Letter Writing, Masculinity, and American Men of Science, 1750-1800

Konstantin Dierks Brown University

Something of a scientific community existed in the British American colonies before the American Philosophical Society was organized on a permanent footing in January 1769, rightly considered a turning point in the history of American science. Based in Philadelphia, then the largest city in the colonies, the Society sought to connect the city's men of science to corresponding members in other colonies as well as to foreign members in Europe. Its premier aim was to unite "the labours of many, to attain one end, namely, the advancement of useful knowledge and improvement of our country." Before 1769, the scattered American scientific community did not revolve around such a focal organization located in the colonies, but rather stood at the edge of a web of international correspondence networks centered in London and Paris and known to contemporaries as the "republic of letters."² The exchange of letters was the cement that held the international scientific community together. In many cases, the relationship between men of science was based entirely on letters since they would never meet in person. Americans were especially grateful to correspond with their European counterparts because they were acutely aware of America's inferiority in science compared to Europe. "We scarcely have a man in this country," Cadwallader Colden of New York lamented in 1743, "that takes any pleasure in such kinds of speculations." To overcome their intellectual isolation, American men of science worked zealously to cultivate, arrange, and maintain correspondences with like-minded men in Europe and, over time, increasingly in America.

It is this zeal to exchange letters, and the powerful sense of identity and community embedded in that zeal, that make the letters of American men of science from this period so exciting to read for the historian. The letters contain a thrilling sense of agency — pushing in new directions, creating new possibilities, advancing new knowledge. But American men of science are not merely fascinating for their science, they are equally fascinating as men. Their letters express great concern over issues of masculinity as the men sought to position themselves within the British empire and later the American nation, and as they sought to define themselves in relation to their own families and their local communities. Troubled by competitiveness before and upheaval after the American Revolution, men of science felt acute anxiety over their family responsibilities, career prospects and social status which left little time for the pursuit of science. "I have long felt that the concerns of a family are a great hindrance to scientific labours," Jeremy Belknap of New Hampshire

complained in 1783. Cultural assumptions in the eighteenth century associated men with a cluster of traits that were distinctly male — the possession of rationality and personal independence — and set up ideals that certain men would move beyond providing for their own families and generously serve the community. The letters of American men of science contain, however, not only a sense of agency but also a sobering sense of constraint on their lives, a flinching at the social realities that impeded men from achieving ideals of masculinity. This dissonance between agency and constraint prompted American men of science to contribute to the gradual formulation of new ideals of masculinity more suited to conditions and possibilities in America after the Revolution.

Questions of masculinity represent a promising and vital new concern of early American historians. 5 Because American men of science so avidly sought to be part of exclusive male social circles, and because they strove so ardently to exercise intellectual authority, the letters of these men can help unravel the complex intersection of personal anxieties, family responsibilities, social pressures, and cultural influences on masculinity in the eighteenth century which were neither unitary nor static. At any given time, masculinities coexist in a shifting spectrum, some considered more acceptable and others less acceptable, some gaining and others losing sway, depending on different positions in society. In the practice of everyday relationships and interactions, these masculinities appear even more unsettled, leaving room for negotiation, modification, and transformation. The scientific correspondences of two American men of science whose adulthood began at different points --Alexander Garden of South Carolina in the 1750s, and Jeremy Belknap of New Hampshire in the 1770s — provide insight into both the shifting ideals and the dynamic practices of masculinity in this era.

Alexander Garden

In the spring of 1752, Alexander Garden emigrated to Charleston, South Carolina, to pursue a living as a doctor because the prospects seemed brighter there than in his native Scotland. Twenty-two years old, fresh out of university, he was fortunate to become the junior partner in a successful medical practice. The two main drawbacks to Garden's new life in America were the heavy workload and the scorching climate, both of which took a toll on his health. After suffering through two brutal South Carolina summers, Garden journeyed to cooler climes in 1754 and made a pilgrimage to the country estate of Cadwallader Colden, eighty miles northwest of New York City. Like Garden, Colden was an émigré doctor originally from Scotland; but Colden was forty years older and perched on the pinnacle of his career, while Garden stood tremulously at the doorstep of his own uncertain future. Marveling at his host's sumptuous lifestyle, Garden witnessed his own dreams of success in

tangible form. If his hopes for the future had been amorphous before leaving Scotland, Garden could now see what was attainable in America. Colden had years ago amassed the economic wealth and political power enabling him to retire from his medical practice, and he had converted his leisure time into a reputation in Europe as a leading American man of science. Garden coveted such wealth, leisure and honor for himself. Handicapped by his father's humble circumstances, Garden had worked as a surgeon's mate in the royal navy for three years until he had saved enough money to pay for a year of medical school. Now, in 1754, he was poised to make his mark on America.⁶

Beyond their shared Scottish heritage and medical background, Garden and Colden enjoyed a mutual interest in botany. Garden had studied botany in medical school, and he had applied his knowledge immediately upon arriving in Charleston by investigating the secret herbs "which the Ethiopians & Africans use for poison to take away the Lives of ye Masters." Garden ridiculed his fellow Charleston doctors for their lack of botanical training. "I find most of the Practitioners here so totally ignorant of Botany," he informed his old botany professor, "if it was not from what they Learn from the Negroe's[,] Strollers & old Women, I doubt much if they would know Common Dock from a Cabbage Stock." Despite living in a large and growing city served by three dozen doctors, Garden felt superior and hence isolated. His letters did not mention missing his family back in Scotland, but instead complained about the lack of men who shared his scientific interests.⁷

By sheer coincidence, Garden was not the only man with a taste for botany visiting Colden in the summer of 1754. John Bartram, a Pennsylvania farmer who like Colden had achieved a reputation in Europe as a leading American botanist, visited Colden during Garden's stay. The fluke encounter was an unexpected pleasure for Garden. "How grateful was such a meeting to me!" he exclaimed, "and how unusual in this part of the world!" Colden and Bartram were exactly the kind of men so lacking in Charleston. "How happy should I be to pass my life with men so distinguished by ... eminent botanical learning and experience!" As thrilling as this meeting of three American botanists was for Garden personally, it also symbolized an important new development in American science. Before mid-century, so few American men engaged in science that they invariably turned to European men of science for intellectual companionship. By Garden's time, however, enough of his fellow countrymen were pursuing science that they could forge ties increasingly with each other. The meeting of Bartram, Colden, and Garden in 1754 was one early sign that scientific activity in America was beginning to coalesce into a distinct and sustained community. American men of science still remained focused on the cultural centers of Europe, but they now began to embrace a competing layer of orientation toward other parts of America.8

Luck smiled on Garden upon his return to Charleston, as he was given the medical practice of a retiring rival. Yet running his own medical practice only magnified Garden's heavy workload, and returning to Charleston only reminded him anew of his intellectual isolation. Garden began to exchange letters with Colden in New York, with Bartram in Pennsylvania, and with John Clayton, a botanist in Virginia, although he griped that these three men were the "only botanists whom I know of on the continent." His sense of isolation partly explains Garden's jealousy over the fact that both Colden and Bartram corresponded with Carolus Linnaeus, the Swede who had revolutionized botany in the 1730s. Inspired by their example, Garden penned an introductory letter to Linnaeus trumpeting his "ardent desire to imbibe true science." True science meant European science for Garden, and in the ensuing years he redoubled his efforts to correspond with various European men of science. Slowly but surely Garden insinuated himself within the orbit of the European republic of letters, a loosely structured and constantly expanding web of correspondents radiating from the cultural centers of Europe and extending across the ocean to America. Exchanging letters with such illustrious men became a heady experience for an unaccomplished American doctor still in his mid-twenties.9

Garden invested considerable effort in claiming a place in the European republic of letters despite the daunting intellectual and practical barriers arrayed against him. The logistical difficulty of corresponding with scattered European men of science led Garden to rely on the kindness of a London naturalist, John Ellis, who was willing to forward letters throughout Europe to enhance his own reputation as a patron of new scientific talent. More irksome was that Garden could afford so little time for science. Fond as he was of botany, he made his living as a doctor and could spare only "stolen moments" to science. In his letters he constantly complained about the unceasing labors expected of him as a doctor in Charleston. "The most pitiful slave must be as regularly seen and attended as the Governor," Garden groaned. His first priority was to reduce the amount of time devoted to attending slaves, because doctoring equally for black as well as white eliminated any leisure time Garden may have otherwise devoted to botany. "From seven in the morning till nine at night, I cannot call half an hour my own." Beyond his resentment of black slaves, Garden also disliked the frenzy of urban life. People in Charleston, he observed with dismay, "are a set of the busiest, most bustling, hurrying animals imaginable, and yet we really do not do much, but we must appear to be doing." Yet Garden reserved his sharpest disdain for those exempt from the bustle, the "gentlemen planters" who were "absolutely above every occupation but eating, drinking, lolling, smoking and sleeping, which five modes of action constitute the essence of their life and existence." Garden did not envy the planters their hedonism, but he did envy them their precious leisure time,

which he could have devotedmuch more fruitfully to science. He felt wedged between the black slaves who consumed too much of his time, and the white planters who flaunted the leisure so lacking in his own hectic life.¹⁰

For Garden, the most apparent way to escape his exhausting workload was to catapult himself above his rival doctors in Charleston, so that he could gain leisure time without losing income. Doing so would be no easy task, however. His most serious rivals had been educated in Scotland, so Garden's medical credentials were no better than theirs. As a newcomer, he lacked personal connections within the local power structure, and as a young upstart, he lacked the proven record of his more established rivals. Seeking to overcome these disadvantages, Garden turned to the European republic of letters as a possible way to skirt the local power structure by refashioning himself in the cosmopolitan image of Cadwallader Colden. Wary of the ugliness of politics, Garden turned instead to a novel and untested route for bolstoring his social status — via science. Ever since Francis Bacon's advocacy of a more empirical approach to science in the early seventeenth century, the social value of science had been hotly contested. Lambasted by academics and theologians, proponents of empirical science achieved public acceptance in England only when they became unabashedly utilitarian in the early eighteenth century, pointing their energies toward the mechanical improvements and commercial ventures that came to be known as the Industrial Revolution. To bolster his own social status, Garden contributed to the effort to enhance the social value of science in the much different conditions of America.11

Garden's first step was to seek membership in the Royal Society of London, the leading scientific society in England if not all Europe. In 1754 only two Americans belonged, and Garden was well aware that he was seeking distinction rarely bestowed on an American. Fortunate to have a patron in John Ellis, a respected member of the Society, Garden still needed to make a public contribution to scientific knowledge. One common way to do so was to submit a travel diary describing the unique wonders encountered on an exotic journey. Garden met with a perfect opportunity to venture on such a journey when he was invited to accompany the Governor of South Carolina on an expedition to Cherokee territory in the west. Because he bristled at the Royal Society's admission fee, Garden never bothered to complete either his travel diary or a long-simmering essay on poisonous plants. He bore his disappointment without much regret because he had an alternative, a promising new scientific society in England, the Society for the Encouragement of Arts, Manufactures and Commerce. Unabashedly commercial, the so-called Premium Society aimed to promote profitable new commodities that could be exported from the American colonies to England. Hoping to endear himself to the planters who dominated Charleston's civic life, Garden placed an advertisement in the South Carolina Gazette urging experiments to determine which of the colony's splendid flora could be "made subservient to the Purposes of Agriculture and Trade." Garden's timing was lousy, however, as his proposal coincided with the emergence of a new boom crop which commanded the planters' undivided attention. "The profits of Indigo have been of late so extraordinary," he explained to Ellis, "that it is vain to propose any thing else just now." In the eyes of South Carolina planters, the rewards of desultory agricultural experiments were too uncertain to be worth any investment, especially when compared with the sure success of traditional rice production and the new boom in indigo production. Garden turned his disappointment into contempt for South Carolinians. "How is it possible that any person could be a niggard of time," he sneered, "when there lies before him a prospect of becoming the author of such a discovery, as may at once confer on him riches and honour."

As Garden learned to temper his optimism about the capacity of science to improve his lot in life, he remained as detached as ever from the community he served as a doctor. People in Charleston, he believed, simply did not see the value of things that were for their own benefit. "There seems to be a kind of Necessity to drive the dull part of Mortals to their own happiness and welfare," Garden observed with exasperation, "the task is irksome, but the reflexion of having intended and promoted a general good is the Superior reward." After this disillusioning episode, however, any thought of public utility vanished from Garden's concern. Yet his faith in the intrinsic value of science remained unshaken, and he still measured his personal superiority and intellectual isolation in terms of science. South Carolina was a "horrid country," he grumbled to Ellis, "there is not a living soul who knows the least iota of Natural History." "Think that I am here," he wrote to Bartram, "confined to the sandy streets of Charleston, where the ox, where the ass, and where men as stupid as either, fill up the vacant space." Garden could indulge his arrogance because he had found a foolproof way to raise his social status, successfully courting the young daughter of a wealthy Charleston merchant who had recently died. His new wife and her family connections gave Garden the economic wealth and social status that he had been unable to claim via science. Ironically, his newfound wealth and status did nothing to diminish his workload, since his wife's share of her inheritance was bound up in providing for the children she was expected to bear. Garden still needed to generate sufficient income in order to fulfill the new responsibilites that accompanied wealth and status — its display in a sumptuous lifestyle.¹³

The pursuit of science had not enhanced Garden's prestige in Charleston society as he had hoped, but he drew other personal rewards from his participation in the European republic of letters. Less tangible than wealth and privilege, such rewards were nevertheless extremely meaningful to Garden. The camaraderie of the republic of letters offered him a kind of pleasure that Garden believed was missing from his interactions with his Charleston

neighbors. The republic of letters represented a social space where he could stand apart from his inferiors and enjoy the companionship of intellectual equals. Although the republic of letters espoused a cultural ideal of equality, its social reality was characterized by hierarchy. At the most elementary level, membership was restricted to men, who, unlike women, were deemed to be blessed with rationality, and only to wealthier men, those blessed with personal independence. Rationality and independence were two crucial pillars of masculinity, and much intellectual energy was expended during the Enlightenment on excluding women and poor men from these traits by definition. As an educated man who lived more comfortably than most people even before he married money, Garden possessed adequate rationality and independence. As an American eyeing a niche in the European republic of letters, however, Garden knew he was an outsider and a transgressor. Even though he had been educated in Europe, Garden still deemed himself inferior by the simple fact that he lived in America. Indeed, gaining admission to the European republic of letters had not been easy. After introducing himself to Linnaeus, for instance, Garden had despaired for three years without receiving a reply until John Ellis vouched for his credibility; only then did Linnaeus deign to respond. Given the stigma of American inferiority, American men's correspondences with their European counterparts invariably assumed a standpoint of deference. With Linnaeus, for instance, Garden's stance was obsequious, posing as an assistant deferring to his master. "I am ready to receive and to obey your wishes and directions," he promised. Faced with these social hierarchies, Garden possessed some, and acquired more, of the savvy necessary to secure his entry and then maintain his place in the republic of letters. Determined to be not just another doctor, but a man of science, and not just an ordinary American, but a cosmopolitan, Garden boldly transgressed boundaries to claim a relatively equal place in the republic of letters 14

Because they were situated at the physical and cultural margins of the European republic of letters, the act of writing a letter placed enormous pressure on American men of science. Since the men would, typically, never meet each other in person during the course of their lives, their entire relationship was premised on the exchange of letters. Each letter served to display character and ability, and to reaffirm a man's standing as an equal member of the scientific community. While careful to present himself with deference, Garden at the same time needed to assert his ability to make observations and to collect specimens of value to his European correspondents. He labored intently to pack his letters with worthwhile information and to fill his shipments with unusual specimens. In return, Garden hoped for reputation and honor, and also something as pragmatic as European science books whose dearth loomed as a serious handicap for American men of science. "Books," Garden told

Ellis, "I value more than gold." Both sides were happy with this international division of labor. European men of science could acquire specimens from the rich natural resources of America, and American men of science could acquire books from the rich intellectual resources of Europe. Indeed, such reciprocity was the premium value underpinning every word and deed in the republic of letters. Since men of science were presumed to be intellectual as well as social equals, they were expected to exchange mutual favors to reaffirm that equality. The pace of writing letters, for instance, was supposed to be orderly and sequential. Each letter was supposed to await a reply before another letter was sent; indeed, each letter insisted upon a reply to affirm both parties' commitment to maintaining an equal relationship characterized by equal exchange. Whenever his medical workload kept him from answering letters from his European correspondents, Garden knew the consequences of his neglect. "I am very sensible the loss is entirely on my own side," Garden admitted in a letter to Ellis, "for by writing to you seldom I must of consequence draw a letter from you but seldom."15

Participating in the European republic of letters gave Garden access to the intellectual companionship he found so lacking in Charleston society. "Every letter I have from you gives me great pleasure and is a fresh whet to industry in pursuing the study of nature," Garden wrote to one European correspondent, "nothing can answer that end more than the approbation of a Virtuous freind whose heart is warm & head intelligent." The emotional rewards of corresponding with men of science rarely came from such open references to Garden's heart; any emotional sympathy or support he felt was usually only implicit in his letters. Instead, his emotional rewards came from the exercise of reason, which was kept at the explicit level. A shared taste for science, not any emotional disclosure, provided the basis for the men's relationships, and contributed to the almost undiluted intellectualism of the men's letters, which rarely alluded to aspects of life other than science. Even politics, which Garden considered ephemeral and associated with disorder, seldom appeared in his letters. 16

Garden drew immense pleasure from writing letters to his scientific correspondents, fully aware of the workings of the genteel system of reciprocity. "I have now the pleasure of sitting down to write to you," he rejoiced in one letter, "and let me assure you, that there is no hour of my life gives me more pleasure than this, when I can with freedom communicate my mind to a distant friend, and be again entertained with his return." Garden intended his letter to bring pleasure to its recipient, and that it would elicit a reply that, in turn, would renew his own pleasure. By fulfilling the genteel code of reciprocity and diligently favoring each other with letters, men like Garden and Ellis, who would never meet during the course of their lives, could build a sustained and emotionally rewarding friendship. "Reverberated pleasures

fire the breast," Garden exclaimed in a rare emotional outburst to Ellis, "and make life, life indeed." Yet quite apart from the letters he anticipated in return, the very act of writing a letter could animate not only Garden's mind and heart, but even his body. "There is no time in which I find myself more universally easy, happy, free, and high spirited, than when I sit down to write to you. I really cannot account for a certain vivacity which I immediately perceive on such occasions, even in my dullest moments. But be this as it will, as soon as I take my pen to address you, I find new life, new strength, and new spirit to pervade, animate, and invigorate my whole frame." 17

Garden gained other personal benefits, beyond these bursts of energy, from his participation in the European republic of letters. Especially after he abandoned any concrete concern for the public welfare that might result from the pursuit of science, Garden relished any opportunity to attach his enthusiasm for botany to a purpose higher than his own personal pleasure. When Linneaus thanked Garden for a new shipment of specimens, Garden reversed the flow of gratitude. "It is to you, Sir, only, that I am indebted for all that mental pleasure and rational enjoyment," he gushed, "which I have had in examining, determining, contemplating, and admiring this wonderful part of the works and manifestations of the wisdom and power of the Great Author of Nature." Placing his contribution to science in the service of religion, rather than in the service of the public, was an alternative route to the legitimacy of science. Whereas his attempt to serve the public had been rejected, Garden's periodic professions of piety provided sufficient affirmation because piety was certainly a respectable social value. As a mark of higher purpose, the formulaic expressions of piety from Garden's pen demanded no gritty effort, no messy burden of proof, and no mixing with people he found distasteful. With the solace that he was devoting a portion of his time to a higher purpose, vaguely in keeping with the genteel ideals of masculinity, Garden was free to devote most of his time to his medical practice. The effect of Garden's participation in the republic of letters was to license his accumulation of wealth and his investment in a sumptuous lifestyle — all to his private benefit — without any inhibition or censure. An upwardly mobile immigrant, Garden could rest assured that his devotion to a higher purpose duly entitled him to the privileges of his newfound social status.18

Writing letters to his scientific correspondents helped to maintain Garden's place in the European republic of letters, whereas receiving letters from his correspondents helped to maintain his focus on science. The stimulation Garden drew from letters motivated him to seek out an ever-widening circle of correspondents. "You will no doubt readily think that it is odd in me," Garden explained after requesting Ellis to introduce him to two German botanists, "who live so far from the learned world, to have such an avaricious desire after new correspondents." "It is really odd," he conceded, "but I cannot

help it, and I think that nothing is a greater spur to enquiries and further improvement, than some demands from literary correspondents." The more letters Garden received, the more he felt obliged to reply, and the more motivated he felt to engage in science. "I know that every letter which I receive not only revives the little botanic spark in my breast, but even increases its quantity and flaming force." Since Garden found it impossible to curb his heavy workload and busy schedule as a doctor, he used letters to create a competing social obligation that could allow him to impose some small limits on his medical practice and to devote at least a little time to botany. 19

Garden welcomed letters from his scientific correspondents to assist him in combatting two inescapable demons in his life: the enervating heat in South Carolina, and the heavy workload of his medical practice. "Every letter I have from you ... is a fresh whet to industry in pursuing the study of nature," he explained to a correspondent, "one In so warm a Climate needs the frequent application of some stimulus to rouse his languid facultys." In addition to the suffocating heat, Garden's heavy workload might have led him to foresake science altogether. "If your most delightful letters had not, from time to time, so powerfully excited me," he confessed to Linnaeus, "I doubt whether I might not, before now, have given up these pursuits, interrupted and teized as I am by other vocations." Letters from his correspondents kept Garden committed to the pursuit of science and connected to the European republic of letters, however tenuously. Ironically, the logistical difficulties and delays of conveying transatlantic mail afforded him the flexibility to drift away from science for long intervals, punctuated by bursts of activity whenever a new letter arrived from a scientific correspondent. Spurred by letters, Garden would squeeze as much time as he could out of his busy schedule for science. "Even the time spent in describing these fishes," he explained to Linnaeus, "has necessarily been stolen from the usual hours of sleep."20

Genteel ideals of masculinity in the eighteenth century placed a complex set of privileges and burdens on men like Garden, which they experienced great difficulty reconciling to the social realities of their lives. These ideals assigned gentlemen, in common with all men, a duty to provide for their families, yet created an added expectation that gentlemen would possess ample freedom of action which could be devoted to higher purposes. In the practice of everyday life in America, however, navigating between such presumed freedom of action and inescapable duty to family was much more arduous than the cultural ideals of masculinity, so neatly drawn, suggested. A sense of confinement, not freedom, was a frequent theme of Garden's letters. "My present Business confines me much to Town," he explained to Colden, "I have not had an hour to spend in the woods this 2 months which makes me turn rusty in Botany." Garden's heavy workload and busy schedule often pushed his identity as a man of science into the background, creating a sense of nagging

dissonance where such an identity was felt inwardly but could not be expressed outwardly. "My close confinement to business has almost made me forget my practical botany," Garden complained to Ellis, "and nothing remains but an inward burning desire and love of that delightful study." The demands of everyday life jarred against his cosmopolitan ambitions, and obligated Garden to choose certain personal priorities over others. His unwavering dedication to his medical practice and his occasional theft of leisure time both entailed a precarious balancing of family responsibilities, career ambitions, and the pursuit of science.²¹

Garden could not foresake his duty to family without jeopardizing his masculinity entirely, but he did try to distance himself from the emotional aspects of family life. At the same time, he sought to reaffirm his attachment to the intellectual companionship and male camaraderie of the republic of letters. Garden apologized to Colden for neglecting their correspondence during his distracting courtship of his wife-to-be. "My Excuse was Love," Garden penned sheepishly to Colden, "A kind of Animall Botanizing occupied my thoughts & time." The months spent on courting Elizabeth were, he grumbled to Ellis, "mostly trifled away with me as to botany." Garden viewed his medical practice as a constant, frequently resenting but never questioning its demands on his time, but he viewed his courtship of Elizabeth as a variable, and looked forward to putting the episode behind him. "An affair of Love quite engrossed my thoughts for a season," he explained to Colden, "tho now I thank God I'm again returned home to myself." "A few days will I hope compleat my happiness in that affair," Garden went on, reclaiming his personal priorities, "but as to real happiness, which cannot possible consist in Any thing but in a knowledge of the beautifull order disposition & harmony of the three Kingdoms here & the other parts of this System in its higher Spheres, which at last leads us Gradually to the Great Eternall & first Cause — as to this happiness I say, I expect to grow in it daily while you & such Ingenious members of Society continue to favour me wt your Correspondence." Garden's version of masculinity pointed him towards placing primary value on the intellectual companionship of other men, rather than the emotional bonds of his family. In the rare instances when he did mention his family life in his letters, his wife and children appeared merely as hindrances. He even wrote Ellis on his wedding day, nervously reaffirming his connection to his male friends on the very day he was committing himself to female companionship. "You will be surprised at finding so short a letter, but when I tell you that this night I expect to be matrimonized." Garden doubtlessly derived some pleasure from his family life, and likely found ways to express that pleasure to his family, but in displaying his masculinity to his male peers, he consistently chose to ignore or, at best, belittle his family.²²

Garden's version of masculine ideals pushed him to stand apart from his family life, and it also steered him to avoid open expressions of emotion in his letters to his male friends. For instance, at the end of long letter about various plants and scientific books, Garden informed Colden that a daughter had died in infancy. "We have been unlucky to lose a little Daughter when she was only eight days old, which with a severe time bore hard on my wife but she now begins to get over it." Garden attributed the emotional reactions to the event entirely to his wife, while avoiding the expression of his own emotions. In 1760, replying to a letter in which Ellis revealed the fact that he had gone bankrupt, Garden could say little. "Never did a letter give any one more surprize, concern, or grief, than yours gave me. I need say nothing more than to tell you that I have felt very sincerely on the subject of the first lines." Although Garden and Ellis had sustained a regular correspondence for five years, filled with repeated pledges of friendship, Garden was accustomed to submerging his emotional supportiveness within the undiluted rational focus of their letters. Openly to express emotions about family life was not considered a gesture of intimacy between men. Instead, the least whiff of such emotions disrupted the masculine ideals of rational discourse that sealed the friendship between men in this era. In the rare instances he violated this code of proper male conduct, Garden gave voice to his emotions as obliquely and as briefly as possible. Even in 1771, when their friendship was nearly twenty years old, Garden could not bring himself to express his emotions openly when alluding to his brother's sudden death. "This was a severe stroke to me," he commented to Ellis, "but I will not entertain you with so disagreeable and melancholy a subject."23 Rational self-control, not emotional disclosure, stood paramount.

In 1763, Garden optimistically predicted that "in two or three years at most" he would be able to retire from his medical practice and devote full time to "the delightful and engaged study of Nature." Still enthralled with an image of gentility derived from Colden's example, Garden's optimism proved premature. Seven years later, Garden lamented that he had not done a stitch of botany for the last three years. After a long lapse in his correspondence with Ellis, Garden recounted his tale of personal woe. "My dear, my first, my chief botanical friend," Garden opened his letter, "It is absolutely with shame and confusion of face, that I take up the pen to write to you. My long silence, my neglect in answering your affectionate letters, leave me not even the shadow of an excuse." Garden's felt ashamed, but he did have an excuse that he hoped would be accepted as a legitimate reason for neglecting their correspondence and friendship. "For these three years past I have done nothing neither read nor studied any branch of natural history. Indeed I have been sunk and lost in application to the practice of medicine alone. Closely confined to town, and having no intercourse with any person in that way here, the spark was almost extinguished." Garden had been neither writing nor receiving letters; he had fallen out of the system of reciprocity that structured the republic of letters. In the process he lost the emotional rewards that attracted him to it. Instead of proud, he felt guilty. Instead of energized, Garden felt idle. Instead of connected to a fraternity of men, he felt isolated and alone.²⁴

Although disclosure of emotions was considered taboo, men's letters written in this tradition nevertheless represented a special zone of introspection and a special display of identity. The masculine egotism asserted in a letter did not necessarily imply the same degree of egotism in everyday life surrounding the letter. The intellectual pleasure and male camaraderie Garden derived from exchanging letters with other men of science reinforced his sense of masculinity, but Garden was also buffetted by competing pressures on his masculinity. Garden belittled his family and fulminated against his heavy workload, but he abandoned neither his family nor his medical practice in order to pursue science. He might have engaged in some petty rebellions in his family life to express his frustration and remind his wife and children of his sacrifice for their sake, but he was nevertheless willing to make that sacrifice. He fulfilled his duty to family first and foremost, even though he drew more personal satisfaction from the pursuit of science. "I often resolve to quit this noisy nonsense, and give myself up to that favorite study," Garden rued in a letter, "but four children put me in mind of my duty to them." Garden relished writing letters to his male peers because those letters provided a refuge from the disappointments and frustrations of life. Writing the letters allowed Garden to navigate the dissonances in his life, as he veered between desire and reality, between his predilections and the competing claims of his family, his friends, and his community. Letters had something of a therapeutic function, permitting Garden to gauge his level of happiness at particular moments, as well as his progress toward personal goals. Letters also had something of a nurturing function, enabling Garden to tailor the expectations of his peers to his own unique circumstances, and to claim his worthiness of their friendship.²⁵

What revived Garden after his three-year neglect of botany, and of Ellis, were old letters that he had tucked away in his desk. "The perusal of some of your letters ... have roused me from my lethargy." Garden resolved to rejoin the republic of letters, but he needed Ellis's help. "I have only to beg your kind fostering assistance to stimulate me to a fresh exertion of the opportunities with which Providence has kindly blessed me, in placing me in a land of wonders. Do not, my friend, forsake me. To you and Linnaeus I owe my all in that way, and you must continue, by a continuance of your correspondence, to impell me to do you any services in my power." Garden was determined to alter the momentum of his life, to recapture his sense of agency, control and mastery. Without letters, Garden's life lacked rational pleasure and male camaraderie, a haven from the relentless toil of his medical practice, and an escape from the duty of providing for his family. Above all, without letters he

lacked a higher purpose. In 1770, even as Garden rejoined the republic of letters, he also began taking steps to purchase a plantation. The following year he fulfilled what had been his unwavering ambition for nearly twenty years, to live on a country estate after the manner of Cadwallader Colden. As a young man Garden had striven against tremendous odds, toiling for three miserable years in the royal navy, paying his own way through medical school, and then emigrating to the distant new world of South Carolina. Now, at age 41, he could begin to garner enviable profit from the labor of the slaves he owned. Yet Garden did not devolve into the hedonism he had always scorned in the planter community, and instead he resumed his scientific activities, sometimes with the assistance of his slaves. The way Garden interpreted ideals of masculinity led him to believe that his newfound leisure imposed on him a higher purpose than for ordinary men preoccupied with their duty to family. For Garden, higher purpose meant the pursuit of science, and in 1773 he sought, and gained, admission into the Royal Society. Unable to draw personal fulfillment from his career as a doctor, or from his family life, Garden turned his attention to making his mark on the world as a gentleman and as a cosmopolitan man of science.26

Jeremy Belknap

In the late eighteenth century, the emergence of the American Philosophical Society in Philadelphia and the American Academy of Arts and Sciences in Boston enabled men of science residing in these cities to attend regular meetings and enjoy each other's intellectual conversation. Outside these cities, however, men remained as reliant as ever on informal correspondence networks to be connected to the scientific community. In 1767 Jeremy Belknap secured a position as a Congregational minister in the small town of Dover, New Hampshire. Twenty-two years old, the son of a Boston tanner, Belknap had searched for just such a promising position for five years since graduating from Harvard. It soon proved to be a disappointment, as Belknap found cause to squabble with his congregation over theological differences and his salary. Within a few years, intellectual companionship seemed infinitely more important than the specious charms of rural serenity. Belknap therefore made an active effort to connect himself to the cosmopolitan world. ²⁷

Belknap's intellectual isolation was not truly alleviated until he met Ebenezer Hazard in 1778. The two met by chance when Hazard visited New England to survey the region's post offices, and they discovered an affinity for each other. When they first met each other, they had little in common beyond the fact that they were both born in 1744. Raised in Boston, Belknap went to Harvard and pursued a career as a school teacher and a Congregational minister in small New England towns before settling in Dover. Hazard was raised a Presbyterian in Philadelphia and attended Princeton, after which he pursued a

career as a bookseller in New York City. Both men became moderate patriots with the coming of revolution and war, but Belknap clung to his position as a minister, whereas Hazard abandoned his career to coordinate the American post office for more than a decade. Although they were the same age, in 1778 Belknap was married and already supporting four children, with a fifth on the way, while Hazard was still a bachelor for whom it was much easier to participate in the revolutionary effort.

What sparked the two men's correspondence was a shared taste for intellectual pleasures like science. Mired in the "ignorant wooden world" of Dover, a town dominated by the lumber industry, Belknap welcomed the slightest connection to the cosmopolitan world. He oscillated in his letters between contempt for his own community and envy for Hazard, who was usually stationed in Philadelphia where he could revel "in the full luxury of scientific entertainment." Like Alexander Garden, Belknap felt a painful inner conflict between his situation at the margins of the cosmopolitan world and his desire for intellectual companionship. One difference between Garden in South Carolina in the 1750s and Belknap in New Hampshire in the 1770s was that Garden felt peripheral to the cultural centers of Europe, while Belknap felt peripheral to Philadelphia, "the centre of science in America," as he deemed the city. "I am placed in such a sequestered spot, and have so little communication with the world," Belknap moaned, "and yet have an insatiable curiosity, and, I hope, an honest desire to do things right." Like Garden, Belknap imagined that the cosmopolitan world represented the zone where a superior man could make his mark. Yet he felt himself in the grip of disadvantages caused by his middling position in society. "'Confined,' as Pope says,' to lead the life of a cabbage,' — unable to stir from the spot where I am planted; burdened with the care of an increasing family, and obliged to pursue the proper business of my station, — I have neither time nor advantages to make any improvements in science." Belknap shared the endemic dilemma of middling men of science in America, a dissonance between intellectual inclinations and lack of leisure time.²⁸

Although Belknap and Hazard would see each other only a handful of times, the two men cemented and indeed deepened their friendship by corresponding regularly until Belknap's death in 1798. Fully aware of the genteel codes of reciprocity guiding the exchange of letters, Belknap assiduously maintained a regular flow of letters by replying to Hazard's missives as quickly as he could, and soliciting prompt replies from Hazard. "You must," he beseeched, "think sometimes of your poor friend starving in these forlorn regions, and let him have now and then a crum from your table." Ideally, building their friendship in each other's company would have been preferable to doing so by letter. "I wish you was here at my elbow, instead of three or four hundred miles off," Belknap pined, "I would then talk with you till

midnight." Yet whenever the flow of letters between the two men slowed down for some reason, they appreciated anew the blessings of their correspondence and treated each letter as the precious equivalent of a "tete-a-tete." Every letter renewed the two men's special regard for each other. "You know I have made a practice," Belknap reminded Hazard, "of communicating to you every observation, occurrence, discovery, or improvement that has fallen within my sphere of knowledge since our acquaintance." Both men possessed a boundless fascination for the world around them, and the contents of their letters were as desultory as the stimuli that fell within their "sphere of knowledge" from week to week.²⁹

While Alexander Garden had carefully managed his scientific correspondences to exclude any matter other than science, Belknap and Hazard were more catholic in their intellectual appetite. Whenever Garden had lacked botanical information, he had simply stopped writing letters to his correspondents until he found time for botany again. In those rare instances that his letters had briefly drifted from the subject of botany, he had admonished himself. Garden's version of male friendship licensed him to disclose only one narrow dimension of his life, only one persona among his identities. Belknap and Hazard, though, developed a multi-dimensional friendship centered on, but not limited to, the literary world of science and history. The two men allowed their letters to meander through scientific phenomena, to political controversies, to theological hair-splitting, to whatever book or magazine they happened to be reading. In other instances, their letters veered entirely outside the appropriate range of masculine rationality, as when Belknap found himself pondering other men's odd choices in wives. "But I shall degenerate into a right-down story-teller," he chided himself and abruptly signed off on the letter. According to the cultural strictures of the period, letters exchanged by men were supposed to remain within parameters of rationality. Gossip and other frivolities were the domain of women, not men, and certainly not men of science.30

Yet these cultural strictures of masculinity were shifting dramatically in the latter half of the eighteenth century. Men had long been connected with rationality and women with irrationality, associations that had profound implications for gender roles, family relationships, social opportunities, and broader power inequalities in an intensely patriarchal society. Whether in letters to peers or closer friends, Alexander Garden had placed no positive value on his domestic life, or even mentioned his emotional stake in his family. Even with his close friends, Garden had expressed the pleasure he derived from their letters in purely rational terms, while any emotional support had been submerged to an implicit level. Toward the end of the eighteenth century, however, a new language of sentimentality was increasingly utilized in the moral philosophy, the conduct manuals, and the literature of the day, reflective

of a changing appreciation of what might, in theory, hold together human society with some degree of harmony. Questions of social stability seemed pressing during the eighteenth century, a time of great social, economic, and political upheaval on both sides of the Atlantic. One great, elusive task of the broad intellectual movement known as the Enlightenment was to realign the hierarchies underpinning the social order while, paradoxically, affirming new solidarities between people. The language of sentimentality complemented the Enlightenment project by affirming the presence of universal sympathies within each person and between all people.³¹

The new sentimental language reflected and, at the same time, sanctioned a broader range of self-expression for men to make sense of their relationships with each other, with their families, and with the community at large. Belknap and Hazard were both aware of the new sentimental language, so much so that they could casually refer to "our good friend Lawrence Sterne," who was not their friend but a leading sentimental author. Accustomed to reading science books and other literature written for a male audience, and characterized by a language of rationality, men tried to employ the same style in their letters. While women became enchanted with the sentimental language voiced by female characters in the novels of Samuel Richardson, men became equally enhanced with the sentimental language voiced by male chacters in Sterne's works. They read Sterne so avidly because Sterne's characters responded to fictional dilemmas in ways consistent with their halting responses to the pressures and strains of their own lives. Outside the books Belknap read and the letters he wrote, his life was a muddle, making it difficult to discern cues from people around him and inclinations within himself. "I really long to be able, with a quiet mind and a free pen, to sit down and write you a serious letter. When shall I again feel settled?" In sentimental literature, new attitudes and behaviors were removed from the blurry momentum of everyday life, articulated with clarity and force, and assigned meaning and purpose. Embracing sentimental language, Belknap and Hazard allowed not only their domestic life but also their emotions to seep into their scientific letters in ways that would have shocked Garden.³²

At first both men were themselves startled and rather wary of the new sentimental language they detected in their own letters. "I have written you several letters lately," Belknap explained in one letter, "and if in them you met with any thing sentimental you may be sure it came *ab imo pectore*, for they were written in such a hurry that nothing could be studied or corrected." Men were supposed to craft their letters from the head, not the heart, the traditionalist in Belknap believed, and he blamed haste to excuse the appearance of sentimentality in his letters. Belknap and Hazard gradually allowed their domestic lives to seep into their letters, but such tangents from the usual flow of their intellectual discourse were kept brief and incidental at first. The first

domestic item to appear regularly in their letters was Hazard's prolonged bachelorhood. "I must be content to pay the tax on single freemen," Hazard mused, "A center of affection does not yet appear." Neither Hazard nor Belknap were yet comfortable with any kind of emotional language when they briefly commented on the matter. Instead, they resorted to metaphors and puns. A year later Hazard announced that he had finally "fixed upon a partner and preliminaries are settled; but no time is yet fixed for signing the definitive treaty." In reply, Belknap could say little more than, toward the end of a typically intellectual letter, to congratulate Hazard on finding "your rib at last." Alexander Garden had mentioned his family only as a hindrance to science, in keeping with his tightly-drawn persona as a man of science, and his narrowly-conceived definition of male friendship. Belknap and Hazard, on the other hand, gradually loosened their definition of male friendship to contain both a language of intellectualism as well as a language of sentimentality. The process of modifying traditional attitudes, and embracing new ones, occurred slowly, and at first both men struggled to find the appropriate language to describe family life. When Hazard described his wedding, he could do so only clinically in the third person, at the end of his letter. "Your friend was married the 11th September: he has administered your salutations to the bride. He was married on Thurday: on Friday his wife's sister lost a child, which was buried on Saturday. You may guess at his situation, obliged to rejoice and mourn at the same time: it was singular." Hazard's use of the third person to describe his wedding, like his use of wit to discuss his courtship, deflected from the emotional facets of family life. A year after his wedding, when Hazard's infant son was "dangerously" ill, Hazard protected his own emotional vulnerabilities and attributed all of the emotionality of the episode to his wife. She was, he reported, "a little deranged by her anxiety," while his own emotions were kept hidden, in a manner akin to Garden.³³

Alexander Garden's wife had rarely appeared in his letters, but over time Belknap's and Hazard's wives played an increasingly active role in theirs. At first the women's appearance was limited to the closing of their letters, where each man would send brisk greetings to his friend's wife, a convention of politeness not meant to be truly personal. As the two men's friendship deepened over the months, they added tidbits of personal information. Slowly, from letter to letter, Belknap and Hazard were negotiating the terms of their friendship, and experimenting with styles of language they deemed appropriate as their level of friendship deepened. Both men were aware of conventions of politeness, and yet both became more and more willing to transgress. Neither undiluted rationality nor formulaic politeness proved adequate to reflect the depth or meaning of their friendship, and personal touches became more and more common in their letters. "Mrs. H., who is present while I write, says I must not forget to remember her to Mr. and Mrs. B.," Hazard closed a letter

with a touch of amusement, "and I suppose, if our little boy could entertain us with his words as he now does with his gestures, he would give a similar hint." Belknap and Hazard slowly relocated some of the emotional support of their friendship outside the parameters of intellectual companionship, even as they sustained an intensely intellectual dialogue in their letters. Garden had kept a firm boundary between his family life and his scientific correspondences, but Belknap and Hazard allowed some of their writing and reading of letters to become embedded in their family life. Indeed, the letters they exchanged sometimes left their exclusive control, and were read by their wives as well. The two men continued to fill their letters with traditional male topics like science, but they were occasionally obligated to exercise more caution in the confidences they shared with each other. When Belknap expressed anxiety about his wife's frail health, he implored Hazard to "not mention a syllable of this in any of your letters, for she constantly reads them, and is always highly delighted with them." Yet Belknap's wife Ruth and Hazard's wife Abigail appeared in their letters not only when family matters were the topic, but occasionally when science was the topic as well. In one letter, for instance, Belknap reported some new scientific information about dyes and added that "Mrs. Belknap also tells me (for I am consulting her on this part of my letter) that a sheep's black, or the wool of a black sheep, dipped in a common blue dye, makes a very strong and lasting black, and does not smut." Belknap was willing to recognize his wife's acumen in an area that for him amounted to the pursuit of science and for her comprised part of her role as family caretaker.³⁴

Alexander Garden's most persistent complaint had been the lack of leisure time keeping him from the pursuit of science. Belknap and Hazard enjoyed no more leisure than Garden, but they did not view their families as an impediment in the same way that Garden had. "I am fully convinced it is not good for man to be alone," Hazard explained before he met Abigail, "but really I am too much hurried to think of either love or matrimony." "For the same reason," he went on, "I have collected but very few, or no new ideas." Whenever Garden had mentioned his family, he had placed his duty to family in opposition to the more noble pursuit of science. Belknap and Hazard, however, placed positive value both on science and on their families. The great demon remained a lack of leisure time, but for Belknap and Hazard their duties pulled them not only away from the rational pleasures of science, but also away from the emotional pleasures of family. Indeed, when Belknap did not hear from Hazard for over a month after Hazard's wedding, Belknap was sympathetic "because I suppose the old excuse, 'I have married a wife,' is good in this case." "I am happy," he reassured Hazard, "in thinking that you have much superior enjoyment." Neither Belknap nor Hazard was naive. They understood their family responsibilities fully, and recognized how these impinged on their leisure time. "I have long felt that the concerns of a family are a great hindrance to scientific labours," Belknap ruminated in a letter in 1783. The end of the American War of Independence signaled a welcome new era for Belknap. "There is now a dawn of what we have often wished over a glass of wine," he exulted, "viz., 'better times.' I mean in a family way, for as to public matters I am afraid that the end of one revolution will be the beginning of another." Whereas Alexander Garden had located his most cherished activities and his most precious identity in the male camaraderie of the republic of letters, Belknap and Hazard placed increasing value on the enjoyment of familial domesticity. For example, when Hazard learned that Belknap's wife had gone away on a family visit to Boston, he expressed sympathy with Belknap's temporary solitude. "I judge by my own feelings," Hazard sheepishly confessed, "You see I am quite a domestic character." In contrast to Garden's generation, Belknap's redefined masculinity to locate pleasure in intellectual companionship and in domesticity as well.³⁵

Even more than their wives, Belknap's and Hazard's children appeared in their letters with increasing frequency. Belknap fretted over his eldest son Joseph, who was approaching manhood. Hazard, meanwhile, recounted cute tales of the mischief perpetrated by his own young offspring. Both men were startled to recognize their fierce emotional attachment to their children, and they began to worry about setting bounds on their emotions. Belknap, the more experienced father, advised Hazard not to be "uneasy" about "idolizing" his children. "It is natural to love them," Belknap insisted, "Reason, prudence, and time will teach us how to set bounds to this fondness; but where is the harm of indulging it, especially at first, when the thing is new?" Belknap's advice was as confused as the emotions he was trying to rationalize, and Hazard responded with skepticism. "Your advice about loving children is natural, but not prudent," he countered, "for, in case of their being taken away, the pangs of separation must be in proportion to the strength of the attachment, and that must be very, very, very great." Both men struggled to reconcile their images of masculinity, still hinged on rationality, with powerful urges propelling them outside the bounds of rationality. Confiding to each other in letters helped Belknap and Hazard in the process of squeezing their emotional feelings into rational thoughts, so they could recapture some sense of control over the emotional demands of family life. Sentimentality and domesticity possessed a certain appeal to these men, but adjusting their images of masculinity presented confusion as well.36

As the years went by, Belknap and Hazard placed increasing value on the emotional joys of domesticity and family life, but they did not forget about the rational pleasures of intellectual companionship. Both men battled to find ample leisure to satisfy their intellectual appetites. At the end of one long letter filled with scientific observations, Belknap felt a dissonant mixture of pleasure and pain. "You see ... I have some inclination to look into the works

of Nature." "I wish," he added, "I had it in my power to gratify that inclination." Belknap's letter was meant to draw sympathy from his friend. "You are sensible," he went on, "that without proper books and instruments, but especially without much leisure from other business, the study of Nature cannot be carried onto any great advantage. I want a friend near me too, who would join in the search." Without scientific resources, leisure time, and intellectual companionship, Belknap felt it was impossible to fashion any original contributions worthy of their scientific peers or beneficial to the public. What was particularly frustrating for Belknap was the thought that the constraints preventing him from satisfying his intellectual inclinations seemed to be entirely beyond his power. Since he had no prospect of acquiring adequate leisure time in his present life, Belknap was left with a specious fantasy about the afterlife: "in the future state," he insisted, "there will be sufficient leisure." 37

Hazard could empathize with Belknap's dilemma wholeheartedly. Reading Belknap's letter "hurt me much," Hazard replied, "as it recalled a number of very disagreeable ideas I had had on thinking of my own situation with reference to the same subject. Equally unprovided with books and instruments, and hurried through life on horseback, it is impossible for me to make any great proficiency in this useful branch of science." Hazard tried to be optimistic about their common dilemma. "However, let us not be discouraged. We can do something; more than we can is not expected from us; and perhaps our feeble attempts may be useful to others. They will, at least, be pleasing to ourselves." Belknap's letter had implicitly lowered the expectations about his ability to make any contributions to science, but Hazard's reply did so explicitly. Even if the men lacked the resources to pursue science to benefit the public, they could nevertheless enjoy it for their own pleasure. Yet Hazard was immediately troubled by the solipsism of his own argument, and sought to connect his intellectual taste to something grander: religion. Any effort to do science was "worth the making" if undertaken in the service of piety. "I never critically contemplate any of the works of Nature without such views of the wisdom, the power, and the majesty of God, as are rapturous and transporting. These views often carry me quite beyond the creature. I get lost in the Creator; come back to earth, and despise myself." Belknap's letter had reached a happy ending — a heaven of leisure time — but Hazard's ended on a note of intense inner conflict, of self-loathing. They tried to straddle the fine line between a healthy humility and an unhealthy frustration at the difficulty involved in making a mark on the world. Both men were trying to find ways to accept their limited control over their own lives, and to reconcile their limited agency with inclinations and ambitions which, in their eyes, differentiated them from ordinary men. Confiding to each other in letters, and eliciting each other's support, helped them temper their lofty expectations without entirely sacrificing their ambitions, shedding their identity as men of science, or losing their self-image as superior men. To some degree, both men did accept the fact that their place and role in the world was bounded, that no amount of effort would enable them to overcome the constraints limiting their control over their own lives as well as their impact on the world. Belknap was ever the optimist. "How pleasing to think," he mused, "that though we are but mere atoms in the Universe, yet the Universe is composed of atoms, and none of them will be lost, but all answer in some degree the important purpose for which the Universe was brought into being." Belknap's solution was to envision a cosmology that circumscribed his place in the world, and to render his shortcomings natural and inescapable rather than willful or voluntary. The trick was to lower his expectations to a feasible level, to make some contribution to the advancement of scientific knowledge, and to retain some hold on his identity as a man of science. "If I can furnish hints to those who have leisure and capacity to pursue them," Belknap whimpered, "it is as much as I can pretend to." 38

Neither man's dilemma diminished or vanished in the ensuing years. Belknap and Hazard revisited their anxieties frequently in their letters to each other as they groped for new ways to refashion their masculine identities as the circumstances of their lives changed, as their children grew more numerous or older, and as the American economy underwent continued turbulence in the aftermath of war. They comforted each other whenever the momentum of life seemed simply too overwhelming. Just as public accomplishment was the constant lure, so leisure was the perennial dream which remained elusive. "I don't believe you misspend time half as much as you seem to think," Hazard reassured Belknap, "If you do as much good as you can, you do as much as you ought to do, and in this case you cannot justly censure yourself." Hazard believed that the key for Belknap to resolve his inner conflict was to invest less ambition in science, because there was no prospect of life getting any easier. "We have different spheres of action allotted us," Hazard counseled, "Providence has devolved the care of a large family upon you, which has confined your usefulness within narrower limits at present than perhaps you would wish; and this kind of usefulness does not make that show which some others do." The solution, Hazard insisted, was for Belknap to pin his hopes on his children instead. "Indeed, a man in reviewing his day's account would hardly give himself a credit for it, and yet all the time he has been attending to his family he has been actually doing his duty, and a very essential part of it too. But usefulness of this sort must not be calculated from present appearances. Look forward, - see your children become valuable members of society, and then judge of your services in qualifying them for being such." Rather than investing so much of his masculine ambition in questing after fame in the public arena of science, Hazard advised Belknap to live vicariously through his children.³⁹

Yet Hazard's solution did little except to rechannel Belknap's worries and frustrations in a new direction. The immediate consequence was to add

immense pressure on Belknap's eldest son Joseph, who had been apprenticed to a prominent publisher in Philadelphia. Belknap entrusted Hazard with keeping a watchful eye over Joseph's progress. Investing so much of his own identity in his son, though, meant that Joseph's shortcomings were Belknap's own. Belknap became deeply stung when Hazard reported that Joseph's performance was somewhat disappointing at first. "I have long thought," Belknap moaned, "it one of the greatest misfortunes of my life to be obliged to rear a family of children in a place and among a people where insensibility to the interests of the rising generation, and an inveterate antipathy to literature, are to be reckoned among the prevailing vices; where there is not so much public spirit as to build a school-house; where men of the first rank let their children grow up uncultivated as weeds in the highway." If the myriad difficulties plaguing Belknap's life had always conspired to deny him leisure time, they also deprived him of the resources to educate his children properly. "The extreme difficulties which the late times brought me and my family into for a subsistence, the many shifts, the manual labour, the time consumed in running here and there, together with the stated duties of my office, were extremely unfavourable to family education." Belknap spent much of this painful letter trying to expunge the guilt he felt at "the poor figure which my son makes," at Joseph's unpreparedness for an increasingly competitive economy. Here, too, Belknap felt himself in a position to lower the expectations impinging on his masculine identity, in this case as a family provider. Young Joseph knew, Belknap insisted, "that his future fortune in life will depend on his own behaviour." "He knows he can have no expectations from me." By the end of his letter, Belknap had gone full circle from regretting his own complicity in Joseph's lack of preparation for the world to insisting that it would be better for Joseph to be responsible for his own fate. "I believe that a lad of tolerable good sense, who sets out in the world with such views as these ... has really a better prospect before him, and is more likely to turn out well, than one who places his dependence on a paternal inheritance." Part of Belknap's letter had been devoted to deflecting blame from himself and pinning it on the community as well as the war, but in the end he shifted the onus onto his son. What Belknap had felt as constraints on his life, and as unmet expectations of his role as a father, were now rationalized as a willful moral choice, a sound decision that would build backbone in his son.⁴⁰

Both Belknap and Hazard devoted a significant portion of their correspondence listening to each other negotiate the constantly swirling perils of masculinity, with one eye on family responsibilities and the other eye on intellectual ambitions. They offered each other tentative words of support, encouragement and advice whenever life began to require painful readjustments of the values, expectations, and desires comprising each man's sense of masculinity. In the late 1780s both men experienced acute unsettlement,

having to change jobs and relocate their families. Hazard abruptly lost his government appointment in 1789 and moved his family from New York City back to Philadelphia, where he entered the insurance business. Belknap, meanwhile, became increasingly annoyed at his congregation: he found a new church and moved his family from Dover to Boston in 1787. In their mid-forties and predisposed toward stability, both men struggled to cope with the abrupt upheaval in their lives as they weighed concerns, impulses and ambitions that had, in the course of their lives to that point, often competed with each other. Both men yearned for a perfect balance. "My principal concern," Belknap explained as he weighed possible options, "is to be usefully employed in such a way as shall not be a hindrance to literary improvement, and to provide a decent maintenance and proper education for my family." Belknap believed that he was seeking no more than the minimum necessary to fulfill his family duty and to satisfy his intellectual appetite. "I have neither the art nor the ambition to be rich." Unlike Alexander Garden who fantasized about becoming a leisured gentleman, Belknap and Hazard held a more modest fantasy of a middling life and the shelter, security, stability, and tranquillity such a life implied.41

Yet Belknap's and Hazard's fantasy of a balanced life proved to be even more elusive than Alexander Garden's dream of gentility. Even after Belknap moved to Boston and Hazard to Philadelphia, their lives still did not settle down as much as they hoped. They were able to achieve the middling competency they desired, but at an inescapable cost. "Never in my life was I so straitened for time as now," Belknap complained. While he had hoped that his new situation "would admit of some attention to matters of science," reality was otherwise. "We must conform to our circumstances," Belknap conceded. Not only did their time for science continue to suffer, but their time for family suffered as well. "I am very seldom with my family, except at meal-times and while I am asleep, and frequently do not leave the office before 9 at night," Hazard griped. Their correspondence and their friendship suffered as well. "It has grieved me not a little," Hazard lamented, "that I have not been able to write to you as formerly, and to continue a correspondence from which I derived both pleasure and information; but it has been absolutely out of my power." Both men tried to resist the nagging notion that they had no real control over their own lives, that their lot in life was "to be a drudge." Yet, over the years, both Belknap and Hazard had been adjusting their intellectual activities, steadily turning their attention away from the pursuit of science and toward the writing of history. They found it easier to collect historical documents and peruse them at home than to do the fieldwork necessary to feel equally proficient in science. In the 1790s both men managed to publish historical tomes, and Belknap helped launch the Massachusetts Historical Society in 1791.42

Recognizing their lack of leisure time and appreciating the constraints on their ability to control their own lives made both Belknap and Hazard intensely wary of public settings where they would be vulnerable to criticism. In 1783, for instance, Belknap sent Hazard his observations on a bizarre atmospheric sound coinciding with an aurora borealis, but he became alarmed to learn that Hazard planned to submit that portion of his letter to the American Philosophical Society. "I am not ambitious," Belknap confided, "of being noticed as the author or communicator of discoveries." He consented to let Hazard report his observations "but you must do it with caution, and with an introductory apology, — so as that I may not be exposed to ridicule." Public scrutiny by the members of the American Philosophical Society placed Belknap's reputation at risk, and he worried that standards of what would be judged scientific "truth" required greater proficiency than he could muster. When Hazard recommended Belknap for membership in the American Philosophical Society, Belknap expressed gratitude as well as apprehension. "But what shall I do? Though I am conscious of being a passionate lover of nature in all her forms, yet I am unfurnished with any kind of instruments but a sun-dial and a burning-glass." All of the manifold shortcomings of Belknap's situation prompted anxiety: his lack of leisure time, lack of science books and instruments, and lack of intellectual companionship. Hazard tried to assuage Belknap's "fear" by reassuring him that the Society's newness "makes it easy to add to the stock of their Transactions." Ironically, when Belknap returned the favor by recommending Hazard for membership in the Massachusetts Historical Society, Hazard was likewise filled with anxiety. "I fear my abilities have been much over-rated, and that disappointment to the Societies, and disgrace to myself, will be the consequence. I have not leisure, and my mind has been, and is, necessarily so much engrossed in mere business, as to be disqualified for literary speculations." Both men were concerned with the raised expectations that accompanied election into a learned society, and both were intensely protective of their reputation with their peers. When Belknap learned that a paper had been presented to the American Philosophical Society "in opposition to" his account of the honey bee, he became unsettled even though the rival paper did, he was informed, treat him "with respect." "This is the second attack which has been made on my performance in public," he muttered.43

Desultory observations and speculations shared in private letters did not shoulder nearly the same burden of proof as public writings, so men of science drew great consolation from entertaining each other in letters. "I have only thrown out these things as subjects of enquiry," Belknap wrote meekly, "If you and I should not think in one channel, we need only propose our thoughts one to the other; and, as I am persuaded we both aim at the truth, if our enquiry be conducted with that openness of mind which the importance of

the object demands, we shall be in the ready way to come at it." Private letters felt liberating to Belknap because they were premised on polite tolerance, mutual cooperation and, increasingly, on sentimental affection. Meanwhile, the public arena, alarmingly permeable to the discord of American society at large, brought its own competitive threats to ego and reputation. By the end of the eighteenth century, men like Belknap placed increasing value on private male social spaces like correspondence networks and exclusive clubs, as well as on family affection and domestic bliss. The resilience of genteel discourse and the new language of sentimentality in Belknap's letters reflected a broader cultural distrust of the competitive impulses ubiquitous in American life by the end of the eighteenth century.⁴⁴

Conclusion

Alexander Garden and Jeremy Belknap could have engaged in science to their hearts' content without consequence, but they drew their special identity as men of science from the performance and display of that identity in letters. Indeed, they worked as intently at cultivating, arranging, and maintaining correspondences as they did at science itself. "If air balloons were as common as hackney coaches," Belknap fantasized in 1786, "This would save the trouble of writing. But, till this mode of travelling is more improved, we must be content to go on in the old way and converse by paper."45 In such men's desire for intellectual companionship and male camaraderie lay a greater quest with ramifications for the social order and the process of social change in America. In 1750 the majority of men of science were drawn from the elite ranks of American society. By 1800, however, an increasing proportion of men of science saw themselves as middling types hoping to claim a higher position in society. Letters represented a crucial resource enabling these middling men to forge a new layer of identity from which they derived rational pleasure and emotional support, and from which they advanced their claims to higher social status and greater intellectual authority. Writing letters helped men of science in the intertwined process of representing and understanding the social order and their position within it. Writing letters helped them to appreciate the gap between their ideals — the social order they preferred and the position they hoped for themselves — and the realities of their situation beset by a chronic lack of leisure time.46

American men of science sought to carve a social space for intellectual interests and social aspirations they shared with select other men. Initially, their efforts took the form of a loose web of informal correspondences, and later the form of organized scientific societies. The republic of letters and local scientific societies were sufficiently porous at first to allow an ascending "class" of middling men to penetrate the traditional domain of leisured gentlemen. Even so, tremendous determination and savvy were required to

decipher genteel codes of discourse and conduct, to gain admission into the scientific community, to make contributions that would maintain one's place in the group, and to offer excuses without jeopardizing that place. Writing letters helped men in the continual process of affirming their commitment to science and preserving their reputation with their peers. In times of enthusiasm, men of science raised their expectations and promised to do great things. In times of stress, they lowered expectations, giving ground to the overwhelming strains and pressures of everyday life. Each man possessed a unique energy level, family circumstances, work burdens, intellectual interests, social skills, and personal ambitions. Every single letter displayed, openly or tacitly, how much time and energy a man of science could seize from the rolling momentum of everyday life. Every letter gauged how much autonomy, how much agency, and how much mastery such men could claim for themselves at a given moment. Their identity as men of science was perpetually at risk; their interpretation of masculinity was constantly at stake.

American men of science engaged in a lifelong effort to match the realities of their lives to cultural ideals of what it meant to be a good man, in an era when ideals of masculinity were shifting drastically along with social, economic and political conditions in America. Changing social realities propelled a constant process of adjustment, whether reaffirming of old values or reaching for new values to guide behavior. Each man sought in his own way to be a good man, to maintain a core sense of self bridging his identities as husband, as father, as worker, as member of the local community, as member of an empire or nation, as man of science, and simply as a man. Men like Alexander Garden and Jeremy Belknap felt considerable uncertainty as they warily faced changing conditions, and as they hesitantly summoned old resources and new ways of exerting some measure of control over their lives. These men assembled a precarious balance between personal ambitions, family responsibilities, and intellectual associations in order to reduce the dissonance in their lives. In the process they helped generate new modes of behavior and new images of masculinity. Garden tried to divide his life into neat compartments by setting up boundaries between his intellectual life and his family life. He kept nearly all traces of domestic life out of his letters, and centered his emotional focus on male camaraderie instead. Whenever his medical practice became overwhelming, he simply suspended his correspondences and resumed them only when he could reclaim the freedom of action befitting a gentleman. Belknap, on the other hand, held lower expectations about his sphere of action, and he set up looser boundaries between his intellectual and family life. Belknap's letters were more transparent in revealing his struggles to cope with personal circumstances as well as with change. Whereas Garden had let few cracks mar his image of autonomy and mastery, Belknap resigned himself to the appearance of giving maximum effort, a lesser goal than mastery. Belknap slowly drifted away from some, though not all, genteel ideals of masculinity, and steadily moved his family closer to a place of high value in his life.

For all the differences between them, Alexander Garden and Jeremy Belknap were both unwilling to make their livelihoods — work — the heart of their lives. Work was seen as a leveller, the common lot of ordinary men. Leisure was the mark of a superior man, yet a life of leisure loomed as an unattainable goal for all but a handful of American men of science. Unable to transcend the constraints of a middling existence, these men sought alternative ways to remove themselves from the world of work and competition. One route was to assign greater value to domesticity, and to bask in the emotional bonds of family life. A parallel route was to join — indeed to create — the tavern clubs, freemason lodges, subscription libraries, benevolent societies, and other organizations that emerged in America before the Revolution and proliferated afterward.⁴⁷ These social spaces provided havens from the toil required to provide for one's family. They also formed zones of harmony and boundaries of order where men could aspire to higher social status and greater intellectual authority without the exhausting competition and distracting strife of the outside world. In the era of upheaval and confusion straddling the American Revolution, men of science pursued two contradictory goals, one of refuge and another of aspiration. They participated in the difficult transition from hankering for old ideals that were fading in applicability and resonance to formulating new behaviors and embracing new ideals. Middling men in particular wanted to see themselves as part of the solution holding society together, rather than part of the problem tearing society apart. They saw the principles of polite tolerance and mutual cooperation guiding the republic of letters and scientific societies as a corrective force upon each other. At the same time they looked upon their intellectual authority as a corrective force upon an atomizing society. Differentiating themselves as a special group upholding special ideals enabled men of science to locate the disorder of American society in the selfishness of lesser men, rather than in their own presumably nobler aspirations. In preferring a social order based on earned merit rather than ascribed status, middling men attached their claims to a higher social position to the achievement of a stable American social order.

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