Paul A. Elliot. Erasmus Darwin's Gardens: Medicine, Agriculture and the Enlightenment Sciences. (Garden and Landscape History.) 366 pp., illus., bibl., index. Suffolk: Boydell Press, 2021. £40 (cloth); ISBN 9781783276103. E-book available.

Dr. Erasmus Darwin loved gardens and gardening. He wasn't alone in this. His social circle, consisting of the brethren of a series of clubs —the Lunar Society of Birmingham, the Derby Philosophical Society, the Lichfield Botanical Society, and a larger convocation, the Royal Society—shared his predilections and supported them. So did at least two women: his second wife, Elizabeth Pole, and the provincial poet Anna Seward. Darwin created botanic and physic gardens at his homes in Lichfield and Derby, and a final one at Breadsall Priory. He also summoned them in verse, in epic poems with more than a hint of the erotic.

In *The Loves of the Plants*, the second part of *The Botanic Garden* (1791), a dramatization of the Linnaean sexual system, Darwin personified stamens and pistils as men and women in order to reflect on the gender relations of the time. In so doing, as Janet Browne explained ("Botany for Gentlemen," *Isis*, 1980, 80:593–621), the botanic garden became more than just a trope. It served as an organizing principle, as both structure and metaphor, grounding male-female relations in a "real" garden, Darwin's Lichfield garden. This was done, says Browne, to create a "botany for gentlemen"—assuage male anxieties by affirming contemporary gender relations as rational. Darwin moved female feelings and activities from the moral world to nature. Men who read him could rest confident that the female behaviors they saw around them were as natural, rational, and little to be feared as the botanical interactions spied in the Lichfield garden.

What organizing principle, we might ask, do Darwin's gardens represent in Paul A. Elliot's book? An answer appears early on page 11: "Despite the amount of academic attention that Darwin has received, the geographies of his career and the impact of landscapes and environment upon his medical and intellectual development have received much less analysis." Elliott sets out to remedy the problem. He wishes to place Darwin in every sense of the word; and several places are considered in turn—most importantly, the gardens of the book's title, which as sites of observation, enable Darwin's critique of Linnaeus. Experience in gardening would compel even an enthusiastic Linnaean to concede the discrepancies and anomalies that growing plants exhibited, disturbing the accuracy of the master's descriptions. Consider monsters thrown up by the environment: the snapdragons (Antirrhinum) in his Derby garden were usually zygomorphic but in summer 1799 produced an "antirrhinum peloria"—and a hardy flower it proved, too, successfully surviving the winter (p. 82). The same argument was extended to medico-botany, where the adaptations of plants to different environments could change their virtues (and thus their medical efficacy) as they responded to changes in the natural economy.

The protean character of life forms encouraged close analogies between plants, animals, and humans and was used to shore up Darwin's claim that his knowledge of medicine and animal pathology could be extended to plants. This in turn provided the incentive, as he wrote to Joseph Banks, to forge "a new philosophical agriculture by applying his knowledge of the 'animal oeconomy' to the study of plants" (p. 150). The result was Phytologia (1800), which baffled at least one scholar (Maureen McNeil), who, Elliott reports, found it hard to explain how an engagement with Scottish writings on agricultural improvement, the Agricultural Revolution, and the scarcity crisis of the 1790s could move an elderly medic to compose a 600-page tract on agriculture. Elliott finds the answer in Darwin's close engagement with farmers and landowners throughout his career and the impact of his medical ideas and experiences upon his analyses of horticulture and agriculture (p. 91). This, I suggest, is insufficient. Any explanation of Darwin's fascination with agricultural improvement must restore the importance of another place he inhabited—Edinburgh University's Medical School where class lectures in botany, chemistry, and natural history daily demonstrated the making of agronomy as the eighteenth century's "pattern science" (Simon Schaffer, "Enlightenment Brought down to Earth," History of Science, 2003, 41:257–268). Edinburgh's class-fee system ensured that professors were only too ready to keep up class sizes by welcoming would-be improvers into them. This was evident (at a slightly later period) in the care taken by John Hope, professor of botany, and John Walker, professor of natural history, to address agronomic interests in their lectures. It would have been interesting to learn how agronomy entered the lectures of Charles Alston, professor of materia medica and botany, in Darwin's time.

The concluding chapters (Chs. 8 and 9) of *Erasmus Darwin's Gardens*, as Elliott is at pains to emphasize, address a completely neglected subject: Darwin's "work on trees and the impact of arboriculture upon his ideas" (p. 225). And indeed, much new information is provided in these interesting chapters. Elliott draws out the nice tension between Darwin's personification of trees, which reinforced his analogies between animals and vegetables, and his endorsement of experiments in agricultural improvement, which more often than not required the destruction of trees. His silvicultural personifications begged sympathy for the plight of trees under attack for reasons of utility. Perhaps they should lead us to conclude (as Roy Porter did) that Georgian notions of utility were not reductively material. They had as much to do with intellectual, religious, and moral benefits, as with monetary profit.

Minakshi Menon

Minakshi Menon leads a Working Group on the seventeenth-century Dutch herbal, the Hortus indicus malabaricus, at the Max Planck Institute for the History of Science, Berlin. She is currently working on a monograph, "Empiricism's Empire: Natural Knowledge Making, State Making and Governance in East India Company India, 1784–1830."

Susan H. Brandt. Women Healers: Gender, Authority, and Medicine in Early Philadelphia. 312 pp., illus., map, notes, index. Philadelphia: University of Pennsylvania Press, 2022. \$39.95 (cloth); ISBN 9780812253863. E-book available.

The existence of a wide variety of women engaged in health care in eighteenth-century Philadelphia should not come as a surprise to historians of medicine or early America. Nevertheless, despite this acknowledgment, historical scholarship centering these women has been remarkably scant. In Women Healers: Gender, Authority, and Medicine in Early Philadelphia, Susan H. Brandt addresses this disconnect. She applies detailed historical analysis to the lives and work of women from a variety of backgrounds—including racial, religious, and class differences—living in the greater Philadelphia area from the last decades of the seventeenth century to the first years of the nineteenth.

This work is easier said than done. While groundbreaking studies in the late twentieth century by historians like Laurel Thatcher Ulrich paved the way for a text like Brandt's, few have taken up that mantle in the intervening years. Most of the Philadelphia women Brandt discusses in Women Healers left few if any records of their existence in their own hand. Therefore, constructing a narrative required a combination of close reading, second- and thirdhand accounts, attention to ephemera, and careful use of literary references to women healers like "Lady Bountiful" from the Restoration playwright George Farquhar's comedy *The Beaux' Stratagem*. Documents like recipe books, business accounts, advertisements, and a handful of letters make up the bulk of her primary source base. Nevertheless, from these fragments Brandt tells a nuanced and rich story arguing that, rather than a break from tradition, the first generations of women medical school graduates and professional nurses of the nineteenth century were a continuation of a varied medical community that included women.

The book's structure adds to this sense of piecing together fragments. While the eight substantive chapters are arranged chronologically, they also build on each other, adding and returning to specific healers and communities while introducing new ones. She balances continuity and change in the greater Philadelphia region for over a century. The back matter of the book also includes a helpful glossary of terms from "ague" to "worms" to better situate those not constantly immersed in the varied and antiquated terminology of the eighteenth and nineteenth centuries. This is one clear example of how Brandt explicitly crafts her text to be accessible to a nonexpert audience while including enough thoughtful analysis to make a substantial and essential contribution to the field. Among Brandt's strengths is her ability to create full narrative biographies of