In 1806 Thomas Jefferson finally turned to a project of great personal consequence. In that year he began construction of his long-awaited villa retreat, which he named Poplar Forest, after its setting in a majestic old-growth forest on the eastern edge of the Blue Ridge Mountains on the Virginia frontier (fig. 10.1). With two more years to go as president and with the rebuilding of Monticello accomplished, Jefferson anxiously launched another building project. While all his architectural projects can be called personal, this one was intimate. Its creation was one of private pleasure, both in the autobiographical nature of its architecture and in the anticipated peace and quiet the retreat would afford him in retirement. Poplar Forest provided the privacy Jefferson had always craved.

After Jefferson’s time the site was lost for more than 150 years—lost to Jefferson histories and lost in original form. While the primary corpus of Jefferson documents and his well-known architectural works have been repeatedly analyzed for over a century, Poplar Forest offers new insights into Thomas Jefferson. In contrast to the more traditional analyses of Jefferson’s buildings, which focus on design and style, this particular study focuses on the construction tradition of Jefferson as practiced at his private retreat. What distinguishes Poplar Forest regarding its workforce, its location, and its materials? Ultimately, what does its construction story tell us about the intellectual role of its designer/supervisor, about construction’s psychological purpose for Thomas Jefferson, or about the reality of construction as dictated by tradition and circumstance?
Fig. 10.1. North (front) elevation of Poplar Forest. Drawing by Mesick Cohen Wilson Baker Architects.

Reading the actual building allows us to make more sense of the conventional documents such as drawings, journals, and letters, enlightening our perspective on Jefferson as a builder, as a materials supplier, as a recruiter of skilled labor, and as a construction manager. Through this understanding of Poplar Forest as an artifact of Jeffersonian construction, we can compare the intended design with the actual execution. For Jefferson the builder, the logistical difficulties of building in the early republic compromised the realization of his ambitious architectural design, yet he never relinquished his patient optimism. Jefferson’s optimism for executing his building projects might very well be the key to understanding his never-ending process of construction—that the act of construction, of "putting up and pulling down," might have been a contributing source for his optimism—of effecting change for some superior result.

Thomas Jefferson’s established role as owner/architect/builder played a major part in this story, but the location of Poplar Forest played an even greater role in its construction. More specifically, location related to supervision, workforce, and market. Poplar Forest was located a three-days’ journey from Jefferson’s home base at Monticello, and much farther from Washington (fig. 10.2). This distance posed obvious challenges for a man with a legendary obsession for detail and control. Distance between the site and its labor force formed the second obstacle; Jefferson used the same group of hired and slave workers for two simultaneous,
yet distant, construction projects. The third challenging factor involved the market location for certain construction materials. Jefferson not only specified uncommon materials that were hard to obtain, he also relied on his remote Monticello shops to produce finished parts for Poplar Forest, with inconvenient consequences regarding transportation. These three things—construction supervision, workers, and materials—run like an autobiographical thread through Thomas Jefferson's life and form a tradition in which to understand his construction practices.

**History of the Site**

The remoteness of Poplar Forest was, in fact, its raison d'être. Situated on the eastern slope of the Blue Ridge Mountains in the county of Bedford, ninety miles south and west from Jefferson's principal house, Monticello, Poplar Forest suited Jefferson's need for a private retreat away from the bustle of visitors.

The property consisted of two working plantations on nearly five thousand acres when it passed to Jefferson's wife upon her father's death in 1773. A workforce of slaves, supervised by overseers, lived on the property adjacent to the cultivated fields. Jefferson relied heavily on its income from tobacco and later wheat. President Jefferson finally set into motion in 1805 plans for his long-awaited villa retreat. Like many things in his life, the execution of a retreat represented a fervent desire long delayed, and in a very real sense, an optimism fulfilled. Brick making began in the fall of 1805. Construction followed in the summer of 1806. By his retirement in 1809, Poplar Forest offered a somewhat habitable site which was finished over the next sixteen years. The ultimate in Jefferson's lifetime of octagonal designs, Poplar Forest equaled a brick repository for his collected and refined architectural concepts, mixing Roman ideas from the ancient world, Palladian interpretations from the Renaissance world, and
French conveniences from the modern world (fig. 10.3). Its landscape design blended architecture and nature in an ongoing horticultural experiment.

Change first occurred in 1814 when Jefferson altered his idiosyncratic retreat house into one for more conventional arrangements with an eastern wing of four service rooms called “offices.” This asymmetrical addition to the house perhaps anticipated grandson Francis Eppes and his wife living there and inheriting the property. Eppes took up residence in 1823 and sold the property in 1828, two years after Jefferson died. Fire struck in 1845, destroying all but the brickwork. Quickly rebuilt in the then-fashionable Greek Revival style in 1846, the house lost Jeffersonian spaces, forms, and details except for the general octagonal shape. Modernization further altered the house in the 1940s.

Rescued in 1983, the house has undergone intensive historical, architectural, and archaeological analysis. Through this architectural analysis a great deal has been learned about Jefferson’s intention for the design, his alterations during construction, the techniques and skills of his workmen, and the subsequent alterations to the building (figs. 10.4, 10.5).

Long-Distance Coordination and Control

The “when” of Poplar Forest’s construction bears a great relationship to its “why” and “how.” Losing patience with public life, Jefferson chose to begin his project in 1806 while still occupied as president in Washington. The impatience signified by this awkward timing must be seen in the context of Jefferson’s lifelong attempts to build a private retreat. Repeated pressures of public life pushed Jefferson’s delayed dream into reality sooner than later. Jefferson must have felt his retreat was almost too late in coming. Nevertheless, his intense desire for privacy put into action another major building project before he had finished paying for the last. Because of his impatience to get started, Jefferson created the challenge of long-distance control and supervision.

Thomas Jefferson’s remote supervision of his construction projects had become routine by 1806. During the initial period of construction of Monticello, 1770–84, Jefferson occupied positions in Williamsburg, Philadelphia, and Richmond, and the post-Paris rebuilding of Monticello took place from 1794 to 1809, years when Jefferson served in Philadelphia as vice president (1797–1800) and then in Washington as president (1801–9).

At Poplar Forest, Jefferson put even greater faith
in the unsupervised workforce and, consequently, on correspondence. He did not enjoy the trusted family supervision there that he had established at Monticello. Besides the field hands, only overseers occupied the plantation. Duties kept him away for as long as two years during the beginning work. He simply sent working drawings and written instructions directly to the workers and occasionally to the overseer. His letters might include the

Fig. 10.5. Restored south elevation of Poplar Forest. Photograph by Robert Ziegler.
phrases "you will find in your instructions," "I now send you a sketch in ink," or "I enclose a drawing." In a letter to the bricklayer after visiting the site for the first construction visit, Jefferson wrote: "Everything is drawn so plainly that no further explanation is necessary. Take care of the drawings as they will be necessary for Mr. Perry, and I do not reserve another copy for him." As important as the working drawings and sketches were, the written instructions were more crucial for their explicit descriptions. Most importantly, Jefferson relied on return letters to inform him of the completed work.

Any letter in this correspondence usually indicated one or more episodes, out of many, in a complicated coordination of details. A typical letter will illustrate this. On June 7, 1808, Jefferson wrote from Washington to his Monticello overseer Edmund Bacon: "As soon as the sashes are ready for Bedford, furnish Mr. Randolph 3 of your best hands, instead of his waterman, who are to carry the sashes, tables, and other things up to Lynchburg, and to give notice of their arrival to Mr. Chisolm, who will then be in Bedford, and will have Jerry's wagon there, which he must send for the things to Lynchburg. In the meantime, they must be lodged at Mr. Brown's at Lynchburg, Jerry is to go to Bedford with his wagon as soon as Mr. Chisolm goes."

This letter indicates many things characteristic of the Poplar Forest process. Foremost is Jefferson's long-distance supervision from the president's house in Washington. Frequently, however, the directives pass through his core of workers and workshops at Monticello, where rebuilding work was still taking place in the first decade of the nineteenth century. The letter principally discusses the Poplar Forest window units, which were made and finished at Monticello rather than at the actual building site. Due to the fragile nature of the glazed sashes, Jefferson instructed that they be sent by boat "up" to Lynchburg. He also directed the slave Jerry and "his wagon" to Poplar Forest, where Hugh Chisolm the bricklayer would also be headed from Monticello. Finally, Jefferson explained that the three slaves were to stay with the goods in Lynchburg until the sashes could be transported by wagon ten miles to the building site. This letter is typical of hundreds that describe the process at Poplar Forest. Other letters between Jefferson and his various workers fill in the details of this constant ebb and flow of directions, materials, and workers at the two sites and of the reality imposed by long-distance supervision.

These letters document the close relationship and trust between Jefferson and his hired workers, as well as the difficulties typically encountered, such as the saga of the window sashes. Jefferson's favorite master house joiner at Monticello, James Dinsmore, made the Poplar Forest sashes at the same time he made new sashes for Monticello. Although the letter refers to "sashes," it is the entire window-frame unit with double-hung and triple-hung sash that was made at Monticello. No documentation ever places Dinsmore at the remote house site, only at the principal carpenter shops at Monticello. In December 1806 Jefferson instructed Dinsmore at the start of the prolonged window project that "The window frames at Poplar Forest may be of poplar dug out of the solid, with locust sills, tho I do not know why the sides and top might not also be of locust dug out of the solid." Typically, this letter reveals Jefferson "thinking out loud" about materials or techniques in corresponding with his most trusted workers whose opinions he valued and with whose decisions he could usually live. Circumstances occasionally determined the matter, as when Dinsmore wrote ten months
later: "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 afraid there is none to be had about here but what is so much given to warp that it will render it very unfit for that purpose." In response, Jefferson allowed Dinsmore the choice based on his best judgment: "I should certainly prefer walnut for the Bedford sashes, because well rubbed on the inside and unpainted it has a richer look than a painted sash, and I believe no wood is more durable but if you cannot get it good, then certainly good pine will be preferable to bad walnut. It must therefore depend on your being able to get good walnut and without delaying the work. The sashes for the lower rooms may be pine." Jefferson not only trusted Dinsmore's opinion, but also frequently took the time to explain his rationale in a mentoring manner. Jefferson's correspondence to other workers reflected the same thoughtful explanation. A letter to carpenter John Perry in 1808 explained the rationale for materials as related to their specifications for production: "The floor at Poplar Forest being intended for an under floor must be laid with oak. Poplar would not hold the nails, and pine is too distant & dear. All the floors of Europe are of oak, so are the decks of ships. Good nailing will secure it against warping. Perhaps it may be easier done in herring bone, as the hall floor at Monticello was. In that case your sleepers should be but 14 I. from center to center, in order that the plank may be cut into two feet lengths."

Jefferson sometimes delayed the Poplar Forest work to take advantage of the best craftsmen at one site instead of two. Such was the case with master painter Richard Barry from Washington, who arrived at Monticello to glaze and varnish window sashes and to faux-grain all the interior and exterior doors to imitate mahogany. Jefferson instructed Barry to glaze the Poplar Forest sashes, still at Monticello, and finish them in a manner similar to the Monticello sashes with a varnished interior side and a painted exterior side. Having delayed the sashes, Jefferson responded to bricklayer Hugh Chisolm's request for the window and door frames in June of 1807 by saying: "if the window frames are ready it is better to put them up & work the wall to them, but if not ready, they are not to be waited for. They can be put in afterwards, tho' with more trouble." Chisolm could not wait and consequently installed the window frames later with considerably more trouble for himself and the carpenters, but not before further delivery delays resulting from Jefferson's choice of materials (fig. 10.6).

The quality of light in a room mattered greatly to Jefferson. This quality depended upon a larger-than-usual size of window glass. Jefferson wrote from Washington to James Donath in Philadelphia in October 1807 to order oversized glass of twelve by eighteen inches "to be very exactly cut to their measures, because in the country those who could trim them are few & awkward & occasion great loss. To be of the same quality you formerly furnished me, that is to say Hamburg or Bohemian glass of the middle thickness." Subsequent letters in October and December 1807, and then January 1808, lament the absence of the glass. The next month Jefferson relayed to Dinsmore that the glass couldn't leave Philadelphia until the Delaware River thawed. The glass eventually made its way to Washington in March, was forwarded to a ship in Alexandria, sailed to Hampton Roads and then upriver to the inland port Richmond, and by late April it had, at last, arrived at Monticello. Two months later Jefferson wrote the letter to Bacon, quoted earlier, instructing that the windows be sent by boat to Poplar Forest.
Dinsmore finally responded to Jefferson in June that he sent fifty-seven metal sash weights for the windows and sheer lead for gutters, among other items on the wagon, but “the sashes will not be ready before harvest.” 26 Jefferson received a letter from Bacon, his overseer, at the end of June confirming this: “The window sashes are not done glazeing [sic].” 25 The next letter from Dinsmore clarified the situation in early July when he reported that he did not have enough sash cord, there were no window pulleys left, and “The waggon was obliged to leave the sash weights behind being so overloaded so that we must send them and the cord along with the sashes, which will be ready in a fortnight.” 26 Thus ended the lengthy ordeal of getting the finished windows to the site to be installed by carpenter John Perry. Jefferson’s use of the shops and craftsmen at Monticello to produce finished parts for Poplar Forest, together with his insistence on hard-to-obtain materials and on the problems of long-distance transportation, exacerbated the difficulties of building in a remote location.

Numerous other materials and parts of the house were at various stages in the same protracted and frustrating sequence of difficult procurement, transportation, and construction. In addition to the window units, solid exterior and interior doors and interior sash doors were made at Monticello and sent to Poplar Forest. Letters between Jefferson and his workmen often mention numerous construction subjects complicated by simultaneous projects at both Poplar Forest and Monticello. They provide a wonderful, yet dense and dizzying, paper trail of construction details squeezed into the busy
life of a president with myriad interests. Jefferson even found time on December 28, 1806, to write James Dinsmore to discuss the type of wood with which to construct the window frames for Poplar Forest. In addition to the usual presidential duties, distractions that day included Meriwether Lewis, who had miraculously arrived back at the president’s house from his long, incredible trip!27

The Workplace,
the Workforce, and the Work
Jefferson’s experience with absentee coordination of building projects did not quite prepare him for the challenges presented by the remote Poplar Forest site. One of the very first letters of communication regarding the beginning brickwork at Poplar Forest should have been an indication of difficulties ahead. In June 1806 Jefferson wrote from the president’s house in Washington to his daughter: “I find by a letter from Chisolm that I shall have to proceed to Bedford almost without stopping in Albemarle. I shall probably be kept there a week or 10 days laying the foundation of the house, which he is not equal to himself.” The 2.5-degree shift in the foundations found during investigation might be related to this letter, presumably reflecting Jefferson’s correction by some precise measurement. Jefferson’s ability, or inclination, to drop presidential duties and take control at the building site says a great deal about his insistence on proper details. However much he might have been tempted to repeat this dedicated commitment, it was only to be repeated once more while he was in office.

Remarkably, a letter written from Poplar Forest could reach Washington in just four days, and yet Chisolm’s early correspondence was infrequent and seemingly timed for needed cash rather than for conscientious reporting. One of only two known Chisolm letters of 1807 in the second season of building starts with “I thought proper to inform you of my progress” and closes “You will please to send me thirty dollars as soon as it is convenient.”28 Workers’ letters helped convey a sense of optimism on Jefferson’s part since they frequently contained only the opinion of the worker. In the case of Hugh Chisolm, that opinion reflected either exaggeration or deceit regarding the quality of what he had done. In later years, perhaps stung by his experience with Chisolm, Jefferson sent his accomplished slave John Hemings to the Poplar Forest to execute classical details with the instructions: “Send me a letter every Wednesday. In these letters state to me exactly what work is done, and what you will still have to do.”29

Jefferson usually repeated the same basic materials, details, and structural techniques in his construction, establishing a tradition known to his workers. The tradition varies, however, in the execution of those materials and details. Brick construction provides one comparative aspect of a Jeffersonian building tradition. Close, and even cursory, analysis of the brickwork at Poplar Forest reveals poorly executed details when compared to Monticello, the University of Virginia, or even to other contemporary buildings of the region. Jefferson sent his Monticello bricklayer Hugh Chisolm to Poplar Forest as a known quantity. What went wrong, even in the absence of supervision, remains a mystery.

Chisolm traveled to Poplar Forest in the fall of 1805 to prepare for brick making.30 He made bricks at the site in 1806, 1807, and 1808. They are typical sand-mold bricks, ranging in color from orange to plum. Special shapes included the corner squint bricks, the beveled fireplace back bricks, the semi-circular column bricks, and the molded Tuscan order bricks for column bases and capitals (fig. 10.7). The exterior bond is Flemish above grade,
and the interior is two- and three-course common bond.\textsuperscript{31} By the second season, Chisolm had finished the walls, columns, the stair pavilions, and the two detached octagonal privies.\textsuperscript{32} Despite the surviving physical evidence that Chisolm did use string lines inside and out, he must not have used a level because the courses are not straight. In several prominent places crude corrections were made for off-level coursing by turning bricks on their stretcher faces to acquire more height. Despite a specific caution from Jefferson to leave enough room for the window openings adjacent to the pavilions, Chisolm got it wrong and had to shift a window opening by cutting one jamb and adding to the other. Chisolm did not bond the pavilions into the main wall; he did not fully align the Flemish bond; and he chose to fully bond stretchers on the inner common bond rather than on the stronger, outer Flemish bond, resulting in a fractured wall when the foundationless pavilions settled. This created structural and conservation problems from the beginning which have only recently been corrected.\textsuperscript{33} The idiosyncratic pattern of makeup bricks in Chisolm's Flemish bond is wildly varied, with little consistency of double headers, double stretchers, bats, or closers. Worse still was the interior brickwork, whose quality, they must have reasoned, would eventually be hidden by plaster. Some inner wythes of brick suggest the shortcut of grouting wall cavities with a liquid mortar rather than using the stronger mortar. Other areas indicate a bricklayer's hurried work of throwing down trowels of mortar on an inner wythe without fully spreading the mortar. Perhaps nervously, Chisolm wrote Jefferson on several occasions remarking on the high quality of his work and stated that the Tuscan columns would be “elegant” when finished. After two seasons of construction, Jefferson made a trip to the site in the fall of 1807. Having seen some of the sloppy brickwork on the lower walls at that time, Jefferson later wrote to Chisolm saying that he must come to Monticello, “where I wish some work done under my own eye.”\textsuperscript{34}

Some of the poor brickwork quality can undoubtedly be attributed to Chisolm's crew, and probably to his own failings at supervision. Jefferson recorded in his account book that he paid Hugh Chisolm twenty dollars a month, “4 inferior hands” ten dollars a month, and at another time he paid Chisolm and his brother John and “two boys.” Jefferson left no opinion of the sloppy brickbond, of the poorly molded capital bricks, or of the incorrect diameter of the Tuscan order columns. For a man obsessed

Fig. 10.7. North portico Tuscan order columns made of brick and rendered with stucco. Photograph by the author.
with these details, he must have been sorely disappointed, if not mortified. Characteristically, Jefferson’s loyalty, and surely his optimism, ran deep when his workers were concerned. He went on to recommended Chisolm to his friends. While Hugh Chisolm’s brother John was left behind to plaster two rooms in the lower level, Hugh left Poplar Forest in 1808 to work for James Madison at Monticello. Jefferson later called Chisolm back to Poplar Forest in 1812 to complete the plastering in the main house and again in 1814 to do more plasterwork as well as the brickwork and stonework for the attached wing of offices. He worked for Jefferson at Monticello as late as 1820.

How did the carpenters fare as compared to the bricklayers? The physical work of hired carpenters John and Reuben Perry cannot be completely judged at Poplar Forest, having been consumed by the fire of 1845. Jefferson employed Charlottesville carpenter/house joiner John Perry at Monticello as early as 1806 and hired him to work on the University of Virginia buildings in the 1810s and 1820s. Perry went back and forth between Monticello and Poplar Forest from 1807 to 1809. During that time at Poplar Forest he installed the wood framing for floor and roof systems, the windows and doors, and the exterior trim. The timber frame roof structure was somewhat typical for the time, except for the octagonal roof shape with the twenty-foot cube room projecting at its center and top. The four-by-ten ceiling joists were connected by four-by-four posts to tapered four-by-six roof rafters (the posts being tenoned to the joist and toenailed to the rafter). The ends of the joists and rafters met in an unusual bird’s-mouth joint.

Fig. 10.8. North-south section drawing looking east. Drawing by Mesick Cohen Wilson Baker Architects.
rather than a butted or false plate juncture (fig. 10.8). After 1809 Reuben Perry, a house joiner in Lynchburg, took over from his brother and installed plaster grounds, among other things, at Poplar Forest. Nailing nogs and ghosts of plaster grounds suggest that the quality of Perry’s work was not superior. Jefferson wrote Reuben Perry in 1812, saying: “I find that for wanting of plumbing the grounds in the parlour, several of them will have to be taken down when we go to putting up the architraves and cornices. I pray you to have strict attention paid to this in the rooms still to be done.” In turn, Perry probably cursed the bricklayer for the inconsistent and nonplumb walls.

Beginning in 1816, and continuing for ten years, Jefferson’s highly trained slave joiner John Hemings executed all the finest finish work on the interior of Poplar Forest. Hemings had apprenticed under the best Monticello craftsmen, held an elevated status among the Jefferson slaves, received an annual salary, and gained his freedom upon Jefferson’s death. Hemings executed Poplar Forest entablatures, sash doors (made in the Monticello shop), and door, window, and wall trim. Hemings also constructed the classical balustrade, the Chippendale-style Chinese rail, and the louvered exterior window blinds. Corresponding with his master regularly about his work, Hemings not only communicated in a fairly literate manner, but as one conversant in classical detail. Jefferson put great trust in Hemings’s work, frequently sending him unaccompanied to Poplar Forest to work with his two carpenter aids at a time when he could have supervised the work himself. Hemings wrote from Poplar Forest to Jefferson in 1821: “I am at work in the morning by the time I can see and the very same at night.” When Jefferson replaced the “rafter roof” over the central twenty-foot cube room with his new favorite “terrass” or “zigzag” roof in 1819, he proudly wrote about Hemings’s work: “a more compleat and satisfactory job I have never seen done.” Hemings continued to work on the house after 1823, even when Jefferson had stopped visiting the property. By that time Jefferson’s grandson Francis Eppes and his wife were living there.

A roof fire in 1825 prompted Jefferson to anxiously write Eppes, saying, “I will spare J. Hem. to you & his two aids and he can repair everything of wood as well or perhaps better than any body there.” Eppes responded that his own man repaired the damaged roof, “but the balustrade and railings are I am afraid beyond his art.” Jefferson quickly replied that Hemings, when he finished covering Monticello’s roof with tin shingles, would go to Poplar Forest and replace the fire-damaged Chestnut shingle roof with tin shingles. Anticipating this, Jefferson ordered his Richmond merchant to “send to Lynchburg 15 boxes of tin addressed to F. Eppes by the first boats.” By July 23 Hemings reported to Jefferson: “we begin to tin the west side of the house and we have used 52 boxes. We shall in a few days finish that side except the Potosis.” The following month Hemings reported that he was putting the final pieces back on the roof, preparing the “chines railing & putting up the ornaments of the hall.” He referred to the Chinese rail on the top of the roof and to the Doric entablature of the central cube dining room (figs. 10.9, 10.10). Hemings most likely referred to the dining room as a “hall” since it was centrally located and probably served as an old-fashioned, all-purpose hall. On this same trip Hemings also repaired the east wing terrass roof and deck and prepared the entablature parts for installation in the parlor on the next trip. One of the last letters Jefferson received before his death was Eppes’s letter of June 23, 1826, sadly informing his grandfather that the newly installed roof was leaking, “not in one but a hundred places.” Eppes blamed this
problem on Hemings, and without the long-term relationship or loyalty of his grandfather's with the carpenter, he was unforgiving. In a letter to his cousin Jeff Randolph after Jefferson's death, Francis commented: "I have just had a workman here examining the roof of the house. There appears to be a radical fault in the putting on of the tin which can be remedied only, by removing and recutting it... I have engaged him thereupon to recover the house so much for J.H. god dam him!" Hemings had made a rare mistake with one of his last known projects at Poplar Forest. This news about his beloved house, and his trusted slave, likely hastened Jefferson's end.

**Transportation**

Along with supervision and workers, the crucial factor of location most affected the transportation of materials. Acquiring and transporting materials to the remote building site posed problems for all concerned. Over a twenty-year period special materials had to be ordered: sheet iron, lead, glass, paint, hardware, entablature ornaments, marble, and tin. While some of these items were domestic, they still had to come from New York, Philadelphia, and Washington via Richmond—Richmond being the closest port. Monticello was frequently designated the first point of delivery for commonly used goods, with needed portions then going on to Poplar Forest. Other items, such as the window frames and sash, came from the Monticello shops. The problem is readily apparent on a map: Monticello and Poplar Forest are both upriver beyond the fall line from Richmond and thus not navigable. Frequent descriptions of "up" in the correspondence no doubt refer to "upriver" because once goods were floated down the Rivanna River from Monticello, they had to be poled up the James River to Lynchburg. Jefferson preferred that delicate goods come by boat and not by wagon. Jefferson directed in the same letter for his Richmond mer-
chant to "send 8 boxes of tin by the first wagon" and to "send me by the first boat" 100 panes of glass. Jefferson wrote to carpenter Reuben Perry in 1811: "My boat will start to Lynchburg as soon as it has got all my flour down from hence ... She will carry the 4. pair of glass doors with their jambs & soffites [sic] & the semicircular windows, all ready glazed for hanging." When corresponding with William Coffee, the New York sculptor who made the significant interior entablature frieze elements for Poplar Forest, Jefferson instructed that the clay ornaments be "forwarded by water" through Richmond to Lynchburg. Jefferson's taste demanded things not produced locally or even in the region. These choices had consequences affecting availability, transportation, and the construction schedule.

Regarding materials produced locally, the most frequent frustration over a fifteen-year building period involved Captain Martin and his sawmill. Getting mill-sawn lumber depended on a consistent water source in the area. Without one, the house became a mixture of pit-sawn and mill-sawn lumber, although Jefferson preferred the expensive option of milling the lumber. Jefferson wrote of one failure: "I shall feel Capt. Martin's disappointment very heavily as we shall be obliged to get our stocks sawed by hand &c to work them green &c for outside work too." On another occasion, Jefferson wrote to his overseer: "I hope Capt. Martin will consider what a loss and disappointment it will be to me if these people [John Hemings and his carpenter assistants] have to return for want of the stuff desired." In that particular case, the overseer replied that "Capt. Martin has completed the first bill of timber, but will not be able for want of water to do any thing with the other this season." John Hemings replied once to Jefferson that he had to go as far as twenty-five miles to find a working mill, although he mentioned the reason most mill owners refused to cut timber in July was for "fear of the worms."

Occasionally Jefferson tried to purchase in Lynchburg items normally made at Monticello. When trying to purchase 6,000 wrought nails from his merchant in Lynchburg in 1815, Jefferson was told that only "cut nails" were available. In March 1809 Jefferson referred to 700 pounds of nails sent from Monticello to Poplar Forest "by Jerry" in 1807. Wrought L-head finishing nails were used to fasten the exterior entablature trim in 1808, but by 1812 machine-cut L-head finishing nails fastened the interior work as well as the balustrade erected in 1815. In this regard Poplar Forest spanned a technological transition, with the rebuilt Monticello of the 1790s constructed entirely with wrought nails and the University of Virginia from 1817 onward constructed with cut nails.

For twenty years, Jefferson's workmen relied on a single wagon and a cart, split between Monticello and Poplar Forest. "Jerry's waggon" proved indispensable for transporting materials as well as the seasonal expedition of workers and their tools. It was mentioned during all times of the year—sometimes as a custom, as in "when the waggon goes in the spring" or "when the waggon goes at Christmas time." Jefferson frequently instructed that the wagon or cart "must stay but one day" or not go one day prior to the workers being ready to come home. In a letter of June 1807, Jefferson wrote: "P.S. We are in great distress for Jerry's waggon at Monticello. I pray you therefore to press the finishing what is for him to do at Poplar Forest." Once there, the wagon or cart did many things such as hauling wheat into Lynchburg and picking up sand for plaster on the return trip, hauling lime, and hauling a "waggon load of plank." The wagon most often transported finished goods from the Monticello workshops in
the early years: chairs, tables, books, or musical instruments. In the later years, when the house was being finished through seasonal expeditions, the wagon generally helped Johnny Hemings and “his gang” or “his people.” In 1819 Jefferson wrote from Poplar Forest to request a carpenter and his three helpers from Monticello, explaining: “It is so inconvenient for the house to spare the little mule and cart, and so few tools will be wanting here that they may bring them on their shoulders. They will need 2 hand saws, 2 jack planes, 2 pair chisels broad and narrow, some augers for common framing, a foot adze, and one of the narrow adzes which were made here to dig gutters in the joists. These things divided among three will weigh little. Let them bring their own provision for the road.”\textsuperscript{63} Clearly, the wagon did its duty for materials and goods and the workers generally walked, except in rare occasions or when the wagon was free, as evidenced in this letter from Jefferson to Hemings: “The carpenters will go up in the spring ... Lilburne has a hurt on his leg which will disable him from walking back. Eston must drive the cart therefore and Lilburne stay and come in the waggon.”\textsuperscript{64}

**Optimistic Traditions**

So far this study has examined the construction context of Poplar Forest—the materials, the workers, the effort, and the constructed work. It has also attempted to tie those threads to its owner/builder’s intention and to the site’s function. We can move beyond this to glimpse an insight into the character of Thomas Jefferson. Jefferson’s difficulties of long-distance supervision during his most demanding public office, the remoteness of Poplar Forest from the central workforce and workshops at Monticello, and the extensive effort to obtain certain manufactured goods places the construction of Poplar Forest squarely in a history and tradition of Jefferson’s construction choices and their consequences, both in terms of process and product.

Beyond the mere observation that unsupervised work can be inferior when compared to supervised, can we read more into the details at Poplar Forest? I’d like to suggest we can. There existed a relationship between Jefferson, his architecture, and his workers which in some ways seems a metaphor for understanding him as a person.\textsuperscript{65} When seen in the broadest perspective, Thomas Jefferson exhibited a personal and professional optimism fueled by a clarity of purpose most conveniently wrapped up in the title of Enlightenment. Jefferson’s fundamental goal was to create order and reason in the world, both at large and his own.\textsuperscript{66} Much has been written about Jefferson’s specific political optimism and his intellectual dedication to those ends. Might we not say that Jefferson’s intellectual capacity and need for architecture, and all that the construction efforts returned to him, benefited from this optimistic drive? Jefferson never stopped his own process of architectural evolution, whether in structure, convenience, or beauty. Adding the indoor toilets, skylights, and alcove beds together with the favorite forms of Palladian orders and regional construction details became the interesting personal process that we call both autobiographical and idiosyncratic. At the same time, the lifelong growth and maturity of Jefferson the designer, supervisor, and builder belies the fact that the reality of construction sometimes got harder, as in the case of Poplar Forest, rather than easier. The extreme difficulties of getting the Poplar Forest window units built, shipped, and installed underlies both an intention and desire for a certain detail and a practiced patience (optimism) for achieving those goals. Observing the quality of brickwork at Poplar Forest after his long absence,
Jefferson should have dismissed Hugh Chisolm without further adieu, much less without further work. The opposite actually happened. Against all odds of time and money, Jefferson pursued his architectural ideas and ideals with an amazing commitment driven by his optimism. At times this optimism can only be summarized as either naive or irrational. Financially, Jefferson’s well-known debt at the end of his life should have precluded any other major personal building projects. Jefferson scholars who have most closely studied his habitual record keeping state that “the daily ritual of recording pecuniary events gave Jefferson an artificial sense of order in his financial world.” Coming on the heels of an overextended personal budget that had paid for an extravagant, yet federally underfunded, presidential lifestyle, Jefferson might have been expected to complete the restyled and reconstructed Monticello. However, to also incur the expense of a completely new villa retreat indicated a fundamental need, a necessity, for a private man long trapped in a public life. Had the need for a retreat been less of a psychological necessity, Jefferson could have deferred construction of Poplar Forest until better financial times, or for just three years until he left the presidency and could supervise the work himself, as he occasionally did for fourteen years with the subsequent finishing of the interior. He couldn’t wait; the retreat represented a dream unrealized for too long. The function of Poplar Forest suited the irrational means to its end perfectly. One characterized definition of the classic villa, especially as conceived by Jefferson from its Roman prototypes, was its power and ability to be “impervious to reality.” To Jefferson, a large part of his reality seemed rooted in an optimistic vision of future possibilities, not the least of which was his own villa retreat, where he could block out worries and still contemplate hopes and dreams. With the physical and mental limits of the once nearby frontier now pushed to the western sea, Jefferson could look out the expansive lights of the triple-sash parlor/library windows at Poplar Forest and still think of the future. His most frequent Poplar Forest companions were his granddaughters Ellen and Cornelia, representing the next generation and learning at his side.

The incredibly minute details Jefferson carefully noted in letters to his workers became juxtaposed with the reality of the workers’ skill and the unsupervised results, whether good or bad. Ironically, the quality of work produced by Jefferson’s most highly paid workers fell beneath that of his slave. While the record is embarrassingly silent on Jefferson’s opinion of Chisolm’s brickwork, the bricklayer’s incorrectly proportioned Tuscan columns on the front and back porticos of Poplar Forest become the defining character of the place: the most consistent intellectual tradition of Jefferson’s architectural efforts, and yet the most noticeably wrong feature of his intimate and cherished retreat. Perhaps like the poplar tree logs serving as temporary columns on the west facade of Monticello, which for so long waited correct classical replacements, or the east facade stone columns at Monticello, so damaged in their rebuilding that they required a painted faux stone finish, the improper Poplar Forest columns probably stood noted on an optimist’s “to redo” list never realized. Similarly, the wing of four service rooms added to the east side of the house in 1814 clearly called attention in its asymmetrical form to a balancing future wing unrealized on the west. Out of lifelong habit, Jefferson’s mind could not stop the physical and metaphysical pairing of architectural improvement with a future state of perfection and his own sense of completeness. With his life quickly
drawing to a close, several years after he had stopped traveling to Poplar Forest, Jefferson ordered John Hemings to finally install the entablature ornaments for the parlor at Poplar Forest, which for five years had been sitting in their boxes. This final directive completed, at long last, the retreat Jefferson never seemed too anxious to complete once he had occupied it.\textsuperscript{72}

Jefferson’s highly controlled and personal desire for specific details, even details long delayed, had become inextricably tied to his experience and outlook on life: one of difficulty and optimism. Yet, as we see in some of the details of Poplar Forest, those ideals were compromised in their physical manifestation, a contradiction among many in Jefferson’s life which he justified or accepted in his own way. Jefferson’s need to control details represented perhaps some anchor of stability in a life of incredible change wrought by political as well as personal circumstances. Distance and absence from the building site, especially when the site moved to the frontier and when the owner/builder happened to be president, increased the need for control through correspondence, both in a psychological as well as a practical sense. In other ways, the close attention to detail on paper sometimes obscured the reality rather than confirming it, like in his detailed financial record keeping. Jefferson’s architectural details represented his own contribution to the spread of civility and refinement, in both public and private venues, and they extended his lifelong commitment to Enlightenment beliefs as well as providing some order and reason in his own world, even if that world at Poplar Forest became detached from reality.\textsuperscript{73} Moreover, Jefferson’s characteristic optimism extended to his workers, resulting in a trust well secured by habit, if not always borne out by results. He trusted his workers to help him achieve his lifelong goal of constructing a physical place where his optimism could renew itself.\textsuperscript{74} Thomas Jefferson created his villa retreat within an intellectual harmony of his own mind and for his own mind. That he accomplished what he did regardless of the inherent difficulties provides us with a humanistic, sympathetic, and understandable perspective of this place and its creator.\textsuperscript{75}

\textbf{Notes}

\textit{ABBREVIATIONS}

\begin{tabular}{ll}
TJ & Thomas Jefferson \\
CSmH & Henry Huntington Library, San Marino, Calif. \\
DLC & Library of Congress, Washington \\
MHi & Massachusetts Historical Society, Boston \\
PPAMP & American Philosophical Society, Philadelphia \\
Vi & Virginia State Library and Archives, Richmond \\
ViW & Swem Library, William and Mary University, Williamsburg \\
ViU & University of Virginia, Charlottesville \\
\end{tabular}

1. The only definitive history of Poplar Forest is S. Allen Chambers, \textit{Poplar Forest and Thomas Jefferson} (Forest, Va.: Corporation for Jefferson’s Poplar Forest, 1993, 1998). This history did not include the investigation details of the house itself, except for the preliminary restoration drawings.


4. The two best overall treatments of Jefferson as a builder are Richard C. Cote, “The

3. Archaeologists have been exploring two slave quarter sites that appear to predate the villa house. An overseer's house was used by Jefferson on the few trips he made to the property before constructing the house in 1806.


7. For a history of Jefferson's attempts at retreats see McDonald, Notes II; Mark Wenger has discovered a relationship between Jefferson's designs for the governor's palace in Williamsburg and a Poplar Forest plat, providing a possible date of 1781 for the plat; "Jefferson's Designs for Remodeling the Governor's Palace," Winterthur Portfolio 32, no. 4 (winter 1997). The significance of this date is that Jefferson drew a small house plan on the plat, indicating an early desire for the tract as a retreat; Jefferson later added a second plan to the plat showing his evolution to the full octagon form he eventually constructed.

8. Jefferson's first important public work, the Virginia State Capitol, was also constructed without his supervision. He wrote virtually nothing about it, being disappointed after having seen it upon his return from Paris. This certainly provided a good early warning about unsupervised construction projects.

9. At Monticello, Jefferson relied on family and overseers to supervise the work when he was away. Occasionally he wrote that the workers "must suspend their work during my absence" because he could not "trust them with its execution in my absence" (TJ to Count Constantin Francois de Volney, Apr. 3, 1797, DLC, quoted in McLaughlin, Jefferson and Monticello, 262). For the most part, however, work at Monticello proceeded without its owner's presence. Jefferson was aware of the potential social problems of unsupervised workers when left without a coordinating and mediating owner. Most often he chose to ignore or accept the inherent and inevitable traits. In one such episode, at Poplar Forest, plasterer John Richardson complained to Jefferson about an overseer in a letter of resignation: "I have quitet for several reasons which I will inform you, there is too much party work going on here" (John Richardson
to TJ, Jan. 16, 1810, MHi-7). Following a dispute at Monticello between an overseer and a worker, Jefferson explained: “It is my rule never to take a side in any part in the quarrels of others, not to inquire into them” (TJ to James Oldham, Nov. 30, 1804, DLC). Jefferson’s optimism for things in general, and especially for people, extended to his “family” of workers, in whom he put a strong faith.

10. From his remote location in Washington, Jefferson directed and coordinated all manner of construction: detailed instructions to hired and slave workers, work and travel schedules, wagons, and the flow of materials between many locations. Jefferson also needed to coordinate the supervision of field hands and crop production at Poplar Forest. Cash crops, especially at Poplar Forest, formed the basis for either cash or speculation credit, paying for the purchase, movement, and use of materials and construction labor. To keep track of this effort, Jefferson used a polygraph machine to make copies of his own letters to workers and overseers. The flow of letters back and forth gives us an explicit view of his process. The obvious exception was when he could supervise the construction work at Poplar Forest directly during his occasional visits after 1809. In those cases the written record ceases except when Jefferson needed something from the Monticello workshops.

11. TJ to Hugh Chisolm, Sept. 7, 1806, MHi-5.
12. Unfortunately none of the working drawings referred to in the letters are known to survive.
14. Jefferson first constructed Monticello between 1770 and 1784. When he left for France in 1784 the house was not quite finished, lacking interior trim. The rebuilding of Monticello began in 1794 and continued until about 1809, when all but the porticos were completed.
15. TJ to James Dinsmore, Dec. 28, 1806, Vi, TJ Personal Papers, 24807.
17. TJ to James Dinsmore, Oct. 25, 1807, MHi-5.
18. TJ to John Perry, Mar. 29, 1808, CSmH-6.

Another letter to Jefferson’s overseer at Poplar Forest in 1815 went into more detail about having a stock of scantling produced (TJ to Joel Yancey, July 25, 1815, MHi-8.):

[G]ive the inclosed bill to Mr. Atkinson & get him to saw it immediately so as to have it ready on the arrival of the carpenters. There are, I imagine, belted poplars in the cleared grounds sufficient to furnish the stocks, for I do not suppose they will take more than 3 or 4 trees. He will need help in pitting, but the shorter he makes the stocks the less help he will need.

A Note for Mr. Atkinson.

I shall have occasion for 600 feet, running measure of scantling 5 1/4 inches square, clear of the saw, all of heart poplar, without a speck of sap. When we use it will be cut into lengths of 2 ft. 8 1/2. for balusters. The stocks therefore must be of such lengths as to cut into these smaller lengths of 2 ft. 8 1/2 without waste.

For example a stock of 8 feet will give 3 lengths
10 f. 8 1/2 l. ———— 4 lengths
13 1/2 f. 4 1/2 l. ———— 5 lengths
16 1/2 f. ———— 6 lengths

to be done immediately so as to be ready on our arrival.

20. The first-period doors of Monticello (1770s) have raised panels. The second-period doors (1790s) have flat panels. Barry's graining technique was to run a double stripe as imitation inlay around the edge of the raised panels or in the position of the raised edge on the flat panels, both with a burl pattern in the area of the sloping panel. The question of whether the stripe was put on the raised panels just to match the imitative one on the flat panel has not been completely answered. Other examples such as Prestwould Plantation would indicate that raised panels can have a stripe on their edge. Paint analyst Frank Welsh believes this was common practice. The question of whether the exterior face of a faux-grained door would have imitation inlay or burl is also at question. Again, Prestwould Plantation in Mecklenburg County, Va., has a stripe on the exterior face of a grained door. Paint analysis by Frank Welsh on the south parlor door at Monticello revealed graining but no details about the inlay or burl.

21. TJ to Hugh Chisolm, June 5, 1807, MHi-5.

22. Given the usual practice of spanning masonry openings with brick arches, putting in a window unit at a later time would not have been a major challenge. Jefferson's designs were not usual, however. He preferred that the segmental brick window arches be hidden on the exterior. This posed a problem for the bricklayer. What would hold up the outer four-inch veneer of brickwork in front of the arch and its arched white oak lintel beneath? Investigation revealed that Chisolm constructed a rough frame against the straight portions of the splayed window jambs with a vertical one-inch board, above which spanned the opening and evidently held a temporary board to support the brickwork.

23. TJ to James Donath, Oct. 9, 1807, MHi-5.


28. Hugh Chisolm to TJ, June 1, 1807, MHi-5.

29. TJ to John Hemings, Nov. 27, 1819, MHi-10.


31. Lynchburg builders continued to employ Flemish bond through the 1840s.

32. The two stair pavilions he added after the main walls were done, telling Jefferson, “I had rather put them up after than to build them with the out walls of the house as the angles where they join interfere so much with the line that I work by”; Hugh Chisolm to TJ, June 1, 1807, MHi-5. Chisolm referred to a string line held by wrought-iron pins pushed into wet mortar for setting level brick courses.

33. The stair pavilions are an interesting feature of the Poplar Forest plan. Based on a letter Jefferson sent to Chisolm after the initial visit when construction began, and also on a preliminary floor plan, the stair pavilions were not part of the initial scheme, nor were the porticos, leaving just a pure octagonal form. Like many ideal things compromised for their practicality, Jefferson then realized that the pavilions were absolutely necessary as the only means of communicating with the lower floor; even with their addition the food had to come through the east chamber to reach the central dining room. This is why the east chamber was altered in 1816, probably with the sealing of the central alcove bed in order to provide a more public “pantry” on the south side of the room for food coming up the east stairs from the newly constructed wing. McLaughlin proposes that the staircase in Jefferson's work
stood as a symbol of democratic life when compared to European prototypes (Biography of a Builder, 6–7). He goes on to suggest that the Monticello staircases, in addition to their comparative plain and democratic form, also reflected a psychological symbol of Jefferson’s personality in their “dark, cramped” way, symbolic of “its owner’s difficulties with free access and disclosure.” If we engage this psychological explanation, we might then comment on the Poplar Forest stair pavilions: they were wider, less steep and more comfortable, filled with plenty of light from a huge lunette window, and yet privately dedicated, one pavilion for each large chamber, and providing private access to the lower floor or to the outdoors—an open, free, and unguarded state of mind, perhaps. Multiple means of access, even in such a private house, echoed Jefferson’s infatuation with French plans, even when made to work in symmetrical Palladian forms. Each stair would also provide access to the exterior octagonal necessities beyond the respective mounds on the east and west.

However, in keeping with personal privacy and convenience, Jefferson’s west stair pavilion became even more private when he retroactively squeezed an indoor toilet (not a water closet) underneath the stairs, similar to the need for one added to his chamber suite at Monticello.

34. TJ to Hugh Chisolm, June 5, 1807, MHi-5.
35. This assumes the same roof framing details as at Monticello, which had just been completed by the same workers.
36. TJ to Reuben Perry, Dec. 10, 1812, ViW.
37. TJ to Brockenborough, Sept. 1, 1819, DLC-51.
38. TJ to Francis Eppes, Feb. 17, 1825, ViU-10.
40. Jefferson used the tin shingles at the University of Virginia as well. Monticello has restored their tin shingle roof and the university has restored four out of ten pavilion roofs. Poplar Forest now features a restored tin shingle roof.

Jefferson reported to a friend about the tin covering: “Altho the operation is so simple that any person of common sense may learn it in 3 hours as well as 3 years it would take sheets of writing to give all its details. . . . The tin costs us 13. D. a box, which does a square and a half (150 sq. ft.) and a man puts it on in 2 days. The machine we use to make the tuck is not worth a dollar.” TJ to Pryor, Oct. 16, 1824, MHi-12.

41. TJ to Peyton, May 6, 1825, MHi-12.
42. John Hemings to TJ, July 23, 1825, MHi-12.
43. Ibid., Aug. 7, 1825, MHi-12.
44. Francis Eppes to TJ, June 23, 1826, MHi-14.
45. Francis Eppes to Thomas Jefferson Randolph, Sept. 21, 1826, ViU-1397-5, Edgehill Randolph Papers. It seems, in fact, that Hemings must have installed the tin shingles in their whole sizes of ten by thirteen inches instead of half sizes. Jefferson once cautioned a friend: “Some workmen with us put the tin on in whole sheets. The half sheet is what 100 years experience elsewhere has approved. In larger pieces it may contact and dilate too sensibly, and there is no reason to justify the innovation” (TJ to Paxton, Sept. 10, 1824, MHi-12). To another friend Jefferson speculated: “If your tin covering has failed, it must have been from unskilfulness. Perhaps it was been put on in whole sheets, or plain like shingles, which will not do” (TJ to Pryor, Oct. 16, 1824, MHi-12).

46. The subject of manufactured goods and their movement and marketing is a larger subject under current research by the author. Research regarding the state of consumer goods in Richmond relative to the War of 1812 shows that a transition occurred from foreign to domestically produced goods and that the war, trade restrictions, and blockades only had a
minor effect on availability. Current research is being conducted into Lynchburg goods regarding their availability upriver from Richmond.

47. Flat-bottomed bateaus, having carried tobacco or wheat downriver from Monticello or Lynchburg to Richmond, could bring goods back up—although with much more difficulty above the fall line, where ships could not travel. Shipping from around the world to upriver ports at the fall line, such as Richmond, posed little problem. An unusual example is that of the Wickham House in Richmond. John Wickham commissioned Alexander Parris of New England to design and build his fashionable new house in 1812. Parris, coming south due to the recession around Boston, not only provided a New England feel to the design of the house (later critiqued by Benjamin Latrobe), but he also used his crew of New England workers who had also come with him and even constructed a good deal of the interior using New England white pine! It is a powerful example of economic determinism regarding labor and materials relative to transportation and distance, not to mention the conservative choices of a Tory owner.

48. TJ to Reuben Perry, May 10, 1811, ViW. In error, Jefferson's Richmond merchant thought the shipping address wrong and sent the Poplar Forest ornaments to Monticello instead of going by boat to Lynchburg. Jefferson wrote to Coffee of the mistake, saying: "Col. Peyton's mistake now made it necessary for me to send them in a waggon by land 90 miles... The consequence which falls to my lot by that of Col. P. I hope I may remedy by bedding my boxes in a good quantity of straw in the waggon." In addition, Coffee mistakenly confused the ornaments for the university with the ornaments for Poplar Forest, an error Jefferson caught at Monticello before the boxes were redirected.

49. TJ to William Coffee, Apr. 30, 1823, ViU-9. The middle room entablature at Poplar Forest is one Jefferson made up for that room from two different sources. When questioned about the inappropriate elements for the Baths of Diocletian, Jefferson responded that it was a "fancy which I can indulge in my own case, altho in a public work I feel bound to follow authority strictly" (TJ to William Coffee, July 10, 1822, MHi-11). Not surprisingly, the orders are hierarchical, beginning with a Tuscan order on the exterior and in the front passage, to a Doric order (albeit altered) in the middle room, and finally an Ionic order in the south parlor. The surrounding secondary chambers contained Tuscan orders as evidenced by the size of their grounds and ghost marks. All these orders follow Palladio's proportions with the exception of the diameter of the columns.

50. There is no mention of how the earliest framing members for the house were produced. The earliest mention of mill-sawn lumber is in 1810; most references after that time are to having stocks taken to the mill.

51. Ironically, the reconstruction of Poplar Forest after the fire in 1846 was entirely with hewn and pit-sawn lumber, mostly poplar. Houses in Lynchburg as late as the 1850s were still using pit-sawn lumber, although usually mixed with milled sash-sawn and circular-sawn lumber. The Hutter family barn from 1856 (date in mortar) at Poplar Forest was constructed of both new pit-sawn and circular-sawn lumber (dendrochronology dated to 1853) and reused pit-sawn lumber from a Jefferson barn constructed circa 1805 (dendrochronology date) and torn down in 1848 (Hutter Farm Journal). The two brick octagonal privies at Poplar Forest (1808) were constructed with pit-sawn joists and rafters.

52. TJ to Joel Yancey, Sept. 13, 1816. MHi-8.
53. Ibid., June 25, 1819, MHi-10.
54. Joel Yancey to TJ, July 1, 1819, MHi-10.
56. In 1810 Thomas Jefferson wrote to Gideon Granger about Lynchburg: “Lynchburg is perhaps the most rising place in the U.S. It is at the head of the navigation of James River, and receives all the produce of the Southwestern quarter of Virginia...it ranks now next to Richmond in importance, it is already ahead of Petersburg with the advantage of being rapidly rising while Petersburg is declining.” Quoted in S. Allen Chambers, *Lynchburg: An Architectural History* (Charlottesville: Univ. of Virginia Press, 1981), 38.
57. Jefferson to Archibald Robertson, Sept. 29, 1815, MHi-8. “Be pleased to send me by the bearer 3000 nails of the length of the longest sample sent & 3000 of the shortest. Wrought nails would be preferred, but cut ones will do.” The response was: “Wrought nails of the description you wanted, could not be procured, I have therefore sent cuts.” Even though Jefferson’s nailery had been established at Monticello in 1794 and produced cut nails by 1796, it only produced a fourpenny cut nail. All other nails made by the slave boys were wrought. In a memorandum of 1807 to Monticello overseer Edmund Bacon, Jefferson states: “Get Mr. Perry and Mr. Dinsmore, an estimate of all the nails we shall want for the house in Bedford; and when you have no orders to execute for others, let the boys be making them, and keep them separate from all others; and when the wagon goes up at Christmas, send what then shall be ready” (TJ memorandum to Mr. Bacon, Dec. 1807, cited in Edwin Morris Betts, ed., *Thomas Jefferson’s Garden Book* (Philadelphia: American Philosophical Society, 1944), 357–58)
59. Based on surviving examples found during investigation.
60. Information from Robert Self regarding Monticello; inspection of Monticello and university buildings by the author. The university framing nails are hand-headed cut nails. Investigation of buildings in the Lynchburg area confirm an early use of small lath-size cut nails around 1800 followed shortly by the use of hand-headed cut nails (Woodborne: rural) and by mature cut nails by at least 1836 (Rosedale: rural setting) and 1840 (202 Norwood: urban setting). The 1846 rebuilding of Poplar Forest after the fire was done with mature cut nails and large wrought iron spikes used in the roof system; although some wrought nails were used in some attic framing, but might have been reused. Wrought rosehead and T-head nails of various sizes were found in the investigation of the house in a first-period Jefferson context, most of which was associated with the roof.
61. TJ to Hugh Chisolm, June 5, 1807, MHi-5.
62. TJ to Goodman, Oct. 18, 1812, CSmH.
63. TJ to Edmund Meeks, July 19, 1819, MHi-10.
64. TJ to John Hemings, Dec. 18, 1821, MHi-11. When the wagon and cart were unavailable, Hemings asked Jefferson to send the mules and their “tuge harness” from Monticello. Curiosity about the unreasonable reliance on one shared wagon and cart for twenty years was answered by the 1826 inventory at Jefferson’s death. It listed just “1 road waggan at $100” and “1 ox cart at $25.”
65. I am indebted to Mark R. Wenger, who challenged me to find the humanistic meaning in the construction story of Poplar Forest.
66. Dumas Malone, in his six-volume biography of Jefferson, refers repeatedly to his optimism as a lifelong character trait.
67. Jefferson recommended the bricklayer to his friends and used him again at Poplar Forest
and at Monticello. Of more significance, Jefferson chose Chisolm to undertake the brickwork at the first pavilion at the University of Virginia in 1817, a high honor in Jefferson's eyes. Despite the good comparative quality of Chisolm's work at Pavilion VII, especially with oil-stock brick, Jefferson's optimistic belief in his bricklayer faltered with a final recognition of his flaws. Chisolm did no further work at the university. Jefferson's displeasure with Chisolm's work on this most idealistic of projects resulted in some of the tightest masonry specifications of the time for the remaining university construction, written, optimism aside, for the yet-untried and unknown personalities who would finish the work (Lynchburg Press and Public Advertiser, Mar. 19, 1819). For more information on the initial construction story of the University of Virginia, see William B. O'Neal, Jefferson's Buildings at the University of Virginia: The Rotunda (Charlottesville: Univ. of Virginia Press, 1960); Cote, “Architectural Workmen”; Richard G. Wilson, ed., Thomas Jefferson’s Academical Village (Charlottesville: Univ. of Virginia Press, 1993); Travis McDonald “The Brickwork at Poplar Forest: Mr. Jefferson Builds His Dream House,” APT 27, no. 1–2 (1996): 36–46; and Mendel Mesick Cohen Waite Hall, series of historic structure reports on several pavilions published for the University of Virginia in the 1980s and 1990s.

The public newspaper ad on March 19, 1819, called out Jefferson's expectations for quality materials and workmanship at the University of Virginia:

It is proposed to lay about a million of bricks this season in buildings so far distinct that the undertakings may be in one or more portions of about an hundred thousand bricks each, the undertakers finding materials as well as work, the front walls are to be faced with oil stock bricks, the others with sand stocks, the interior mass to be of plane bricks, all to be laid with good bond to be clinkers, and not a single sammell brick to be used in any part of the work under a penalty of 5 cents for every such brick, nor more than 2 bats to 9 whole bricks, the inner mortar to be one third lime and two thirds clean and gritty sand without any mixture of earth, the outer 1/2 lime and 1/2 such sand and the whole to be grouted with a mortar of the inner quality.


69. At the time of his leaving the presidency in 1809, the year in which he started living at Poplar Forest, Jefferson discovered, despite his record keeping, that he was $10,000 more in debt than he realized (McLaughlin, Jefferson and Monticello, 378).


Contrast to the Eighteenth? Is it to extinguish all the Lights of its Predecessor?” Forces had been aligning against the Enlightenment: Jacksonian Democracy, romantic emotions, and popular religious revivals. It is no wonder that Jefferson stopped reading newspapers and returned to the classical authors of his educational and optimistic foundation to resecure this failing optimism at his retreat.

72. Jefferson’s greatest public project, the University of Virginia, was considerably completed when he died in 1826.


74. The peace and quiet of Poplar Forest allowed Jefferson to design his ultimate Enlightenment monument and, we might say, his most fervent optimistic hope for the future: the University of Virginia.

75. The process of researching, investigating, conserving, reconstructing, and restoring Poplar Forest for the past nine years has been a transcending experience. The commitment of philosophy and time from the board to “do it right,” the commitment from donors to fund the project, and the commitment from the architectural team to tackle each and every detail in the spirit of a greater good has meant all the difference. Most of all, by trying to follow the details and techniques of the original work has meant reliving the frustrations of Jefferson regarding supervision, workforce, materials, and details. We can get no closer to his process. My own natural optimism in people and in projects mirrors Jefferson’s in perfect, ghostly precision. This story of construction is humbly dedicated to the committed craftsmen whose work stands as testament against the current theories asserting that the traditional connection between head and hand has been lost; for those reasons, this work is dedicated to all the restoration craftsmen who have given it their best, and especially to master restoration craftsman Douglas Rideout.