

Building in the Middle of “Nowhere”

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If Jefferson was wrong, America is wrong.

If America is right, Jefferson was right.¹

In October of 1797, Maria Jefferson Eppes fell through an opening in an unfinished floor of her father’s house and sprained her ankle badly. It was her wedding day. The ceremony had taken place in the parlor—one of two rooms at Monticello with a temporary roof.²

The Monticello that tourists now visit never existed for Thomas Jefferson, his family, many guests, slaves and employees. A permanent construction site during Jefferson’s lifetime, the building and its surrounding landscape was finally “finished” by admirers long after the founding father’s death. While it is well documented that the plantation was never financially successful and that the perpetual remodeling of the villa contributed to Jefferson’s terminal insolvency,³ the well maintained Monticello museum tells a very different story to the casual visitor. This paper—a preliminary version of the first chapter in a book of case studies in 19th and 20th century architecture in the United States—presents another image of the utopian shrine. That image, a more dynamic and complex thing, mirrors the man himself and sets the stage for another kind of history.

If my book project has a single major premise, it is this: the working architect has been swept under the rug of aesthetics and ideology; architecture is generally considered to be a problem of artistic intention and cultural expression, not one of social production. I am particularly interested in the issue of everyday work—politics, economics, office sociology, media and construction technologies, and the dialog between designers and builders. The project was inspired by the work of the late Robin Evans, particularly the last paragraph of his essay “Translations from Drawing to Building:”

It would be possible, I think, to write a history of Western architecture that would have little to do with style or signification, concentrating instead on the manner of working. A large part of this history would be concerned with the gap between drawing and building.⁴

Although I am sure Evans had more than working drawings in mind when he wrote this essay, clearly his “other” history assumes an inextricable relationship between thinking and doing, between

the immaterial and the material—it assumes that architectural meaning is a consequence of making buildings.

Much has been written about Monticello and its master. The political and personal conflicts of Jefferson are now well represented in popular and scholarly publications. This study does not attempt to add new information to that extensive body. It does, however, acknowledge the fact that Jefferson’s public life and his great domestic project embody some important national paradoxes we still prefer not to ponder. The issues of racism, misogyny and anti-urbanism that haunt Monticello are beyond the scope of this project, but they certainly form the backdrop against which this alternative history of architectural practice begins. This first chapter attempts to describe a paradox particular to our profession, the seeds of which Jefferson himself may have planted.

It is important to mention that Jefferson preferred to call himself a farmer. This designation was, perhaps, a rhetorical position. It is fairly well documented that he only puttered in his garden, leaving the manual labor of farming to his slaves. Furthermore, he avoided any actual oversight of agricultural production at the Monticello estate, leaving that work to overseers or privileged slaves.⁵ In the case of the villa’s design and construction, he did make all his own drawings, personally supervised the work, and occasionally did some actual construction. Monticello was Jefferson’s intellectual retreat, figuratively and literally. The house afforded him an escape from that constant debate between his head and his heart.

The psychoanalyst Erik Erikson has described Monticello as a “maternal shrine.” Erikson sees Jefferson’s mother in the building’s recurring octagonal forms and earth-hugging office wings: the house is a bosom, “enclosed, protected, all warm.”⁶ It is certainly possible to study the building’s morphology for signs of Jefferson’s psychopathologies. A few features stand out. The traditional dependencies (also known as “offices”) of the Virginia plantation such as the kitchen were buried in the earth, in the basement of the main house by Jefferson’s Palladian masterplan. This radical departure from the vernacular of discreet “outbuilding” suppresses evidence of the servants necessary to support Jefferson’s aristocratic lifestyle. The house appears more freestanding, less dependent. Similarly, when the house was enlarged to accommodate his growing family, Jefferson squeezed the stairs to the second floor

into the villa's poche and hid evidence of the second floor on the elevation. The women and children who occupied the upstairs were as concealed as their servants.

Through successive renovations, Jefferson's bedroom and study became more secluded from the house's primary corridors. He also designed systems of blinds to further shield the rooms from the exterior. It is possible, then, to read into the final form of Monticello, Jefferson's attempts to live alone in the house. Apparently he was unsuccessful because during his Presidency—with a major remodeling of Monticello underway—he began plans for Poplar Forest, a small octagonal retreat for himself in an isolated part of his Bedford County estate.

The recent revelations about Jefferson's affair with Sally Hemmings force reconsideration of Jefferson's desire for solitude and further complicate psychological readings of Jefferson's formal designs. While these issues are certainly significant, it should be pointed out that Monticello reached its final form only at the end of Jefferson's life and, for much of the 60 years he worked on the project—"taking down and putting up"—large parts of the house were uninhabitable. This study argues that formal readings of the Monticello museum oversimplify the story and miss the point. It was the process of design and construction that gave Jefferson shelter, not the physical dwelling.

So it appropriate to begin this investigation somewhere in the middle of the action, in 1802, with the house recently deconstructed and undergoing significant revision and expansion:

"...As I suppose Mr. Lilly is digging the Northwest offices and Icehouse I will now give further directions respecting them. The eyes [sic] of those offices is [sic] to be of course exactly on the level of those on the South East side of the hill. But as the North West building is chiefly for coach houses, the floor must be sunk 9 feet deep below the bottom of the plate to let a coach go under it. The icehouse is to be dug 16 feet deeper than that. The icehouse is then to be walled, circular, to a height of 4 feet above the office floors, leaving a door on 3 1/2 feet wide on the N.W. side of it. On that height it is to be joisted with 2 [inch] plank, 9 [inches] wide and laid edge up and 9 [inches] clear apart from one another running across the building, or N.W. and S.E. then to be covered with inch plank. By this means it will depend on the roof of the offices for shelter from rain, and these will be a space of about 2 or 3 [inches] (I do not remember exactly) between it's [sic] covering and the joists of the offices. Thus." -from a letter to James Dinsmore from Thomas Jefferson, March 19, 1802.⁷

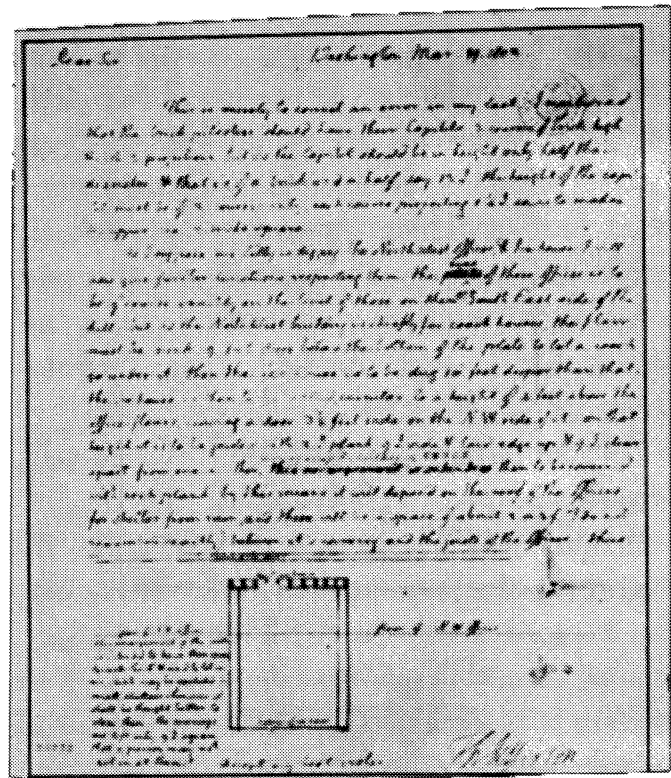


Fig 1. Letter from T. Jefferson to J. Dinsmore, March 19, 1802.

A small simple section of the proposed icehouse takes up the bottom of this one page letter to James Dinsmore, the carpenter Jefferson left in charge of remodeling at Monticello when he assumed his post as President. While Jefferson had previously hired professional craftsmen to work on his dream house, he had personally supervised all aspects of the construction. His relationship with Dinsmore was different. The letters between the two men provide evidence of Jefferson's attempt to remove himself from everyday decision-making and to give more responsibility for the project to his "contractor." As this letter makes painfully clear, Jefferson did not have the professional skills to be an "architect" in the contemporary sense. His instructions are almost entirely verbal. Reading the letter, we can't help but sense the unwritten closing remark above his signature, "Wish I were there with you."

The practice of architecture at the beginning of the 19th century—especially in the United States—was not yet clearly distinguished from that of building construction. So Jefferson's "deficiencies" were shared by many of his contemporaries. The extensive body of conventions that now constitutes architectural construction documentation was in an embryonic state at that time. Calling attention to the "unprofessional" nature of Jefferson's methods would be pointless if it were not for the fact that his architectural expertise was so well respected:

"Mr. Jefferson is the first American who has consulted the Fine Arts to know how to shelter himself from the weather."⁸

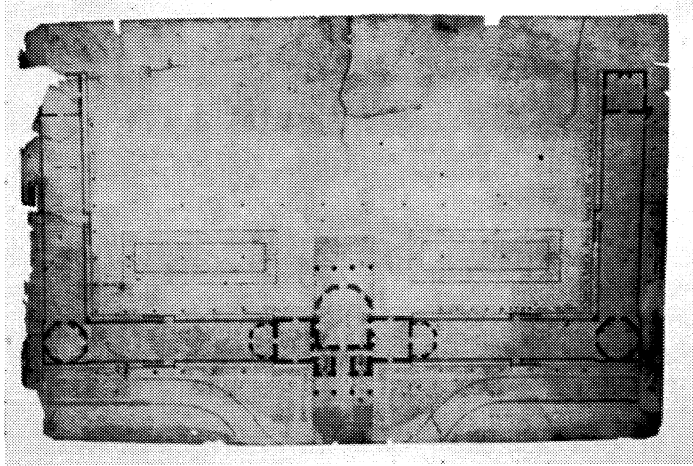


Fig. 2. First floor plan with dependencies, before August 4, 1772.

This comment made early in Monticello's history captures the essence of Jefferson's achievements. While it has not been unusual for American architects to have launched their careers with heady designs for their own or relatives' houses, Jefferson may have been the first. Furthermore, Jefferson almost single handedly established his spare form of neo-classicism as the architectural language of the new republic. He did so primarily through the vehicle of Monticello. Jefferson aggressively promoted his architectural ideas using drawings prepared for his dream house. Visitors (friends, enemies, and assorted dignitaries) to his plantation (and there were many over the years) were treated to an explanation of Jefferson's vision for the estate.⁹ His early plans for the villa were painstakingly drafted according to the rules laid out in Palladio's patternbook. Jefferson clearly distinguished himself from other amateurs of his generation by tirelessly studying architectural theory. What he built at Monticello, then, is emblematic of his great mythological appeal as a self-made man. In building his own house, he had to teach himself everything from architectural theory to brickmaking.

Of particular importance to this study is the fact that Jefferson taught himself how to make architectural drawings. His father was a surveyor, so he learned basic drafting at an early age. His skills improved dramatically over his long life as evidenced by the comparison of his very first floor plan for Monticello and a sketch for the rotunda at the University of Virginia. Even so, Jefferson never made the sort of polished drawings that were common among professionally trained architects in the early 19th century—particularly among those trained in France. He rarely made a freehand drawing and used wash techniques crudely. He seemed most comfortable with simple pen and ink methods but took to using pencils after his exposure to the fashion during his years in Paris. Despite his limited aptitude for drawing, Jefferson was diligent autodidact, studying both from books and absorbing information from the numerous trained professionals that he met.¹⁰

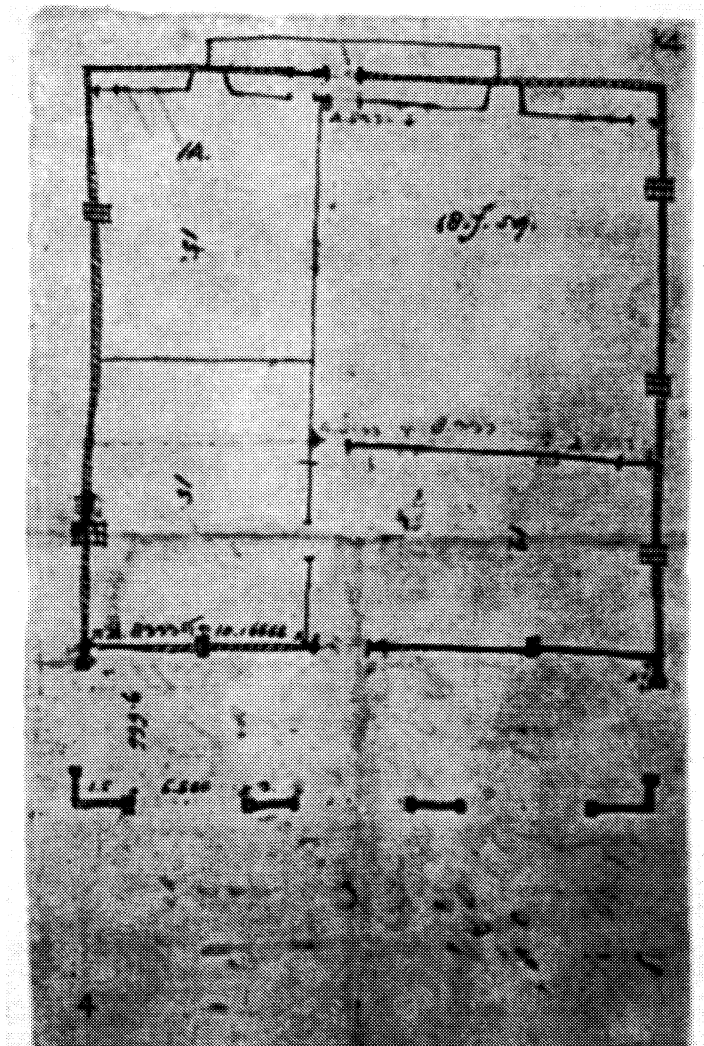


Fig. 3. First plan for Monticello, probably 1767.

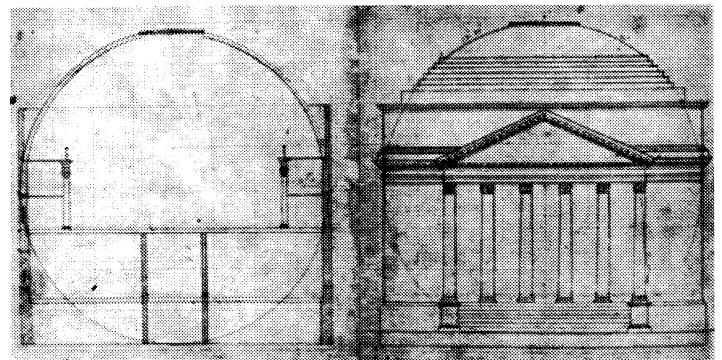


Fig. 4. Sketch for the rotunda at the University of Virginia, 1819 or 1820

Jefferson was a compulsive journal-keeper, letter writer, and archivist of his own papers. Consequently, we have been left with a fairly complete record of his public and private documents. It is important to sort out, in the large archive of Jefferson's drawings, notebooks, and letters that reference Monticello, just what constitutes a construction document. Labeling his correspondence with James Dinsmore as such establishes the essential frame of refer-

ence for this inquiry: the amateur's work does not fall into orthodox categories. When we examine Jefferson's private notebooks, however, we are confronted with a dilemma. Since he acted as his own builder for most of the nearly 60 years he worked on this the project, certainly the notebooks serve as a form of detailing. They are also a record of problem solving and design development. The fugitive boundary between design and construction represented in Jefferson's notebooks is an accurate image of the project. The notebooks, like the construction process, span many decades and paint a picture of the fluid, experimental nature of Jefferson's architectural practice.

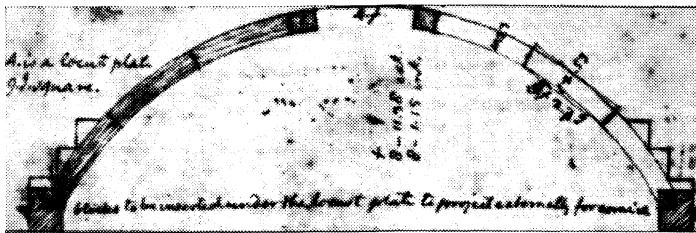


Fig 5. Study for dome construction from notebooks, 1796

It is particularly interesting how much of Jefferson's notebooks are filled with obsessive dimensioning. Born of a religious devotion to Palladian proportioning systems, Jefferson's dimensions are often figured to within 4 or 5 decimal places. This degree of precision was clearly absurd in the context of his actual building, where the margin of error was often as much as 3 inches. So, working back and forth between the ideal and the real, Jefferson made do. The building itself frequently reveals the failure of Jefferson's grasp on reality—most obviously in the case of the false balustrade on the dome: rather than jog the railing awkwardly out around the octagon, its third dimension is reduced to nearly zero, creating the illusion of proportional precision.

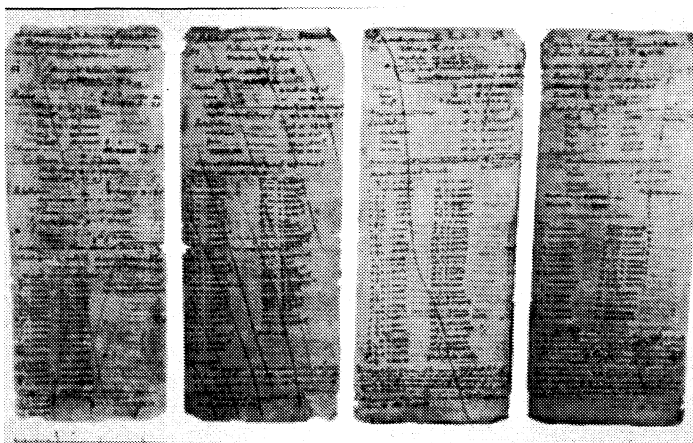


Fig 6. Typical pages from notebooks.

Over the years, Jefferson's difficulty materializing the ideal did not discourage his zealous accounting. In much the same way, his

constant financial bookkeeping, a compulsive tabulating of income and expenses, did not forestall his insolvency. Lurking in between the lines of both apparently rational chronicles is the true story: Jefferson worked hard to repress physical reality.

Visitors to the Monticello project never saw Jefferson's journals and account books. They saw only the building under construction and whatever set of formal plans Jefferson had made at the time. By contrast, Jefferson's workmen, most of them unskilled slaves, never saw either. Most of Jefferson's communication with his crew was verbal. The exception to this practice was his use of full-size templates. Jefferson developed much facility with this particular type of construction document. Those that survive count as some of Jefferson's most captivating architectural drawings. The drawings, and the details they generated, were derivative of plates in Jefferson's respectable library of European precedents. In the form of the template, Jefferson's dematerialized classicism had some efficacy in actual construction. In the remote mountains of Virginia, he was able to translate stone into wood. While this practice was not unusual in the colonial Americas, Jefferson's high profile made the alchemy seem virtuous.

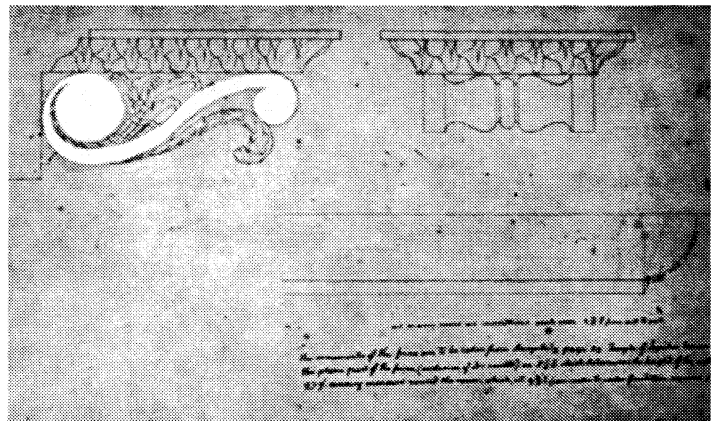


Fig 7. Full size dining room cornice details with cutout for template, 1775 or later.

Trained carpenters were comfortable with the ancient and common practice of template-guided work. While it was difficult for Jefferson to hire trained carpenters and masons to work at his remote Monticello site, he managed to do so occasionally and he used these professionals to help him train his slaves. While some of Jefferson's ornamental details were manufactured in urban centers like Philadelphia (which is where many of his trained workmen were hired), much was made on site. Over time, his combination of workmen trained in European carpentry methods and journeymen slaves became very effective. In Jefferson's later years, the slave John Hemmings made furniture, carriages, and built much of Jefferson's retreat at Poplar Forest.¹¹

In addition to templates for ornamental details, Jefferson made a few drawings that are prototypical of contemporary construction documentation. For example, a section through the office wing at a scale of 1" equals 2', describes Jefferson's proposal for roofing the spaces below the promenades. This drawing was made in 1772,

more than 20 years before construction of the offices began and does not denote what was finally built. It is likely that Jefferson never showed this drawing to anyone. At the time he made it, he did not have any workmen capable of making use of such a sophisticated diagram. He didn't have that luxury until James Dinsmore was hired at the end of the 18th century. Drawings such as this one would have been common in professional offices at that time. The fact that Jefferson spent so much time on this particular drawing further illustrates his desire to be more than a mere amateur. The labor required to make this drawing was, in Jefferson's case, certainly excessive. The effort seems especially poignant because it produced a useless document.

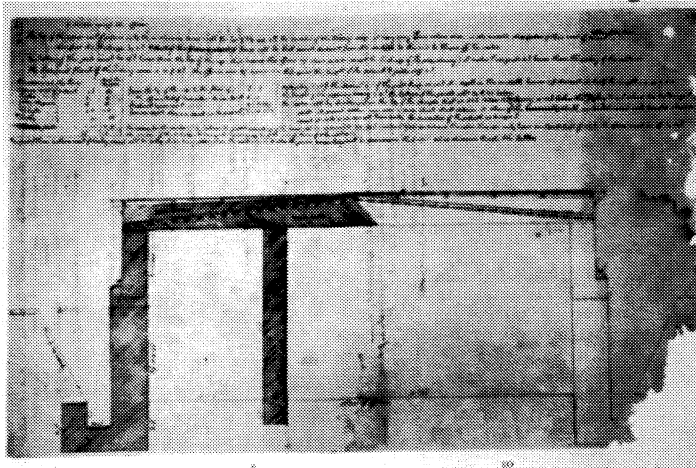


Fig 8. A section across the dependencies, before August 4, 1772.

The office section drawing prefigures future conventions. This drawing does not actively engage the act of construction the way a template does. In keeping with modern practice, the drawing coordinates a set of dimensions and a collection of components. It presents a static diagram of a complex finished product. The drawing is an orthographic armature for information, not a guide for fabrication. Masquerading as a picture of the finished product, the orthographic armature removes the architect from the labor of construction. Built on paper, the artifact defies gravity and materiality. It is possible to make a construction document of this type that does not “work” in the physical world. The template establishes dynamic and physical relationships from eye to hand to tool to material; the relationships described in an orthographic armature are exclusively visual. The gap between drawing and building established by the orthographic armature distinguishes architect from builder.

Jefferson's methods of production at Monticello leave a record of his remarkable capacity for self-education but they also reveal his dependency on orthodoxy. He did not invent, he transplanted. His public promotion of European conventions of design and drawing helped establish the foundation for our contemporary distinction between designer and builder and did much to propel the movement towards professionalization of the practice in the United States. In popular mythology, however, the remote and quixotic project, Monticello, affirms Jefferson's image as the consummate do-it-

yourself. It is in the unconventional construction documentation, Jefferson's notebooks and letter archive that we find affirmation of that persona.

... You expressed a wish to have the sashes for Poplar Forest made of walnut. If you still desire it you will please to let me know that we may have the walnut got to kiln dry along with the plank. I would beg leave however to observe that I am affraid there is none to be had about here but what is so much given to plank that it will render it very unfit for that purpose... James Dinsmore to Thomas Jefferson October 16, 1807.¹²

The dispassionate orthographic drawings of the idealized villa describe none of the difficulties that building in the middle of nowhere presented. They present the improbable as accomplished fact. Jefferson spent an inordinate amount of time on those drawings. He superimposed a rational and abstract habit of mind on that which was often beyond his grasp. In a similar way he superimposed the orthogonal grid on the Louisiana Purchase, as a symbol of democracy and as if nothing were there. The architecture profession's particular form of the orthographic armature has evolved since Jefferson's time. It is at once an extreme oversimplification of physical reality and laborious act of accounting. The profession could profit from taking an irreverent look at the hegemony of the orthographic in construction documentation practice. It begins with an irreverent look at Thomas Jefferson's Monticello.

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NOTES

- ¹James Parton, as quoted in Ellis, Joseph J., *American Sphinx* (New York: Alfred A. Knopf, 1997).
- ²James Bear and Edwin Betts, eds., *The Family Letters of Thomas Jefferson* (Columbia, MI: University of Missouri Press, 1966) pg. 156. Elizabeth Langhorne, *Monticello: A Family Story* (Chapel Hill: Algonquin Books, 1987) pg. 87.
- ³See, for example, Joseph J. Ellis, *American Sphinx*, Jack McLaughlin, *Jefferson and Monticello* (New York: Henry Holt and Co., 1988).
- ⁴Robin Evans, “Translations from Drawing to Building,” *AA Files* No. 12 (Summer, 1986).
- ⁵See Joseph J. Ellis, *American Sphinx*, pg. 142.
- ⁶Jack McLaughlin, *Jefferson and Monticello*, pg. 62.
- ⁷*Thomas Jefferson Papers*, Library of Congress Manuscript Division—now available online through the Library of Congress website.
- ⁸Marquis de Chastellux, a commander of the French army and member of the French Academy, visited Jefferson at Monticello in the spring of 1782 and published an account of his stay. A selection of *Travels in America* is available in Julian Boyd et al, eds., *The Papers of Thomas Jefferson* (Princeton: Princeton Press, 1950-)
- ⁹see Jack McLaughlin, *Jefferson and Monticello*
- ¹⁰Fiske Kimball, *Thomas Jefferson, Architect* (New York: Da Capo Press, 1968). In 1916, the architectural historian Fiske Kimball published an invaluable study of Jefferson's drawings that included a detailed accounting of his use of instruments and paper. I am particularly indebted to Kimball's scholarship. This study would not be possible without the information it provides.
- ¹¹See Jack McLaughlin, *Jefferson and Monticello*, chapters 3 and 4.
- ¹²In the Jefferson Collection at the Massachusetts Historical Society. Many thanks to the staff for their research help.