



Harvard Once Removed: The "Favourable Situation" of Hannah Winthrop and Mercy Otis Warren

Citation

Lord, Frances Herman. 2004. Harvard once removed: The "favourable situation" of Hannah Winthrop and Mercy Otis Warren. In *Yards and gates: gender in Harvard and Radcliffe history*, edited by Laurel Ulrich, 39-52. New York: Palgrave Macmillan.

Permanent link

<http://nrs.harvard.edu/urn-3:HUL.InstRepos:4662766>

Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA>

Share Your Story

The Harvard community has made this article openly available.
Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)

Harvard College Once Removed:

The “Favorable Situation” of Hannah Winthrop and Mercy Otis Warren

Frances Herman Lord

“Dr. Price thinks Thousands of Boyles Clarks and Newtons have probably been lost to the world, and lived and died in Ignorance and meanness, mearly for want of being Placed in favourable Situations, and Injoying Proper Advantage,” Jane Franklin Mecom wrote to her self-made brother, Benjamin Franklin, in 1786.¹ The wife of an unsuccessful Boston tradesman and mother of twelve children, Mecom was repeating the sentiments of her minister, which expressed the constraints facing eighteenth-century women without the advantages of education and leisure. Conscious of her own struggles caused by poverty, middle-aged widowhood, and the premature death of almost all of her children, the 74-year-old Mecom continued, “Very few we know is able to beat thro all Impedements and Arive to any Grat Degre of superiority in Understanding.” Mecom possessed extraordinary pluck, commonsense, and resourcefulness, but she could not translate those qualities into the advantages enjoyed by women fortunate enough to occupy “favorable Situations.”

The lives of two of Mecom's Boston-area contemporaries, Mercy Warren and Hannah Winthrop, in contrast, illustrate what could be achieved by women of privilege in the mid- to late eighteenth century. Although responsible for child-rearing and household management, Warren and Winthrop were members of a class that had the opportunity for both education and leisure. What set the two women apart from other women of advantage, however, was their close and profitable association with Harvard-educated men--an extraordinary advantage that shaped their intellectual endeavors.²

Warren and Winthrop were daughters of men of substance who were leaders in the intellectual and political circles of colonial and Revolutionary-era Boston. The two childhood friends could advance beyond the informal education that introduced young children throughout New England, male and female, rural and urban, to the rudiments of reading, writing, and cyphering. Post-dame school education for "young misses" such as Winthrop, Warren, and their social peers could comprise several terms at a fashionable needlework school or attendance at urban dance or painting classes. There, aside from a smattering of French, geography, and history, the emphasis was on moral instruction rather than on what was viewed as "rational" instruction, that is, instruction "agreeable to reason"³ and commensurate with higher academic learning.

Meanwhile their brothers would be privately tutored or would attend male-only Latin school. In both settings, schoolboys would be drilled in speaking and reading Latin and Greek and would be introduced to higher mathematics as the prerequisite for entrance to college. In colonial colleges such as Harvard they would recite the writings of classical authors in their original language and also study the mathematics and

experimental science of Boyle, Newton, and Clarke. The study of Newtonian natural philosophy (astronomy, physics, and optics) was required of all juniors and seniors at Harvard.⁴ Introduced to the curriculum in the late 1720s by Isaac Greenwood, the first Hollis Professor of Natural Philosophy and Mathematics, its study was firmly entrenched by John Winthrop, who succeeded Greenwood in 1738 at the age of 24. By midcentury Winthrop was recognized as the foremost member of New England's scientific community.⁵

Young women of means, impeded by their sex rather than their social circumstances, were ineligible for college because they lacked the necessary classical preparation. True, their schooling would impart the social skills and deportment necessary for genteel living as well as the elevated sentiments and expressions of polite, rather than ordinary, discourse. But they would not learn the rational thought imbued in traditionally male subjects, whether mathematics and science or philosophy and logic. Thus all women, not only those in Mecom's straitened circumstances, faced a seemingly insurmountable impediment--rooted in gender rather than intellectual capability--in achieving a "Grat Degree of superiority in Understanding" comparable to that of men. Although this obstacle was strengthened by cultural attitudes and unconsciously internalized, occasionally there did exist circumstances that placed certain women in situations that favored a breach of the barriers.

Hannah Winthrop's unique position as the wife of John Winthrop, the renowned professor of natural philosophy and mathematics at Harvard, offered the potential for such a situation. The family desk, so Hannah Winthrop reminded Warren, was "generally adorned with a Variety of Authors"; their works comprised history and literature, theology and natural philosophy.⁶ Hannah's reading indicates the scope of the intellectual life she shared with her husband, for John Winthrop was, in fact as well as name, Hannah's "Dear Preceptor" and "Philosopher." Professor Winthrop was his wife's teacher and intellectual guide to the world of rational ideas in general and of natural philosophy in particular.

Hannah Winthrop's intimate friendship with Mercy Warren contributed another dimension to this "favorable Situation." Like Winthrop, Warren was the wife and sister of Harvard graduates, and like Winthrop, she profited from this association: first, as an attendant at her brother's tutorial preparation for entrance to Harvard, and second, as the intellectual, as well as domestic, partner of her husband, James Warren.⁷ Aware, as Warren once expostulated, that an apparent "Deficiency . . . of Female Intellects" was the result of "the different Education betow'd on the Sexes," the two women reveled in the "Cultivation of the Mind" afforded by sharing their husbands' interests.⁸

Although preoccupied in her rural Massachusetts home with her five sons and the Whig politics of her husband, Mrs. Warren was a keen observer of the Revolutionary War and through her poetry and plays, an acute commentator on politics.⁹ As evident in their private correspondence, both she and Hannah Winthrop had fiercely supported their husbands' active advocacy of the colonies' overthrow of English rule. Following the outbreak of hostilities, James Warren, then Speaker of the Massachusetts House, served as a member of the Navy Board for the eastern department, although John Winthrop's age and frail health, if not his position at Harvard, precluded his active involvement in military affairs. Mercy Warren's admiration of Professor Winthrop as "a distinguished genius of our time," however, was no less fervent than Hannah Winthrop's admiration of Colonel Warren as a political and military leader.¹⁰ Moreover, as we shall see, the correspondence between the two friends provided a sounding board that reinforced their engagement in their husbands' endeavors. Spanning nearly 20 years, their "conversing by letter," instigated at Mercy Warren's "kind invitation" in 1768, marked the decades and the reflections of their mature years and continued until 1786, the year of Warren's death.¹¹

Early in 1777, upon considering the firsthand news from the military and diplomatic fronts that entered their Cambridge home by way of familial and political connections, Hannah Winthrop cleared a space for her pen, paper, and inkwell among the books on the family desk. She industriously applied pen to paper—any news of the war, now in its second year, would be welcome to Warren who, residing in the town of Plymouth south

of Boston, was “removed[d] from the scene of action.”¹² After a sally deprecating General’s Howe’s latest boast to conquer America, Mrs. Winthrop paused in her writing: Would her “dear Friend,” she wondered, charge her “with an Affectation of dabbling in Astronomy” if she revealed her participation as “an humble Attendant” in her husband’s recent scientific project, the observation of a lunar eclipse of the sun. Despite her doubts, Winthrop proceeded with an elegantly refined description “of Cynthia in Eclipsing that glorious Luminary that rules the Day.” Drawing a practical and moral conclusion, she remarked that the eclipse and other celestial phenomena are “great Points to an astronomer, tho the greater part of Mankind are . . . inattentive to these Glorious works of an almighty Creator.” With a nod to the conventions of polite discourse, she concluded, “Now [if] I have incurrd your Censure pray pass Sentence.”¹³

Hannah Winthrop’s attendance upon her husband’s observation of the eclipse and her subsequent remarks to Mercy Warren reveal the benefits conferred by her association with Harvard College, albeit an acquaintance once removed from the academic classroom. For both women the college represented the center of New England’s intellectual life, the “Seat of Science [i.e., learning] and Polite Literature,” as they termed it. In Warren’s opinion, Winthrop’s access through her husband to the academic world insured that she was “surrounded with advantage,” as Winthrop had acknowledged to Warren early in their correspondence. Indeed, Hannah felt that Warren’s “good opinion” of her “situation” formed Mercy’s “expectation” of the intellectual content of their exchanges. For her part, however, she used Warren’s envy of her proximity to

Harvard and its educational advantages as the bait in urging her friend to visit more often.¹⁴

Among those advantages was one that Hannah Winthrop especially cherished: the use of John Winthrop's own astronomical instruments as well as a number from the College collection. As the Hollis Professor of Natural Philosophy and Mathematics, Winthrop had the privilege of borrowing various instruments from the College--a practical arrangement that allowed him to conduct experiments and observations at his house in the days before Harvard had either science laboratories or an observatory. An inventory of the College apparatus in the professor's home taken shortly after his death lists some eleven instruments, including astronomical apparatus such as telescopes and quadrants.¹⁵ That Professor Winthrop was able to conduct various experiments at home also illustrates the lack of professional barriers between workplace and home in the mid-eighteenth century. His home work and the instruments he employed became a source of enjoyment for Hannah and contributed to her informal science education.

These opportunities set Hannah apart from most of her contemporaries. The approved place of women as well as their lack of proper education acted together to suppress their actual practice of science.¹⁶ Although lecturers sought women's attendance at public science demonstrations and booksellers sought their business, both tacitly acknowledged women's (and most men's) lack of science education. This is evident in newspaper advertisements that touted "fashionable" demonstrations of electricity and pneumatics and also introductory texts made "plain and evident" for the benefit of those "who have not made Philosophy a previous study."¹⁷ The passage in which Winthrop

relates her experience makes clear that Newtonian astronomy exerted a special appeal for her and also provided a special opportunity. From her remarks, it is apparent that her participation in scientific activity was motivated not by fashion's dictates but rather by rational and religious concerns.

As her husband's "humble Attendant," Hannah Winthrop had access to the apparatus and knowledge necessary for the practice of astronomy. Her brief description of the eclipse, while deliberately couched with "sentimental elegance and dignity" in the language of polite discourse, hints at what her astronomical activities may have comprised.¹⁸ "The Sky at the beginning of the Eclipse," she reported to Mercy Warren, "was unkindly overspread with Clouds but soon Cleard off, and gave so good a View as to be able to judge with Precision the Quantity and duration of the Moon's path over the Sun. He has also this fall taken a trip with little Mercury across the Sun similar to the Transit of Venus. I think it a beautiful Sight."¹⁹

With this description Winthrop relates the atmospheric conditions at the time of the sighting, alludes to the precise scientific measurements involved, suggests her familiarity with a recent transit of the sun by the moon and Mercury, and compares the latter to the transits of Venus that had occurred in 1761 and 1769. Winthrop does not specify what measurements she assisted in taking. Nonetheless, her remark that they concerned the "Quantity and Duration of the Moon's path across the sun" leads to the conclusion that she may have had the knowledge to make sightings and readings that required a telescope, an astronomical quadrant, and a clock. For these observations, Winthrop and her husband probably used the family clock, a standing quadrant borrowed

from the Harvard apparatus collection, and telescopes belonging to her husband and to the Harvard collection.²⁰ Although Hannah's letter contained only a verbal description of the eclipse, a diagram with calculations made by Professor Winthrop of a much earlier lunar eclipse of the sun (1747) serves to indicate the close attention and precise readings required by an "Attendant" at such astronomical observations: five sightings taken over the course of twelve hours were necessary to plot the path of the moon and the angle of its course, from the moment of ingress to the moment of egress across the face of the sun.²¹

In the manner of ministers and poets, Hannah Winthrop "improv'd" the incident by "expiating" on its meaning. Her defense of astronomical practice rested on its teleological message. "I assure you," she emphasized, "these are great Points to an astronomer, tho the greater part of Mankind are so inattentive to these Glorious works of an almighty Creator that they rise and shine and perform their amazing Circuits without any other observation than its being sometimes a fine sunshine day, or a fine Starlight Evening."²² Acquired through the guidance of her husband, Winthrop's knowledge of astronomy, no matter how rudimentary, provided her with a heightened awareness that allowed her to appreciate the glories of the universe manifested in its daily, not just extraordinary, operations. Moreover, this was privileged knowledge, because it drew Hannah into a sphere of learning set apart from the "greater part of Mankind" and defined not by gender but, as Jane Mecom phrased it, by a "superiority in Understanding."

Yet astronomy had an even more poignant, personal appeal. By turning her gaze to the celestial world, Winthrop found escape from the very real uncertainties that

surrounded her: the disorder, dislocation, and depredations brought on by the “Horrors of the Civil War” now in its second year.²³ In referring to the celestial world, she marveled, “However enwrap in uncertainty the events in which we of this Terrestrial ball are interested a perfect regularity reigns there. No intervening accident can prevent the Completion of their appointed route.” Thus the “appointed” order and constancy--what natural philosophers spoke of as the “design” of the natural world--evident even in extraordinary celestial phenomena offered solace that could be found nowhere else in the disordered times brought on by the “unnatural” condition of war conducted by England, the “mother country,” against her colonial subjects. Winthrop reinforced this idea in the closing sentence of this passage, when she proffered the hope that “ the inhabitants of those States [i.e., the planets and stars] are better employd than in spreading devastation and death among their Loyal Subjects and brethren.”²⁴ Winthrop’s report of the eclipse reflected her own synthesis of astronomy, religion, and politics. Her “improvement” upon it validates her modest claim to “dabbling” in astronomy, while it also elucidates the ingeniousness of her disclaimer, “Now I have incurrd your Censure pray pass Sentence.”

One of the bonds that enriched the friendship between Warren and Winthrop was that each regarded the other’s husband with equal affection and respect. More important than respect born of external achievements was affection engendered by their mutual awareness that, as Mercy Warren once remarked, “We are both happily united to such companions as think we are capable of taking part in whatever affects themselves.” Mercy, therefore, felt confident in asserting her political views, frankly telling Hannah, “Nor shall I make an apology for touching on a subject a little out of the line of female

attention.”²⁵ Winthrop, writing sometime later in a similar vein to her “sister Heart,” praised their spouses for allowing them a role beyond mere “domestick use”:

Dear Mrs. Warren I often contemplate Your & my happy Lot in the kind disposition of Providence in our dear Consorts formd with disinterested enlargd minds, not only pursuing the happiness of Mankind in general, but making happy Domestic life, not keeping that awful distance some persons imagine Heaven designd between the Social Tye, who look upon Wives only fit for domestick use. I am sure we may Bless our selves in Consorts who delight in forming our Ideas & in Communicating Intellectual Pleasure.²⁶

Conversation with her husband enlarged Hannah’s sphere, creating a *mutual* “domestic life” wherein she could engage in the practice of science.

For Winthrop the practice of science fell within the realm of “rational” rather than “polite” pursuits. Indeed, as Hannah told Warren, she was “unacquainted with Polite Life, the encreasing dissipation, the round of Elegant amusements which are becoming the work of every Evening.” Warren, too, prided herself on her ability to transcend the superficiality often ascribed to female pursuits. Despite her avowal of “retired life,” Warren was far from being secluded. Through her literary endeavors and her personal association and correspondence with political activists, she negotiated what has been termed “an associative, public sphere,” a sort of middle sphere of “social, discursive, and cultural production.”²⁷ Like Winthrop, she attributed her good fortune to a supportive husband. Concluding a long letter to Winthrop on the infringement of despotic rulers on

the natural rights of those whom they governed, she protested, “As for that part of mankind who think every rational pursuit lies beyond the reach of a sex too generally devoted to folly, their censure or applause is equally indifferent to your sincere friend.”²⁸

Moreover, for Warren any “rational pursuit,” including science, was inextricably tied to the pursuit of moral goodness, as she made clear in a letter to Winthrop prompted by the government crisis of 1773. Without moral goodness and knowledge, she maintained, the “path of Rectitude” would be beset by “Anarchy & darkness,” especially now when the “enemies of America” were “sacrificing the rights of Posterity to . . . Ambition & Avarice.” She advised Hannah,

Let us turn our eyes to the more rational satisfaction of the good man who exerts his talents for the good of society. . . . [who]

Tracing the depth of Nature’s hidden Laws
With Godlike Newton, mounts beyond the stars,
And ranging o’er the vast ethereal plain
Surveys each System of the wide domain.

She coyly concluded, “If you know a person who answers to this Character, I hope you will not fail to make my respectful regard acceptable to him.”²⁹ Warren knew her friend would pass the compliment on to her husband, John Winthrop.

Following John Winthrop's death in May 1779, Warren expressed her condolences to Hannah in the form of a poetic eulogy. She not only eulogized her friend's husband but also exhibited her own awareness of Newtonian philosophy in verses adorned with scientific allusions, perhaps gained from her once-removed association with Harvard and its professor of natural philosophy. Warren's litany of philosophic sages extended from the ancients to the moderns: from Socrates and Plato to Newton, Boyle, and Locke, Huygens and Gravesande.³⁰ Yet she regarded their truths as a poor substitute for the "reveal'd" truths of "Christian faith and hope," which she identified as,

. . . the perfect code,
Seal'd by a messenger divine,
The sacred son of God.³¹

Warren's elegy celebrated Winthrop as the perfect "guide to Harvard's youth," among whom were her own sons.³² For, in her view, he successfully combined the rational truths of philosophy with the revealed truths of Christianity. Indeed, in a letter to Hannah, Warren had commented that Professor Winthrop "has often in the silence of midnight observed the rotation of the stars & with holy rapture adored the divine architect who constructed the stupendous fabric, & set the wheels in motion."³³ What Warren here identifies as a felicitous blend of religion and natural philosophy on the professor's part mirrored her own accommodation of piety and science, which was rooted in her Puritan religious heritage.³⁴

The gift of Warren's poem was balm to Hannah Winthrop, whose loneliness was heightened by the loss of the intellectual stimulation her husband had always provided: "That fatal fall from the Sublime pleasures of the most engaging Converse to the trifling," as she confided in a letter to Mercy.³⁵ Her response to Warren's "Consoling animating ingenious poetic piece" was to share it with her minister. He in turn saw that it was published (on the front page of the *Independent Chronicle* for October 21, 1779) so that, as Hannah reported to Mercy, "others might enjoy the Pleasure likewise."³⁶

The consolation Mercy Warren afforded Hannah Winthrop was short-lived; within the next five months Hannah's loss of her husband was compounded by the loss of the scientific instruments she had shared with him. In April 1780, after she was required to surrender the scientific instruments kept in their home, she poured out her wounded feelings to Warren. Hannah's polite diction cannot conceal her anguish: "Could you have thought," she asked her friend,

that after being bereft of my most essential Portion, I should be [so] deeply affected with being derob'd of those emblems, those badges of office that mark^t the Astronomer, that gave such pleasing amazement to my dear departed Philosopher[?] ah! My poor wounded heart was most exquisitely touchd by a requisition of those enlightening Tubes [i.e., telescopes] thro which He often led me to View the wonders of creating power, but a Successor must enjoy all those advantages.³⁷

With the removal of the instruments by the Harvard officials, Hannah suffered a multiplicity of losses: the overt losses of her husband himself and of the astronomical activities they formerly shared, and the more subtle losses associated with her husband's prestige and his power to evoke the immediacy of creation and hence Hannah's own comprehension of the "creating power" of God. Without the assistance of her husband or the possession of his instruments, Hannah was powerless to pursue even casual astronomical observations.

Most important, widowhood deepened Hannah Winthrop's cognizance of her dependence on her husband for "forming ideas" just as it deprived her of the "intellectual Pleasure" of conversational exchange. Marriage had invested her, "with all those pleasures the rational soul could possibly desire," she wrote to Mercy Warren in April 1780. The divesture of those pleasures was especially painful on this occasion only a few days after what would have been her twenty-fourth wedding anniversary--the first of 11 anniversaries she would spend alone before her own death in May 1790. Her husband's death had "dissolved the endeared Connection" that bound her to the world of ideas just as certainly--and just as strongly--as it had bound her to her husband.³⁸

Perhaps Winthrop's heightened awareness of the extent that her intellectual development had depended on the role of a supportive husband precipitated her re-evaluation of women's prescribed role in even the most enlightened marriage. Only two years later, her correspondence with Mercy Warren upon the occasion of the annual installation ceremonies at "Alma Mater" (as she now familiarly referred to Harvard) suggests that she had become a champion for women's higher education. "Learning," she

observed in the early years of the new republic, had become “suitable”--that is, appropriate to a wider audience than those young men served by Harvard. “Why should not the Capital [Boston] be Philosophied,” she queried, “& the Fair ones of the present day, be taught to square the Circle, & the important knowledge of the laws of Attraction, & Cohesion.”³⁹

In academic circles “to square the Circle” and to know “the laws of Attraction, & Cohesion” were shorthand references to advanced mathematics and to Newtonian natural philosophy--“rational” subjects that symbolized and were exclusive to advanced, male instruction. Thus Winthrop advocated that young women, “the Fair ones of the present day,” acquire an education equal to the rational education of young men. From the vantage of her widowhood, she realized that only such instruction would enable them to fulfill the “prevailing thirst for acquirement”--a thirst not satisfied by the once-removed position of “the Professor’s wife,” but by the “favorable Situation” of young women as students in their own right.⁴⁰

Notes

I would like to acknowledge my twentieth-century preceptors – Jan Golinski, for introducing me to the history of Science; Laurel Thatcher Ulrich, for introducing me to women’s history; and I. Bernard Cohen, for his aid in unraveling the intricacies of Newtonian science as a member of my dissertation committee – and to thank my colleague Beth Nichols, for her critical reading of this essay in its embryonic form.

1. Quoted in Anne Firor Scott, “Self Portraits: Three Women,” in *Uprooted Americans: Essays to Honor Oscar Handlin*, ed. Richard L. Bushman et al. (Boston: Little, Brown and Company, 1979), 55. For a biography, see Carl Van Doren, *Jane Mecom: The Favorite Sister of Benjamin Franklin . . .* (New York: Viking Press, 1950). Mecom refers to Isaac Newton (1742-1727) and Robert Boyle (1627-1691), whose late seventeenth- and early eighteenth-century scientific discoveries ushered in the era of the “new”—i.e., “experimental”—science, and to the English clergyman Samuel Clarke (1627-1691), whose writings popularizes Newtonian science in the defense of Christianity.
2. Hannah Fayerweather Tolman Winthrop (1726-1790) was the daughter of Thomas and Hannah Waldo Fayerweather of Boston, and sister to Samuel Fayerweather (Harvard, 1743). The childless widow of Farr Tolman, she married Professor John Winthrop in 1756. Winthrop’s first wife Rebecca Townsend, whom he married in 1746, died in 1753, leaving four sons whose care Hannah assumed. *Sibley’s Harvard Graduates* 10: 246-48.
- Mercy Otis Warren (1728-1814) was the daughter of James and Mary Allyne Otis of Barnstable and sister of James Otis (Harvard, 1743); in 1754 she married James Warren (Harvard, 1745) with whom she had five sons. Jeffrey H. Richards, *Mercy Otis Warren* (New York: Twayne Publishers, 1995), 5. Mercy Warren’s brother and husband were both students of John Winthrop, as was Hannah Winthrop’s brother. For James Warren, who attained the rank of general in the colonial forces, see *Sibley’s Harvard Graduates*, 11: 584-606.
3. Samuel Johnson, *A Dictionary of the English Language in which the Words are Deduced from Their Originals . . .* (London, 1755).

4. In the eighteenth century, the term ““natural philosophy”” comprised mathematics and the physical sciences; it was a distinct branch of “science,” a term used synonymously with “knowledge.” The modern use of the term “science” was not introduced until the 1830s. For the general curriculum at Harvard, see Samuel Eliot Morison, *Three Centuries of Harvard* (Cambridge, Mass.: Harvard University Press, 1936); for the science curriculum, see I. Bernard Cohen, *Some Early Tools of American Science: An Account of the Early Scientific Instruments and Mineralogical and Biological Collections in Harvard University* (1950; rpt., New York: Russell & Russell, 1967).
5. Winthrop (1714-1779) was known for his astronomical observations, correspondence with members of the international science community, and contributions to the *Philosophical Transactions* of the Royal Society of London; he was awarded an honorary doctorate by the University of Edinburgh and in 1765 was elected a Fellow of the Royal Society. See Raymond Phineas Stears, *Science in the British Colonies of America* (Urbana, Ill.: University of Illinois Press, 1970), 742-70.

6. Hannah Winthrop to Mercy Otis Warren, Jan. 9, 1778, Warren-Winthrop Papers (1758-1789?), Massachusetts Historical Society, Boston [hereafter, W-W Papers].
Winthrop mentions books on these topics in various letters to Warren. The Warren-Winthrop Papers include 49 letters (46 from Winthrop, 3 from Warren) that survive from their correspondence extending from late 1768 to at least 23 March 1786 and dealing with intimate family news as well as contemporary political and military events; some are reproduced in whole or part in “Warren-Adams Letters, Being Chiefly a Correspondence among John Adams, Samuel Adams, and James Warren,” vol. 1, “1743-1777,” *Collections of the Massachusetts Historical Society* 72 (1917), and vol. 2, “1778-1814,” *ibid.* 73 (1925) [hereafter, “W-A Letters”].
7. For Mercy Otis Warren’s education, see Rosemarie Zaggarri, *A Woman’s Dilemma: Mercy Otis Warren and the American Revolution* (Wheeling, Ill.: Harlan Davidson, 1995).
8. Warren’s comments regarding female education, made in response to a young woman seeking advice, are quoted in Alice Brown, *Mercy Warren* (New York: Charles Scribner’s Sons, 1896), 241-42.
9. For Warren’s poems and plays, see *The Plays and Poems of Mercy Otis Warren*, comp. and intro. Benjamin Franklin V (Delmar, N.Y.: Scholars’ Facsimiles & Reprints, 1980).

10. Professor Winthrop was elected to the Massachusetts Provincial Congress in 1774 and 1775, but he declined re-election in 1777, citing ill health and his professional duties. *Sibling's Harvard Graduates* 10:258-60. Quotation, Warren to Winthrop, June 3, 1775. Mercy Warren Letterbook, Mercy Warren Papers (microfilm), Massachusetts Historical Society [hereafter MW Letterbook], 76. See also, Warren to Winthrop, April [?], 1773, *ibid.*, 63; Winthrop to Warren, Jan 4 and April 12, 1773. W-W Papers; "W-A Letters" 1:16-17.
11. Quotations, Winthrop to Warren, Oct. 6, 1768, W-W Papers (in response to a letter from Warren, Sept. 23, 1768). Winthrop also wrote of her delight at the "renewal of former friendship . . . the many happy hours we spent together in our youth"; *ibid.*
12. Winthrop to Warren, Jan. 3, 1775, W-W Papers.
13. Winthrop to Warren, Jan. 14, 1777, W-W Papers; "W-A Letters," 1: 283-84.
14. Winthrop to Warren, Nov. 10, 1773, W-W Papers.
15. See the catalogue of instruments taken May 20, 1779, "*At the House of Mrs. WINTHROP*" following Professor Winthrop's death. The catalogue was added to a separate inventory of the College apparatus and is published in Cohen, *Early Tools of American Science*, appendix II.

16. Only one woman in the northern colonies, Caroline Colden Farquher (1726-1766), daughter of Lt. Gov. Cadwallader Colden of New York, has been recognized by historians of science and social historians as a “scientist.” Introduced to botany by her father, Colden (as she is known to historians) collected specimens and corresponded through him with European natural historians; Joan Hoff Wilson, “Dancing Dogs of the Colonial Period: Women Scientists,” *Early American Literature* 7 (1973): 225-27. Colden abandoned her botanical pursuits after her marriage in 1759; Margaret W. Rossiter, *Women Scientists in America: Struggle and Strategies to 1940* (Baltimore, Md.: Johns Hopkins University Press, 1982), 2-3. Applying a twentieth-century concept of “scientist” (i.e., one who publishes or teaches), Rossiter regards Colden as “America’s pioneer (and only) woman scientist for almost ninety years” (p. 3), whereas Wilson, using a more inclusive approach, lists nine colonial women “scientists” active in agronomy, horticulture, and botany; “Dancing Dogs,” 225-351, esp. 232n3. For her scientific work, see Jane Colden, *Botanic Manuscript*, ed. H. W. Rickett (New York: Chanticleer Press, 1963). For southern women scientists and their books, see Kevin J. Hayes, *A Colonial Woman’s Bookshelf* (Knoxville: University of Tennessee Press, 1996), chap. 6.

17. See, for example, the advertisement for “Two LECTURES on PNEUMATICS,” *Boston News-Letter*, June 21 and 28, 1770. For science lectures and demonstrations in Boston, see Frances H. Lord, “Piety, Politeness, and Power: Formation of a Newtonian Culture in New England, 1727–1779” (Ph.D. diss., University of New Hampshire, 2000), chap. 4; for their appeal to women, see *ibid.*, esp. 173-77 and 191-210.

18. Winthrop uses this phrase to describe her own writing, Winthrop to Warren, Nov. 10, 1773, W-W Papers. Winthrop's style was an extreme example of conversational politeness whose object was to achieve "verbal agreeableness" through the "dextrous management of words"; Lawrence Klein, *Shaftesbury and the Culture of Politeness: Moral Discourse and Cultural Politics in Early Eighteenth-Century England* (New York: Cambridge University Press, 1994), 4.
19. Winthrop to Warren, Jan. 14, 1777, W-W Papers; "W-A Letters," I: 284.
20. Among the entries in the 1779 inventory of college instruments in the Winthrop home were "A standing Quadrant of 2 feet Radius," "An ac[h]romatic Telescope . . . ," and "A large reflecting Telescope"; Cohen, *Early Tools of American Science*, appendix II.
21. John Winthrop's diagram and calculations of the 1747 lunar eclipse are reproduced in Cohen, *Early Tools of American Science*.

22. Winthrop used these terms in a letter to Warren, Nov. 10, 1773, in which she described the “beauties of creation” viewed on a trip from Portsmouth to Dover, N.H., stating that if she had the “poetic Genius” of Warren, she “might have improvd the happy opportunity of expatiating on the beauteous scene”; W-W Papers. Four years later, Warren herself improved Winthrop’s description with a poem, entitled “To Honoria, on her Journey to Dover, 1777.” Moving from a description that “trace[s] the scene” described by Winthrop, Warren contemplates the “august design” marked out by heaven for the “happy land.” Here, where truth and genius rule, “other Boyles or Newtons yet may rise, / And trace the wonders of the western skies.” *Poems, Dramatic and Miscellaneous*, 216-17 [hereafter, *Misc. Poems*], in Franklin, ed., *Plays and Poems of Mercy Otis Warren*.

23. Winthrop to Warren, Sept 27, 1774, W-W Papers; “W-A Letters,” 33. Hannah Winthrop’s description of the evacuation of Boston following the Battle of Bunker Hill is one of the most vivid eyewitness accounts of the war, see Winthrop to Warren [April or May] 1775, W-W Papers; “W-A Letters” 2: 409-11.

24. Winthrop evidently subscribed to the belief that the planets were inhabited, a belief common in the eighteenth century.

25. Warren to Winthrop, [?] 1774, MW Letterbook. Winthrop expresses a similar willingness to contravene “the sphere of female life” that precludes being “any way active in the manoeuvres of state” by making “observations” on the patriotic activities of fellow Bostonians; Winthrop to Warren, June 14, 1774, W-W Papers.

26. Winthrop to Warren, June 23, 1775, W-W Papers. Winthrop's awareness here is remarkably akin to Klein's description of reason as a "habit actuated in the practice of conversation"; unspoken in Winthrop's letter is also an attitude similar to Klein's observation of participants as "agents [who] resisted the passivity of mere listening"; Klein, *Shaftesbury*, 98.
27. Lawrence Klein, "Gender and the Public/Private Distinction in the Eighteenth-Century: Some Questions about Evidence and Analytic Procedure," *Eighteenth-Century Studies* 29, no. 1 (1994): 97-109. For an insightful analysis of Warren's correspondence, see Richards, *Warren*, chap .2.
28. Warren to Winthrop, [?] 1774, MW Letterbook, 71.
29. Warren to Winthrop, [?] Feb. 1773, MW Letterbook. See also Warren to Winthrop, April [?], 1773, MW Letterbook, 63.
30. John Locke (1632-1704), English political philosopher; Christian Huygens (1629-95), Dutch astronomer, mathematician, and physicist; Willem s'Gravesande (1688-1742), Dutch mathematician and physicist, whose work explicating Isaac Newton's major work, *Mathematical Principles of Natural Philosophy* was among the most popular Newtonian texts in New England.
31. "On the Death of the Hon. John Winthrop . . .," *Misc. Poems*, 237.
- 32 At least three of the four Warren sons would have studied under Professor Winthrop. Several also boarded in the Winthrop home. See Winthrop to Warren, Aug 14, 1772, Oct. 12, 1779, and Jan. 16, 1782, W-W papers.
33. Warren to Winthrop, June 3, 1775, MW Letterbook, 76.
34. Cheryl W. Oreovicz, "Mercy Warren and 'Freedom's Genius'," *University of Mississippi Studies in English*, n. s. 5 (1984-1987): 218.

35. Winthrop to Warren, 12 Oct. 1779, W-W Papers.
36. Ibid. The elegiac poem apparently became a favorite of Harvard students, for it was included on the reading list of the Harvard Speaking Club which met biweekly from Sept. 11, 1770 until at least 1781; Albert Goodhue, Jr., "The Reading of Harvard Students, 1770-1781 As Shown by Records of the Speaking Club," *EIHC* 73 (April 1937): appendix A. Warren's elegy was published later in her *Poems, Dramatic and Miscellaneous* (Boston, 1790).
37. Winthrop to Warren, April 20, 1780, W-W Papers. Because John Winthrop would have posted a bond securing the college instruments in his possession, return of the instruments and discharge of the bond was required to settle his estate; I. Bernard Cohen, conversation with author, Aug. 19, 2000. For the source of the inventory of instruments in Hannah Winthrop's possession upon her husband's death, see n. 15 above. After Winthrop's death, his family donated two of his own telescopes to the Harvard apparatus collection; David P. Wheatland, *The Apparatus of Science at Harvard, 1765-1800* (Cambridge, Mass.: Harvard University Press, 1968), 13.
38. Winthrop to Warren, April 20, 1780, W-W Papers.
39. Winthrop to Warren, Jan. 16, 1782, W-W Papers.

40. Ibid. Not until science entered the curriculum of female seminaries was the systematic study of science available to women; Rossiter, *Women Scientists*, 3-8. For specific curricula developed to meet the popular enthusiasm for science in the mid-nineteenth century, see Deborah Jean Warner, "Science Education for Women in Antebellum America," *Isis* 69 (1979): 58-67. Ironically, Hannah Winthrop spent her last days in Harvard College. At some point after John Winthrop's death, Hannah moved from their house on Brattle Street to a room in one of the residential halls. On Monday, May 10, 1786, Pitt Clarke (class of 1790) noted in his undergraduate diary that he attended the funeral of "Mrs. Winthrop" and two days later he recorded, "Moved my abode for study down to the room lately occupied by Madam Winthrop deceased." "The Harvard Diary of Pitt Clarke, 1786-1791," transcribed and ed. Ernest John Knapton, *Publications of the Colonial Society of Massachusetts* 59 (1982): 305.