

Asher Benjamin's West Church: A Model for Change

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Physical deterioration and inadequate space motivated the West Boston Society to make the following decision to replace the original church structure, which had been built in 1737:

That on a view of the situation and size of the present building they are of the opinion, that should the Society cause those repairs to be made, which are absolutely necessary for its preservation, or these alterations and additions, which its size may be capable of admitting of future accommodation, such Expenditures would prove burthensome without attaining those objects for which they would be made. Your Committee are therefore of the Opinion that the present House be taken down, and another erected upon the Land of the Society in a more extensive plan.¹

The Building Committee commissioned Asher Benjamin as their architect and appropriated up to \$20,000 for the construction of the Church. If the demands for structural soundness and adequate space were the two major justifications cited by the West Boston Society for their decision of 1805, did Benjamin's plan for the new West Church incorporate these two considerations in it?

The young architect whom the West Boston Society had chosen had been born in Hartland, Connecticut, in 1773. Prior to coming to Boston in 1803, Benjamin had designed many houses and buildings in the Connecticut River Valley, including the wooden Old South Church in Windsor, Vermont, in 1798. In the 1803 *Boston City Directory*, Benjamin is listed as a "housewright"; the West Church was to be

Benjamin's first major commission in Boston. Not only is the West Church central to a study of Asher Benjamin as a stage in his architectural career in Boston, but also as a model which Benjamin proposed for adoption by other builders. In his first edition of *The American Builder's Companion*, published in 1806, Benjamin included sketches of the front facade of the Church, its floor plan, roof structure, and pulpit design (Figures 1 and 2). In addition, Benjamin furnished the following description of the West Church:

The size of the house is seventy five feet square, porch twenty by forty six feet; to contain one hundred and twelve pews on the lower floor. The gallery is supported by columns of the Composite order, as laid down in this book.²

In *The American Builder's Companion* Benjamin also provided explicit information and sketches regarding the execution and position of columns, windows, and other architectural details. The exterior of the West Church conforms to his theories regarding proportion and combination of orders. According to Benjamin's description of the Church, the size of the cornices is determined by the height of the building; and the Doric order of the third story of the porch and the Ionic order of the cupola are faithful executions of his theory.³ Likewise, in the interior, the composite order of the columns supporting the gallery and the cornice detail reflect Benjamin's sensitivity to proportion and scale.

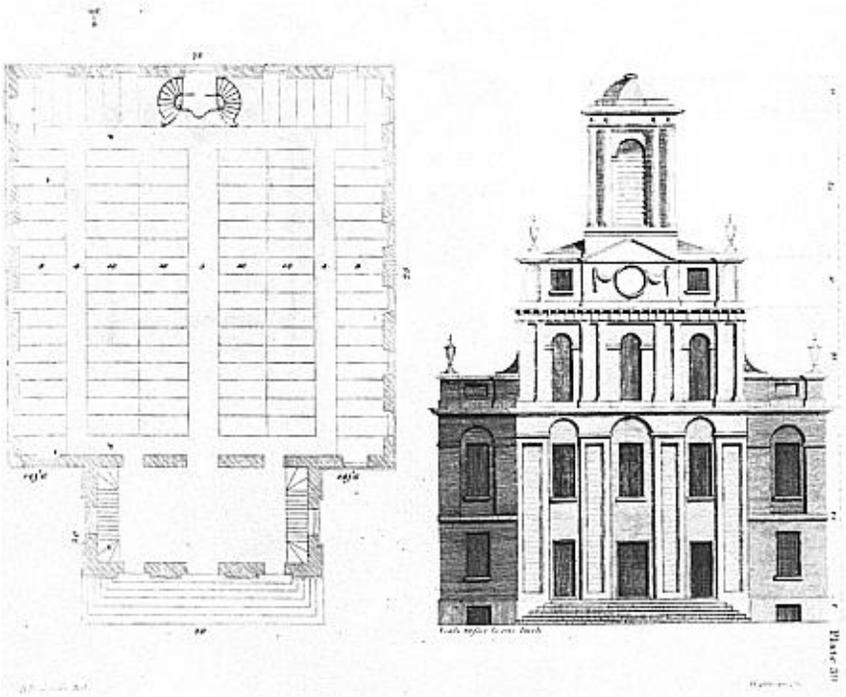


FIG. 1. FLOOR PLAN AND FRONT ELEVATION, WEST CHURCH, from Asher Benjamin's *The American Builder's Companion*, 1806. (Photo SPNEA.)

At the same time that the West Church is a model of those architectural principles that Benjamin delineated in his guide-book, it is also proof of Bulfinch's influence on his architectural style. The lightness and delicacy of detail in Bulfinch's architecture are also characteristic of Benjamin's design. Like Bulfinch's Church of the Holy Cross, built in Boston between 1800 and 1803, the West Church was designed with a cupola and front facade with three doors. The antecedents of Benjamin's architectural style can also be traced to Bulfinch's New North Church, built in Boston between 1802 and 1804. In its scale and in its cupola, tower, projecting porch, roundheaded windows,

and wooden details, Bulfinch's New North Church was a prototype for the West Church.

In his execution of his plan for the West Church, Benjamin used a combination of brick, wood, and stone to give substance to the Bulfinch-influenced neo-classical details. The brick exterior is Flemish bond, with the exception of the rear facade, where the later addition of a chimney and some minor repairs are of irregular and less expensive English bond. The lightness of the wooden details on the exterior, the urns, cupola, swags, and cornices, many of which were rendered in tin in a later period, made it possible for Benjamin to combine functionalism with

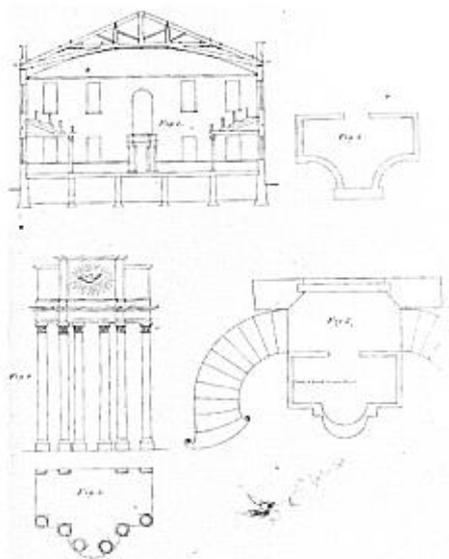


FIG. 2. SECTION AND DETAILS, WEST CHURCH, from Asher Benjamin's *The American Builder's Companion*, 1806. (Photo SPNEA.)

his neo-classical style — the ideal he advanced in the following essay:

We are well aware the magnificent temples of ancient times still retain a degree of romantic grandeur, which would do honour to the present age. It will, at the same time, be readily acknowledged, that an exact imitation of those noble productions of former times, on account of the present expense of materials and labour, would require no common degree of opulence for their completion; and, indeed, a strict conformity to the orders of Architecture seems to be demanded in the construction of public buildings only, and other of immense magnitude; in such situations they have a most noble and majestic appearance; but in private buildings, and others of less magnitude, their massy size and the expense attending them, are little suited to our convenience and means of appropriation. A principal part therefore of our design, in this work, is to lighten their heavy parts, and thereby lessen the expense both of labour and materials.⁴

In their meetings on proposed changes in the West Church following its completion in 1806, the West Boston Society acknowledged and respected Benjamin's application of his architectural theories in the Church. On December 8, 1806, the Society voted "that it is of importance to preserve a uniformity in the appearance of the House, and therefore that no person be permitted to put up on any window, a curtain, unless of the same colour and fashion of those already put up by the Corporation . . ."⁵ In another debate of the Society's Committee on the question of whether the communion table and font could be raised, it decided in the affirmative provided that the alterations could "be done without destroying the Harmony of the work around the pulpit."⁶ Benjamin's *The American Builder's Companion* was one means of disseminating his architectural theory; his buildings, such as the West Church, were also instructive examples of his architectural principles. The West Boston Society's familiarity with Benjamin's 1806 guidebook cannot be determined; however, the Society's votes on contemplated changes in the Church suggest the extent to which Benjamin's theories filtered down to the lay population.

Though the Society had evinced a reluctance to disrupt what they perceived as the harmony of the elements in Benjamin's design, it was not similarly inhibited when it decided to raise the roof in 1823. In his 1806 edition of *The American Builder's Companion*, Benjamin described and included a sketch of the roof structure which supports a dome ceiling "of forty two feet in diameter, which rises six feet."⁷ However, an examination of the present roof structure reveals that the roof has been raised approximately forty-two inches, with the holes for the original purlins still visible



FIG. 3. INTERIOR FRONT WALL OF WEST CHURCH, ABOVE THE CEILING. Note the original roof line and purlin holes. (Photo by William W. Owens, Jr.)



FIG. 4. KING POST (left) AND QUEEN POSTS (right), WEST CHURCH. (Photo by William W. Owens, Jr.)



FIG. 5. DETAIL OF BUILDER'S NUMBERS, ON ROOF FRAME TIMBERS, WEST CHURCH. (Photo by William W. Owens, Jr.)

(Figure 3). The difference between the 1806 and 1823 roof trusses is striking. The 1806 truss system employed only one queen post to each side of the king post, and its component parts were held together by iron bolts (Figure 2). In contrast, the 1823 truss system is composed of a king post with two queen posts on each side; early nineteenth century numbers distinguish those elements of the truss system which are to be joined to each other (Figures 4 and 5). Additional evidence of the 1823 alteration of the roof can be found by examination of the rear wall of the Church. The demarcation between the 1806 and 1823 roofs is made visible by the smaller size and less regular shape of the handmade 1806 bricks.

Why did the Society vote in 1823 to proceed with the expensive and time-consuming job of raising the roof? Church records reveal that as early as 1808, two years after the erection of the Church, the West Boston Society established "a Committee to Cause such repairs and alterations to be made in the Dome of the Ceiling as in their Opinion the Safety of the Same requires . . ." ⁸ No actual changes were made in the roof system until 1823, but the following accounts of the West Boston Society Committee prove that the safety of the roof was a continuing concern, though not one requiring immediate attention until 1823:

October 30, 1808 — Consult and employ a carpenter, if necessary, to "secure the roof."

December 2, 1811 — Arrange a contract for the repair of the roof.

July 29, 1818 — Examine the roof to determine if it warrants repair.

December 4, 1821 — Vote that the roof must be repaired.

July 30, 1823 — Delegate Mr. Thomas Sumner to examine the roof, report on the feasibility of erecting a new roof, and

"exhibit a Plan and the probable expenses of the same."

August 3, 1823 — Accept Sumner's plan for the ceiling and ask him to make suggestions regarding the roof.

August 26, 1823 — Draw up a contract with Messieurs Shaw, Dunbar, and Downing to repair the roof.⁹

According to the above accounts, the Committee may have made minor repairs on the roof prior to raising it in 1823. However, a significant and complete change in the truss system was undertaken when Shaw and Dunbar raised the roof; the Church financial accounts list a payment of \$4,500 to them for this project.¹⁰ It can be inferred from the above records of the Committee that the identification of a structural weakness in the roof system necessitated the raising of the roof in 1823 and that changes were made in the ceiling, as well as in the roof. Unfortunately, Benjamin does not expand on his description of the original ceiling; but the guilloche, the petal design, and sunken panels distinguishing the new and present ceiling are characteristic of an early nineteenth century style.

It is interesting that Thomas Sumner should have been appointed to draw up plans for the repair of the ceiling and roof. By 1823, Sumner had become well known in the Boston builders' community by virtue of his leadership of the Massachusetts Charitable Mechanics Association and the Society of Associated Housewrights of Boston.¹¹ Not only was Sumner a wise choice on the part of the West Boston Society because of his reputation as a builder, but also because of his familiarity with Benjamin's work. In conjunction with two other housewrights, Sumner issued the following prefatory recommendation of Benjamin's 1806 edition of *The American Builder's Companion*:

Having been chosen a committee by the government of the Boston Housewright

Society, to examine the proofsheets of a new book you were publishing, entitled, "The American Builder's Companion; or a New System of Architecture:" and being satisfied that work of this kind has been much wanted, and that yours is better calculated to assist the American builder than any that has come within our knowledge, we therefore do not hesitate to say, we shall cordially recommend it whenever we have it in our power.¹²

Sumner and his associates were well aware of the significance of Benjamin's guidebook for other builders; likewise, Benjamin conceived of it as a testing ground for his architectural models. In the following preface, Benjamin explains some of his reasons for having eliminated some of the plates in his 1806 edition of *The American Builder's Companion* from his 1811 edition:

Five years have elapsed since the first publication of the American Builder; during which time I have been constantly employed in drawing and executing plans for buildings. The experience of that time enables me to confirm some, and reject other former methods.¹³

Significantly, while the West Church's front facade and floor plan are reproduced in the 1811 edition, the roof elevation of the Church has been omitted in the second edition. In this 1811 edition, Benjamin again responds to the problem of supporting a domed ceiling; but he now proposes an entirely different model than that which he represented in his 1806 guidebook. In the 1806 model, the king and queen posts are framed into a single, horizontal tie beam (Figure 2); in the 1811 modified scissor truss system, the tie beam is formed from two timbers that meet at an angle at the king post (Figure 6).

In both the first and second editions of his guidebook, Benjamin emphasized the criterion of functionalism in the creation and publication of his models. In his 1827

edition of the same guidebook, in which he reproduced the 1811 truss system, Benjamin made particular mention of the success of this model for spanning long distances.¹⁴ Benjamin's decision to eliminate the 1806 model from subsequent guidebooks is relevant not only to a study of the roof structure of the West Church, but also to the history of his guidebooks and their influence. If Benjamin's books "spread the Bulfinch and Benjamin interpretation of the Adamesque to the countryside beyond Boston," his design for the West Church and its roof may have had an impact on subsequent church architecture.¹⁵

Benjamin's omission of the 1806 truss system from later editions of his book may have been due to its lack of popu-

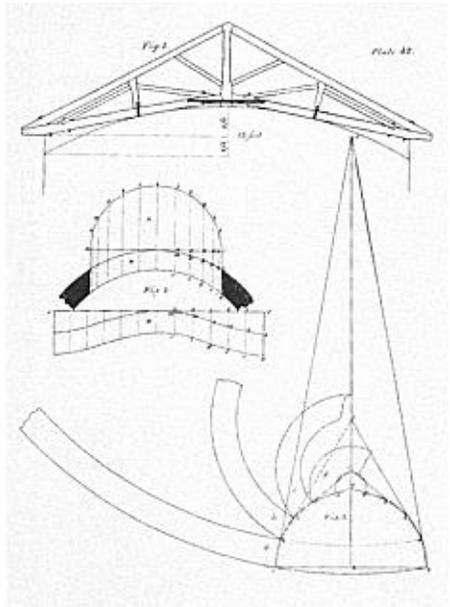


FIG. 6. PLANS FOR A ROOF SUPPORTING A DOMED CEILING, from Asher Benjamin's *The American Builder's Companion*, 1827 edition. (Photo SPNEA.)

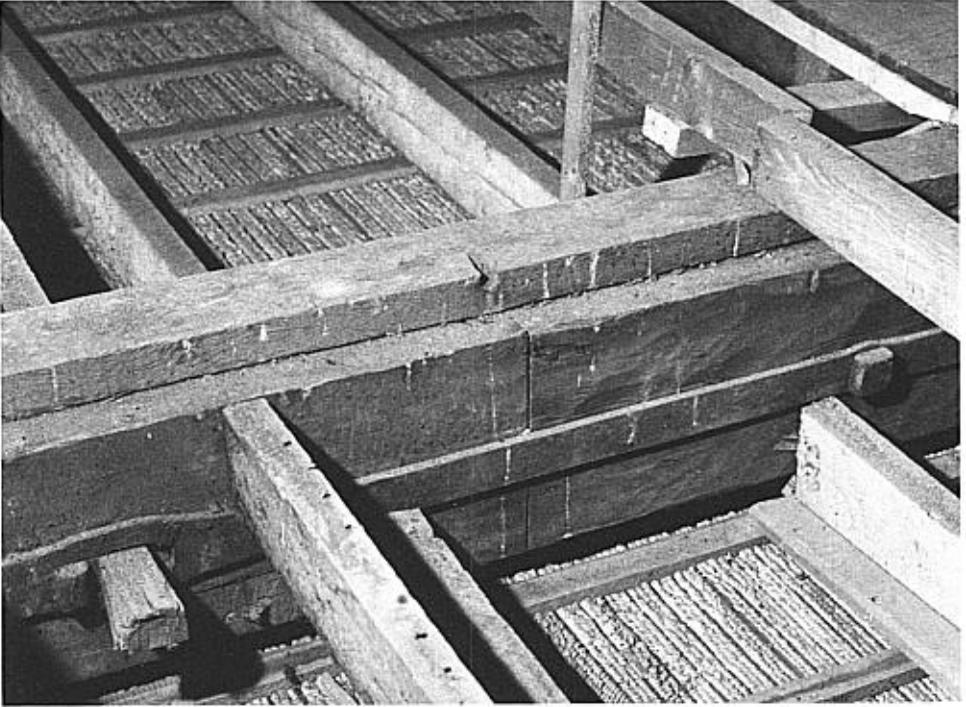


FIG. 7. DETAIL OF TIE BEAM, SHOWING SCARF JOINT AND IRON STRAP, WEST CHURCH. (Photo by William W. Owens, Jr.)

larity or its structural failure. Benjamin's inexperience in brick construction must be acknowledged. Benjamin's design for the Old South Church in Windsor, Vermont, in 1798, had been executed in wood; therefore, Benjamin may not have fully accounted for the stress imposed upon the roof system by the heavier materials used in the construction of the West Church.

Even without the complete alteration of its roof structure in 1823, the West Church would be an interesting, as well as an informative, model of early nineteenth century building techniques. The tie beams are not a single piece of timber stretching across the seventy-five foot

span; instead, two timbers are joined by a bladed scarf joint, which is five feet in length and secured by a six foot iron bolt (Figure 7). The bladed scarf joints and the numbering and lettering of matching roof members have much earlier precedents in seventeenth century English and American framing. However, the style of the letters and numbers clearly dates the roof to the early nineteenth century (Figure 5).

Not only is there a variety in the methods of joining units, but also in the sawing techniques. Examples of pit sawn, hand hewn and up and down sawn timbers are found in the roof structure (Figures 4 and 8). The haphazard pattern

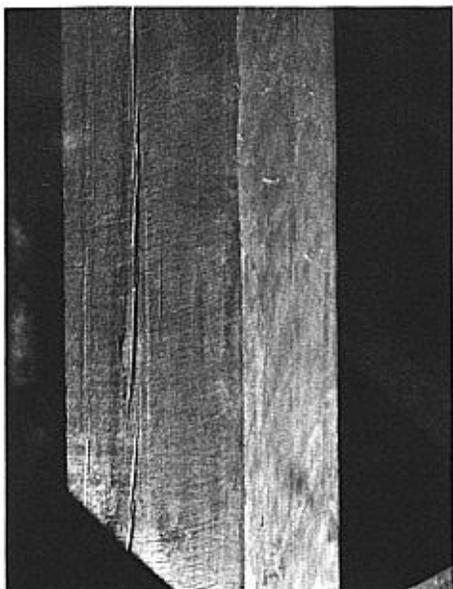


FIG. 8. DETAIL OF QUEEN POST, SHOWING PIT SAW MARKS. (Photo by William W. Owens, Jr.)

of saw marks slashing across the surface of the wood of the queen posts are characteristic of pit sawing (Figure 8). The split in the lower end of this queen post suggests that the post was pit sawn up to this point and was then split the rest of the way.

After the raising of the roof in 1823, various minor changes and repairs continued to alter the appearance of the Church's interior and exterior. In 1824 the West Boston Committee voted to erect a new pulpit.¹⁶ The curvilinear and decorative design of the new pulpit was stylistically compatible with the detail work of the new ceiling, as well as with the original ornament and orders of Benjamin's execution of the interior (Figure 9). In the course of the nineteenth century, repairs were made on the roof and chimney, and the windows in the wall behind the pulpit were bricked up.

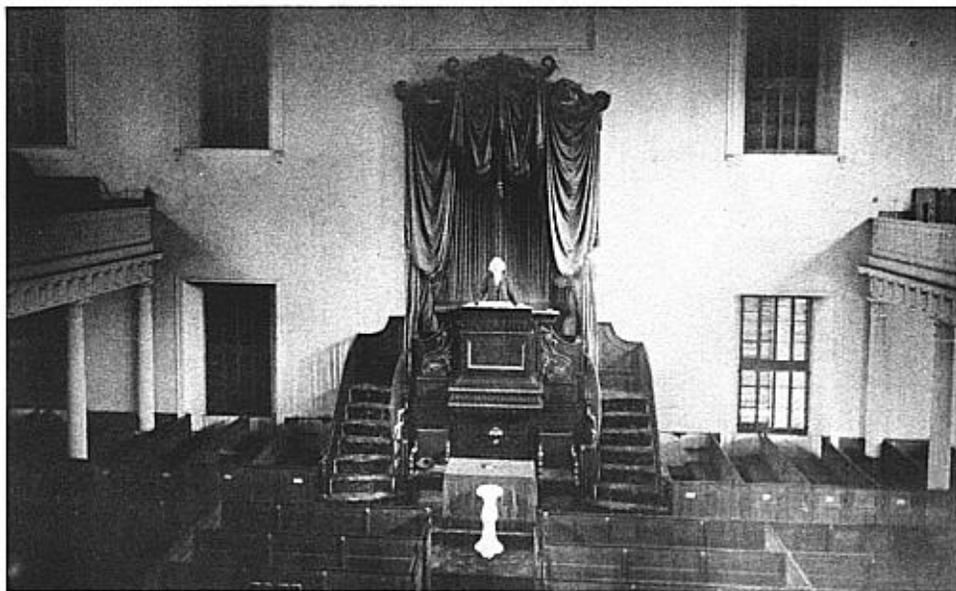


FIG. 9. DR. BARTOL IN THE PULPIT AT WEST CHURCH. (Photo SPNEA.)

ther reinforcement of the building structure was undertaken when the West Boston Society sold the Church to the City of Boston in 1896. The Church served as a branch of the Boston Public Library until it was bought by the Methodist Church in 1960.

Change in both the ownership and the structure of the West Church characterized the history of the building. The roof system of the West Church apparently contained within it certain structural problems which necessitated major repair and change. The time which elapsed between the West Boston Committee's initial investigation into the "Safety" of the dome of the ceiling in 1808 and their decision to raise the roof in 1823 implies that the weakness in the ceiling may not

have been critical, at least at first. The necessity of a complete alteration of the roof system must be considered in relation to Asher Benjamin's reputation as a pioneer in the field of architectural engineering. Benjamin's inclusion of the roof elevation of the West Church in his 1806 edition of *The American Builder's Companion* may have had ramifications for other New England buildings, which had been built under the influence of Benjamin's popular guidebook. However, Benjamin's model of a new truss system in his 1811 edition of his guidebook demonstrated his ability to test and recognize the shortcomings of his earlier models and subsequently, to conceive of new solutions to previously unresolved architectural problems.

NOTES

¹ West Boston Society Records, 1805, Society for the Preservation of New England Antiquities (SPNEA).

² Asher Benjamin and Daniel Raynerd, *The American Builders's Companion; or, a New System of Architecture; Particularly Adapted to the Present Style of Building* (Boston: Etheridge & Bliss, 1806), p. 60.

³ *Ibid.*, p. 60.

⁴ Benjamin and Raynerd, 1806 edition, p. vi.

⁵ Records of the Committee of the West Boston Society Corporation, December 8, 1806, p. 4, Boston Public Library (BPL).

⁶ Records of the Committee of the West Boston Society, April 6, 1807, p. 7, BPL.

⁷ Benjamin and Raynerd, 1806 edition, p. 60.

⁸ Records of the Committee of the West Boston Society, February 14, 1808, p. 11, BPL.

⁹ Records of the Committee of the West Boston Society, October 30, 1808-August 26, 1823, pp. 16-68, BPL.

¹⁰ West Boston Society Records, December 20, 1823, SPNEA.

¹¹ Gerald Ward, "The Society of Associated Housewrights of the Town of Boston,

1804-1837: A Brief History, with Biographical Sketches of the Members" (an unpublished research project, Boston University, 1973), p. 63.

¹² Thomas Sumner, Jonathan Loring, and James Butler, "Recommendation" in *The American Builder's Companion; or, a New System of Architecture; Particularly Adapted to the Present Style of Building* by Asher Benjamin and Daniel Raynerd (Boston: Etheridge & Bliss, 1806).

¹³ Asher Benjamin, *The American Builder's Companion; or, a New System of Architecture; Particularly Adapted to the Present Style of Building* (Charlestown: Samuel Etheridge, 1811), p. iii.

¹⁴ Asher Benjamin, *The American Builder's Companion; or, a New System of Architecture; Particularly Adapted to the Present Style of Building*, Ed. William Morgan, 6th ed. (1827, reprinted New York: Dover Publications, Inc., 1969), p. 78.

¹⁵ Benjamin, Ed. William Morgan, 6th ed., p. vii.

¹⁶ Records of the Committee of the West Boston Society, August 3, 1824, p. 75, BPL.

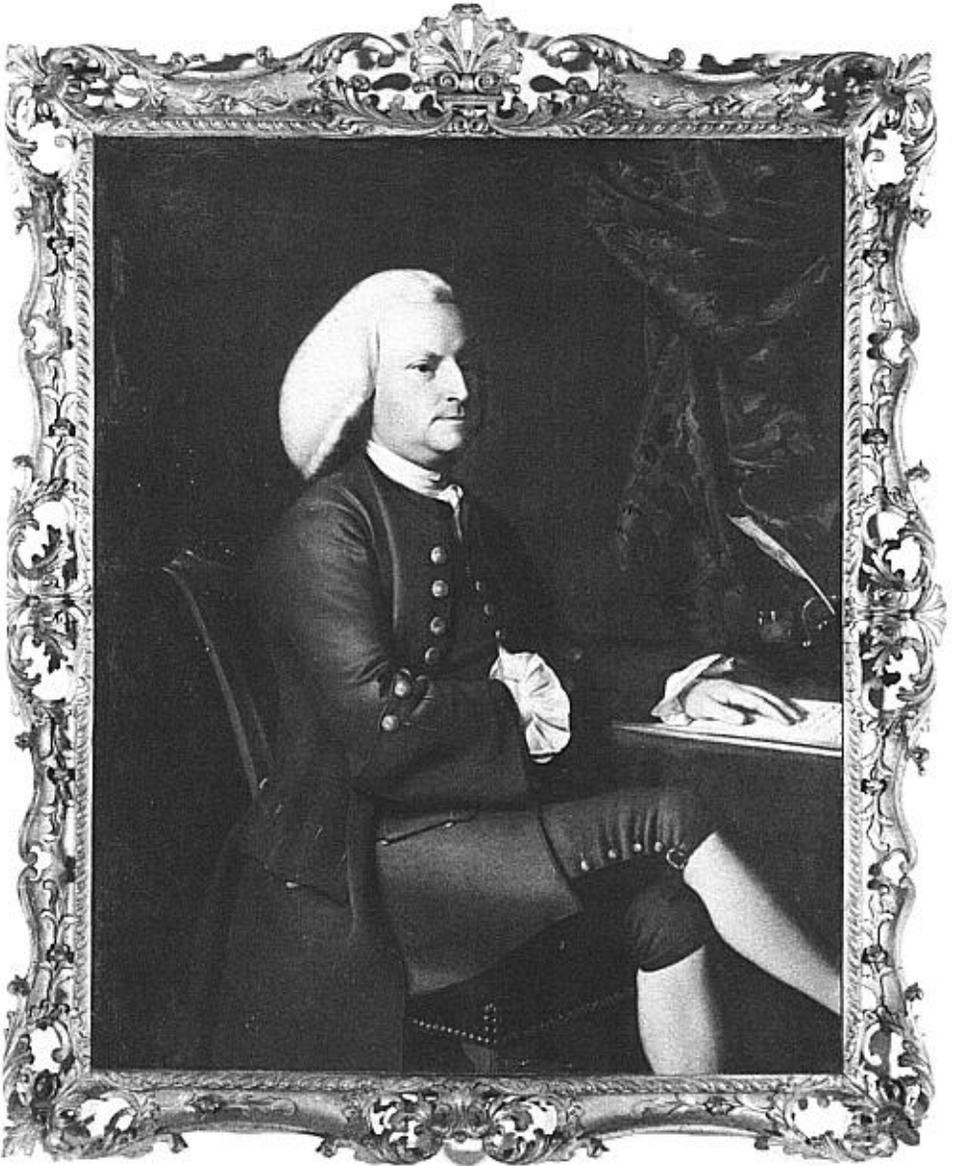


FIG. 1. MR. ISAAC SMITH, oil on canvas by John Singleton Copley, 1769. 40 1/8 by 50 1/8 inches, excluding frame. (Courtesy of Yale University Art Gallery; Gift of Maitland Fuller Griggs.)