

*Daughters of Alchemy: Women and Scientific Culture in Early Modern Italy.*

Meredith K. Ray.

I Tatti Studies in Italian Renaissance History. Cambridge: Harvard University Press, 2015. 292 pp. \$45.

---

In this fine volume Ray combines recent trends in the history of science, particularly those that show the importance of “pseudoscience” in the development of modern science, and the history of women to show women’s involvement in early modern science. She examines works by several Italian women, and one that may have been by a woman, to reveal women’s participation in the scientific culture of the fifteenth through the seventeenth centuries and to suggest ways that women influenced the direction of the discourse of the time.

As was typical then, serious scientific pursuit was often an avocation, and Ray opens with a discussion of an unpublished manuscript by the late fifteenth–early sixteenth-century political strongwoman of Forlì Caterina Sforza, which she titled *Experimenti*. Not that alchemy was totally unrelated to her position: Ray points out that attempts to produce alchemical gold, counterfeit coins, and poisons and their antidotes had political repercussions, and that other alchemical experiments related to the maintenance of health and management of the household; recipes in the broadest sense, which Ray relates throughout to the important genre of books of secrets, could be used as gifts. Women have tried to use beauty to gain or maintain power throughout history, and Ray mentions Sforza’s prescription for ensuring small breasts and thereby preventing sagging, in the days before another chemical breakthrough solved that problem — silicone implants. What is particularly interesting, as Ray notes, is that Sforza was engaged in experiment and worked together with an apothecary who not only guided Sforza, but also learned from her. This manuscript was passed to her heirs, and as Sforza was a progenitor of Medici grand dukes, Ray wonders if their interest in fostering the sciences was not influenced by pride in her work.

The apothecary shop was a major place for scientific activity, so it is not surprising that Camilla Erculiani, a sixteenth-century apothecary in Padua, would engage in and write about scientific experiments. Her *Lettere di filosofia naturale* emphasize her reliance on experience over formal learning, although Ray points out that it is clear that

she had the latter. The letters are formulated as a correspondence between her and the Burgundian medical writer George Garnier, who represents academic learning, but Ray suggests that Erculiani may in fact have written the letters attributed to him as well. It is likely that she had met him, and Ray discusses the role of Padua as an international center of natural philosophy, in which women participated. In fact, the letters are dedicated to Anna Jagiellon of Poland and were published in Krakow.

The other work Ray deals with that shows actual engagement with scientific work is *I segreti della signora Isabella Cortese*. Ray points out that it is often declared to be the only book of secrets by a female author, but, in fact, there may have been no such person as Isabella Cortese, and it could have just as easily been written by a man. Books of secrets frequently dealt with women's issues, such as women's health, cosmetics, and cookery. Nevertheless, Ray suggests that its existence, whether or not it was written by a woman, shows us that publishers knew that books of secrets were widely read by women and, consequently, there was an audience for a book of secrets written by a woman.

The other works Ray discusses show less direct involvement with scientific activity. Ray sees the *querelle des femmes* as an important part of scientific discourse, and two authors published works in 1600 — Moderata Fonte's *Il merito delle donne* and Lucrezia Marinella's *La nobiltà et eccellenza delle donne co' difetti et mancamenti de gli huomini* — that showed the authors possessed some scientific background and stressed the importance of scientific education for women. A third author, Margherita Sarrocchi, not only had references to science in her epic poem *La Scanderbeide*, but associated with major scientific figures of her day, and she met and corresponded with Galileo. Ray does an excellent job elucidating the relationship between science and women in Renaissance Italy, adding to our understanding of the history of both.

Sheila J. Rabin, *Saint Peter's University*