50]

The west elevation of the building drawn on July 26, 1929, reveals what would probably have been constructed had the Bodleian Plate not been discovered (figure 38). It shows a two- rather than three-story west façade and a continuous hipped roof, although the pedimented pavilion was already in place. The plate caused instant revisions (figure 39). Unfortunately, it does not show the center bay of the west façade; thus no visual evidence exists for it. The noncontiguous foundations became the basis for this detail. It is not clear whether the architects had access to the 1856 elevations drawn by Travis or Mary F. Southall. Three plans and cross sections of the roof (figure 40) show the change in the structure caused by the Bodleian Plate. The one dated January 25, 1929, shows a hipped roof covering the entire main range much as had probably been the case in the first building. For reasons that are not clear, this was revised after May 2 and approved by the "Art Commission" on July 29, 1929. The roof over the main range

was lowered several feet to match exactly those over the Chapel and Hall. Smaller chimney stacks were deleted, and a pentroof was made to cover the loggia and gallery above it. The third section and plan, revised on March 31, 1930, was, as the notation makes clear, a quick response to the "Bodleian Telephoto Arrived January 10, 1930."

The chimneys above the great hearths of the main range continued to pose a problem, much as they had with the first building. When the first building burned, perhaps because someone lit a fire in the fireplace with a major girder in its hearth, it is likely that enough brick survived in these chimneys to have been incorporated in the 1705 rebuilding. It was not until the fires of 1859 and 1862 that this brickwork was finally lost. The restoration architects had, therefore, to reconstruct all chimneys, including the two major ones heating the rooms in the main range. The section dated January 25, 1929, unlike those made later, shows the chimney in the center of the roof. These stacks, as shown in the revised drawing of May 2, had been shifted to the east six or seven feet in order to break the roofline at its now lower and most easterly ridge, an arrangement basically retained after the Bodleian Plate had surfaced. What is likely is that the restoration may have inadvertently repeated a process followed 225 years earlier. The original building may well have had a cross section, if one story higher, like that shown in the January 25 section.

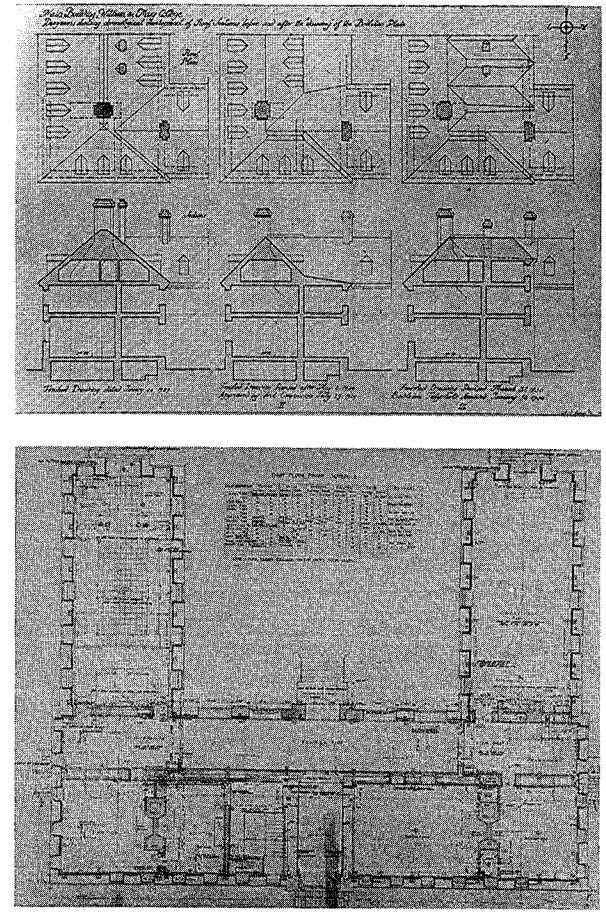
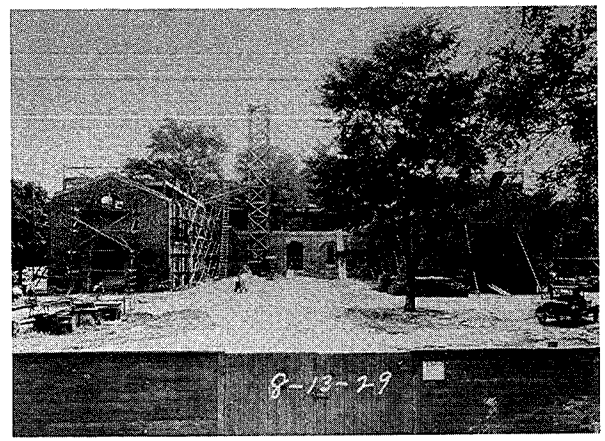
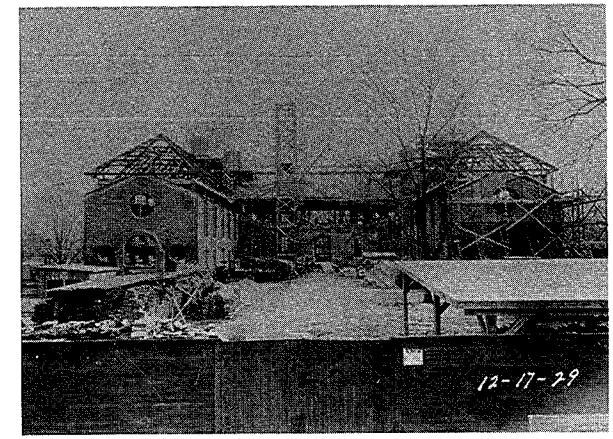


Fig. 40. *The College of William and Mary, diagrams showing chronological development of roof sections before and after the discovery of the Bodleian Plate,* drawing, March 31, 1930, in Andrew H. Hepburn, "Notes on the Reconstruction of the Wren Building," and Lawrence Kocher and Howard Dearstyne, eds., "The Wren Building of the College of William and Mary," (Colonial Williamsburg, Department of Architecture, 1951, Vol. 2, part 2, 111), Colonial Williamsburg Foundation.

Fig. 41. Perry, Shaw, and Hepburn, *First Floor Plan, The College of William and Mary,* drawing, 1929–1931, Colonial Williamsburg Foundation.

The working elevations, showing the analysis of brickwork dates, confirm the many questions



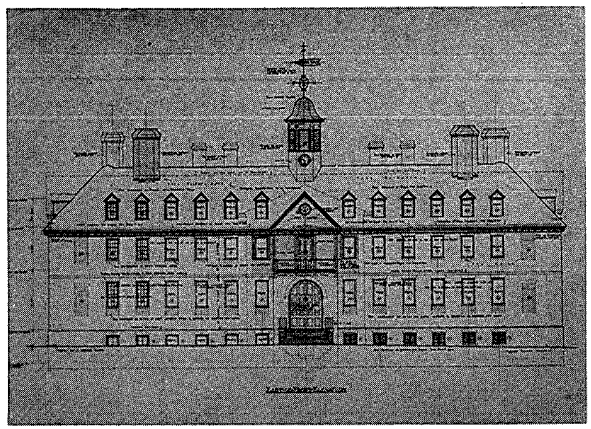


Figs. 42a–b. *Restoration in Progress, The College of William and Mary*, 1929, photographs: Colonial Williamsburg Foundation.

and problems confronting any restoration (figures 18 and 19a–b). While these drawings have already been analyzed, some of them show questions remaining into the final phases as to distinctions between periods of brickwork. The problematic west façade of the Hall raised the most interesting question: "date of rebuilding (between 1695 and 1732) of end of Great Hall after it had fallen down (first end was about 15′–0′ farther out). Wasn't it 1705?"[51] This restorer-designer dated the brick on the wall to 1705, rather than 1729–1732. He also noted on the north elevation (shown in figure 19a) that the "1705" wall had broken away from that on the side dated "1695." Prentice Duell was unable to resolve entirely the dating or function of the foundations beyond those of the present west wall of the Hall, which he implied had been built the same time as the Chapel. Because these exterior foundations are narrower and unbonded to those of the Hall itself, Duell suggested they supported a vestibule of lower height than the Hall itself, which may have been true. The only trouble with this theory is that little was said about the foundations supporting the present west wall of the Hall, thought to have been built in 1729–1732.[52] Do the foundations date to that period, to the period 1695–1699, or to another pre-1729 date?

Final plans show that double stairwells were inserted at both ends of the loggia, which were enclosed, probably to meet fire regulations (figure 41). The main staircase was returned to the position in which Jefferson had shown it. Because no plan survived of the second floor, that of the first was basically replicated. As noted, all fireplaces had to be constructed anew. Similarly, very few descriptions, let alone images of interiors dating to before 1859, still existed. Architects were thus forced to turn for models to contemporary interiors in England and in the United States. The most elaborate interior reconstruction attempted is that in the Chapel. This reconstructed interior features woodwork not unlike Grinling Gibbons's joinery in the chapel of Trinity College, Oxford, putatively a work of Wren, but also involving Henry Aldrich.

One of the most interesting as well as most problematic facets of the entire restoration-reconstruction process involves the final decision as to what should be stripped away and what should be reconstructed. Photographs taken in December 1929 show that decisions about stripping away were not simultaneously arrived at with the question of what would be reconstructed (figures 42a–b). Of course, no one



expected the appearance of the Bodleian Plate within the month. The photographs affirm that in the month the plate was discovered, virtually all brickwork dating after 1732 had been removed. Brick matching that dated to the first two periods of construction had to be found from other buildings or fired anew. It had been decided that a steel-cage framework would be interpolated within the surviving walls. Studies of these bearing walls pointed to fractures, fissures, faults, and meanderings, which affirmed that they were no longer able to bear the weight of floors, furniture, and people.

By 1931, when the building was first designated the "Wren Building," the finished product was visible to all and appeared as we see it today (figures 43a–b). Its freshness was captured in a drawing of the west façade by Thomas Mott Shaw (figure 44). The process had taken four years, exactly the same amount of time spent on the first building. An aerial perspective of the College Yard drawn by Arthur Shurcliff shows the College building, as well as the Brafferton and President's house, returned to their appearance in the period 1732–1859 (figure 111). However, both Shaw and the restoration architects appear to have made no effort to restore its gardens to their original appearance, or to the form shown in the Bodleian Plate.[53]

The plan of the College Yard shows the poor alignment, already mentioned, of the Brafferton and the President's house, both in their relation to each other and to the College building (figure 110). The plan shows two additional buildings, whose east façades were aligned with the west façades of the Chapel and Hall, singled out for demolition, probably in part because they were too close to the original College Yard. Two small structures, possibly privies, are shown in their place on this plan, perhaps meant to reproduce two of the four small buildings shown in this location on the Frenchman's Map (figure 98).[54]

The College building as finally restored bears only partial resemblance to what had likely been first built. It bears still less resemblance to what was first designed. It should be clear from this chapter that the ravages of time as well as a scantiness of evidence account overwhelmingly for this reality. The conjectural drawings illustrated in figure 24 are the first effort made to represent the first building, some sixty years after the effort was begun to return the fourth building to its appearance in 1715–1859. These sixty years have witnessed virtually no new visual evidence for either the first or the second buildings, despite continuous research. Neither has any further specific reference to Wren as the

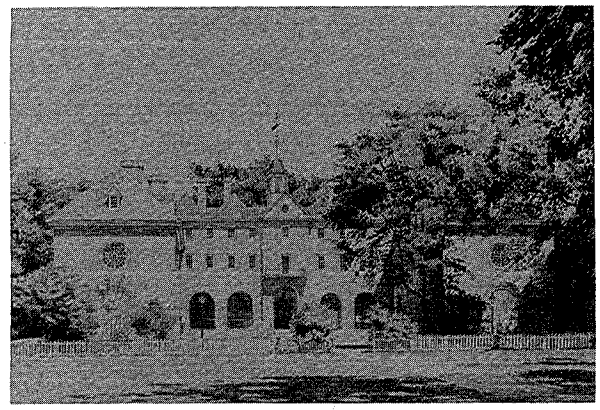


Fig. 43a. Perry, Shaw, and Hepburn, *East Elevation The College of William and Mary (fifth building, 1928–1931)*, drawing, 1928–1931, Colonial Williamsburg Foundation.

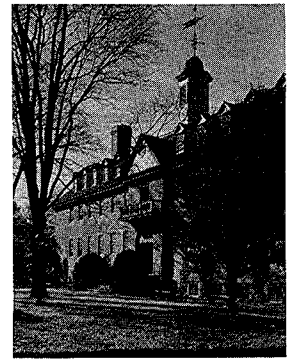
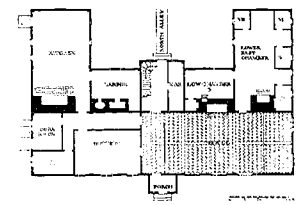


Fig. 43b. *East View, The College of William and Mary (fifth building, 1928–1931)*, Department of University Relations, College of William and Mary.

Fig. 44. T. M. Shaw, *Perspective View of The College of William and Mary from the West, (fifth building, 1928–1931)*, pencil drawing, 1935, Colonial Williamsburg Foundation.



Figs. 45a–b. Harold R. Shurtleff, *Conjectural View and Plan, Harvard College, Cambridge, Mass., c.1638*, drawings, courtesy of the Harvard University Archives.

designer of the first College building been found. While spectacular new visual evidence is highly unlikely for the first building, this will probably prove not to be the case with regard to new evidence for a connection between the two Wrens, building and architect.

The College of William and Mary can rightly claim the oldest academic building in almost continuous use in the United States even if one refers to the second building, which was entirely complete by 1715. Only Harvard College, founded in 1636, predates it as an institution, but its oldest surviving building, Massachusetts Hall, dates c.1718. Before 1695, when William and Mary's first building was begun, Harvard had built at least three. Its first college building, built in 1638, is shown in a conjectural image (figures 45a–b). Harvard built an Indian school in 1654–1656 that did not survive the century, and it replaced its initial frame building with the first Harvard Hall, a brick structure built in the period 1672–1682. As shown to the left in the 1723 Burgis print of Harvard College, it was a building still strongly Tudor in style (figure 112).[55] The first Harvard Hall is generically similar to Wren's own college at Oxford, Wadham College (figure 46), the layout and design of which, like Oriel and University colleges there, also remained Tudor or medieval. Yet all these English colleges were designed and built in the early or mid-seventeenth century.[56] Not until the construction of Stoughton Hall (shown in the center of the Burgis print [figure 112]) in 1697–1699, four or five years after the College of William and Mary had been designed, did Harvard turn to a classical style. Thus, its initial architectural legacy was a medieval one, one that disappeared from the American scene by 1699. Not until Alexander Jackson Davis and others revived it in the 1830s was it to be seen again, and many American colleges such as Yale, Princeton, and Chicago continued to build Tudor quadrangles into the Depression. The architectural legacy from William and Mary was both classical and Baroque, a legacy that never needed revival. It was an auspicious beginning.[57]

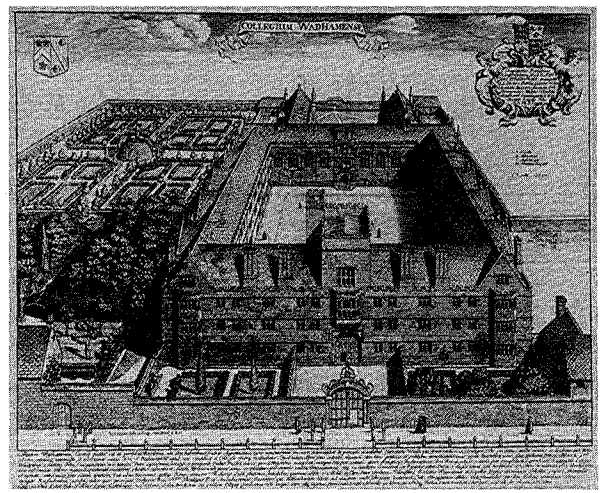


Fig. 46. *Wadham College, Oxford*, from David Loggan, *Oxonia illustrata* (Oxford, 1675), Beinecke Rare Book and Manuscript Library, Yale University.

Notes to Chapter II

1. The most complete study of this group of buildings is H. M. Colvin, ed., *The History of the King's Works*, 6 vols. (London, 1976) V, 263–304. See also *The Survey of London*, XIII, XIV, XVI, and appropriate sections of chapter III. The Knyff bird's-eye view exists in at least three versions, one in the British Museum, one in the Westminster City Library (both cited in Colvin, *King's Works*, V, 285), and a third, shown by J. E. Morpurgo, *Their Majesties' Royall Colledge: William and Mary in the Seventeenth and Eighteenth Centuries* (Washington, D.C., 1976), 21, is at the London Museum.

2. Henri and Barbara van der Zee, *William and Mary* (New York, 1973), 335.

3. For the Dutch Admiralty in Amsterdam, see W. (Wouter) Kuyper, *Dutch Classicist Architecture: A Survey of Dutch Architecture, Gardens, and Anglo-Dutch Relations from 1625 to 1700* (Delft, 1981), 32, 98, 201, 218. The Dutch Admiralty was given colossal pilasters, which is to be expected in the midcentury period in which it was built. In the later seventeenth century, when the British Admiralty was built, pilasters were generally avoided in England and in the Netherlands where the rejection of them came to be known as the "Flat Style:" see Jakob Rosenberg, Seymour Slive, and E. H. ter Kuile, *Dutch Art and Architecture 1600 to 1800*, 3rd ed. (Harmondsworth, 1977), 404.

4. For Marcus Whiffen's discussion of the Golden Section with regard to Williamsburg's public buildings, see Marcus Whiffen, *The Public Buildings of Williamsburg* (Williamsburg, 1958), 24, 80, 82, 86, 100. The Golden Section refers to the Pythagorean theorem wherein the smaller part is to the larger as the larger is to the sum of the two, or a is to b, as b is to a + b. The systems of proportion derived from this theorem are basic to classical architecture as developed by the Greeks and Romans and in the Renaissance.

5. See Ruth Bourne, "John Evelyn, The Diarist, and His Cousin Daniel Parke II," *Virginia Magazine of History and Biography*, LXXVIII (1970), 3–33; and note 38, chapter I. The reference to James Road is contained in Pipe Roll 4 for Hampton Court Gardens, May 1689 to 25 Mar. 1696, Audit Office, Roll 298, Bundle 2482. It seems clear that Mary's interest in collecting exotic and foreign plants for her water garden at Hampton Court largely explains Road's trip. According to Ernest Law, her interest in rare plants was such that "she sent gardeners at great expense to Virginia, the Canary Islands, and other places:" Ernest Law, *A Short History of Hampton Court* (London, 1906), 306.

6. Hugh Jones, *The Present State of Virginia*, ed. Richard Lee Morton (Chapel Hill, N.C., 1956), 26; Reverend William Dawson to the bishop of London quoted in *William and Mary Quarterly*, 1st Ser., IX (1901), 220.

7. Bland was a surveyor who laid out Marlborough in Stafford County in 1691, but John Reps suggested that his preparation of the survey of Williamsburg might have taken several weeks and that Nicholson may have engaged him before May 1: John W. Reps, *Tidewater Towns, City Planning in Colonial Virginia and Maryland* (Charlottesville, 1972), 143, 310n. The original survey, possibly the one that Nicholson sent to London on July 1, 1699, is in the Public Record Office there (CO 5-1310, Folio 143). Because of its poor and fragile condition, the redrawing illustrated in figure 97 appears to have been prepared by the Colonial Williamsburg Foundation and is included in Rutherfoord Goodwin, *A Brief & True Report Concerning Williamsburg in Virginia . . .* (Williamsburg, 1940).

8. For the Burgess' specifications for the Middle Plantation site, see W. W. Hening, ed., *The Statutes at Large: Being a Collection of All the Laws of Virginia From the First Session of the Legislature in the Year 1619* (Richmond, 1809–1823), III, 123–124.

9. Thomas Ballard had acquired this land in 1674/75. See Mary R. M. Goodwin, "The College of William and Mary . . . ," 6, 326n, for primary references to this land. The charter also included 20,000 acres of land, 10,000 on the Blackwater Swamp in Surry County, and 10,000 on Pamunkey Neck in New Kent County. See figure 96 for a plan of the Middle Plantation site as it might have appeared before the city was laid out (prepared by the Colonial Williamsburg Foundation). A study of the earliest College site was part of the subject of David Sacks's, "A History of Landscape Design at the College of William and Mary," (honors thesis, College of William and Mary, 1984).

10. Blair, "Papers Relating to the Administration of Governor Nicholson and to the Founding of William and Mary," *VMHB*, VII (1899), 165.

11. See Whiffen, *Public Buildings*, 18–23, 210; and William Stevens Perry, ed., *Historical Collections Relating to the American Colonial Church*, 5 vols. (Hartford, Conn., 1870–1878), I, 55–57; and *WMQ*, 2nd Ser., VIII (1928), 220–224. The 800,000 brick figure was calculated as follows: Parke was reportedly paid £547.07 for making bricks at 14 shillings per 1000. This can be calculated as 1,440 bricks per Pound × £547 = 787,680 bricks. These bricks measured 9–9½" in length, from 3¾–4¼" in width, and 2¼ to 2 7/16" in height. If twenty such bricks built a solid cubic foot of wall, some 40,000 cubic feet could be built with 800,000 bricks. If this solid wall averaged 40 feet in height and 2½ feet wide, some 400 lineal feet could be built, an amount falling short of the 528

or more lineal feet of exterior brick wall built by 1700 at the College. Archeology undertaken in 1929 recovered the site of the brick kilns that were located near the building.

12. Whiffen, *Public Buildings,* 19. The document in which the statement was made is, according to Whiffen, among the Lambeth Mss., William and Mary College Reports, Folder 8, Bodleian Library, Oxford. The Rector of the Board of Visitors of the College was Miles Cary, elder brother of Henry Cary, Sr., who would undertake construction of the Capitol and Governor's Palace. His son, Henry Cary, Jr., later supervised construction of the President's house, Chapel, and, probably, the Brafferton at the College.

13. Hadley and other workmen are mentioned by Nicholson in *Papers Relating to an Affidavit made by His Reverence James Blair, Clerk, pretended President of William and Mary College, and Supposed Commissary to the Bishop of London in Virginia, against Francis Nicholson, Esq.* (London, 1727). This was Nicholson's belated effort to defend his reputation against Blair's earlier allegations that had effectively removed him as Virginia's governor in 1705, as well as against Blair's continuing effort as late as 1726 to have the former governor removed from the College's Board of Visitors. Nicholson remained on the Board until his death in 1728. Surviving College building accounts appear to have been submitted to the Board of Trade and are printed in "Accounts of the College," *WMQ,* 1st Ser., VIII, (1900), 167–171. Hadley is also mentioned by Blair in his Jan. 21, 1698, letter to the Board of Trade (Fulham Mss. Virginia Box 2, 65) reprinted in *WMQ,* 2nd Ser., XIX (1939), 347.

14. For Ludwell's role in shingling the College, see Parke Rouse, Jr., *James Blair of Virginia* (Chapel Hill, N.C., 1971), 92; Whiffen, *Public Buildings,* 21.

15. The Board of Visitors' letter to Andros is quoted from Alfred Lawrence Kocher and Howard Best Dearstyne, "Discovery of the Foundations for Jefferson's Addition to the Wren Building," *Journal of the Society of Architectural Historians,* X (1951), 28–31. The original letter is in PROCO 5/1309.

16. A. Lawrence Kocher and Howard Best Dearstyne, "Architecture of the Wren Building," (Architectural Report, Typescript, Library, Colonial Williamsburg Foundation), 3. It was during this visit to London that Blair won for the College its first major endowment, an annual £90 from the charitable bequest left by the physicist, Robert Boyle. Blair probably learned of this fund from Bishop Burnet, an executor of Boyle's estate.

17. See note 13 for Blair's Jan. 21, 1698, letter.

18. Blair's letter is included in Perry, ed., *Historical Collections,* I, 112–113. The report in *The London Post Boy* appears as reported by John Oldmixon, *The British Empire in North America,* 2 vols. (London, 1741), I, 437.

19. The Statehouse at Jamestown burned on October 31, 1698, shortly after Andros left Virginia for England and a month before Nicholson arrived as governor that December.

20. Michel's drawings show transoms in the basement windows but not in the stories above them. This implies that casements were used in the basement story, possibly in the attic story (as was usual at the time), and that sashes were used in the three principal stories. This last feature is supported further by the fact that former governor Andros provided funds for "Sashing the College" on Oct. 10, 1700: Whiffen, *Public Buildings,* 43, 23. This means that the College was probably the first building in the colonies to feature sash windows, although most writers on the building have been either silent or ambivalent on the subject. The earliest known reference to them, however, remains the 1699 act that specified that they be used on the Capitol in Williamsburg. The sash window is traditionally thought to have originated in the Netherlands, but more recent studies have suggested a French or English origin. In 1962 Alec Clifton-Taylor left the matter open as to whether they were "invented" in England or Holland. He cited their first use in England at Chatsworth in 1676–1680, before it was rebuilt in 1687. The second recorded use of them Clifton-Taylor cited was in the buildings Wren designed for James II in 1685, including the Privy Gallery. Sash windows in the Privy Gallery would make this building an even closer source for the design of the main ranges at the College, especially since the original windows of the Royal Hospital, Chelsea were casements: see Alec Clifton-Taylor, *The Pattern of English Building* (London, 1962), especially chap. 16, 327–36. However, some more recent scholarship suggested a French origin, possibly dating as early as 1630: see Geoffrey Beard, *Craftsmen and Interior Decoration in England 1660–1820* (New York, 1981), especially, 54–55, where he suggested the word "sash" is a corruption of the French "chassis" and that they were first used in England at Ham House in the 1670s. See also Peter Thornton, *Seventeenth-Century Decoration in England, France, and Holland* (New Haven, 1979). I am indebted to William Pavlovsky for pointing out to me these last two sources. Kerry Downes has posited that sash windows may have been invented by the Royal Society at some point in the 1670s: Kerry Downes, *The Architecture of Wren* (London, 1982), 87. Finally, H. J. Louw has considered the arguments for Dutch, French, and English origins

and has favored the latter. See, "The Origin of the Sash Window," *Architectural History,* XXVI (1983), 49–72. Louw's doctoral dissertation (Oxford, 1981) focuses on the origin of the sash window.

21. Between Christmas 1702 and late October 1705, Nicholson wrote, according to Whiffen, his "Memorandum of Several faults in the Building of William & Mary Colledge which have proved dangerous & prejudicial to the said Building," (Nicholson Papers, Colonial Williamsburg Foundation.) Surviving testimony about the fire is in the Virginia Archives and also appears in *VMHB,* VI (1899), 272–277; and in *WMQ,* 2nd Ser., VIII (1928), 231–234.

22. Perry, ed., *Historical Collections,* I, 93–112, 131–138. It is curious that Blair blamed Nicholson for employing "unskillful Workmen." Did he mean the English masons, Pocock, Baker, and Cryer, or did he mean the carpenters Nicholson later claimed were in Blair's employ? Nicholson himself published a rebuttal to Blair's affidavits in which he listed over £2,652 in gifts he had given to the College between 1699 and 1702. One of the worst confrontations between Blair and Nicholson appears to have occurred in December 1702 when Blair alleged Nicholson had incited the students to rebel against him by providing them with food, pistols, and alcohol. Blair was not alone in finding eccentricities of behavior in Nicholson, but the governor had his supporters as well. Despite Blair's machinations, Nicholson retained friendships in high places in England. On October 3, 1697, for example, William Byrd wrote the governor that Bishops Compton and Tenison were "frequently speaking fine things of your Excy." On November 10, 1701, Compton wrote Nicholson as "Your Assured Friend:" see Dorothy Louise Noble, "Life of Francis Nicholson," (Ph.D. diss., Columbia University, 1958), 56–57. By the summer of 1703, however, Blair and his wife had left for England, this time to effect Nicholson's removal as governor.

23. On the archeology undertaken in 1929, see Prentice Duell, "The Wren Building," (Archeological Report, including a Brief History of the Four Forms of the Building. Typescript, 1932, Library, Colonial Williamsburg Foundation.) As for the projecting foundations on either side of the east entrance, Duell's report was less clear. Most of Williamsburg's public buildings were built with brick laid entirely in English bond below the watertable and Flemish bond above, or entirely in Flemish bond. English bond features a course of headers (the width of a brick) that alternates in each rising course with one of stretchers (the length of a brick). Flemish bond requires that each course contain alternating headers and stretchers placed in a header-stretcher-header pattern in each rising course. If the headers are glazed, the alternating pattern becomes quite apparent, as in the earlier public buildings in Williamsburg with their distinctively characteristic bluish glazed headers. Many buildings built exclusively in English bond are pre-1700 in date, but the bond continued to be used well into the nineteenth century. Those laid with English bond foundations and with a Flemish bond superstructure, or those that have entirely Flemish bond walls, generally date between 1700 and the 1840s. Colonial brickwork is especially important because in many cases it is all that survives of the original building.

The first College building (1695–1699) was built entirely in English bond, apparently with randomly laid glazed headers. The Capitol, begun in 1701, may have been the first public building in Williamsburg built with English bond below the watertable and Flemish bond above. It and the Palace were reconstructed with this bonding in 1931–1934. However, no bond appears to have been mentioned in the specifications for either building, and because the superstructures of both were gone by the mid-nineteenth century, it is not entirely clear that the original bonds were those reconstructed. On the other hand, English-Flemish bond combinations began somewhere, and the Capitol and Palace are likely places. Determining the oldest surviving Flemish bond walls in Williamsburg is further complicated by the diverse bonds seen in the possibly transitional Gaol. The present size of the Gaol is the result of an original pile (1702–1703) given as many as three additions (1712, 1722, and 1772). Some wall sections survived and were incorporated in the restoration that used all new face brick. The portion of the original Gaol that survived appears to have had English bond below the watertable, Flemish, above. The Public Records Office (1747–1748) was also constructed entirely in Flemish bond. Thus, the oldest surviving Flemish bond walls in Williamsburg appear to be those of the Gaol, followed by Bruton Parish Church (1711–1715), whose brick also contains glazed headers. Every other public building constructed in Williamsburg before 1776, including nearly all of its houses, adhered to these formulas. After the Revolution, simpler "common" bonds increasingly outnumbered combinations of English and Flemish bonds until the latter virtually disappeared in the 1840s. I am indebted to Carl Lounsbury, Nick Pappas, and Mark R. Wenger for assistance on brick bonds and in formulating Appendix I.

24. The library of the Colonial Williamsburg Foundation maintains an ongoing collection of research reports, dating

as early as 1932, on all the major public buildings as well as on many others. It also maintains an extensive collection of architectural and archeological drawings, also ongoing, which date as early as 1928. A two-page summary of these research reports is included in Catherine Savedge Schlesinger's "The Wren Building at the College of William and Mary," (Research Report, Colonial Williamsburg Foundation, 1968, rev. ed. 1979).

25. On Michel, see William John Hinke, trans. and ed., "Report of the Journey of Francis Louis Michel from Bern, Switzerland to Virginia, October 2, 1701–December 1, 1702," *VMHB*, XXIV (1916), 1–43, 113–141, 275–288. According to Whiffen, Prentice Duell, who prepared the report on archeology undertaken on the Wren Building, first examined the notebook itself with regard to its Williamsburg references and found it to be marked "3rd Copy" and entitled "Meines Bruder's Franz Ludwig Michel's kurze Amerikanische Reisebesschreibung." The surviving Michel images thus appear to be those copied by his brother. Other copies and the original do not appear to survive: Duell, letter to W. A. R. Goodwin, Aug. 10, 1937; Whiffen, *Public Buildings*, 211n. Whiffen considered that the cupola of the Capitol may have been modeled on that above the first College building: *ibid.*, 40. He did not speculate as to the sources of the arched entrances and bull's-eye windows of the Hall and Chapel. By 1715 they could be seen both at the Capitol and Bruton Parish Church. Whiffen also gave some credence to Michel's drawing:

> *Perhaps the crudity of the drawings may even be considered some warrant of their essential veracity. In any case, a reading of Franz Ludwig Michel's diary makes it clear that he was in general a careful and intelligent observer. His drawing of the College shows a front ten windows wide and three full storeys and a basement high, with a half-story in the roof. In fact the first College building, as the surviving walls show, was thirteen windows wide. But the error is intelligible, for even the trained observer can be hard put to remember the number of windows in quite familiar façades. Michel is less likely to have been mistaken about the number of storeys, especially as he had climbed the stairs to the top of the lantern or cupola and spent the night there. And it can be taken as certain that the horizontal divisions of the front was essentially as he depicts it.*

ibid., 33.

Morpurgo, on the other hand, considered Michel "had an unusual gift for inaccuracy and self-contradiction," but he did not make clear why this might have been true: Morpurgo, *Their Majesties' Royall Colledge*, 53.

The likely source for the popular thirteen-bay façade used for the first College building appears to be Sebastiano Serlio who illustrated several in *Book VII* (51, 61, 225, 227, and following p. 243). That illustrated on p. 227 has three floors and a 1:3 proportion like the College. The illustration following p. 243 has a five-bay loggia like the College (figure 47). Wren's college, Wadham College, Oxford, has thirteen bays. Perhaps Serlio was a major design source for both Inigo Jones and Wren.

26. Kocher and Dearstyne suggested the possibility that these quoin-like features might have been French gutters: see Kocher and Dearstyne, "The Architecture of the Wren Building." A. Edwin Kendrew also considered that the colonial college building had ground-level drains or gutters, not those restored at course level: see Kendrew, "Addendum: Supplementary Facts About the Restoration of the Building." (House History File, Colonial Williamsburg Foundation, 1951), 138. Nicholas Pappas, Foundation Architect, suggested, on the other hand, a more likely feature—stucco replicating stone quoins: *Letter* to the author, May 6, 1988. It would have been unusual to apply such rustication on the ground story only, and the problematic corners of the College, as shown in Michel's drawing, do not show quoins there, which would have been usual: see a similar basement treatment at Coleshill (figures 61a–c) and corner quoins there and at the Royal Hospital, Chelsea (figures 89a–c).

27. Robert Beverley, *The History and Present State of Virginia*, revised as *The History and Present State of Virginia in Four Parts*, ed. Louis B. Wright (Richmond, 1942), 231–232. According to Whiffen, Queen Anne's gift of £500 raised from quitrent revenue in March 1709 enabled the College rebuilding to begin. On December 8, 1709, John Tullitt was engaged as a contracter to complete reconstruction for £2000. When Spotswood arrived as lieutenant governor in June 1710, he carried a further warrant for £500 to be raised from quitrents: *ibid.*, 96–97.

28. Jones, *The Present State of Virginia*, ed. Morton, 26. Jones was a Welshman who completed his master's degree at Jesus College, Oxford about 1716 and was recommended for the position at the College by John Robinson, bishop of London, and successor to Henry Compton. Jones also served variously as Professor of Mathematics and Master of the Grammar School. His book makes clear that he sympathized with Governor Spotswood (also versed in mathematics), whose removal from the governorship in 1721 owed much to Blair. Jones himself had reservations about the College's president whom he clearly

thought was out more for himself than for the College. Both Jones and Spotswood returned to England about the same time in 1721 or 1722 and their departures appear related. Jones's likely friendship with this architecturally-minded governor is a reason to accept his statement about Wren and the College.

29. *Ibid.*, 26.

30. For a sampling of reactions to Jones's attribution of the College's first design to Wren, see Appendix II.

31. The Bodleian Plate is one of at least eight plates given the Bodleian Library at Oxford by Richard Rawlinson in 1755. The plate is thought to have been made for a book, stressing natural history, to be prepared by Peter Collinson, Mark Catesby, or another English naturalist. Mary F. Goodwin, cousin of Reverend Goodwin, then Rector of Bruton Parish Church, located the plate in December 1929 while unsuccessfully searching for documents that would prove Jones's attribution to Wren. Providing important new information on Williamsburg's buildings as they appeared about 1740, restoration architects, as noted, made modifications to the College building, Capitol, and Governor's Palace in accordance with the images shown in the plate. The Bodleian Library gave the plate to the Colonial Williamsburg Foundation: see Luis Marden, "The Adventure of the Copper Plates," *Colonial Williamsburg—The Journal of the Colonial Williamsburg Foundation,* (1987), 3–18.

32. On the Jefferson addition, see Kocher and Dearstyne, "Discovery of the Foundations," 28–31. Before archeology in 1940 confirmed that construction on the Jefferson addition had been started in the period 1772–1776, sufficient documentation dating to between September 3, 1772, and November 9, 1774, existed to confirm this (figure 17). That discontinuation of construction had been determined by September 1780 is affirmed by advertisements of building materials by the College in the *Virginia Gazette,* Sept. 13 and Sept. 20, 1780.

33. Thomas Jefferson (1743–1826), *Notes on the State of Virginia,* ed. W. E. Peden, (Chapel Hill, N.C., 1955), 153.

34. The drawings shown in figure 24a–d were developed by William S. Pavlovsky, a Boston architect specializing in restoration work, in consultation with the author, Nicholas A. Pappas, and John F. Millar. Visualizing the design of the first College building was the subject of a paper undertaken by Pavlovsky while an undergraduate major in Fine Arts at the College in 1974. The text sections treating these drawings are also the result of a collaboration of author and architect. A model of this design, included in the exhibition, "So Good A Design," at the Muscarelle Museum of Art, January 14–March 12, 1989, was not complete in time for inclusion in this study.

35. On the Golden Section, see note 4, this chapter.

36. According to Pavlovsky, Whiffen meant that

> *the expression "Middle of the Pile" (Whiffen, Public Buildings, 24) was taken literally, that the original main stair went straight up from the central passage. This notion is wholly unsupportable. In the first place, it appears certain that the entry, like the loggia, was originally open to the weather and secured at night with gates. An open stairwell in this position, giving access to the upper floors, would have created unnecessary security problems when the gates were left open, not to mention some very strong drafts. From a purely architectural standpoint, the ramifications of a central stair are equally troublesome: a single flight against one wall would have destroyed the monumental symmetry of the axial entry, while a more proper arrangement of two parallel flights would have crowded the entry, leaving only a few feet for circulation. The only possible conclusion is that the original main stair occupied the same position as in the second building. Objection has been made [Whiffen] on the grounds that no foundation wall was found in the basement to support the southern partition of the stairwell, but in fact none was required, and no foundation was found for the second stair, the existence of which is recorded by Jefferson.*

37. The author does not feel as strongly as does the architect that the main stair could not possibly have been in the central passage, but agrees that a location at the ends of the loggias seems more reasonable. The contemporary reference to "gates" and to the fact that they were sometimes left open at night lends much weight to an argument against a stair in the center passage. These gates were, however, wooden doors, and their large scale may have occasioned use of the term to describe them. It seems that doors, similar to those restored, were in comparable positions both in Wren's Chelsea Hospital and in Lilly's Codrington College.

38. Testimony quoted about the fire in 1705 was taken from *William and Mary Quarterly,* 2nd Ser., VIII (1928), 231–234.

39. Among Dutch designs that Pavlovsky considered show similar enlarged dormers are Philips Vingboons's design for the Alewijn house at Vredenburgh (c.1640), Maurits Post's Soestdijk (1674–1678), and a house at Heerengracht 460, Amsterdam, assigned to Jacob Roman (1685).

40. According to Pavlovsky,

> *well-known and influential structures like London's*

Royal Exchange (1566–1588), later Gresham College, the Amsterdam Exchange (1611), and the buildings surrounding Lincoln's Inn Fields, London (c. 1640) all originally featured hipped dormers with spikey finials. A design by Roger Pratt for Kingston Lacy, Dorset (1663–1665) [figure 68], and a project of Wren, thought to be for the royal stables at Winchester (1683), show the continued popularity of the motif.

41. For the Alston design, see *The Wren Society*, XII, plate 1; for Wren's Trinity College design, see chapter III.

42. Because roof construction was a highly standardized department of carpentry, Pavlovsky considered changes in design to be infrequent:

The pitch of a roof depended on the covering and was always expressed in terms of the proportional relationship between the length of the rafters and the span. The English precedent for the steeply pitched hipped roofs of the mid- to late-seventeenth century was possibly set by Inigo Jones in the 1630s when he topped his arcaded ranges in Covent Garden with a vernacular, high-pitched roof and dormers. The method used by Jones to determine the angle of his roofs was to make the rafters three-quarters the breadth of the building. Called the "true pitch" or "common pitch," it was in use in country areas of England until well into the nineteenth century. The angle of any "true pitch" roof is 42 degrees.

Whiffen also assumed that because lead was mentioned as having melted during the fire that the first building had gutters; the lead might, however, have been from the deck of the roof: Whiffen, *Public Buildings*, 24.

43. *Ibid.*, 25–26.

44. See Henry Wotton, *The Elements of Architecture*, intro. and notes, Frederick Hard (Charlottesville, 1968), lxix. Vitruvius's *Ten Books of Architecture* is the only treatise on the subject to survive from antiquity.

45. Virtually all images known of the second College building are in collections of the Earl Gregg Swem Library of the College or in those of the Colonial Williamsburg Foundation. The whereabouts of the painting (figure 26) and the plan of the fourth building (figure 33), illustrated in Howard Dearstyne's essay on the building, are unknown. However, a photograph made of it by Frank N. Nivison is known to exist. See note 49, this chapter.

46. According to Kendrew, cited in note 26, this chapter, the Virginia Art Commission "insisted upon making the first floor windows three lights in width," and keep those on the second story four lights in width," Kendrew, "Addendum," 138n.

47. How seriously this elevation drawing and that made of the east façade can be taken is unclear in part because neither has been considered in any publication on the building. The drawing of the west façade suggests, however, that the roofs shown covering it in the Bodleian Plate had been replaced at some later date. Kocher and Dearstyne referred to these drawings as having been made by "a little girl." However, Margaret Cook, Curator of Manuscripts and Rare Books at the Earl Gregg Swem Library of the College, considered that these drawings, contained in a commonplace book and written jointly by Mary F. and Travis Southall (possibly her brother), were probably made by the latter: *Letter* to the author, Aug. 5, 1988.

48. On the third building, see Whiffen, *Public Buildings*, 193–195, and Kocher and Dearstyne, "The Architecture of the Wren Building," 63–81.

49. On the fourth building, see Whiffen, *Public Buildings*, 195–197, and Kocher and Dearstyne, "The Architecture of the Wren Building," 82–105. The plan shown in figure 33 was reproduced by Howard Dearstyne, "Architectural History of the Wren Building . . . ," (Research Report, Colonial Williamsburg Foundation, 1950, 1951), 58. The plan appears to be signed H. Exall, and Dearstyne discussed it as the third building, although it reflects far more the rebuilding of the fourth building. Dearstyne credited Thomas T. Layton for the photograph (see note 45, above).

50. The Boston-based architectural firm of Perry, Shaw, and Hepburn was a fitting choice for the restoration of the College and colonial Williamsburg's major buildings in the period 1928–1934. Beginning in 1934 architects on the staff of the foundation assumed these duties as well. William Graves Perry was born in Boston in 1883, graduating from Harvard, M.I.T., and the École des Beaux Arts. His career began in 1914 in the office of Shepley, Rutan, and Coolidge, successors of Henry Hobson Richardson's firm. Shepley, Rutan, and Coolidge were noted for their designs of college buildings, many of which are at Harvard, and following Richardson's lead were also interested in historic preservation. Thomas Mott Shaw was born in Newport, R.I. in 1878, and also earned degrees at Harvard, the École des Beaux Arts, and a D.F.A. from Brown. Shaw began his career as a designer with the firm of Guy Lowell in Boston in 1905. Andrew Hepburn, born at Catasauqua, Pa. in 1880, studied at M.I.T. and was Lowell's chief draftsman at the time. In 1910, Shaw and Hepburn formed a firm by that name. Perry joined them, and in 1926 Perry, Shaw, and Hepburn was formed. In this period they distinguished themselves as designers of colleges. The firm entered the Wheaton College, Goucher

College, and Smithsonian Gallery of Art competitions in 1938–1939. Ironically, that at William and Mary in 1938, for a Festival Theatre and Fine Arts Center, did not elicit a design from the firm. From 1945 to 1952, they operated as Perry, Shaw, Hepburn, and Dean. The successor to this firm, Perry, Dean, Rogers, and Partners, practices today in Boston. Their latest addition to the campus of the College of William and Mary was that made in 1984–1988 to the Earl Gregg Swem Library. For citations of details found in other buildings and used in the restoration of the College, see Thomas Tileston Waterman, "The Wren Building—Architectural Report," (contained in a typescript, The Wren Building, Vol. 2, Library, Colonial Williamsburg Foundation, 1932). This largely deals with precedents for unknown details, particularly with regard to interiors.

51. Quoted from the bottom of the drawing of the west elevation of the College, dating c.1929 and illustrated in figure 18.

52. See Prentice Duell, "Archeological Report," The Wren Building, (Vol. 2, Library, Colonial Williamsburg Foundation, 1932), 24–25. As noted, Duell's discussion of the foundations on either side of the east entrance was less than clear. See Appendix II.

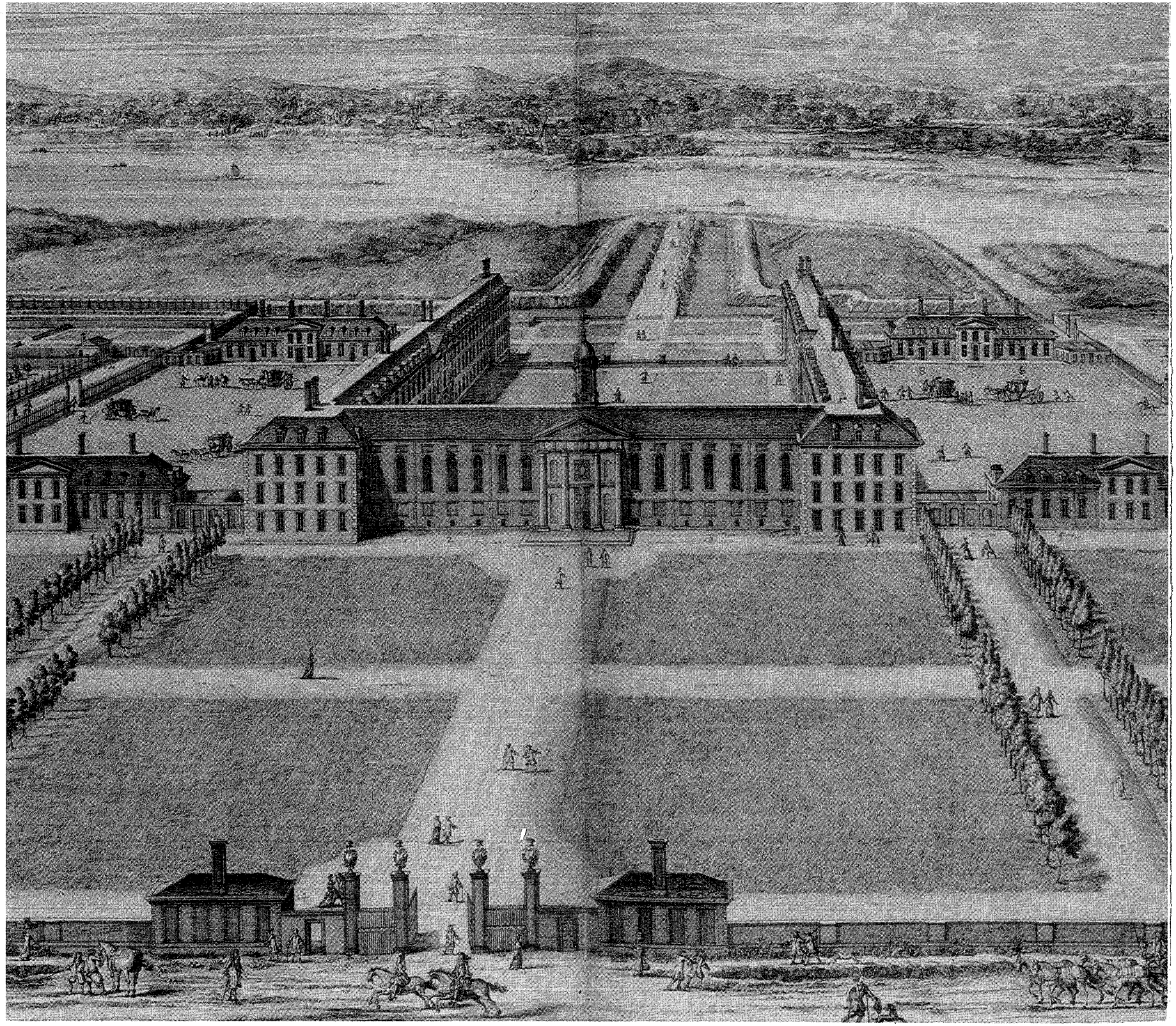
53. For the author's view about the present name of the College building, see his Note in Appendix II. It remains unclear whether archeology was ever seriously undertaken of the College Yard with a view to learning more about its original gardens as designed or as shown in the Bodleian Plate. This most certainly should be done because they were Williamsburg's first gardens and are among the best documented. As the College itself approaches its own tercentenary, it might be considered a worthwhile project not only to undertake archeology in and around the College Yard, but to restore the gardens as they appear, characteristically Anglo-Dutch, in the plate.

54. The Frenchman's Map, discussed in chapter IV, is the most detailed plan known to survive of colonial Williamsburg. Dated c.1782, it was probably drawn for the purpose of billeting French troops serving in the Revolution. See note 10, chapter IV.

55. For Harvard's early buildings, see Samuel Eliot Morison, *The Founding of Harvard College* (Cambridge, 1935). Some of Harvard's later colonial buildings are discussed in chapter IV. Archeology undertaken at Greenspring, Governor William Berkeley's plantation in James City County, as well as other evidence, points to a large, probably quite Tudor frame house abutting, but also predating, the brick pile drawn by Benjamin Latrobe c.1800. The foundations of this earlier house form roughly an H with a porch chamber centered on the cross. Suggested is a structure much like that conjectured for the first Harvard building, and the plan suggests that first drawn for the Williamsburg Capitol. This was probably the house Berkeley built when he first acquired the land c.1646. Because both the Governor's Council and the House of Burgesses met at Greenspring during and after Berkeley's governorship, it may be that this earlier house was an inspiration for the first plan of the Capitol. Berkeley died in 1678 and his widow shortly thereafter married Philip Ludwell. It is possible that the house Latrobe showed was built at this time. I am indebted to Cathy Grosfils for positing this theory. The first College building marked a sharp departure from even the second Greenspring, and the nine or more, possibly pilastered, brick arcades of Robert "King" Carter's Corotoman in Lancaster County, probably built by 1720, may have been an early response to the College and new architecture of the Capitol.

56. The principal façades of both Wadham and University colleges at Oxford also comprise thirteen bays. According to Howard Colvin, the style of these English colleges remained "essentially that established by William of Wyckham in the fourteenth century." He continued: "though a new symmetry can be detected . . . the style of the doorways and fenestration remains for the most part obstinately Gothic." See Howard Colvin, *Unbuilt Oxford* (New Haven, 1983), especially, 7–12. He illustrated a pasteboard "model" of University College, Oxford, made shortly before 1634, in figure 10. The tradition continued into the period when the College was designed, as shall be seen in my discussion of a model for New College by William Byrd in 1682, figure 78, chapter III. When Hugh Jones wrote that the College was "first Modelled" by Wren, he probably meant that a model was built much like these.

57. On the College as an important precedent for the American campus, see Paul Venable Turner, *Campus: An American Planning Tradition* (Cambridge, Mass., 1984), especially, 33–37.



III. Dutch and English Architectural Precedents for the College and Williamsburg, 1619–1699

The decision to build the College at Middle Plantation in 1693 was a momentous one, for by the time of the American Revolution it had resulted in the creation of fourteen public buildings, whose form, function, and structure are unthinkable without European precedents. By 1732, when the College, Capitol, Gaol, Palace, Bruton Parish Church, Magazine, Playhouse, Brafferton, and President's house stood complete, the ensemble was unmatched anywhere in the colonies. By 1776, five additional public buildings had joined them—the Public Records Office, the Guardhouse, the Markethouse, the Courthouse, and the Public Hospital (see Appendix I). The classical traditions established in Williamsburg can be traced to the principles of architecture and town planning begun in the Italian Renaissance, particularly with Filippo Brunelleschi and Leo Battista Alberti. The continued validity of the principles practiced by Brunelleschi and Alberti and their followers is perhaps supported by the fact that among the two dozen or more treatises known to have comprised Wren's library, Alberti's *De re Aedificatoria (Ten Books of Architecture)*, first published in 1485, was among them. As the first published Renaissance architectural treatise, it remained basic for any architect even in Wren's day.

Works by Sebastiano Serlio, Andrea Palladio, Giacomo Vignola, Fra Andrea Pozzo, Carlo Fontana, and other Italian theorists were owned by Wren. Many designs illustrated by Serlio in *Tutte l'Opere d'Architettura e Prospettiva* (1537–1575) were sources, often in later editions, for some designs by Wren and other English architects. The plan of the palace (figure 47), shown on page 225 of *Book VII,* is arranged much like Hampton Court Palace, the first College building, and the addition Jefferson made to the second building (figures 88, 24a, and 23). This is not to suggest that this particular plan, or any other, specifically influenced these later buildings, but such earlier works surely stand as guides. Wren also owned Palladio's *I Quattro Libri dell' Architettura* (1570). Palladio's influence on Wren has never been much stressed, and the absence of it is often given as an explanation for the emergence around 1715 of the Palladian movement in England. Centered on Lord Burlington and Colen Campbell, this new movement was seen in part as a reaction against the Baroque of Wren, Nicholas Hawksmoor, and John Vanbrugh. Wren's collection of French treatises included those by J. A. Ducerceau, Antoine Le Pautre, J. F. Blondel, Charles Perrault, and Sebastian Vauban. French influence on his work has long been acknowledged. Some scholars ignore or deny any Dutch influences on his architecture in part because no Dutch treatises or books are known to have been owned by Wren. However, his likely knowledge of, and reliance upon, Dutch architecture was noted at least as early as 1923 when Arthur Stratton wrote that Dutch influence "upon a wide range of his executed

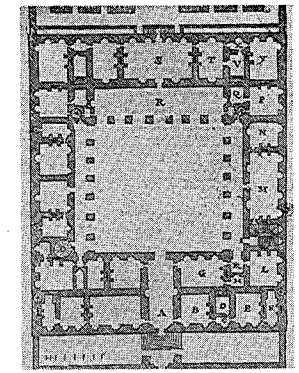


Fig. 47. *Plan* from Sebastiano Serlio, *Il Settimo Libro* (Vinegia, 1600), 225, Special Collections, Colonial Williamsburg Foundation Libraries, Williamsburg, Va.

Detail, figure 89a.

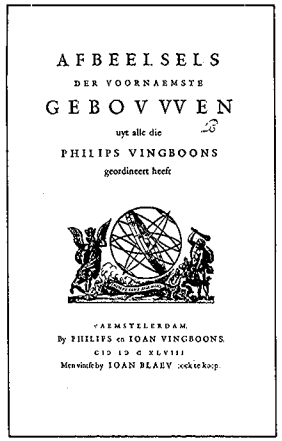

AFBEELSELS
DER VOORNAEMSTE
GEBOVVEN
uyt alle die
PHILIPS VINGBOONS
geordineert heeft
TAEMSTELLERDAM.
By PHILIPS en IOAN VINGBOONS.
Men vindt by IOAN BLAEV

Fig. 48. Philips Vingboons, *Afbeelsels der Voornaemste Gebouwen* (Amsterdam, 1648), frontispiece, The Provost and Fellows of Worcester College, Oxford.

work is undoubted [and] shows especially in his civic and domestic buildings. [It was] a vernacular style peculiarly suited to the English climate, temperament, and social outlook."[1]

Travel and publication were the major means by which classical architectural principles, well rooted in Florence by 1450, had spread a century later to France, Spain, and certain northern European cities such as Antwerp. Classical principles eventually became popular even in countries with entrenched medieval traditions such as Germany, the Netherlands, and early seventeenth-century England. Sixteenth- and early seventeenth-century French architectural achievements were important influences on the Dutch and English, but with the exception of Inigo Jones, the English were slower to turn from mannerisms typical of the sixteenth century. This can be seen not only in the publication of treatises and prints illustrating the new classical manner, but also in buildings themselves. Hendrick de Keyser's *Architectura Moderna* (1631) was not matched in Britain until 1715 with the publication of Colen Campbell's *Vitruvius Britannicus*. De Keyser's book was followed by Philips Vingboons's *Gronden en Afbeeldsels der Voornaamste Gebouwen,* first published in 1648. *Gronden* was so popular that it enjoyed six editions, appearing as late as 1736; its fourth, two-volume edition appeared in 1688 at the time of the Glorious Revolution (figure 48). Editions of prints of specific Dutch buildings, often with plans, elevations, or perspectives, were published throughout the century. Perhaps the most remarkable of these editions are the six prints engraved by Daniel Stalpaert in 1650 of Jacob van Campen's Amsterdam Town Hall, built in 1648. The building became so celebrated that a second enlarged edition with further engravings by Jacob Vennecool appeared in 1660–1661.[2]

Illustrations of Pieter Post's buildings, such as Swanenburgh and possibly Huis ten Bosch, although often engraved shortly after construction, were not made available in a collected edition until much later. *Les ouvrages d'architecture de Pierre Post* was first published in 1715 (figure 49).[3] By this date, the two most elaborate folios on British architecture yet to appear—Johannes Kip's *Britannia illustrata* (c.1708–1714) and Colen Campbell's *Vitruvius Britannicus*—had also been published. Before their appearance, there were few books on English architecture. The most important may have been Henry Wotton's *The Elements of Architecture,* first published in 1624 when Inigo Jones was at the height of his creative strength. Not until 1663 did Palladio's book appear in English, and then only *The First Book of Architecture* was published (figure 50). However, the nascent Palladian movement in England encouraged the publication in 1715 of the Giacomo Leoni edition of Palladio's *Four Books of Architecture,* a reprint of the original 1570 Italian edition. The continued popularity of this book helps to account for the edition

published by Isaac Ware in 1738. With the exception of Roger Pratt and Roger North (whose writings on architecture were not published until this century), none of Britain's important founders of the classical architectural tradition in the seventeenth century attempted portfolios of their works, let alone a treatise. This situation would change greatly after 1715.[4]

The classical architectural influence from the Netherlands that began a subtle penetration of England at midcentury, helped sweep away the last vestiges of Tudor and Jacobean design that owed much to earlier Dutch and Flemish architecture. Inigo Jones was the only English architect before midcentury who showed a profound interest in classicism and who created a highly original architecture. Jones's two journeys to Italy in 1597–1603 and in 1613–1615, and his predilection for Palladio's architecture, are reflected in the buildings he designed in England between 1616 and 1640; they mostly predate and possibly influenced Jacob van Campen. Van Campen's Mauritshuis at The Hague (1633) is for Dutch architecture what Jones's Queen's House, Greenwich (1616–1621) would be for England—the fountainhead of a new, more classical direction. Though Jones and his pupil, John Webb, attempted to continue the new manner in England in the period 1640–1660, political constraints, and ultimately Cromwellian rule, inhibited the development of a school or widely accepted style as was concurrently flourishing in the Netherlands.[5]

Between December 1641 and July 1646 Jones was arrested, interrogated, and had his estate sequestered because of activities undertaken for Charles I.[6] During the ensuing eleven-year Interregnum (1649–1660) many English architects, prelates, and intellectuals fled to the Netherlands, a nation recognized for its liberal religious policies. Charles de Saint-Evremond, a political exile in the Netherlands in 1661, noted, "the difference of religion, which in other places raises so many commotions, does not in the least ruffle here the minds of people; everyone seeks heaven after his own way." The choice of the Netherlands was also occasioned by the presence at The Hague of the exiled Charles II. The diarist John Evelyn visited the republic as early as 1641, and William Temple's visits there made him keenly aware of Dutch advances in architecture and landscape design.[7] The architect, Hugh May, sojourned there from about 1656 to 1660, and it is known that the Scotsman, William Bruce, returned to the Netherlands in 1659 and probably visited it at least once again in 1663. He was appointed surveyor general of the King's Works in Scotland from 1671 until 1678, and has the distinction of having first introduced the classical language of architecture to Scotland.

Other architects, notably Roger Pratt, visited Italy, France, and the Netherlands in the period

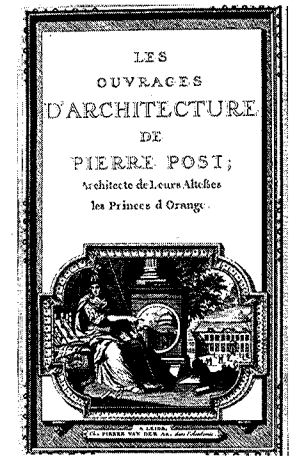


Fig. 49. Pieter Post, *Les ouvrages d'architecture de Pierre Post* (Leiden, 1715), frontispiece, Beinecke Rare Book and Manuscript Library, Yale University.

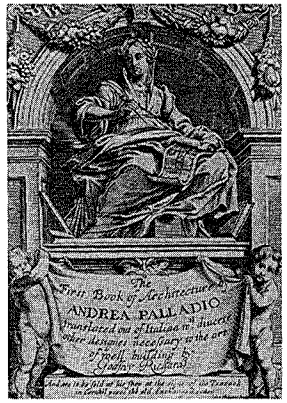
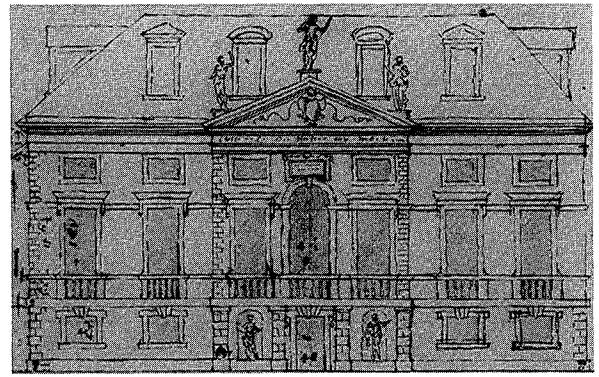


Fig. 50. Andrea Palladio, *The First Book of Architecture* (London, 1663), frontispiece, Beinecke Rare Book and Manuscript Library, Yale University.

Fig. 51. Inigo Jones, *Elevation, The Prince's Lodging, Newmarket, Suffolk*, drawing, 1619, The British Architectural Library, RIBA, London.

1643–1649; in 1660, Pratt bought a copy of Steven Vennecool's edition of prints of Amsterdam's Town Hall. William Winde was probably born in the Netherlands where his exiled father served with the States of Holland. Robert Hooke began his close associations with Wren at Oxford as early as 1661 and probably visited the Netherlands in 1672 when he likely acquired a copy of Vingboons's *Gronden* and drew van Campen's Nieuwe Kerk at The Hague. Virtually every major architect or designer who would emerge in the period 1660–1690—Evelyn, Temple, May, Bruce, Pratt, Winde, and Hooke—is known to have seen recent Dutch architecture. Christopher Wren appears to be the exception. However, if he did not visit the Netherlands, he surely had access to books and prints that William III, among others, would have made available to him.

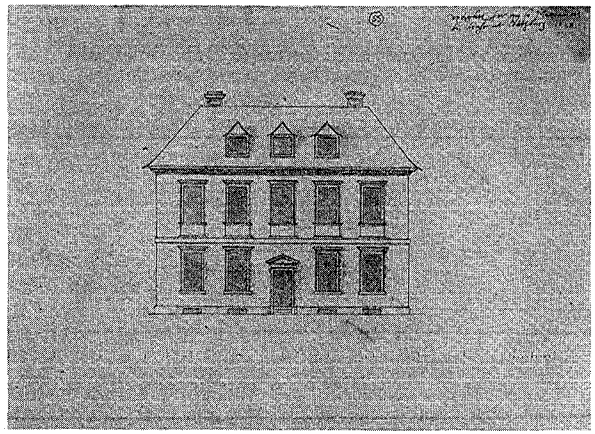
William Talman, the only other important architect to emerge in the period 1660–1690, was too young to have been a member of this expatriate generation. It is not known whether he traveled abroad before he began work at Chatsworth for the fourth earl of Clarendon in 1687. Certainly his eclectic taste would be hard to account for except from exposure to prints and books on continental architecture. By 1660, when Charles II's coronation marked the beginning of the Restoration, van Campen and his progeny, especially Pieter Post, Arent van s'Gravesande, Daniel Stalpaert, and Philips Vingboons, had all built or published a classical *oeuvre* without parallel in England. Some two dozen buildings designed or built by these architects—mostly in Amsterdam and The Hague—have nearly all the characteristics only later to emerge in work by Pratt, May, Winde, Hooke, Talman, and Wren.

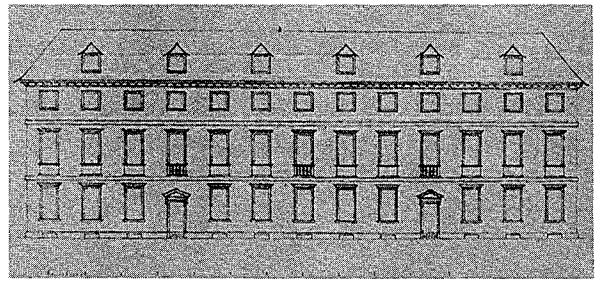


It is important at this point to acknowledge Inigo Jones's prophetic and influential work. His Queen's House at Greenwich (1616–1621), Banqueting House at Whitehall (1619–1622), and Covent Garden in London (c.1619, Britain's first classical square), are influential, well-known works that have less direct relevance to this study than do three less ambitious designs—the Prince's Lodging at Newmarket for the future Charles II (1619), and two unexecuted designs, a house for Lord Maltravers in London (1638) and a design, also dating to 1638, for rowhouses on the Arundel Estate in London. This design

was also associated with Lord Maltravers (figures 51–53). The Prince's Lodging, built for Charles I, produced no immediate progeny in England, unlike van Campen's Mauritshuis that soon saw variations like the Huygens house in The Hague (1633–1637) and Post's Swanenburgh (1645) (figures 54a–d, 59). This last mode of design had almost reached the level of the vernacular by 1648 when Vingboons published his first book. The Prince's Lodging, as it is thought to have been executed, was quite Palladian and generically similar to what would come to the Netherlands. The house consisted of seven bays, the center three of which were framed by a pedimented pavilion. Covered by a steep hipped roof pierced by pedimented dormers, the house also had a high platform basement or ground story. John Summerson considered the room located in the pavilion a nearly perfect double cube, some twenty by forty feet and twenty feet high.

If the Prince's Lodging was important for later directions in English and Dutch architecture, the far simpler designs for the Maltravers and Arundel houses were important precedents for American architecture. The Maltravers house with its two-story, five-bay, fifty-five foot façade and hipped roof, illuminated by three pedimented dormers aligned with the inner three

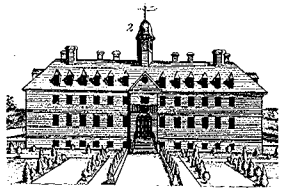




bays of the lower stories, appears to be the earliest prototype anywhere of the type of house Vingboons first popularized in 1648. The Maltravers house is a model for the Governor's Palace, the President's house, and the Brafferton, all three of which are very similar in scale and design, if not in proportion and detail, although the Williamsburg buildings are more vertical and elegant in proportion. In addition, the Governor's Palace had a roof balustrade and cupola, both characteristic of Dutch houses at least as early as Post's Swanenburgh and fully developed by 1686 when Jacob Roman began Het Loo for William and Mary. The Arundel houses are the earliest English prototype for the main ranges of the College's first building; a design much like them appears to have been used by Wren for the Privy Gallery at Whitehall in 1685–1686. The houses, like the first College design, were three stories high, comprised thirteen bays, and were covered by a hipped roof pierced by dormers. The height and length of the façade, like the College, adhered to a roughly 1:3 proportion. Unlike the College, but like buildings that would appear between 1699 and 1718 at Harvard and Yale, double entrances were used because of the function of the building. As prophetic as the Maltravers and Arundel houses were, it is unclear how they might have influenced later English architecture as neither was built.[8]

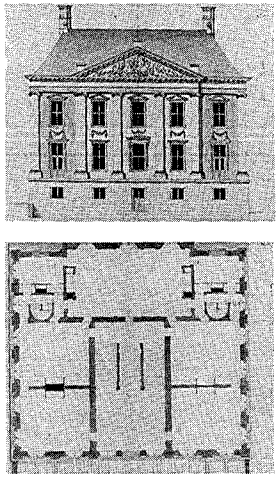
Jacob van Campen's Mauritshuis of 1633, though triple pile, shows within the whole a clear

Fig. 53. Inigo Jones, *Elevation of Rowhouses, Lord Maltravers's Estate, Lothbury, London*, drawing, c. 1638, by kind permission of the Provost and Fellows of Worcester College, Oxford.

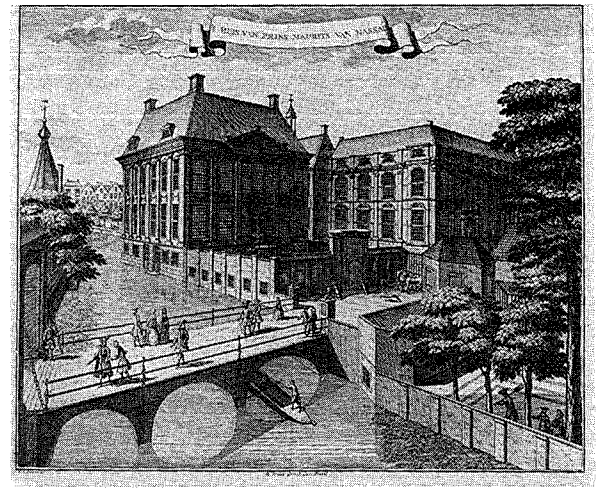


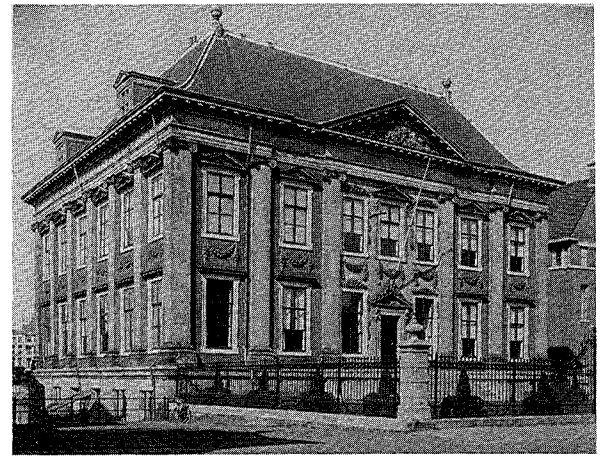
The College Building, detail from the Bodleian Plate, figure 21.

Fig. 52. Inigo Jones, *Elevation, Design for a House for Lord Maltravers, London*, drawing, 1638, The Provost and Fellows of Worcester College, Oxford.



Figs. 54a–b. *Elevation and Plan, Mauritshuis, The Hague, Jacob van Campen, architect, c.1633*, engravings, Koninklijke Bibliotheek, The Hague.





Figs. 54c–d. *Views, Mauritshuis, The Hague, Jacob van Campen, architect, c 1633*, engraving and photograph, The State Service for the Preservation of Historic Monuments in the Netherlands, Zeist.

double pile arrangement of two symmetrical rooms on either side of a central passage that contains the staircase and runs the length of the double pile (figures 54a–d). It is an arrangement that would not appear in England until Pratt's Coleshill of c.1657; in the United States, the Brafferton at the College is the oldest surviving example clearly pointing to this type of plan.[9] It would also be difficult to find a house more like these later English and American houses that is earlier than the Mauritshuis. In the spirit of Jones's Prince's Lodging, it owes a debt to Italy and France, but is Dutch in its relatively small scale, vertical elegance, and fenestration. The perfectly square plan of the Mauritshuis with its three equal parts harmonizes with the facades that are also tripartite. This means the height of the facade from ground to cornice is half the width of the façade, and the hipped roof is half as high as the façade it covers. This illustrates the play of 1:2:3 proportions that is found in the Prince's Lodging and the College. The proportions of the Mauritshuis suggest French influence and are more elegant and vertical than those of Jones's more Italianate schemes.[10]

This new Dutch design was seen the following year when van Campen and his patron, Constantijn Huygens, designed Huygens's nine-bay house at The Hague.[11] Less elegantly proportioned, it had a proper double pile plan, twice as wide as deep. French influence is once again seen by the one-story, single bay pavilions extending forward from both end bays to the road that both created and enclosed the forecourt.[12] Presumably, these were the first instances of such projecting pavilions in the Netherlands, a design that did not arrive in England until Pratt designed Clarendon House in London in 1664. In 1636 Arent van s'Gravesande designed the Sebastiaansdoelen at The Hague, which but for its nine-bay façade seems to be little more than a footnote to the Mauritshuis (figure 55). It also comes closer to Hugh May's Eltham Lodge in Kent (1662), perhaps the most Dutch of all surviving English houses of the period that features a pronounced use of colossal pilasters. Van s'Gravesande's Cloth Hall at Leiden, built in 1640, employed the projecting end pavilions first seen in Holland with the Huygens house. Such use of pavilions may have first come to England with the Volary Building, built shortly after the Restoration for Charles II at Whitehall (figure 10).[13]