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The Multi-Tasking Marquise

FOR ANYONE—AN ARTIST, A THINKER, AN ATHLETE—who aspires to fame or glory, proximity to someone more famous is a mixed blessing. Take the example of Henry James and Edith Wharton: Wharton gained prestige, certainly, by her close friendship with this widely acknowledged great man, but their association meant that she had to struggle to be taken seriously as an important novelist in her own right, rather than as merely the great man’s satellite.

The same was true of Voltaire and his friend and lover Emilie le Tonnelier de Breteuil, marquise du Châtelet (1706–49). Du Châtelet was a brilliant and original thinker in her own right, a mathematician of genius at a time and place when women were barred from the academic world: the *Académie royale des sciences*, for example, did not allow women in at all except as spectators at its twice-yearly public meetings. Du Châtelet’s relationship with Voltaire did wonderful things for her. It was a partnership between intellectual equals: the two collaborated on numerous projects, from the literary to the dramatic to the scientific, and the marquise’s status as Voltaire’s beloved gained her an easier admission into the heart of the Enlightenment intelligentsia than she could have achieved without him.

But there was a downside: rather than being known principally as the intellectual phenomenon she was, du Châtelet has long been remembered primarily as Voltaire’s acolyte (a reputation that would not have pleased her, since she vehemently disagreed with him on many issues and was scientifically and mathematically far more gifted than he). As a couple they have always caught the popular imagination; even Nancy Mitford, the ever-romantic popular novelist and biographer, took up the subject in her 1957 book *Voltaire in Love*. Voltaire readily acknowledged du Châtelet’s great mental powers, especially early in their relationship—“Born for the arts of pleasing,” he wrote, “[she] prefers the truth”—but after her early death he began to rewrite the history of their partnership, penning an elegy that depicted her more as a disciple than an equal. Posterity has followed his lead, and since the apotheosis of Voltaire during the French Revolution and afterward, du Châtelet’s name is generally heard only when coupled with his.

Judith Zinsser’s new biography of the marquise is a gesture of justice and restitution.¹ “Du Châtelet’s history,” she writes,

¹ LA DAME D’ESPRIT: A Biography of the Marquise Du Châtelet, by *Judith Zinsser*. Viking. \$24.95.

exemplifies all of the standard devices used to negate a woman's contribution to the traditional narrative of European history. Du Châtelet overcame the obstacles to women's education, but, we will be told, she allowed her responsibilities as a member of a family and her emotional attachments to take time from her intellectual pursuits. She published but, of course, less than the men of the Republic of Letters with whom she was in an unspoken and impossible competition. Her works, when described at all, are judged derivative, dismissed as "not original."

Zinsser has written a book called *Feminism and History: A Glass Half Full* and co-authored *A History of Their Own: Women in Europe from Prehistory to the Present*. As a woman's historian she is particularly sensitive to du Châtelet's conflicting priorities and her shifting roles as scientist, mother, lover, and aristocratic wife and helpmeet. The wonder, to her (a wonder she succeeds in conveying to her readers) is not that du Châtelet wrote less than the men of the Republic of Letters did, but that she wrote so very much in her short, busy, worldly life: a translation of Bernard de Mandeville's work of moral philosophy, *The Fable of the Bees* (as with many "translations" of the period, du Châtelet's contains a great deal of original writing); a collaboration with Voltaire, *Eléments de la philosophie de Newton*; an original treatise on the nature and propagation of fire, which she submitted for the *Académie royale des sciences'* prize competition of 1738; her own *Institutions de physique*, an ambitious attempt at a unified theory of the universe; her 700-page skeptical commentary on the Old and New Testaments; and her translation and commentary on Newton's *Principia*, to this day the only complete French translation of this great work. All this while raising three children and performing the traditional and not inconsequential duties an aristocratic wife owed her family: to advance her husband's career, launch her children into the great world, attend the queen at court, and work for the "grandeur of their line." In the case of du Châtelet, whose soldier husband spent much of his time away on campaign, she was also responsible for the running of their land and estates. Truly she was, as Voltaire described her, "a prodigy."

Gabrielle Emilie le Tonnelier de Breteuil was born on December 17, 1706. There is little material available on the marquise's early years, as is to be expected: childhood in *ancien régime* France was not considered important enough to bother to record, and as a female, Emilie would have been of little interest in any case. Zinsser pads out the thinness of the sources with a good deal of fanciful reconstruction, speculating on the basis of left-behind clues such as household inventories, as well as on what is already known about the lives of the Paris aristocracy during the last days of Louis XIV and the subsequent Regency. Emilie's father, the baron de Breteuil, was royal master of protocol from 1698; upon the death of Louis XIV, he sold this office but remained close to the court as a friend of the Regent.

Emilie would have been educated by a *gouvernante* and possibly spent some time at a convent school as well—the sources are unclear. In any case, she admitted later in life to dissatisfaction with the level of education she received, and said that if she were in charge of things she would establish *collèges* for women. (*Collèges* were the elite secondary schools founded in France by the Jesuits.) The purpose in her life was, of course, to make a good marriage, and to this end she was provided with a dowry of 150,000 livres. She did well, catching a member of one of the oldest noble families in Lorraine: Florent-Claude, marquis du Châtelet-Lomont, a colonel in one of the king's regiments.

Aristocrats were not expected to marry for love, and such a possibility never seemed to enter the mind of either of this pair. But Emilie was lucky: the marquis, a shadowy historical figure, comes across as the unsung hero of her story. An ordinary man of his class and occupation would have been embarrassed by a *femme savante* and angered by a wife's indiscreet, indeed openly flaunted, love affair with one of the most notorious men in Europe. But the marquis du Châtelet seems to have been no ordinary man. While having no intellectual interests of his own, he was proud of his bluestocking wife, boasted about her work, and acted as unofficial agent both for her and for Voltaire, carrying their manuscripts to printers and publishers and supporting their efforts in every possible way. He was discreetly silent when Voltaire and Emilie set up house in the du Châtelet château at Cirey in the Champagne region; he never behaved as a humiliated husband; and after Emilie died he never remarried, although he was only fifty-four. "Happily," she said early in their married life, "I am sure of M. du [Châtelet], he is the most respectable and most estimable man I know." Amazingly, she was never given cause to revise that opinion.

Their first years together were relatively uneventful. They married in 1725, when Emilie was eighteen, and produced a daughter in 1726 and a son in 1727. (A second son was born a few years later but died in infancy.) She was very much occupied by her children's education, and in fact acted as her son's principal tutor for several years; it was her desire, she later told him, to "inspire you with love of the sciences, & the desire to cultivate your reason." (The boy, Florent-Louis, would eventually rise in the army to the rank of *maréchal de camp* and become ambassador to England in the 1780s as well as being one of Louis XVI's close advisors.)

In a *Discours sur le bonheur* ("Treatise on Happiness") she wrote, Emilie claimed that "One of the great secrets of happiness is to moderate one's desires & to love the things that one possesses." So far as worldly effects went, this could not have been much of a challenge, for according to Zinsser's cited household inventories the du Châtelets freely indulged their rather opulent tastes, usually going into debt rather than denying themselves comforts and luxuries.

These were busy years for Emilie, obviously. "How, then," Zinsser asks, "did du Châtelet come to question this life? Why would she

embark on a program of study worthy of the learned elite . . . ?” Why indeed? For there is no evidence that she ever offered serious rebellion against the strictures and demands of her life or the world she sometimes dismissed as that of “princesses and pompons.” The answer seems to be that “by chance,” as she said, she happened to encounter “*gens qui pensent*” and made the surprising discovery that she too was “a thinking creature.”

However it happened, in 1733 Emilie began lessons in mathematics with the eminent Academician Pierre-Louis Moreau de Maupertuis. Maupertuis was in the thick of current scientific disputes that pitted traditionalist adherents of Descartes’s theories against the new Newtonians: with his *Discours sur les différentes figures des astres* he had “turned a scientific dispute into a topic for the *gens qui pensent* of the cafés and salons, and took the very public lead for the new, younger members of the *Académie* who admired the mathematical and philosophical writings of the two Englishmen, Newton and Locke.” While Emilie also met Voltaire at about this time, her intellectual friendship with Maupertuis was at least as important to her at that point. There has been considerable speculation over the question of whether this friendship was sexual, but as Zinsser points out, “The young marquise did not need sexual relationships with them to find these mathematicians [Maupertuis and Aléxis-Claude Clairaut] exciting.”

The affair with Voltaire, however, quickly flourished. In Emilie the philosopher recognized a unique phenomenon: “There is a lady in Paris, named Emilie,” he wrote to a friend, “who, in imagination and in reason, surpasses the men who like to think they know a lot. . . .” Lovemaking was combined with study as the two read Locke, Samuel Clarke, and Malabranche together (“She understands Locke better than I,” Voltaire admitted) and pursued mathematical work with Clairaut, who said that while Emilie was “altogether remarkable,” he could not even get Voltaire to understand what mathematics were. Voltaire, smitten, wrote her his “*Épître à Uranie*” (“Epistle to Urania,” the muse of astronomy and geometry).

In 1733, Voltaire’s *Lettres philosophiques* were published in London (they would never have got by the Paris censor); a year later they appeared from a Rouen publisher and were soon the talk of cultivated France. The *parlement* of Paris immediately condemned the book as “scandalous to religion, morality and the respect due to the authorities”; there was a ceremonial burning of the volume, while the lieutenant of police confiscated all the copies he could find. Faced with having to go into exile, Voltaire chose the château of Cirey, the du Châtelet estate in Champagne, at a distance of some three or four days from Paris. After a few months, Emilie decided to join him there.

It was an unorthodox, even scandalous decision, but one she had considered carefully. “I love Voltaire enough to sacrifice all that I could find pleasurable and agreeable in Paris for the happiness of living with him without dangers, and the pleasure of tearing him away in spite of

himself from his imprudences and his destiny." Although to be truthful, she was taking less and less pleasure in Paris society as she became ever more engrossed in mathematics and philosophy; the fashionable fatuity of court life was becoming only too evident. "I give myself up to the world without liking it very much," she admitted. "Imperceptible chains make entire days pass often without one being aware that one has lived." Life at Cirey, which she dubbed "my hermitage," "my Carthusian monastery," was so much more fulfilling, especially when Voltaire asked her to help him with the research for his newest play, *Alzire*.

There was a certain amount of diplomacy to be exercised with her cuckolded husband, of course. She bade his closest friend, the duc de Richelieu, to "just speak to him of Voltaire, but with interest and affection, and above all try to insinuate that it would be crazy to be jealous of a wife with whom one is content, that one esteems, and who conducts herself well." Her idea of conducting herself well might not be generally subscribed to, but the marquis seemed to see her point; at any rate he gave them no trouble and continued to depend on her to conduct his business on the estate.

Here, at "our little republic of Cirey," "the country of philosophy and reason," Emilie embarked on what was probably the happiest period of her life. She and Voltaire enlarged their studies of "natural philosophy" (what we would now simply call science), reading Newton, Galileo, Descartes, Halley, and Cassini. Voltaire introduced Emilie to the English moral philosophers, a new interest which led to her translation of *The Fable of the Bees*. They entertained fellow-scientists, including Maupertuis, Algarotti, de Resnel, Helvétius, Jacquier, and Hénault, generously; discussion could not take place, Voltaire insisted, "without the wine of Champagne and excellent food, because we are very voluptuous *philosophes*." Voltaire worked on his new plays, and in the evenings they staged riotous performances of his dramas in the château. "The greatest vengeance one can take against the people who hate us," Emilie stated, "is to be happy."

During the eighteenth century, the three fields that we would now call metaphysics, morality or ethics, and physics were not really separated. They all belonged under the general rubric of "philosophy," and while Voltaire and du Châtelet differed in their theories about natural philosophy, their ethical and moral ideas were remarkably similar; both of them arranged their ideas according to pragmatic standards. On the eternally fascinating problem of free will and human liberty, du Châtelet offered the common-sense opinion that God gave "a little portion of liberty [to man] just as he gave a little portion of intelligence." Voltaire tended to avoid too much metaphysical speculation and in a 1737 letter to Frederick the Great went far toward dismissing the entire subject of moral philosophy: "All of metaphysics in my opinion consists of two things. The first that which all men of good sense can know, the second that which they could never know."

Inspired by their study of Newton's *Opticks* and *Principia*, Voltaire and

du Châtelet embarked on an effort to persuade the French intelligentsia of the “truths” of Newtonian principles and together produced *Eléments de la philosophie de Newton*. It was necessarily published under only Voltaire’s name—women in France at that time did not publish openly, and “*précieuses*” invited ridicule, as Molière had devastatingly demonstrated—but his dedication (“to Madame la Marquise du Ch***”) made it clear she was his co-author, as did the frontispiece, which pictured her as the goddess of truth, guiding his—the poet’s—hand. Privately, he admitted that “She dictated and I wrote.” The book was hugely influential in persuading French thinkers to turn away from Cartesian principles toward Newtonian ones.

It was not until 1737 that Emilie had the confidence to embark on her own work, independently of her eminent lover. Giving up literary studies, she now devoted her efforts entirely to natural philosophy and began to take issue with Voltaire’s scientific work and the conclusions he drew from it. The *Académie royale des sciences*’s prize competition for 1738 was to be on the nature and propagation of fire. Voltaire assumed that Newton had been correct in saying that fire was matter, therefore subject to the forces of gravity, but the results of his experiments did not bear this out. Emilie was shocked to see that he refused to accept his own results, and she decided to write her own essay on the subject and submit it for the *Académie* prize—something no woman had ever done. Her work brought her to the conclusion, she wrote, “that Fire has no weight, or that, if it does, it is impossible for us ever to perceive it [with our senses]”—a theory that looked back to Descartes, rather than to Newton.

Her submission was necessarily anonymous—if it had been known that it was by a woman, the judges would not have taken it seriously—and while it did not win one of the three prizes, it was chosen for publication by the *Académie*. Success emboldened her to undertake a really monumental task, an *Institutions de physique*—an attempt, that is, to lay out the sort of “unified theory” of the universe that has continued to elude physicists, and that even Newton himself did not endeavor. Published anonymously in 1740, its frontispiece showed portraits of Newton, Descartes, and Leibniz, indicating that the author drew from the theories of all three. She had always been critical of “sectarians” like Voltaire who gave blind partisanship toward just one master. “When it concerns a book of *Physique*, one must ask if it is good, & not if the author is English, German, or French.”

The *Institutions* stirred up quite a response in the acrimonious scientific climate of the time. Samuel König, the Swiss *géomètre* who had once tutored her, jealously claimed he had taught Emilie everything she knew, simultaneously blowing her incognito. Jean-Jacques Dortous de Mairan, the newly-elected perpetual secretary of the *Académie des sciences*, attacked what he diagnosed as her feeble reasoning and feminine changeability in a widely-disseminated pamphlet. Her response showed good sense: first disarming her attacker by assuring him that

“However the public decides, I hold myself honored always to dispute against a person of your merit,” she went on to provide a thirty-seven-page rebuttal which was widely circulated in the scientific community. This time he was unable to respond, which gave her infinite satisfaction: “his silence is an acknowledgement that he is wrong, and his response would only show his weakness.” Both the *Institutions* and her correspondence with Mairan won her numerous fans among the *gens qui pensent*, with the great Buffon praising her “clarity, order, neatness, precision of the words and the ideas.”

As with so much scientific work of the period, the implications of the *Institutions* for traditional religion were grim. “With but a few references to the word ‘God,’” Zinsser points out, “du Châtelet had done what should have been impossible in eighteenth-century Catholic France: she had created a deity, a story of the creation and of the overall workings of the universe, without any reference to established religious doctrines, religious texts, or their authorities, and she had eliminated any role for this ‘Supreme Being’ other than that of ‘First Cause.’” Now (1742) the marquise began to work on her long *Examens de la Bible*, a commentary on the Old and New Testaments which is very much in the spirit of Voltaire’s *Lettres philosophiques* and other skeptical documents of the period, dismissing Jesus as a “pious fraud.” “Every discovery that men have made in physics and in astronomy has made evident a new absurdity in the story of the creation,” she claimed, saying that the Old Testament prophecies of Jesus’s birth were so vague as to be applicable to almost anyone. “Louis 14 and King James are predicted much more clearly than J.C.”

Here the marquise was clearly on the same wavelength as Voltaire, but her independent scientific work and intellectual disagreements with him had begun to open a gulf between the once inseparable partners. Voltaire challenged her ideas in print, writing a negative and patronizing review of her *Institutions* and mocking her as “the illustrious newton-leibnitzienne.” Zinsser even speculates, persuasively, that the portrait of the ridiculous Cunégonde and her discovery of “experimental philosophy” in *Candide*, written several years after the marquise’s death, was a joke at the expense of the author’s former lover.

Whatever the causes, the relationship began slowly to cool down; Voltaire announced that he was no longer equal to having sexual relations, and Emilie learned to content herself with a platonic friendship. But in 1746 Voltaire began a secret love affair with his voluptuous, widowed niece, Mme. Denis. When she discovered the truth, Emilie was deeply hurt: “I was loving for two, I spent all my time with him, & my heart, free from suspicion, delighted in the pleasure of loving and in the illusion of believing myself loved.” But “I have lost this happy state, & this cost me many tears.” In 1748 she repaired to the court of Lunéville in the east, where Louis XV’s kind father-in-law, ex-King Stanislas of Poland, held court as duc de Lorraine and where Emilie could pursue her husband’s interests and those of his family.

Here, while working on her translation of Newton's *Principia*, she met and fell in love with a young army officer, Jean-François de Saint-Lambert, and in 1749 she became pregnant. There was a certain amount of public hilarity at her expense, with Voltaire, rather than the marquis du Châtelet, being generally regarded as the cuckolded party. Her advanced age—forty-two—was also grounds for amusement, with her bitchy friend Mme. de Graffigny remarking that after this miracle, all the sterile women were going on pilgrimages to Saint-Lambert.

Childbirth, especially at the age of forty-two, was a dangerous business, and the practical marquise realized that there was a good possibility she might not survive it. Accordingly, she rushed on with her translation and commentary, hoping to finish the work by the time her child was born and resolving “to sequester myself absolutely, to risk all for all, and to do nothing else but my book.” On September 4 she gave birth to a daughter, Stanislas-Adélaïde; four or five days later, having finished correcting the printer's proofs for her translation and commentary, she sent them to the royal librarian. Then, on September 10, she developed a sudden fever and died, probably from an embolus in one of her major veins.

It was a tragic end for a relatively young woman at the height of her powers. Had she lived, she would have reveled in the continuing ferment of scientific discovery and activity that flourished as the eighteenth century wore on, and in seeing her own work vindicated in later years. “Her instincts about the most basic nature of matter and about the inapplicability of attraction to describe motion at that level of reality were correct, as twentieth-century quantum mechanics demonstrated,” Zinsser says. “Physicists today are praised for their search for a unified theory of the universe that she assumed existed. How she would have enjoyed being part of this mathematically orchestrated world of virtual realities, atomic particles, space travel, and a plurality of universes.”

Patricia Fara, the author of a book on women and science in the Enlightenment, has pointed out that Emilie du Châtelet “was caught between conflicting, unsatisfactory stereotypes—the learned eccentric, the flamboyant lover, the devoted mother. Too many biographers have plumped for one or another of these hackneyed models, rather than listening to her quiet insistence of being ‘in my own right a whole person.’” Zinsser's book is a clear antidote to these incomplete and distorted characterizations, and through her eyes we come to see Emilie as strong minded and individualistic but not particularly “eccentric”; a warm lover but not especially “flamboyant”; devoted to her children, yes, but also devoted to both of her lovers, to her husband (in her way) and not least to her work. She divided her energies between these conflicting demands as only a woman, born and bred to multi-task, could have done. Zinsser pays du Châtelet the great compliment of taking her seriously as a powerful and original thinker. It is an honor that surely, after more than two and a half centuries, the gifted marquise has earned.