

# When We Were Young: The American Philosophical Society in the 18th Century<sup>1</sup>

GARY B. NASH

Distinguished Research Professor  
University of California, Los Angeles

In 2018 the American Philosophical Society celebrated its 275th anniversary, though in truth, 1743 is a shadowy date. Some think the APS began in 1727, when Benjamin Franklin, at age 21—having resided in Philadelphia for less than two years since he first arrived in late 1723—convened his famous Junto of leather apron men (Figure 1). Drawing up rules for this private self-improvement group, 12 in number and limited to that size, he tasked “every Member in his Turn” to produce “one or more Queries . . . to be discuss’d by the Company.”<sup>2</sup> Among the founding group, four were from Samuel Keimer’s print shop (Franklin, Hugh Meredith, Stephen Potts, and George Webb) while the others were shoemakers (John Jones and William Parsons); a surveyor (Nicholas Scull); a scrivener (Joseph Breitnall); a carpenter (William Coleman); an ironmaker (Robert Grace); a glass maker (Thomas Godfrey); and a cabinet maker (William Mangrudge).

It was a noble start, indeed an astounding venture, ushered into the world by such a youth striving to implant himself in a young river port, where Quaker merchants and landowners of growing wealth held sway.<sup>3</sup> The APS website today claims our Society as an “offshoot” of

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1 Read 26 April 2018. My thanks to the anonymous reviewers for their comments and suggestions for this paper.

2 The editors of the comprehensive edition of the *Papers of Benjamin Franklin* aver that Franklin had been influenced by Boston’s venerable Cotton Mather’s *Essays to Do Good* (1710), which proposed voluntary groups to encourage morality and religion. Not much for religion, but decidedly so for morality, Franklin proposed that his group focus on “Morals, Politics or Natural Philosophy.” See Franklin, *Papers*, 1:255. Recent scholarship is more convincing in showing that Franklin was more influenced by Addison’s *Spectator* essays in 1711 about a workingman’s club and John Locke’s *Rules of a Society* in 1720. Franklin almost surely knew of these clubs as he spent nearly two years in London from 1724 to 1726. See Bunker, *Young Benjamin Franklin*, 219, 416n11–14.

3 The Junto continued to meet intermittently, its size always apparently limited to 12. Franklin biographers were not able to track the life of the Junto until Lemay’s *Life of Benjamin Franklin*, 1:332–56, where Lemay documents the Junto’s demise in 1765. The editors of the *Papers of Benjamin Franklin* tentatively give a long list of queries to be discussed by the Junto, dated to 1732. See Lemay, *Life of Benjamin Franklin*, 1:254, 256–64.

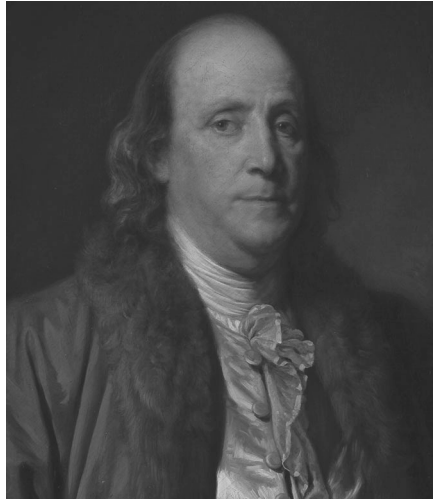


FIGURE 1. Young Benjamin Franklin. Jean-Baptiste Greuze, *Portrait of Benjamin Franklin*, 1777, oil on canvas, Philadelphia, American Philosophical Society.

Franklin's Junto—the word is derived from the Latin *juncto*, meaning “joined together.” This is true in the sense that both Franklin and William Coleman were members and officers of the 1743 launch of the American Philosophical Society while Franklin remained a key figure in establishing succeeding iterations of the APS.

A more defensible starting point for the American Philosophical Society is 1743, although using this date sidesteps the organization's collapse after a very abbreviated life. Four years earlier, John Bartram, Quaker farmer and self-taught botanist, first proposed a society to promote natural history (Figure 2). However, his request for advice from Peter Collinson, an English Quaker botanist with whom he would have a lifelong correspondence, provided little encouragement. Then in 1743 he teamed up with Franklin, by now the publisher of the *Pennsylvania Gazette* and *Poor Richard's Almanack* and proprietor of the city's post office, to issue “A Proposal for Promoting Useful Knowledge among the British Plantations in America.”<sup>4</sup> Its first seven members—by design “a Physician, a Botanist, a Mathematician, a Chemist, a Mechanician, a Geographer, and a general Natural Philosopher”—called themselves the American Philosophical Society.

Though two of them had been members of the 1727 Junto, the others bore little resemblance to the skilled artisans so prized by Franklin. In fact, they were drawn from the upper echelon of Philadelphia society. Thomas Hopkinson was a flourishing merchant, lawyer, and judge; William Coleman had risen from house carpenter to

4 Franklin, *Papers*, 2:380–83.

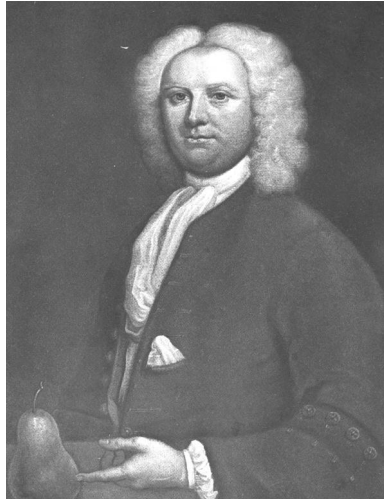


FIGURE 2. John Bartram. *Oil painting of John Bartram*, n.d., black and white photoprint, 10 x 8 in., Tallahassee, State Archives of Florida, Florida Memory. <https://www.floridamemory.com/items/show/605>.

prosperous merchant; Thomas Bond stood at the top of the medical profession in the city; his brother Phineas Bond was similarly esteemed; Samuel Rhoads rose from carpenter to “speculative builder”; William Parsons, first a shoemaker and then a tavernkeeper, rose to become Surveyor General of the colony; and John Bartram had achieved international fame as a botanist and seedsman. Only Thomas Godfrey still worked with his hands as a glazier and inventor. To be sure, these were men with deep scientific interests and accomplishment, but they were not young men on the rise. Rather, they were men in their middle years who had climbed upward in a city riding a wave of headlong population growth and economic development.<sup>5</sup>

The same could be said of the 18 members quickly recruited from outside Philadelphia, mostly from New York and New Jersey. Men of wealth, social standing, and political importance, they were cut from different cloth than Franklin’s Junto of 1727. From New York came Cadwallader Colden, Daniel Horsmanden, John Smith, Richard Nicholls, James Alexander, Joseph Murray, and James De Lancey. Joining them from New Jersey were Robert Hunter Morris, Archibold Home, David Martin, and John Coxe. They added weight, but possessing vast tracts of land, holding multiple offices, and displaying wealth with a flourish did little to sustain the new society.

<sup>5</sup> Thomas Hopkinson was named President, William Coleman became Treasurer, and Franklin assumed the pivotal role as Secretary. For sketches of these three members, see Bell, *Patriot-Improvers*, 1:11–36.

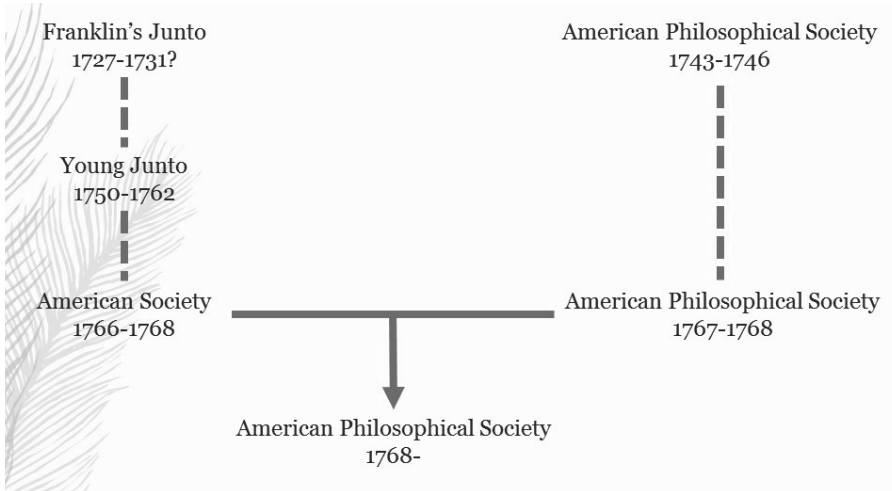


FIGURE 3. Chart of organization genealogy.

Despite the blue ribbon credentials of the 1743 cohort, Franklin and Bartram soon discovered they had a sick child on their hands.<sup>6</sup> The initial proposal called for at least one meeting each month, but the society met only sporadically and seldom with more than a handful of members present. John Bartram complained in 1745 that more time was spent in “the Club, Chess and Coffee House for the Curious amusements of natural observation” than in serious scientific study and the publication of such findings.<sup>7</sup> Franklin agreed. “The members, of our Society, here,” he had written to Cadwallader Colden a few weeks before, “are very idle Gentlemen [who] will take no Pains.”<sup>8</sup> Unhappily, by 1746, the society died in its crib, and the corpse was not disinterred for 20 years.<sup>9</sup> Replacing leather apron artisans with powdered-wigged gentlemen was not the answer (Figure 3).

A similar—but very different—society took form in or about 1750. Calling themselves the “Young Junto,” a bow to Franklin’s 1727 Junto, 12 Philadelphians met as a semi-secret mutual improvement group. Almost nothing is known of the Young Junto’s early years and even the

6 For an abbreviated history of the 1743 venture and biographical sketches of its members, see Bell, *Patriot-Improvers*, 1:3–174.

7 Bartram to Colden, October 4, 1745, in Colden, *Letters and Papers*, 3:159–60.

8 Quoted in Franklin, *Papers*, 2:379–80. Franklin wasn’t immune from frivolity. Six weeks before writing Colden he “had turned aside from the sober sciences to write his Advice to a Young Man on the merry science of choosing a mistress.” See Van Doren, “Beginnings,” 284.

9 The Society failed, writes Brooke Hindle, “because its local base had been too feeble and limited,” which is to say it was far too small in its membership. See Hindle, *Pursuit of Science*, 73–74. See also Van Doren, “Beginnings,” 284–89; and Sivitz, “Founding to Failure.”

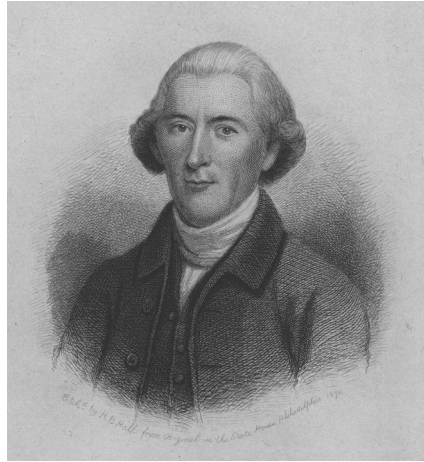


FIGURE 4. Charles Thomson. *Charles Thomson, Secretary of the Continental Congress*, 1870, New York, The Miriam and Ira D. Wallach Division of Art, Prints and Photographs: Print Collection, The New York Public Library. <http://digitalcollections.nypl.org/items/e586e7b0-9308-0130-9824-58d385a7b928>.

names of the 12 charter members are uncertain since the first surviving minutes of the group's meetings date to late 1758.<sup>10</sup> But what is known of the eight who were most likely founding members is that they were young and ambitious, mimicking Franklin's Junto of 1727. Several were teachers and most of the others were apprenticed to established merchants. All were Philadelphians, thus offering no pretension to intercolonial status.<sup>11</sup> They launched their enterprise on the wings of optimism in a bustling port town of about 15,000 that had almost tripled in population since Franklin's arrival in 1723. Using the same rules that Franklin had drawn up for the "old Junto," the Young Junto met on Friday nights at the house of Samuel Carruthers, a carpenters' toolmaker.

One of its founding members, and most likely its leader, was Charles Thomson (Figure 4). An immigrant from Derry County, Ireland, whose father died at sea in 1739 as their ship hove in sight of

10 Brief histories of the Young Junto are in Bell, *Patriot-Improvers*, 1:175–79; and Hindle, "Rise of American Philosophical Society, 31–42.

11 Bell identified 20 known members of the Young Junto in its brief years from 1750 to 1762. Of the 13 who were members before September 22, 1758 when the first surviving minutes are available, only eight were older than age 17 in 1750 and thus could be considered founding members. They were teacher Charles Thomson, age 20; merchant apprentice Francis Rawle, age 20; doctor Stephen Woolley, age 26; apprentice merchant Peter Chevalier, age 19; apprentice merchant Isaac Paschall, age 22; clerk Edmund Physick, age 23; William Franklin, about age 19; apprentice merchant Joshua Howell, age 24; and teacher Paul Jackson, age 21. Biographical sketches are in Bell, *Patriot-Improvers*, 1:183–96, 203–208, 212–13, 215–35.

the North American mainland, Thomson was taken under the wing of a kindly Delaware woman and sent for schooling to Reverend Francis Alison in Chester County, Pennsylvania. In 1750, just short of 20 years old, Thomson received an appointment as tutor of Latin and Greek in the infant Academy of Philadelphia (where Alison had become vice-provost); later that year, he stood out in the formation of the Young Junto, duplicating Franklin's precocity 23 years before as a civic-minded, intellectually curious, and ambitious young man.<sup>12</sup>

By 1759, membership was down to eight; by 1761 to five, and no records survive to indicate it met thereafter.<sup>13</sup> A few surviving members—Thomson, Physick, and Paschall—made a brave attempt in mid-1761 to resuscitate the society, rewriting the bylaws and announcing their determination to pursue “mutual Improvement in useful Knowledge.” The revival lasted hardly a year.<sup>14</sup> It was a frail group, composed of only 23 known members, a majority of them Quaker, in its 12-year existence.<sup>15</sup> But at least this second sickly child served up interesting topics for discussion on “morals, politics, the sciences, or other prudential and useful subjects.” Among them were:

“What are the common causes that occasion the downfall of an empire?”

“By what means do plants propagate their species, or can they fruit without flowering?”

“Is it good policy to admit the importation of Negroes into America?”<sup>16</sup>

“How may Artificial Magnets be made?”

“Would a public Bath be of advantage to this City?”

“What is the difference between a falsity and a lye?”<sup>17</sup>

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12 A full biography is provided by Schlenther, *Charles Thomson*.

13 Bell, *Patriot-Improvers*, 1:177–78.

14 Bell, 178.

15 Twelve of the 23 were Friends, six were Anglicans, four were Presbyterian, and two of unknown denomination. They included William Franklin, Benjamin's son, barely 20 years old but clerk of the Pennsylvania legislature and postmaster of Philadelphia.

16 This question, posed in 1761, probably proceeded from the advent of a group of Quaker reformers, especially John Woolman and Anthony Benezet, who were campaigning against the Atlantic slave trade and urging members of the Society of Friends to cleanse themselves from slave owning.

17 Bell, *Patriot-Improvers*, 1:178. The last query resonates today with special force.

The Young Junto made one other contribution, one of critical importance, in the person of Charles Thomson. In April 1766, Thomson, who by then had forsaken teaching for trading, gathered a small group from the lifeless Young Junto. They elected seven new members and on December 13, 1766 changed their name to "The American Society for Promoting and Propagating Useful Knowledge, held in Philadelphia."<sup>18</sup> In a flourish, they elected John Morgan, the one man of the Young Junto with an international reputation. Trained in medicine at Edinburgh and elected to England's Royal Society, he had recently returned to Philadelphia and to great acclaim had laid the foundations for a school of medicine at the College of Philadelphia.<sup>19</sup>

"After this noble beginning," writes Brooke Hindle, "the society languished; its meetings declined until by the summer of 1767 they had become uniformly unproductive."<sup>20</sup> But Thomson was far from unproductive. With the arrival of news of the Townshend Revenue Act, passed in June 1767 by Parliament to bring the rambunctious American colonies under strict account, he, like many other colonists, saw this as another attack on the liberties of free-born Englishmen. In response, with politics rather than science flooding his mind, Thomson reconvened the languishing American Society on September 18, 1767 to read "a sketch of a new vision . . . of its potentialities; a vision born of his reflections upon the deterioration of relations between the colonies and England."<sup>21</sup> Thus, he called for investigations of "the Several Supports of Mankind at large, Agriculture, Manufactures and Commerce," all of this hinting at the future of independent American colonies. Some of the ferment now swirling through the Quaker City was reflected in the topics discussed: "whether Roman Catholics should enjoy civil rights, whether women should be admitted into councils of

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18 Bell, 1:178–79. Of the seven members elected in late 1766 five were Quakers, one an Anglican, and one of unknown denomination. Their average age at time of election was about 24. See Bell, 1:303–82. In *Pursuit of Science*, Hindle writes that in the brief revival of the Young Junto in 1766, "the most striking characteristic of the group was their Quaker coloration" (123). He also argues that Thomson's revival of the Young Junto "was a result of the influence of the Stamp Act crisis," which in 1765 roiled the city and led to a threatening crowd of artisans outside Franklin's new home, enraged by his endorsement of Parliament's levies on all kinds of stamped paper and his role in securing the appointment of John Hughes, his friend, as Philadelphia's stamp collector. When Franklin (from London) urged the angry colonists to "light candles" and "make as good a night of it" as possible, Thomson shot back "be assured the Americans will light lamps of a different sort from those you contemplate" (122). Some of Thomson's friends in the new Society, Owen Biddle and George Clymer in particular, had figured in the demonstrations that had led to a repeal of the Stamp Act. I have explored the Stamp Act disturbances in Philadelphia in Nash, *Urban Crucible*, 305–308.

19 For a sketch of Morgan, see Bell, *Patriot-Improvers*, 1:327–36.

20 Hindle, *Pursuit of Science*, 123.

21 Hindle, 124. Hindle suggests that the lassitude of the Society "might have continued unimpeded except that the Townshend Revenue Act was passed by Parliament" (123).

state, whether farmers or merchants were more valuable to the commonwealth.”<sup>22</sup> By Thomson’s lights, it was proper that useful knowledge could not be deployed to enlighten the citizenry on the brewing imperial showdown.

Amidst this in 1767, the eminent physician Thomas Bond wrote Franklin, his bosom friend still in England, that he had “long meditated a revival of our American Philosophical Society.” And so he did, gathering a group of Philadelphia doctors to resuscitate the moribund APS established in 1743. Rather than “a den of liberal Quakers”—as Hindle calls the members of the Young Junto—who had just come back to life as the American Society, this was to be a group of men more diverse in religious commitments but decidedly conservative on the burning imperial issues of the day. For the most part they supported the proprietary party led by John and Richard Penn, William Penn’s grandsons, and this squared them off against Benjamin Franklin’s Assembly party that had worked to turn Pennsylvania into a royal colony. Now Philadelphia had two sparring groups, each eager to build a general scientific society modeled on England’s Royal Society, “each dominated by one of the city’s political factions” and each competing for members.<sup>23</sup>

Competition, fanned by vitriolic annual campaigns to control Pennsylvania’s unicameral legislature, was beneficial. In a membership war, by 1768 the American Society had enrolled 78 resident and 67 corresponding members. Especially heavy with doctors,<sup>24</sup> this group included many of Franklin’s friends, many prospering artisans, and five members of the Moravian community in Bethlehem, one of whom was married to a Wampanoag woman.<sup>25</sup> A few were British officers stationed in the colonies, and many of the corresponding members were British West Indies officials. As a whole, they were aligned with Franklin in calling

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22 Bell, *Patriot-Improvers*, 1:179.

23 Hindle, *Pursuit of Science*, 128–29. Hindle credits Bond with the attempt to skirt partisan politics “by developing a broadly-based membership” (128). Bell provides an account of the brief pre-merger revival of the American Society in *Patriot-Improvers*, 1:339–46, with details on engaging questions for discussion such as how farmers might try new crops for the export market, how natural resources could be exploited, and how internal improvements could be made to facilitate trade.

24 The American Society’s hefty roster of physicians was a result of absorbing the 12 members of the Philadelphia Medical Society organized in 1766 by John Morgan, a leading member of the medical school faculty at the College of Philadelphia. A sketch of the short life of the Medical Society and its members is in Bell, *Patriot-Improvers*, 2:367–421.

25 Christian Frederick Post (c. 1715–1785), elected on April 8, 1768, “had been sent to the colonies as a ‘fisher in the countryside,’ that is, an itinerant evangelist whose aim was to unite the scattered German sects.” Dispatched to minister to Christianized Mohicans in Dutchess County, New York in 1743, he married Rachel, a baptized Wampanoag. After her untimely death, he married Agnes, a Delaware woman in 1748, another short-lived marriage ending with her death in 1751. See Bell, *Patriot-Improvers*, 2:104–105.



for the end of the Penn family's hold on the affairs of the colony, a burning issue that played out in elections to the colony's legislature.<sup>26</sup>

Concurrently, the American Philosophical Society quickly boasted 92 resident members and 36 corresponding members (with some overlap between the two membership lists). Included were most of the high ranked officials of the colony—among them, John and Richard Penn, who served alternately as lieutenant governors while their brother Thomas remained in England; Benjamin Chew, Attorney General of the colony and member of the governor's council; William Allen, Chief Justice of the colony; and his son Andrew Allen, Councillor and Supreme Court justice.<sup>27</sup> The APS was also well-stocked with doctors and wealthy merchants, many of the latter more interested in political leverage than science. This may be evident in several surprising electees. As if the war clouds were not gathering, the APS ushered in two towering representations of British authority: Sir William Johnson, Superintendent of Northern Indian Affairs and a controlling figure in Iroquois relations with New York and Pennsylvania colonists until his death in 1774; and Major General Thomas Gage, Commander-in-Chief of British forces in North America (and soon to be hated for coordinating attempts to enforce the various acts of Parliament meant to suppress colonial resistance).<sup>28</sup> It is no small irony that the American Philosophical Society included many of Franklin's enemies while the American Society enrolled many of his friends.

Then, by deciding to merge while political tensions in the city grew, the two groups put aside differences in social standing, occupation, and politics. In religion, however, one striking difference remained. Of those elected to the American Society from Philadelphia and its environs, 21 electees were Quaker, 19 Anglican, one Baptist, one Presbyterian, and two of unknown religion. By contrast, among the APS electees were 14

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26 Bell provides sketches of this group in *Patriot-Improvers*, 1:348–529, 2:3–366. Among them were men who would play leading roles in the American Revolution: John Dickinson, Thomas Mifflin, Francis Hopkinson, and Benjamin Rush; others, such as Jonathan Odell, Andrew Oliver, and Jonathan Belcher, would become Loyalists.

27 Sketches of this group are provided by Bell in *Patriot-Improvers*, 2:367–421, 3:11–620. Some of the sketches were written, after Bell's death in 2009, by Charles B. Greifenstein (who also edited vol. 3), Richard Shrake, Valerie-Anne Lutz van Ammers, Joseph-James Ahern, Earle Spamer, Gail S. Rowe, and John Van Horne. As with the American Society members, those elected to the Philosophical Society included Patriot stalwarts such as David Rittenhouse and Joseph Reed as well as Loyalists and British officers such as Joseph Galloway, William Allen, and Jacob Duche.

28 As late as 1772, the Society was electing British officers stationed in the colonies: St. Stephen Adye of the Royal Artillery; Lt. Thomas Hutchins of the 50th Regiment; and Capt. John Montessor, veteran of the Seven Years' War and Pontiac's Rebellion, now stationed in New York. See APS, *Early Proceedings*, 72. Patrick Spero, APS Librarian, called my attention to this invaluable publication.

Quakers, 31 Anglicans, 21 Presbyterians, two Baptists, two Catholics, and one Lutheran. From this data, derived from the biographical sketches in Bell's *Patriot-Improvers*, several observations can be made. First, almost one third of the members in the newly merged APS were Quakers, though they made up about one seventh of Philadelphia's population. Second, just as Friends had been admitted to both societies, so was the case with Anglicans, though before the merger they were more aligned with the proprietary party that resisted the royalization of Pennsylvania. Thirdly, in the membership competition, the American Society had installed only one Presbyterian while the Philosophical Society elected 21. No ready answer to this remarkable disparity can be provided and awaits investigation.

In theory, the merger of the two societies was a wise idea, and the minutes of the APS, rejoicing that it was a "union on terms of perfect equality," suggest calm and comity befitting the City of Brotherly Love.<sup>29</sup> But this was far from the case. The mixed marriage had to be brokered amidst a city-wide contest over how to respond to the Townshend Revenue Act of 1767. In Boston and New York it triggered a boycott of British imports along with non-consumption pledges by ordinary consumers, led by women who held the purse strings of the household economy. But when Philadelphia merchants refused to join the economic boycott, some of those newly elected in the membership competition were called by artisans and small shopkeepers "contemptible to the last degree for their mercenary principles and abject pusillanimity." In early 1769, the merchants caved in, pledging a boycott of British imports that only a year later they attempted to scuttle. Trying to stanch a political upsurge from below, they told artisans they had "no right to give their sentiments respecting an importation."<sup>30</sup>

Overlaying this simmering inter-class tension was the intra-class hostility caused by the still open sore concerning the campaign to turn Pennsylvania into a royal colony. The strenuous objections to the merger of the two societies by Doctor Cadwalader Evans (1716–1773), a Quaker, drove to the heart of the matter. His work at the Pennsylvania Hospital for the Sick Poor—one of Franklin's crowning civic achievements in 1752—put Evans close to Franklin. And so did Evans's hatred of the Penn proprietorship of the colony. Evans saw the revival of the American Philosophical Society, in Whitfield Bell's words, "as a thinly-disguised scheme of the Proprietary party and Franklin's enemies to win the latter's countenance and support and by the use of his name

<sup>29</sup> Hindle, *Pursuit of Science*, 136.

<sup>30</sup> Quoted passages are from Nash, *Urban Crucible*, 375–76. The rise of the artisans in city politics can be followed in Olton, *Artisans for Independence*; and Ryerson, *Revolution Is Now Begun*.

to gain credit for their party and the College of Philadelphia.”<sup>31</sup> Six days after accepting election to the American Society, Evans wrote Franklin’s son, now the royal governor of New Jersey, that the proposed merger was a marriage awaiting disaster:

I had rather stand alone than Join them, because it is preposterous to associate in philosophical disquisitions, which require the utmost precision and veracity with [William] Smith, [Francis] Alison, [John] Ewing, & [Hugh] Williamson, whom we know have stuck at no lies to injure us. But if we unite and keep our young men together, we may be instrumental in establishing them in the paths of Philosophy and Patriotism.<sup>32</sup>

Was Evans an intemperate man who exaggerated the bad blood between the leaders of the two societies? This seems not to be the case, for he was greatly esteemed for his work at the Pennsylvania Hospital and Almshouse where he served the most disadvantaged. Yet Evans’s willingness to defend Franklin puts a bright light on the depth of the hostility that had overtaken even the most august of the city’s institutions. Responding to scurrilous attacks on Franklin for advocating an end to the Penn proprietorship of Pennsylvania, Evans wrote William Franklin that “it was thought justifiable to attack them [the pamphleteering proprietary party leaders] in their own way, with tomahawk, scalping knife, chewed bullets, or any other barbarous weapon they should use.”<sup>33</sup>

How then did the two societies put aside the wounds accumulated over recent years? It was not easy. It took almost a year of smoothing ruffled feathers, jockeying as to whether the American Society was senior to the Philosophical Society, and deciding how leadership roles could be determined. But the consolidation of the two groups was finally accomplished on December 20, 1768. This would be called the American Philosophical Society for Promoting Useful Knowledge, held in Philadelphia. To overcome the politically charged distaste many Members had for each other, it was decided to elect three Vice Presidents, four Secretaries, and three Curators with each of the two societies, now merged, to share the officerships. As for President, two names came forward: Franklin, still over the ocean in London, and James Hamilton, Pennsylvania’s governor appointed by the Penn family proprietors of the colony. Franklin was the winner, though not without

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<sup>31</sup> Bell, *Patriot-Improvers*, 1:391.

<sup>32</sup> Evans to William Franklin, January 25, 1768, quoted in Bell, *Patriot-Improvers*, 1:391.

<sup>33</sup> Evans to William Franklin, February 10, 1767, quoted in Bell, *Patriot-Improvers*, 1:394.

a hot-tempered debate, perhaps defused by not knowing just when Franklin would return to Philadelphia to take up the Society's reins.<sup>34</sup>

Tip-toeing toward agreement that scientific common interests should transcend politics, the APS made two important steps toward legitimacy and international recognition.<sup>35</sup> The first was entirely fortuitous. Almost as if the celestial system understood that the APS merger needed a chance to put politics aside and show off its Members' talents, planet Venus streaked across the face of the sun to the amazement of Philadelphians on June 1, 1769. Among those deeply involved in charting the transit of Venus was David Rittenhouse, whose genius as a mathematician and instrument maker reached new heights as he deployed his 144-power refracting telescope at his farm outside the city (Figure 5). APS Members seized the moment, knowing that Philadelphians would not be able to observe and calculate the transit of Venus for another 105 years.<sup>36</sup>

The second benchmark moment was a product of the first: the publication of an APS journal, the customary way of presenting a society's research to the world of learning. Titled *Transactions of the American Philosophical Society*, the first volume dribbled forth piecemeal in Philadelphia newspapers in 1769, then appeared as a collected volume of papers in 1771 with papers measuring the transit of Venus (Figure 6). It sold briskly and brought praise from London to St. Petersburg, establishing the APS's international *bona fides*.<sup>37</sup> A second volume would not appear until after the long war for independence. But a dime had been dropped.

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34 Hindle attributes Franklin's victory over Hamilton because Franklin had friends in each society and because he was widely esteemed for his internationally acclaimed scientific accomplishments "that transcended party considerations." Peter Stephen Du Ponceau, French immigrant, linguist, and future President of the APS, related 72 years later in a brief history of the early APS: "Thus the Democratic spirit triumphed over the efforts of the Government and of the aristocracy, a prelude, as it would seem, to the scenes that soon afterwards followed." "The Governor was greatly mortified and disappointed by this result," Du Ponceau continued, "when a Committee of the United Society waited upon him to request his acceptance of the title of their patron, he fell into a violent passion, and in an angry tone replied: 'I never shall be the patron of a Society that has for its President such a \_\_\_ as Franklin.' I have this anecdote from Bishop White." See Du Ponceau, *Historical Account*, 48.

35 In Franklin's absence, Thomas Bond, with a foot in both political camps, effectively became the President after assuming one of the three Vice Presidencies. Bond chaired most of the meetings and coordinated most of the committee work. See Bell, *Patriot-Improvers*, 1:37. By Hindle's account, most of the old American Society's leaders "lost interest in the united society." See Hindle, *Pursuit of Science*, 138.

36 Hindle devotes chap. 8 of *Pursuit of Science* to the widespread excitement in studying the transit of Venus, which marked the APS's maturation in conducting scientific investigations and in publishing the results.

37 Hindle, 165.

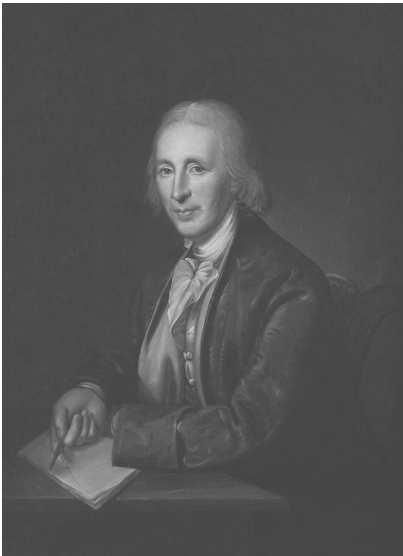


FIGURE 5. David Rittenhouse. Charles Willson Peale, *David Rittenhouse*, 1791, oil painting, Philadelphia, American Philosophical Society.

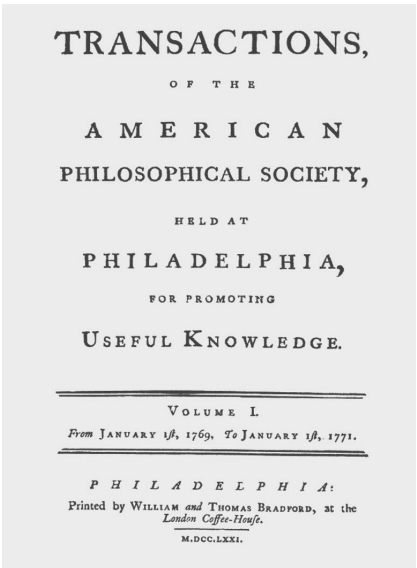


FIGURE 6. Title page of *Transactions of the American Philosophical Society*, vol. 1.

Meanwhile, the Society received a steady stream of papers for discussion and possible publication. The flow began at its second meeting, January 16, 1769, with receipt of “a sample of Chinese vetches, six bottles of soy and six pounds of powdered sago, presented with a letter from S. Bowen of Georgia.” Come February, a letter from a certain Peter Miller arrived, explaining a “method of preserving Peas from the Bugs.”

April brought word from Dr. James Weems Moore of Charlestown, South Carolina of a “method of curing the bite of the rattle-snake, for which Sampson, a negro, had got his freedom and a premium by Act of Assembly of Carolina”—a remedy referred to the Medical Committee for discussion. In June, Members received a report from Thomas Gilpin—he would be one of the exiled Quakers who were sequestered at Winchester, Virginia in the winter of 1777–1778, where he died and was buried—with a plan of a canal between Chester River and Duck Creek in Delaware, which later resulted in the plan to dig a canal across the Delmarva peninsula connecting the Delaware and Chesapeake bays that reduced the cost of shipping wheat in flat-bottomed boats by more than two thirds. In September, 17 Members gathered to hear a paper delivered by Hugh Williamson, a Philadelphia physician, in which “he endeavored to explain the Theory of the Motion of the Comets, the Probability of their being inhabited, and to account in a new way for the appearance of their luminous train on their near approach to the sun”—a paper referred to the Committee of Astronomy, which received permission to publish the paper if they deemed appropriate.<sup>38</sup>

Eager to broaden its reach, the Society added 12 new Members in April, all but one of them from colonies ranging from New York to Florida.<sup>39</sup> And so it went through the spring and early summer of 1769, when the Society met frequently with gratifying attendance, often as many as 40 and seldom fewer than 20 (see Table 1). The APS seemed poised to move forward, strong in numbers, able in leadership, and energized by its Members’ scientific and natural history contributions.

It was not to be. The number of meetings fell sharply in July 1769, and attendance withered quickly for meetings that were held less

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38 APS, *Early Proceedings*, 25, 32–34, 40, 43. Williamson’s paper, “A Dissertation of Comets,” was published later in the year in the *American Magazine of General Repository*. The magazine had been launched by Lewis Nicola (1717–1807), a recent immigrant who dabbled in nearly everything over a long lifetime. Bell calls the *American Magazine* “the first American scientific journal,” one that lasted, however, for only nine months. Bell’s sketch of Nicola is in *Patriot-Improvers*, 1:53–67.

39 Those elected included John Witherspoon, President of the College of New Jersey; Miles Cooper, President of College of New York; and Landon Carter, one of Virginia’s largest land- and slave-owning plantation patriarchs. See APS, *Early Proceedings*, 35.

Year	Number of Meetings	Number of Attendees	Ave./Meeting
1769	24	586	24.4
1770	17	257	15.2
1771	16	172	10.8
1772	11	101	9.2
1773	14	123	8.8
1774	6	67	11.2
1775	7	76	10.9
1776	1	?*	?

TABLE 1. Meetings of the American Philosophical Society, 1769–1776.

\*An unrecorded number of Members met on January 5, 1776 to elect officers. See APS, *Early Proceedings*, 98.

frequently for the remainder of the year.<sup>40</sup> For the next few years, the slump continued, both in the number of meetings and in meeting attendance (see Table 1). By 1772, months passed between meetings, and by 1774, it was difficult to turn out even a dozen Members.

Society minutes are silent on the sharp decline in Member attendance after the promising start in early 1769, when 89 attending the initial meeting of the merged societies on January 2. However, a close look at the political and religious affiliation of the Members and their involvement in the cauldron of politics in Philadelphia yields some cautious observations.

Perhaps of greatest importance was the rise of radical politics, played out in the committees of inspection and enforcement chosen to give teeth to the non-importation and non-consumption pacts, which seems to have unnerved much of the city's elite, of which the APS Members were an important subset. At first, this was not the case. When the first merchant committee gathered in November 1765 to consider a non-importation pact, six of the 11 Members were among those elected to the American Society and the American Philosophical Society in 1768.<sup>41</sup> But over the next decade, the city underwent what Richard Ryerson has called a "radical transformation of the process of government"—where craftsmen, shopkeepers, and petty retailers came to dominate local politics with the dual objective of cutting ties with the mother country and, concurrently, constructing a radical state

40 Fewer than 20 Members attended any of the meetings.

41 Ryerson, *Revolution Is Now Begun*, appendix E, 264.

constitution.<sup>42</sup> Far from a seamless process, it was a jagged, boisterous clashing of ideas, braided with religious tensions and a bitter argument about dismantling proprietary government in favor of turning Pennsylvania into a royal colony.<sup>43</sup>

From 1769 onward, the middling artisans and shopkeepers began their ascent—a baneful development as seen by the city’s Quaker and Anglican patriciate. As merchant Clement Biddle, a member of the Old Junto and then the American Society, lamented in July 1770, “the lead of Affairs here is (I think) now got too much out of the hands of the merchants.”<sup>44</sup> Indeed, it was a turning point, occasioned by the decision of the Philadelphia merchants, under duress, to resume importation. Throwing off customary deference, “Brother Chip,” addressing his “Brethern the Tradesmen, Mechanics, &c,” declared the day was now over when laboring men would tamely endorse men nominated by the elite. “If we have not the Liberty of nominating such Persons whom we approve, our Freedom of voting is at an End,” he wrote in the *Pennsylvania Gazette*. “These Gentlemen,” he continued, “make no Scruple to say that the Mechanics (though by far the most numerous, especially in this County) have no right . . . to *speak* or *think* for themselves.” No, “Mechanics most elect their own,” refusing to commit the “greatest imprudence to elect men of Enormous Estates,” which would only add “Power [to their] Wealth which gives them such a superiority over us as to render them our Lords and Masters and us as their most abject Slaves.”<sup>45</sup> By 1773, the “Old Ticket” alliance between Quakers and Anglicans, which led the campaign to royalize Pennsylvania, had further given ground to a Presbyterian-dominated ticket for Philadelphia County, whose assemblymen pledged to bring down the “old corrupt Junto.”<sup>46</sup>

Such fracturing of political protocols by no means barred Society Members from turning out for bimonthly meetings, but it shattered the

42 Ryerson, 254. Olton’s *Artisans for Independence* also analyzes how craftsmen elbowed their way into street politics as the resistance movement unfolded.

43 Hutson’s *Pennsylvania Politics* covers the politically tangled attempt to oust the Penn proprietors and convert Pennsylvania into a royal colony, a morass that cost Franklin his seat in the legislature and much of his popularity. See also Newcomb, *Franklin and Galloway*.

44 Biddle Letterbook, HSP, quoted in Rosswurm, *Arms, Country, and Class*, 41.

45 *Pennsylvania Gazette*, September 27, 1770. See also Committee of Tradesman to Franklin, November 1, 1771, in Franklin, *Papers*, 18:249. Joseph Galloway, another Society Member, grimaced that “many of them have left the old Ticket.” See Galloway to Franklin, September 27, 1770, in Franklin, *Papers*, 17:228. “Brother Chip” was the *non de plume* for a ship’s carpenter, whose customary entitlement was to carry away the chips from ship construction for fuel.

46 Olton, *Artisans for Independence*, 53; the jibe about the “old corrupt Junto” was apparently directed at the Franklin-Galloway political machine rather than at Members of the now merged APS.



repose in which meetings could be held and distracted from intellectual engagements as the city buzzed with arguments and demonstrations attending the political resistance movement. The correlation between the rise of radical politics and the decline of APS attendance does not prove a causal connection; nonetheless, it was something more than a coincidence. Even the return of Franklin in May 1775 could do little to salvage the Society's disrepair.

That politics elbowed aside scholarly meetings was on full display in how Charles Thomson's activities out of doors displaced his indoor role in the APS. Once the nursemaid of Young Junto, the inspiration for the 1767–1768 rebirth of the American Society, and chosen as one of the Secretaries at the first meeting of the merged societies, he was not reelected as a Secretary at the January 4, 1771 meeting and never attended sessions thereafter.<sup>47</sup> This rupture coincided with his rise as a leader of the artisan-heavy Presbyterian insurgency against the Quaker-Anglican phalanx that had controlled the conservative assembly.<sup>48</sup> By 1773, already the leader of radical Whigs, Thomson was busy organizing a Committee of Tarring and Feathering to prevent the docking of a ship carrying tea in defiance of the boycott. Thereafter, he was fully immersed in the Pennsylvania revolutionary movement, moving on to the national stage as secretary to the Continental Congress over its full 15-year life span.

The collapse of attendance also may be explained by the increasing problems faced by its Quaker Members. As the acts of Parliament rocked the colonies and the resistance began to evolve into a revolutionary movement, Friends in Philadelphia—in the colony at large, in fact—faced public revulsion over their age-old policy of non-violence. By 1769, leaders of the Philadelphia Yearly Meeting and its Meeting for Sufferings began to distance themselves from unruly public meetings pushing nonimportation and considered withdrawing from civil office holding altogether. As the class composition of committees of observation and enforcement began to move downward, the cautions became more urgent with Friends becoming “particularly sensitive to the dangers of spiritual contamination inherent in worldly politics.”<sup>49</sup>

<sup>47</sup> APS, *Early Proceedings*, 24–69, passim. On February 18, 1774, Thomson was appointed to a committee to prepare a volume of the *Transactions*; the minutes give no indication of his participation. APS, 91.

<sup>48</sup> John Adams would later call Thomson “the Sam. Adams of Philadelphia—the life of the Cause of Liberty.” See Adams, *Diary*, 2:115. Thomson's rise as the radical strategist of the Patriot movement in Philadelphia can be followed in Ryerson, *Revolution Is Now Begun*; Schlenther, *Charles Thomson*, chaps. 6 and 7; and Zimmerman, “Charles Thomson,” 464–80.

<sup>49</sup> Bauman, *Reputation of Truth*, 144. The step-by-step disengagement from politics in Philadelphia can be followed in chaps. 7–10; and in Mekeel, *Relation of Quakers*, chaps. 3–8. Charles Thomson, bellwether of the Young Junto, later opined that “The Quakers had an

The retreat toward neutrality, which brought sulfurous charges of thinly disguised loyalism, culminated in 1774, when the Philadelphia Yearly Meeting issued an advisory that forbade Friends from participating in extra-legal procedures that were at the heart of the resistance movement.<sup>50</sup>

Non-attendance was common among Members of all denominations but most decidedly among Friends. In fact, of some 60 Philadelphia-area Quakers, only Samuel Rhoads, house carpenter, building contractor, designer of the Pennsylvania Hospital, its manager for 30 years, and mayor of the city in 1774–1777, attended regularly after 1770. Had the atmosphere become so superheated that Friends concluded it was imprudent to meet with fervent Patriots, especially of the Presbyterian persuasion?<sup>51</sup> Probably this can never be answered, but it is reasonable to assume that beleaguered Quakers, seeking shelter in the storm, found it best to stay away.

If there was one ray of hope in the APS's dark days of revolutionary ferment, it came through annual elections of new Members. An emphasis was placed on finding corresponding Members outside Philadelphia and from across the Atlantic, an initiative that presaged the Society's future. Indeed, of 90 Members elected in the seven years following the merger, nearly 80 percent were expected to participate only through correspondence. Thirty-three of them were scattered throughout the 13 colonies, while 35 others resided abroad (see Table 2). John Fothergill of London, almost a patron saint of the Society who had been an inspiration and fount of advice for years, was elected in 1771. Two years later, the Society reached out to Sweden and Russia, appointing Torbert Bergmann, Professor of Mathematics in Stockholm; and science-minded Timothy, Baron de Klingsted from St. Petersburg, who had met Franklin in London. In 1775, in an unusual nod to Paris and the French Enlightenment—almost certainly this was due to the

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aversion to town meetings and always opposed them." See Thomson to W. H. Drayton, undated, New York Historical Society, *Collections*, 11 (1878), 279, quoted in Mekeel, *Relation of Quakers*, 46.

50 Minutes of the Monthly Meeting of the Northern District of Philadelphia, August 1774, Friends Historical Library, Swarthmore College. By January 1775, the Philadelphia Meeting for Sufferings issued an advisory declaring "our entire disapprobation of . . . every usurpation of power and authority in opposition to the laws and government and against all combinations, insurrections, conspiracies, and illegal assemblies"—in effect, a disavowal of the revolutionary movement. Bauman calls this "the most tendentious, defiant, and provocative" of the advisories issued by the Meeting for Sufferings. See Bauman, *Reputation of Truth*, 148. Mekeel's view is far more protective of the Friends' attempt to stay true to their pacifist principles. Marietta takes a middle position in his *Reformation of American Quakerism*.

51 For the hostile relations between Presbyterians and Friends that only intensified during the Revolution, see Bockelman and Ireland, "Internal Revolution," 124–59; and Ireland, "Crux of Politics," 453–75.

Year	Phila. Area	Other Colonies	Foreign	Total
1769	2	9	1	12
1770	2	4	4	10
1771	8	3	4	15
1772	2	6	4	12
1773	1	3	5	9
1774	4	8	7	19
1775	0	0	13	13
1776–1778	0	0	0	0
Total	19	33	38	90

TABLE 2. Members elected to the American Philosophical Society, 1769–1778. The names of those elected can be followed in the minutes cited in n28 or, more conveniently, in APS, *List of Members*.

influence of Franklin, who returned to Philadelphia in the spring of the year to assume the Society’s presidency—eight Frenchmen were elected. Among them were Antoine-Laurent deLavoisier, a pioneer in chemistry and biology research; Jean Baptiste Francois Rozier, professor of botany and medicine at Lyon; Jean-Baptiste Dubourg, member of the medical faculty at the University of Paris, where his studies of smallpox inoculation put him on the frontier of international research on the world’s most lethal agent of death; and Louis-Jean-Marie Daubenton, Keeper of the Cabinet du Roi and one of Franklin’s correspondents.

Of special significance was the selection of two Parisians who were at the center of the Atlantic-wide protest against the enslavement of Africans—a topic already linked to the discourse about British attempts to enslave white Americans with their denial of their rights as freeborn Englishmen. The Society’s minutes are silent regarding any discussion of slavery, but it could not have been far from the minds of the Members since the slave trade was under discussion by the Continental Congress in the city and a challenge to racial bondage had been thrown down by the Society of Friends, who by this time had made the ownership of human property a disownable offense. The selection of Marquis de Condorcet in January 1775 immediately followed his queries to Franklin about whether “there [are] in the English Colonies, Negroes who having obtained their liberty, have lived without mixing with the white people?” and “if their black Children born free and educated as



FIGURE 7. Marquis de Condorcet. Jean-Baptiste Greuze, *Portrait of Marquis de Condorcet*, n.d., oil on canvas, Versailles, Château de Versailles. <https://www.the-athenaeum.org/art/detail.php?ID=75370>.

such have retained the genius and character of the Negroes, or have contracted the Character of Europeans?” (Figure 7).<sup>52</sup>

Also elected in 1775 was Abbe Raynal, a paragon of the Enlightenment whose stirring call in 1770 for slaves to assert their natural rights through rebellion in the Americas ricocheted around the Atlantic basin after it was published as *Histoire philosophique et politique des établissements et du commerce des Européens dans les deux Indes* (Philosophical and Political History of the Two Indies).

While electing two European heralds of antislavery, the Society invited no colonial abolitionist leader such as Samuel Hopkins of Rhode Island, John Woolman of New Jersey, or Philadelphia’s Anthony Benezet (whose merchant cousin had been elected in 1768). Was the

52 Condorcet’s queries, which were transcribed in the manuscript minutes of December 30, 1774, are provided in Bell, *Patriot-Improvers*, 1:25. Franklin sent the questions to Benjamin Rush for the APS’s consideration. See Franklin to Rush, July 25, 1774, in Franklin, *Papers*, 21:258. In the meantime, Franklin scribbled a few brief responses to Condorcet’s questions. On the race issue he replied: “The Negroes who are free live among the White People, but are generally improvident and poor. I think they are not deficient in natural Understanding, but they have not the Advantage of Education. They make good Musicians.” See Franklin to Condorcet, March 20, 1774, in Franklin, *Papers*, 21:151. I have found no evidence that the Society responded to Condorcet’s queries. Benjamin Rush was elected in 1768, principally for his work as a physician and professor in the College of Philadelphia. Not until five years after his election did he become an ardent abolitionist. Rush was one of the Society’s Secretaries from 1773 to 1776 and was tasked with responding to Condorcet’s queries on natural history and race. See Bell, *Patriot-Improvers*, 1:455.

matter too touchy to invite outspoken colonial emancipationists while APS recruitment efforts frequently reached south of the Mason-Dixon Line? It is a question that cannot be answered by surviving testimony of the Society's Members or its minutes.

Though efforts were made to continue the Society's work as the decade-long struggle with the mother country descended into armed conflict, the lurch toward a collapse of the APS took its course. Two weeks after Benjamin Rush delivered an oration on February 4, 1774, "An enquiry into the natural history of medicine among the Indians of North American with a comparative view of their diseases and remedies with those of civilized nations," the minutes gloomily reported on what became known as the Intolerable Acts, which shortly triggered the convening of the first Continental Congress in Philadelphia:

The acts of the British parliament for shutting up the port of Boston, for altering the charters, and for the more impartial administration of justice, in the province of Massachusetts bay, together with the Bill for establishing popery and arbitrary power in Quebec, having alarmed the Whole of the American colonies, the members of the philosophical Society partaking with their countrymen in the distress and labors brought upon their country were obliged to discontinue their meetings for some months until a mode of opposition to the said acts of Parliament was established, which they hope will restore the former Harmony, and maintain a perpetual Union between Great Britain & the American colonies.<sup>53</sup>

By early 1775, the chances for "harmony and perpetual union" had faded away. Members met—only 11 including the officers—on January 20, 1775, and they gathered again later in the month, then again twice in March, and finally, with eight Members present on May 30, just after Franklin had arrived from London. With Franklin choosing to be absent, no further meetings were held until a small number gathered in mid-September and again in mid-December. Franklin attended neither. On January 16, 1776 the Secretary recorded the decision to postpone all further meetings. The official pronouncement cited the "calamities of war and the [anticipated] invasion of the city."<sup>54</sup> What was left unsaid was almost as important. David Rittenhouse, himself involved in the radical wing of the patriot cause (and after the war to become the second President of APS), dared to say in private what the Society chose not say in its minutes: Meetings were discontinued, he wrote to

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<sup>53</sup> APS, *Early Proceedings*, 86. Rush's oration was delivered before a large gathering, including many non-members. The decision to discontinue meetings was taken on February 18. No meetings were held thereafter until the last two weeks in December, when only a handful of Members appeared.

<sup>54</sup> APS, 99.

Virginian John Page, “rather through the disputes between Whig and Tory than any public necessity.”<sup>55</sup> As Hindle tells us, “the men, the institutions, and the interrelationships that sustained science were badly disturbed and disrupted.” Benjamin Rush later pleaded that “in science of every kind men should consider themselves citizens of the whole world.”<sup>56</sup> But that noble sentiment had no resonance in war-torn Philadelphia.

In the three and a half years of darkness, waiting for the skies to clear, APS Members did not stand idly, for there was war work to do, individually rather than collectively. To be sure, as Hindle has noted, “Most of the men who had given evidence of a capacity and desire to make creative contributions to science found their support threatened, their environment drastically altered, or their attention diverted to other subjects.”<sup>57</sup> Yet some Members tried to keep the lines of transatlantic communication open on matters of science, while others participated fully in war efforts. Rittenhouse was foremost among them. Busy surveying the Delaware River to prepare fortifications, experimenting in rifling cannon, overseeing the manufacture of munitions, and tinkering with Charles Willson Peale for the use of telescopic sights for rifles, he also occupied a seat on Pennsylvania’s Council of Safety and its Board of War, all the while serving as the state treasurer.<sup>58</sup>

It was almost a given that those APS Members who were doctors would be indispensable for the war effort. Indeed three of them—John Morgan, William Shippen, Jr., and Benjamin Rush—were the beating heart of the Continental Army’s medical service. Morgan came first, appointed in October 1775 by the Continental Congress as director-general of the Continental Army Hospital, at that time stationed in Cambridge, Massachusetts. He was succeeded in January 1777 by William Shippen, Jr., with whom he had professionally dueled for a decade—a prelude to their swordplay occasioned by the court-martial of Morgan. Rush chaired the medical Committee of the Congress and was appointed surgeon-general of the Continental Army’s Middle Department in 1777, a position from which he would later write that “hospitals are the sinks of human life in an army; they robbed the United States of more citizens than the sword.”<sup>59</sup> It would be only a

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55 Rittenhouse to Page, August 18, 1777, quoted in Hindle, *Pursuit of Science*, 232–33.

56 Hindle, 219. Rush is quoted on p. 222.

57 Hindle, 222.

58 Hindle, 230; Bell, *Patriot-Improvers*, 1:75–78.

59 Rush, *Medical Inquiries*, 1:276, quoted in Bell, *Patriot-Improvers*, 1:458. Also serving as army surgeons were George Glentworth, Jonathan Potts, and Thomas Bond, Jr. The fierce infighting that marked the service of Morgan, Shippen, and Rush is detailed in Bell, *Patriot-Improvers*, 1:331–35, 458–59, 3:21–26.

slight exaggeration to say that APS Members were the backbone of the Continental Army's medical department.<sup>60</sup>

Though they would not have regarded making war a part of contributing to useful knowledge, many APS Members subscribing to the Glorious Cause served in the long war for independence. Thomas Mifflin, forsaking his Quaker peace testimony to become Washington's Quartermaster General and president of the Continental Congress in 1783, was the most famous of them, but there were many more, including brothers Thomas and Lambert Cadwalader, who led Pennsylvania battalions into battle; brothers Owen and Clement Biddle, both serving in the quartermaster corps after leaving the Society of Friends; and others holding military administrative positions such as George Clymer.

For APS Members who opposed the war, either overtly by declaring themselves outright Loyalists or by leaning toward loyalism but remaining neutral, the fruits of war were often bitter. Many recruited in the membership competition of 1767–1768 might have regarded the mobbing of John Kearsley, Jr., as an example of a testy and incautious man who brought ruin upon himself. Yet Kearsley, the nephew of the eminent doctor John Kearsley, had served the community well, mustering for service in the Seven Years' War and volunteering to inoculate poor Philadelphians against small pox in 1774. But this did nothing to keep at bay the wrath of an infuriated crowd that heard of his pledge to support British troops should they arrive in Philadelphia to enforce Parliamentary policies and suppress the rebellion. Seized at his home, he was wrestled to the ground, slashed in the hand, forced to watch the windows in his house shattered and much of his furniture reduced to kindling, carted through the streets, and ordered to drink toasts to the "destruction of all anti-Americans." Then, a month later, his loyalism undiminished and caught red-handed sending Patriot military information to London, he was confined to jail in York and then Carlisle, where he died in 1777.<sup>61</sup>

But other cases involving APS Members were of a different stripe, ones that surely anguished them about what they might or should do to aid a fellow Member under duress. Such was the travail of John Drinker (1733–1800). Born into a Quaker family stretching back to the days of William Penn, Drinker had advanced from hatter to merchant and had prospered, all the while devoting himself to civic affairs. Chosen a director of the Library Company of Philadelphia in

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60 For general accounts of medicine in the revolutionary army see Owen, *Medical Department*; and Gillett, *Army Medical Department*.

61 For accounts of Kearsley's rough treatment, see Rosswurm, *Arms, Country, and Class*, 46–48; and Bell, *Patriot-Improvers*, 2:378–81.

1770 and appointed manager of the Corporation for the Relief and Employment of the Poor in the same year, he was also a pillar of the Philadelphia Quaker community and clerk of the Meeting for Sufferings, the policy arm of the Philadelphia Yearly Meeting. As a member of the Young Junto of 1760 and elected to the American Society 11 years later, he was among the best known of the devotees of useful knowledge.

But this counted for little in the estimation of fervent Patriots four months before the Declaration of Independence. Like many Quaker merchants, he refused to accept Continental bills of credit, and this made him a target of the radical Committee of Observation, which declared him and fellow Quakers “ENEMIES to their Country, and precluded from all Trade or Intercourse with the inhabitants of these Colonies.” Adding muscle to this condemnation, members of the Committee of Observation and Inspection, a kind of extra-legal police force, shuttered Drinker’s store and demanded his account books. Among those involved in this police action were four fellow Society Members.<sup>62</sup>

Although John Drinker was not among the seven APS Members who were charged with treasonous activities, denied *habeas corpus*, and exiled to Winchester, Virginia in the fall of 1777—the British army was poised to occupy the city—his brother Henry, one of the city’s greatest merchants, was not so fortunate. Neither were APS Members Thomas Fisher, Edward Penington, Israel Pemberton, Jr., James Pemberton, Thomas Wharton, Sr., and Thomas Gilpin. All but three of the 20 Philadelphians banished from the city were Friends. All of them denied they had betrayed the American cause and pleaded they had been given no chance to defend themselves.<sup>63</sup>

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62 The incident is recounted with long diary entries from the John Drinker Account Book, 1776–1779, HSP, in Bell, *Patriot-Improvers*, 2:343–53; Drinker had already incurred the wrath of fervid Patriots in 1774 when he published “Observations on the Late Popular Measures offered to the Serious Consideration of the Sober Inhabitants of Pennsylvania by a Tradesman of Philadelphia.” Here, while condemning the “tyrannical proscription[s]” of Parliament since the mid-1760s, he also deplored the strong-arm tactics of Patriots and their suppression of dissent. “I am jealous for the honour of my countrymen in whom I wish a righteous zeal to prevail, . . . a zeal for that liberty which is essential to human happiness and not a liberty which is destructive of it, a license to tread down common right on the pretence of opposing the invaders of it.” See Mekeel, *Relation of Quakers*, 75. The committeemen barring Drinker’s store and forcing their way in to inspect his account books included APS Members George Clymer, Thomas Wharton, Jr., Owen Biddle, and Samuel Miles. For the suppression of dissent, see Ryerson, *Revolution Is Now Begun*, 131–33.

63 Gilpin, *Exiles in Virginia*. Only a year old when his father was banished from Philadelphia, Thomas Gilpin, Jr. (1776–1853) was elected to the APS in 1814. A celebrated paper maker, he privately published a documentary history of the exiles who died at Winchester at the onset of the Mexican-American War. For a modern account see Oaks, “Philadelphians in Exile,” 289–325.



If the exigencies of war silenced APS Members watching colleagues march out of the city on their way to exile in Virginia, they also had to brook the rule of the man they had elected to serve from 1768 to 1774 as a Vice President of the merged societies as the Superintendent General of Police, in effect, the civil administrator of the city during nine months of British occupation. This was Joseph Galloway, once Franklin's treasured friend and political ally, a Pennsylvania delegate to the first Continental Congress, the speaker of Pennsylvania's unicameral legislature from 1766 to 1775, and then an avowed Loyalist. One can only imagine the amazement and dismay of many APS Members as the imperious and intemperate Galloway jubilantly rode his horse into the city on September 26, 1777 alongside red-coated General Lord Charles Cornwallis and Hessian Lieutenant General Wilhelm Knyphausen, starchy veteran of many European campaigns and ranking officer of the Hessian mercenaries. Perhaps most of the APS Members who remained in the city during the British occupation welcomed Galloway's departure with the British troops in mid-June 1778.

But there were many who were not so sure. Philadelphia shopkeepers and taverners had sold happily to the free-spending English and German occupiers; women of suspect virtue gladly pocketed the pay of the thousands of officers and enlisted men; wealthy families hosted the enemy at lavish dinner parties and balls; and more than a few romances and marriages with local women occurred, leading Franklin to quip that General Howe had not captured Philadelphia but Philadelphia had captured Howe.

Now, a month before the scheduled British evacuation, APS Members were among those who gladly spent a night such as the city had never seen, celebrating with the British officers. On display at the *Meschianza*—the lavish fete staged by British officers to honor their commander, General William Howe, as he left Philadelphia in May 1778—was full-throated sympathy for the enemy. At Walnut Grove, the estate of the recently deceased loyalist-leaning merchant, Joseph Wharton, at the foot of Washington Street in Southwark, British officers came costumed as medieval knights with Philadelphia ladies on their arms turned out as Turkish maidens. A regatta on the Delaware River got the day started with bands on the British ships playing "God Save the King" while "three cheers given from the vessels were returned from the multitude on shore," wrote a chronicler of the *Meschianza*. Then a mock-medieval chivalric tournament between Knights of the Blended Rose versus the Knights of the Burning Mountain amused the guests before dinner. Twenty-four slaves in Turkish outfits complete

with silver collars and bracelets served courses almost beyond count.<sup>64</sup> Fireworks and dancing followed, keeping many of the celebrants away from their beds until four the next morning. Among some 50 comely Philadelphia belles at the ball were the daughters of APS Members Phineas Bond, Benjamin Chew, John Redman, Rev. William White, and Edward Shippen.<sup>65</sup>

The British departure from Philadelphia was far from marking the end of the war—it would continue for another four years—but it probably figured in attempts to revive the APS in January 1779. A group of 13 gathered on January 16, and in February a larger cohort agreed to move forward. The first formal meeting met at the College of Philadelphia on March 5, with Thomas Bond in the chair. “It was unanimously agreed,” read the minutes, “that the Meetings & Business of the Society be revived” and that two weeks later officers should be elected for the year. Thus, to launch a new era, Franklin was re-installed as President, though he was in France as the nation’s minister. Thomas Bond, William Shippen, Jr., and David Rittenhouse were chosen as Vice Presidents, and, by invitation Joseph Reed, president of the state, as a patron.

Rebuilding the languishing Society required refreshing the membership. Of some 140 Resident Members alive at the time of the 1768 merger, 34 had gone to their graves, including two Quakers who had been exiled to Winchester, Virginia. Another dozen Members, dedicated Loyalists, had left the city, never to return. With 21 Members present, three new Members were elected on April 16, 1779: Conrad Alexandre Gerard, the first French emissary to the United States; Dr. James Hutchinson, son of a Bucks County stonemason who had been apprenticed to APS Members Isaac and Moses Bartram; and Rev. George Duffield, minister of Third Presbyterian Church.<sup>66</sup> The choice of Gerard is easy to understand for he had credentials, as the diplomat who had negotiated the 1778 treaty of alliance between France and the infant United States. But the choice of Hutchinson and Duffield is curious.

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64 No historian has inquired into these enslaved men. Some were probably the chattel property of Benjamin Chew and other Loyalist Philadelphians, while others may have been enslaved to British officers.

65 Sargent, *Major John Andre*, 169. Andre’s long account of the Meschianza, published first in London’s *Gentleman’s Magazine* in August 1778, is in Sargent, 167–77. Shippen’s 18-year-old daughter would soon marry Benedict Arnold in the most famous of all marriages during the city’s occupation. Joseph Wharton was the father of two APS Members, Isaac and Samuel, who almost surely attended the Meschianza. For a recent consideration of the cultural nuances of the Meschianza, see Shields and Teute, “Meschianza,” 185–214. Andre was later charged with stealing some of the Philosophical Society’s books from Franklin’s home. See Hindle, *Pursuit of Science*, 233.

66 APS, *Early Proceedings*, 100–102; Bell, “James Hutchinson (1752–1793): A Physician in Politics,” in *Colonial Physician*, 99–117.

Hutchinson had completed his medical training only three years before and, in Bell's estimation, had "no more than a mild interest in science." What he did have was close connections to the Philadelphia radicals who resumed control of the city after the British evacuation and were organizing protests against merchants in an attempt to cope with the runaway prices on everyday commodities that had pummeled the lower ranks of the city. Duffield's credentials were similar. He had little to contribute to science or useful knowledge but was the minister to many of the radical leaders.<sup>67</sup> Had Rittenhouse, also close to the radical Whigs, persuaded Bond, Shippen, and the other APS officers to install Hutchinson and Duffield as a bow to struggling Philadelphians in a year of great turmoil?

In May 1779, the Society bestirred itself with 14 Members listening to Dr. Phineas Bond's essay on "The means of preserving health and preventing disease," followed by one more fanciful by Lewis Nicola, already installed as one of the curators, on "To account for the [Biblical] Deluge from the suspension of the Diurnal rotation of the earth."<sup>68</sup> This promising beginning faltered, with no meetings convened between May 21 and July 23, one in August, and none thereafter until December 10, when seven Members met, all but one of them officers. The December meeting was ceremonial, simply to record a letter of thanks to Georges-Louis Leclerc, Comte de Buffon, for sending two volumes of his massive study of natural history. In thanking Buffon for his two-volume *Histoire naturelle des Oiseaux*, published in Paris the previous year, the APS officers explaining opaquely the lateness of their reply:

that the chief attention of those among our members who might have contributed something towards the important work in which you are engaged hath been necessarily called towards the Assistance of their country in the great Struggle which she now sustains. But it is hoped the time is fast approaching . . . when the re-establishment of general peace shall have the friends and Devotees of Science on both sides of the Atlantic at full liberty to unite their effort for the advancement of wisdom, virtue, and humanity, unconfined to sect or nation.<sup>69</sup>

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<sup>67</sup> Rosswurm says Hutchinson "became radicalized in late 1778 or early 1779 and would remain so until his death in 1793." See Rosswurm, *Arms, Country, and Class*, 189. Bell does not cover Hutchinson's political activities in the late 1770s but explains his later radical politics, including opposition to the Constitution of 1787.

<sup>68</sup> APS, *Early Proceedings*, 102. All references to APS Minutes hereafter are taken from the manuscript minutes, now available and digitized at: <http://diglib.amphilsoc.org/islandora/graphics/minutes-american-philosophical-society>.

<sup>69</sup> APS, *Early Proceedings*, 104–105. The letter had been written on September 15 but not transmitted for three months as civil disorder enveloped the city.

Received in France, word of “the great Struggle” that diverted APS “Devotees of Science” would logically have been interpreted as the continuing clash of arms between England and its North American colonies in the long war. But the carrier of the letter, Minister Plenipotentiary Gerard, knew that the struggle that nearly shut down the just-revived APS had been in the streets of Philadelphia, where high drama, mass town meetings, a newspaper war, and violence had brought the city to the precipice. With the wartime economy deranged by galloping inflation—the worth of Continental dollars, issued by the Continental Congress in huge quantities, had made them nearly worthless by mid-1779, “immense heaps of paper trash,” as one Patriotic woman called them—the long-simmering tension between haves and have-nots had broken forth in a fury.<sup>70</sup> At the center of the matter was bread.

With the economy careening out of control, Pennsylvania’s government, recognizing the privation of the poor, tried to stop merchants from monopolizing the grain market and withholding flour from bakers and housewives in search of better profits. Days of rage in May had seen radical militia artillerymen, back from the front, seizing alleged monopolizers and price gougers. By July, a committee charged with establishing fixed prices on essential commodities was distributing barrels of flour and bread to the poor. Through the summer of 1779, merchant advocates of an unrestricted market economy and supporters of price-fixing stared and shouted at each over a widening chasm. Minister Gerard, two months after his selection to the APS, was himself implicated when a price-setting committee in Wilmington seized a cargo of flour and sent it to Philadelphia for distribution at an affordable price. The cargo, as it happened, had been purchased by Robert Morris, hated for forestalling and monopolizing, and John Holker, French Consul in the city. Gerard intervened on their behalf, getting “the flour released and Holker absolved of all wrongdoing.”<sup>71</sup> It is no wonder, then, that the APS met only twice between May 21 and December 10 in 1779, as the bread crisis intensified, such that by early

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70 Mercy Otis Warren, quoted in Nash, *Unknown American Revolution*, 309. By fall 1779 a Continental paper dollar was worth four cents in specie; Nash, 310.

71 For Gerard, see Rosswurm, *Arms, Country, and Class*, 189. Rosswurm provides a detailed account of the agonizing summer of 1779 in chap. 6, “The Militia in the Streets.” One of the city’s wealthiest merchants and soon to be treasurer of the Continental Congress, Morris became a lightning rod for the surging debate. Morris insisted that his freedom as a citizen included the right to send his ships where and when he wanted, even laden with flour desperately needed in the city; or to withhold incoming cargoes until he decided that the moment was ripe to sell advantageously; or to sell flour to whomever he chose at whatever price he could obtain.

September poor Philadelphians were eating bread made of “musty English Flour, which formerly would have been given to the cattle.”<sup>72</sup>

Then, on October 4, the lid blew off the steaming cauldron. Known in history as the Fort Wilson riot, Philadelphians faced off at the stately house of lawyer-legislator James Wilson at Third and Walnut Streets. The day began when a crowd of city militiamen, angry that the price control committee could no longer keep poor families supplied with basic commodities at fixed prices, seized APS Member John Drinker as he left the Quaker meetinghouse. Parading Drinker and four other men regarded as “Tories” through the streets with drums beating “the Rogue’s March,” the mob marched toward Walnut Street. When it reached James Wilson’s house, heavily fortified by his friends in anticipation of a crowd assault, shots rang out. Before the sun set about six were dead, another 17 wounded. Hutchinson had done his best to restrain the militiamen without success in what Henry Laurens, president of the Continental Congress, described as “a convulsion among the people.”<sup>73</sup>

It seems likely that the alarming October bloodletting led to an attempt to reconcile the APS’s divided Members and help the Society regain its footing. Again, the minutes reveal nothing about the discussions, negotiations, and compromises on sensitive matters, as was typical of organizational records of this period. But the roster of 22 new Members, elected three months after the Fort Wilson debacle, has its own story to tell. Over the preceding four years, a total of only three Members had been elected. Now, with a flourish, the call went out to almost two dozen. The choices had little to do with science—only James Madison, president of William and Mary College; and William Churchill Houston, mathematician at the College of New Jersey had any scientific pretensions—but a lot to do with the conduct of the war for independence. Washington and two of his major generals (Arthur St. Clair and Anthony Wayne) received the nod along with Col. William Grayson of the Board of War; Baron Fredrick Wilhelm von Steuben, Inspector-General of the Continental Army; two of Washington’s many aide-de camps (Alexander Hamilton and Henry Laurens); two military engineers from abroad (Chevalier de Ternant, attached to Washington’s Southern Army, and Major Charles Vallancey, 2nd Engineer of Ireland); and Robert Erskine, distinguished English cartographer who joined the Americans to work on their behalf. In gratitude to France and Spain,

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72 Quoted in Rosswurm, 211. On a brave attempt to meet on July 5 only five Members appeared, all of them officers.

73 For two accounts of the Fort Wilson blood-spilling, see Rosswurm, chap. 7; and Alexander, “Fort Wilson Incident,” 589–612. Laurens is quoted in Rosswurm, *Arms, Country, and Class*, 217.

Year	Phila. Area	Other U.S.	Overseas	Total
1779	2	0	1	3
1780	3	14	5	22
1781	2	3	1	6
1782	0	0	0	0
1783	0	0	0	0
1784	9	2	10	21
1785	8	7	14	28
1786	8	1	24	33
1787	12	7	15	34
1788	0	0	0	0
1789	12	11	14	37
1790	0	1	4	5
1791	9	10	10	29

TABLE 3. Members elected to the American Philosophical Society, 1779–1791.

indispensable allies, Chevalier de la Luzerne, Gerard's replacement as France's minister to the United States; and Francois Barbe-Marbois, Secretary to the Embassy of France, received invitations. For their political importance in the Continental Congress John Adams, Thomas Jefferson, John Jay, and Henry Laurens were honored. Here was a war roster, engineered by the Society's officers aware that pacifist Quaker members no longer attended meetings (Table 3).<sup>74</sup>

As part of re-energizing the Society as the fight against the British moved to the south, its officers resumed the pre-war tradition of annual orations to which the public at large were invited. For the 1780 and 1781 meetings the choices of Timothy Matlack and Owen Biddle were nods toward mending the Society's wounds. Matlack had no scientific pretensions but was an ardent Whig aligned with Rittenhouse, Thomson, Reed, and other APS notables. Perhaps more important, he had joined fellow Free Quaker Moses Bartram in proposing an accommodation between the orthodox Friends and those who had been

<sup>74</sup> The only Philadelphia area persons elected, none for scientific contributions, were Rev. General Anthony Wayne; John C. Kuntze, rector of the German Lutheran Church; and Timothy Matlack, Secretary of the State Supreme Executive Council. Matlack, like the other Philadelphians elected in 1779, was a radical Whig; Kuntze ministered to many of the radical militiamen involved in the Fort Wilson riot. The election results, missing from the manuscript minutes of the APS, were reported in the *Pennsylvania Packet*, January 27, 1780.

disowned for their military involvement, a move that bore no fruit at the time.<sup>75</sup> Biddle, also a Free Quaker, was genuinely a scientific thinker and tinkerer. In fact, he was a polymath who had used watch and instrument-making as a springboard to conduct experiments with the electric eel, played an important role in observations of the transit of Venus, had helped prepare the papers related thereto for the first volume of the APS *Transactions*, had experimented with beeswax, and had even convinced himself that mosquito bites were beneficial since “the irritation they occasion makes us give our legs and other extremities of the body a wholesome friction by scratching.” Also recommending Biddle were his tireless contributions in promoting the APS. He had been a member of the Young Junto many years before and “was one of the most active and enthusiastic members” of the revived Society after its merger with the rival American Society in 1768. Serving on four of its standing committees, as one of its curators and secretary, he emerged from his many wartime activities to sign the call for reconvening meetings in early 1779.<sup>76</sup> Whereas Matlack’s oration was a mash of unalloyed patriotism and a celebration of American virtues, Biddle ransacked the history of the world to provide “an historical sketch of those capital inventions and discoveries, which have led to all the subsequent improvements in useful knowledge . . . as to make a total change in the condition of the human race.”<sup>77</sup>

Despite these efforts, Society meetings were poorly attended from 1780 to 1782 (see Table 4), often with officers making up most of the participants. Part of the problem was the unintended effect of incorporating the Society by legislative act in 1781. With hostility against Quakers still running high, Pennsylvania’s assembly insisted that the charter include a clause disqualifying for any Society leadership position a person not capable of holding office in the state—an unambiguous way of freezing Friends out of APS officerships since they had lost all civil rights for refusing to take test oaths pledging allegiance to the revolutionary government. It may also have weighed on Friends that no Quaker had been inducted since the resumption of meetings in 1779. In such an inhospitable atmosphere, it is understandable that Friends, representing about one third of the Society’s resident membership, were loath to attend meetings. The hostility against Friends continued through the year, heightened after Quakers in the city refused to illuminate their windows to celebrate the surrender of the British

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<sup>75</sup> Bell, *Patriot-Improvers*, 2:303. Hindle, *Pursuit of Science*, 270, touts the orations as “notable for their exhortations to advance science for the welfare and greater glory of the United States.”

<sup>76</sup> Bell, *Patriot-Improvers*, 1:99.

<sup>77</sup> Matlack, *Oration Delivered*; Biddle, *Oration Delivered*.

Year	Number of Meetings	Number of Attendees	Ave. per Meeting
1779	10	104	10.4*
1780	13	115	8.9
1781	12	112	9.3
1782	5	27*	5.2
1783	16	164	10
1784	17	226*	13.3
1785	21	199	9.5
1786	22	232	10.5
1787	23	323	14
1788	19	185	9.7
1789	21	256	12.2
1790	22	192	8.7
1791	21*	248	11.8

TABLE 4. Meetings of the American Philosophical Society, 1779–1791.  
\*No attendees were recorded for the meetings of January 4, 1782 or December 17, 1784. The March 1, 1791 meeting to assemble Members for the funeral procession of Franklin is excluded. Statistics for meetings in the 1790s are disfigured by the 1793, 1797, 1798, and 1799 yellow fever epidemics, which emptied the city and made meetings impossible from July through October.

army at Yorktown in October 1781. The houses of APS Members Henry and John Drinker attracted particular crowd attention, while the homes of other Society Members such as Edward Penington, Nicholas Waln, and Thomas Fisher suffered extensive damage, with crowbar- and axe-wielding attackers splintering interior panels and doors, smashing furniture, and shattering windows.<sup>78</sup>

The near collapse of the Society in 1782 went unremarked in the minutes, where the Secretary noted the date of each meeting along with the number of attending Members. The previous year had been bad enough with only three meetings registering more than nine Members. Only six new Members were elected in 1781, most notably the Marquis de Lafayette, the French boy general whose bond with Washington was sealed in blood.<sup>79</sup> Only a few officers and an occasional Member turned

78 Elizabeth Drinker, Henry Drinker’s wife, inked in her diary that “scarcely one Friend’s House escaped” the mob fury. Crane, *Diary of Elizabeth Drinker*, 1:393; *Representation of People Called Quakers*; Rawle and Rawle, “Loyalist’s Account,” 104–107. The diary of Anna Rawle reported that John Drinker was beaten and lost half his goods in his store. See Marietta, *Reformation of American Quakerism*, 245.

79 The others elected were Jared Ingersoll of Connecticut; Ebenezer Hazard of New



out in 1782 for a scant five meetings. At the meeting in January when new Members were elected, the turnout was so feeble that no new Members were elected. Though the war was nearly over and a semblance of order restored to Philadelphia, the Society was caught in the doldrums and continued so deep into 1783. Possibly, stalled attempts to revise the state's radical constitution of 1776 combined with the harsh new policies of radical Whigs to make life miserable for Quakers and suspected Loyalists sapped the enthusiasm for reviving the Society. Definitive answers, however, are hard to come by.

Then the energetic Francis Hopkinson, Treasurer of the Continental Loan Office and treasurer as well of the APS, "soundly spanked the members of the society for failing to throw off their state of lethargy and warned them that if they did not reform, they would 'unavoidably sink into contempt.'"<sup>80</sup> Devoted to science, a poet, painter, musician, judge, and inventor—he had to his credit a water clock, a candle shield, and a lubricant containing rubber—Hopkinson cudgelled the Society's Members as if they were wayward children. They must reform the Society's governance, focus entirely on science, acquire or construct their own building, and—did it really need saying?—attend meetings punctually "with greater ardor." True to his own advice, Hopkinson offered a draft of "additional laws and regulations" for the Society to consider as the year closed.<sup>81</sup>

Under Hopkinson's prodding, Society Members roused themselves for the maiden meeting of 1784. With 21 Members attending, they elected a like number of new Members, 10 of them from abroad (see Table 3). Included were Charles Gravier, Comte de Vergennes, architect of the Franco-American alliance of 1778; Peter Van Beekel, minister from the Netherlands; William Gerard deBrahm, English surveyor and cartographer; Samuel Vaughan, Franklin's bosom friend and, from his perch in London, a supporter of American independence; Jeremiah Belknap of New Hampshire; and John Dunlap, Philadelphia's printer of the Declaration of Independence. Advances were made to the state legislature for procuring a lot near the Statehouse for the Society's hoped-for building. Attendance quickened as more regular meetings took place (see Table 4).<sup>82</sup> Commissioning Rittenhouse to build an orrery for the King of France and launch an air balloon after receiving word of such a project in Paris were other indications of the quickening pulse of the Society.

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York, Thomas Bee of South Carolina; and Dr. Hugh Shiell and Isaac Gray of Philadelphia.

80 Hindle, *Pursuit of Science*, 268; the last phrase is from Hopkinson's "An Address to the American Philosophical Society," in Hopkinson, *Miscellaneous Essays*, 1:362.

81 APS, *Early Proceedings*, 120.

82 APS Minutes, February 6, 1784 and other meetings.

The replenishment of the membership and the engagement with natural history, medicine, natural philosophy, and the improvement of civil society gathered momentum in 1785 and 1786. In 1785, most of those elected, 28 in number, were corresponding Members with only eight added to the Resident Members who potentially would attend bimonthly meetings. But if international fame and the embodiment of Enlightenment ideals were wanted, the Society chose well in electing four internationally celebrated Friends of Liberty. Thomas Paine, whose *Common Sense* had been reprinted dozens of times in many languages, was still in Philadelphia when Franklin, who called Paine his “adopted political son,” arrived in September to find the famous pamphleteer attempting to create smokeless candles and, more grandly, to design an iron bridge to span sizeable rivers. Tadeuz Kosciuszko, lauded for his military engineering skills that had brought General John Burgoyne’s 5,000-man British army to its knees at Saratoga in 1778, had left Philadelphia only a year before, returning to his native Poland, where he would become a national hero for his attempts to reclaim independent Poland from Russian and Prussian rule. Richard Price, dissenting clergyman, friend of Franklin, and tribune of religious toleration, had just published *Observations of the Importance of the American Revolution and the Means of Making It a Benefit to the World*, in which he waxed indignant at the continuation of slavery in the land of freedom.<sup>83</sup> Joseph Priestley, England’s eminent chemist and friend of Franklin, was another son of the Enlightenment. This foursome alone gave the membership roll great overseas distinction.

Among the others elected, James Madison was the most distinguished of the Americans. Also noteworthy were the president of Princeton, Samuel Stanhope Smith, and James McHenry, a Maryland Congressman. Chosen locally were political power brokers William Bradford, the state’s Attorney General; Edward Burd of the Pennsylvania Superior Court; and George Wall of the state Supreme Executive Council.

By 1785, initiating plans to build a home of its own and welcoming home their long absentee President, the Society gave promise of entering a brighter era (Figure 8). Having secured from the Pennsylvania Assembly a portion of the State House Yard facing Fifth Street, plans went apace to gather funds for the design and construction of Philosophical Hall. Samuel Vaughan, the London wine merchant who had

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83 “Till they have [abolished slavery],” Price lamented, “it will not appear they deserve the liberty for which they have been contending. . . . Nothing can excuse the United States if it is not done with as much speed, and at the same time with as much effect, as their particular circumstances and situation will allow.” “Observations . . .” in Thomas, *Political Writings*, 150.



FIGURE 8. Philosophical Hall. Philadelphia, American Philosophical Society.

now taken up residence in the city, provided plans from which construction began. But when few contributing to the building fund—a major source of funding dried up with the withdrawal of Quakers from Society activities—the officers considered abandoning the project or selling the building in its early stages of construction to the Library Company.<sup>84</sup> Then Franklin returned to Philadelphia. To have him back was almost magical. Gone for all but a few years since he had been elected President of the APS in 1768 and absent for more than eight years since he had last been in the city, he was crippled with gout, kidney stones, and the maladies of old age. Yet he was still as adroit in a way peculiarly his own at bringing together those who would often prefer to stay apart. With funds and finesse, he rescued the Philosophical Hall project. Contributing 100 pounds, he summoned Members to his house on Market Street, where, “in a delightful display of psychology and diplomacy,” he rallied them to stiffen their spines and think more positively about what they could do. It was promptly agreed, “in a flurry of emotion,” that work on construction should continue (aided by Franklin’s second contribution of 100 pounds).<sup>85</sup>

After his return to Philadelphia, Franklin also nominated for membership a host of intimates and correspondents from his years in London and Paris.<sup>86</sup> The 1786 and 1787 elections (see Table 4) doubled all those elected in the preceding seven years. Among the luminaries were French Enlightenment *salonistes* Duc Le Rochfoucauld,

<sup>84</sup> Hindle, *Pursuit of Science*, 271–72.

<sup>85</sup> Hindle, 271–72, citing APS Minutes, September 17, 1785. The quoted words are Hindle’s. Philosophical Hall would not be ready for Society meetings until mid-November 1789, five months before their beloved President died on April 17, 1790.

<sup>86</sup> Bell, *Patriot-Improvers*, 1:28–29.



FIGURE 9. Portrait of Dashkova. Alexei Nesterovich Maximow, *Portrait of Ekaterina R. Dashkova as Director of the Imperial Academy of Sciences and Arts*, 2003, replica of early 1790s painting by unknown artist held at the State Historical Museum, Moscow, oil on canvas, Philadelphia, American Philosophical Society.

Condorcet, and Crèvecoeur, the latter famous for his *Letters from an American Farmer*; Jan Ingenhousz, Dutch biologist and chemist, discoverer of photosynthesis in plants; and Princess

Catherine Ekaterina Dashkova, director of the Imperial Academy of Sciences in Russia, was the first woman elected to the Society, in 1789 at age 45, and singular in this regard for many decades (Figure 9). This intake of International Members—they were mostly French and English with a scattering of Dutch, Italian, and Spanish—continued through the 1790s, constituting more than 40 percent of the newly elected Members.

Incomparable in repairing deep fissures in human affairs, Franklin could not dissolve the hostility toward Quakers, still prevalent in the post-war years (Figure 10). Not until 1789 did the state legislature restore full citizenship rights to the Friends by annulling the test oaths that they had refused to take for fifteen years as a matter of conscience. In the meantime, no Friend had been elected to an officer or councilor position of APS after meetings resumed in 1779. Moreover, among the 48 Resident Members elected between 1779 and 1786, no Friend received an invitation. All the while, death thinned the number of Quaker Members, standing at 56 in 1768 at the time of the historic merger, 36 at Franklin's death in 1790, and 27 at the close of the century. They included the only two Quakers admitted to the Society since the onset of the Revolution. Both were brilliant young

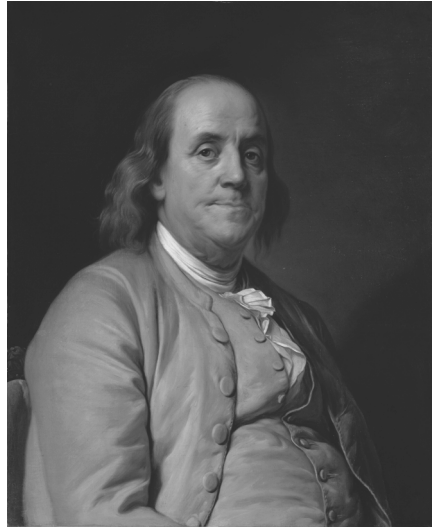


FIGURE 10. Portrait of Franklin in last years. Joseph Duplessis, *Benjamin Franklin*, n.d., ca. 1785, oil on canvas, Washington, DC, National Portrait Gallery.

doctors—Caspar Wistar (1761–1818) and John Penington (1768–1793), elected in 1787 and 1791, respectively.<sup>87</sup> But never would the APS return to its Quaker-tinctured character. The induction in 1814 of Thomas Gilpin, Jr., recipient of a patent for the nation's first paper-making machine; and the election of Caspar Wistar as the APS's fourth President in 1816 were the only echoes of a Quaker-suffused APS.

While the religious and occupational composition of the Society changed markedly in the postwar years, attendance at the prescribed bimonthly meetings remained on a plateau (see Table 4). Ten was the norm, rarely exceeding 20, and not much different than before the Revolution. Yet the minutes of the meetings tell a more optimistic story. The rapid intake of International Members—in the 1790s they exceeded 40 percent of admitted Members—nourished trans-Atlantic exchanges in knowledge, particularly in natural history and medicine. Also, under the guidance of John Vaughan, the Society's reference collection began to grow from a mere 300 volumes at the end of the century to a library of great repute.<sup>88</sup> As well, published scholarship increased with the second, third, and fourth volumes of the *Transactions*, coming off the press between 1786 and 1799. Also, a rapid intake of natural history objects—as small as a stone dodecahedron from the

87 No other Friend was elected for the remainder of the century, though George Logan (1753–1821), the grandson of James Logan, would have qualified but for his disownment three years before his election in 1793 for joining a militia unit in Philadelphia.

88 Gary, "Study of American Origins."

Ohio River and as large as a Native American sculpture found in the Cumberland River in Virginia “supposed to represent an Indian woman in labor”—began to turn the modest cabinet of curiosities into a museum of natural history worthy of international attention.<sup>89</sup> Published annual orations told the world of the Society’s participation in the boisterously expanding, westward moving new republic.

Leadership mattered too. The election of David Rittenhouse in 1791 brought new energy to the Society. It was he who set the standard for public service and promotion of useful knowledge through his multiple boundary surveying labors; his participation in river, canal, and road projects; and his devotion, as the state treasurer from 1777 to 1789, to the thankless task of putting Pennsylvania’s tangled finances on a stable footing.<sup>90</sup> At the same time, Rittenhouse accepted the role as leader of the Democratic Society of Pennsylvania, the most influential of the anti-Federalist political action clubs established to oppose the Washington administration.

With Rittenhouse’s death in 1796, Jefferson became the Society’s third President. Arriving from Monticello in March 1797 as the nation’s vice president, he found himself all but frozen out of President John Adams’s administration. This was all to the APS’s advantage, for Jefferson, retreating to Philosophical Hall, threw himself into the Society’s work. Chairing most meetings while in the city, he organized fact-finding expeditions to trace the spread of the wheat-destroying Hessian fly and to explore the continent’s interior; promoted research on the indigenous people of North America in all their linguistic and cultural variety and on the study of vertebrate paleontology; and worked to emphasize natural history and agricultural improvements in the Society’s agenda.<sup>91</sup> Though his election as the nation’s third president in 1800 and the removal of the nation’s capital to the banks of the Potomac River necessarily limited Jefferson’s role as APS’s leader, he maintained a lively correspondence with Society Members and helped from a distance to strengthen its sinews.

Despite devoted leadership, Rittenhouse and Jefferson were partially hobbled by a phenomenon entirely out of their control. Like all Philadelphia institutions, the Society’s steps forward were compromised in the 1790s by the silent visitor who drove the federal and state governments out of the city in the late summer of 1793, convinced thousands to flee to the countryside, and turned Philadelphia into a

89 APS, *Early Proceedings*, 196 (August 19, 1791) and 207 (October 5, 1792). Bell, *Cabinet of Curiosities*; Smith, *Museum*; and Gochberg, “Useful Cabinet.”

90 Hindle’s *David Rittenhouse* is the authoritative biography.

91 Spero, “Other Presidency,” 12–25. For Jefferson’s deep engagement with Native American culture and paleography see Thomson, *Jefferson’s Shadow*.

morgue. Even the most talented medical and scientific Members of the APS had no answers to *aedes aegypti*, the murderous insect that ignited a yellow fever pandemic in 1793, killing some four thousand and returning in 1797, 1798, and 1799 to scythe down many thousand more.<sup>92</sup> By 1797, it became almost obligatory to hold no meetings after mid-July in anticipation of another yellow fever onslaught.

Thus, closed the century for the APS—the Age of Reason some called it—with a Library and meeting place of its own, with its membership roll modestly increased, diminished by the absence of Quaker Members but strengthened by its many Members abroad,<sup>93</sup> with an international reputation, and with the hope that the gathering, sponsoring, and dissemination of useful knowledge would mark it as the nation's preeminent scholarly society.

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<sup>92</sup> For recent essays on the swelling scholarship on the yellow fever scourge of 1793, see Estes and Smith, *Melancholy Scene*.

<sup>93</sup> In the last decade of the century, when 43 percent of 124 elected Members were from abroad, the Society elected fewer than 30 Members from the Philadelphia area. With natural death and the yellow fever epidemics taking the lives of many Members, the number available to attend meetings remained static, thus continuing the problem of sparse gatherings.

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