Alisha Rankin


In Panaceia’s Daughters, Alisha Rankin describes the healing work of early modern German noblewomen. To reconstruct their knowledge and practices, Rankin has mined a truly impressive array of archival sources, including letters, diaries, chronicles, recipe books and estate inventories. She combines fascinating stories of these women’s lives with persuasive arguments about the rise of experimental method in the sixteenth century and the place of women in early modern science and medicine. The result is a highly engaging book that intervenes in some of the central historiographical debates about the Scientific Revolution.

Since the seminal work of Steven Shapin and Simon Schaffer, a substantial amount of scholarship on the rise of experimental methods has concentrated on England and on the gentlemen of the Royal Society. In this setting, the epistemological credibility of experiments depended crucially on the social status of the experimenters, like Robert Boyle. These men represented themselves as trustworthy by virtue of their status as gentlemen. Gentlemen, unlike artisans or other practical men, were disinterested because they were free of commercial or mercenary motivations for investigating the natural world. They and they alone were able to be objective (or so they claimed). This work has been challenged by, among others, Pamela Smith, Pamela Long, Bruce Moran, and Deborah Harkness, who have demonstrated that experimental methods were developed at many different sites throughout Europe in the early modern period. Further, these scholars (and others) argue that a wide range of people were involved in experimental practices; they were not all either ‘gentle’ or ‘men’. Rather, experimental methods were developed and deployed by men and women with practical concerns, including engineers, alchemists, and medical practitioners.

Rankin builds on this scholarship in a novel and unexpected way. She meticulously recreates the experimental activities of sixteenth-century German noblewomen, a group that has not previously attracted the attention of historians of science. She demonstrates that these women were actively involved in the production of medicines using elaborate chemical apparatus and processes, and that they devised their own recipes and techniques through a program of ongoing experimentation. Rankin contends that these women need to be seen as important contributors to the rise of experimental philosophy.

The book contains three detailed case studies of German noblewomen. The first two examine the lives and activities of Dorothea of Mansfeld (1493–1578)
and the Electress Anna of Saxony (1532–1585). These two women were widely known in their own day for their medical expertise and for their skill in preparing medicines. People from all over Europe and from all walks of life (royalty and aristocracy as well as local artisans and peasants) consulted them about medical problems ranging from fevers to stroke to hemorrhoids to infertility. The two women dispensed both medical advice, including instruction on diet and regimen, and medicines that they had made themselves. Dorothea and Anna both had distilleries – essentially laboratories – where they prepared medicines according to recipes they had developed themselves and where they performed experiments with a view to improving existing remedies or creating new ones. Sometimes this meant testing a remedy on a lower-status patient before giving it to a higher-status patient. So when Dorothea learned that the Elector August of Saxony was suffering from erysipelas, she tested remedies that she concocted at her distillery on other patients, including her own son, before she deemed it effective enough to send to August (p. 111).

Dorothea was one of the first (if not the first) German noblewoman to have a distillery. Her equipment was set up in the 1540s and served as a model for the distilling houses at many other courts (including Anna’s). These distilleries were large operations; both women employed servants to manage them, although they seem to have personally overseen a good bit of the work that went on. These servants were not mere technicians either. Anna’s were so well trained and trusted that she directed at least one of them, Katharine Klein, to do her own experiments to modify and improve a pre-existing recipe for an electuary (p. 149). (Interestingly, many of the servants Anna employed in her distillery appear to have been women.) Dorothea and Anna both prepared large quantities of medicines in their distilleries, and shipped them all over Europe. And although Dorothea and Anna were particularly renowned for their medical expertise, several other German noblewomen shared these pursuits. Dorothea, Anna, and other German noblewomen with distilleries drew on the traditional expectation that a noblewoman would prepare medicines for herself, her household and possibly her neighbors. Dorothea and Anna did not accept payment for their medicines, which they gave as gifts or offered to the poor. However, the scale of their operations, the size of their correspondence, and their vigorous experimentalism distinguished them from this traditional charitable model.

Rankin makes the case that there was widespread interest in the experimental work of noblewomen like Dorothea and Anna, both because their medicines were seen as highly effective, and also because their activities fit within the broader cultural context of ‘court experimentalism’. In the sixteenth century, rulers throughout the German territories (and in other parts of Europe) were