ship in *As You Like It* to argue that the theatre itself was a site of forgetting. Overall, while the excellent introduction seems hopeful that this volume will help inaugurate a new interest in forgetting, the volume as a whole takes a medium-sized step into new, exciting critical territory rather than a large stride. The essays do not quite congeal into a larger critical conversation, perhaps because of the very variety of approaches and subject matters gathered here. Scholars and upper-level students of Renaissance literature and culture, however, will find this a solid book overall and one that may furnish a useful starting point for further inquiries.

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Elizabeth Spiller. *Science, Reading, and Renaissance Literature: the Art of Making Knowledge, 1580–1670*. Cambridge: Cambridge University Press, 2004. Pp. xi, 214.

Elizabeth Spiller's thesis in this book is that seeing early modern natural philosophy and imaginative fiction as sharply opposed is anachronistic. So, she proposes that the "two cultures" model which has been used to describe intellectual life in the last few decades does not work for the sixteenth and seventeenth centuries, where both scientific and poetic writing are characterized and unified by an interest in "making knowledge."

Spiller's introduction distinguishes the history of knowledge from the history of ideas (with which she does not propose to deal), and sketches her fundamental argument, that early modern writers from Sidney to Hooke saw knowledge as *made*—made by various kinds of art and artifice, including the writing of poetry and the contriving of laboratory experiments, and by the active experiences of reading and seeing. This argument is then worked out in four chapters, each of which brings a text from experimental natural philosophy together with a fictional text. In the first, Sidney's *Defence* and Gilbert's *De magnete* are linked by the idea of making worlds: the golden world of the poet, and the globe-shaped magnets or terrellas of Gilbert's work. The second reads Spenser's *Faerie Queene* and William Harvey's *De generatione animalium* with an eye to their "shared interest in theorizing the creation of knowledge": for both, the double semantic field of conception, the relationship between making babies and making ideas, is important. The third (part of which first appeared in *Renaissance and Reformation / Renaissance et Réforme* in 1999) extends the range of the book beyond England to examine Galileo's *Sidereus nuncius* and Kepler's vision of life on the moon in the *Somnium* as intertwined engagements with questions of knowledge and seeing. The fourth turns back to England, discussing Robert Hooke's depictions of what he could see through the microscope and Margaret Cavendish's responses to Hooke and other natural philosophers in the *Blazing world* and elsewhere. An afterword fast-forwards to the late twentieth century, reflecting on the questions of fact and fiction raised in responses to the Sokal hoax

and concluding, in the final words of the book, that “once science is identified not as a form of knowledge but as an instance of truth, it cannot really learn anything from other disciplines.”

Science, reading, and Renaissance literature is clearly structured and written in good prose; there are a few factual slips (Blair Worden’s name appears back to front, Margaret Cavendish’s husband was not the Duke of Cavendish), but only a few. It offers an interesting discussion of some contexts in natural philosophy for some familiar English texts. But this is modest praise for a book whose title is sweepingly ambitious: how powerful a contribution does it actually make to the study of science, reading, or Renaissance literature? It is easiest to take the three topics in reverse. “Renaissance literature” does not simply mean “English Renaissance literature,” since there is a chapter on Galileo and Kepler, but the book makes no attempt to examine other European texts, or to ask whether English texts were representative of those from the rest of Europe. It is perhaps in keeping with this Anglocentricity that Latin texts by Harvey, Galileo, and Kepler are unapologetically read in modern English translations. The book’s approach to “reading” is more sophisticated than this, setting up a chronologically structured argument. Elizabethan and Jacobean reading is presented not only as an active experience but as a creative one, whose creativity is important whether the text being read is poetic or embryological: “Spenser’s reader ... like Harvey’s scientist ... must participate in the practice of virtue through the act of abstracting and putting together the different facets of virtue into knowledge.” By contrast, a few decades later, Margaret Cavendish is still imagining multifarious, imaginative, engaged readers, but “the science which Hooke practices can only imagine a silent, passive reader rather than one who writes back in the manner that Cavendish desired.” This makes a good clear story, but is it really true? The early correspondence of the Royal Society surely includes quite a lot of writing back of one sort and another, and the early responses to at least one text which came out of the Royal Society in the decade of Hooke’s *Micrographia*, namely Wilkins’s *Essay*, are far from passive. As for “science,” Spiller’s work raises some questions of methodology and disciplinarity. She and I are both professors of English, a line of trade whose practitioners have always ventured merrily into other people’s areas of expertise: early medieval archaeology, the conquest of the New World, continental philosophy. But is this always well-advised? When Gilbert’s spherical magnets are said to be “models in the sense that they comprise a site for producing knowledge, a representation of England and the globe itself, a moral ideal as well as a pattern for imitation,” is the history of science really being engaged with rigorously? The Sokal hoax comes to mind; its object was not to attack interdisciplinary studies but to demonstrate that scholars in the humanities are too often tempted to talk fancifully and inexpertly about scientific topics. Likewise, when Spiller founds an argument on the claim that one of the cherubs in the frontispiece of Galileo’s book on sunspots is looking through a telescope, she is missing two points: sunspots are not observed by looking through a telescope, and the long instrument with a flared end which the cherub is raising playfully to his eye is not a telescope anyway, but a trumpet.

Science, reading, and Renaissance literature is a good book of its kind, but its title and conclusion suggest interdisciplinary ambitions which it does not realize. Despite its concluding words, it is certainly unlikely to lead science into healthy ways of learning from other disciplines, and despite the claims of its introduction, it may not even convince all social historians of science to turn from the “limited” and “narrow” work in which they presently engage to the “crucially different” approach which it takes. However, it has interesting material to offer to literary scholars as they think about the scientific texts which are such an important and attractive feature of the high culture of early modern England.

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Wolfgang Lefèvre, ed. *Picturing Machines 1400–1700*. Cambridge, Mass. and London: MIT Press, 2004. Pp. vi, 347.

This book is a collection of essays from a conference held at the Max Planck Institute for the History of Science, Berlin, in the summer of 2004. Organized into five different areas, the book presents an overview of recent research focusing on the representation of machines in the early modern period. This book should appeal to a broad range of scholars: not only historians of technology but those interested in cartography as well as historians of architecture and art. Although there are excellent papers dealing with the Middle Ages and Northern Europe, the emphasis is on Italian material between the mid-fifteenth-century Sienese engineer Mariano Taccola (1382–1458?) and the mid-sixteenth-century architect Antonio da Sangallo the Younger (1483–1546): this is when standards were developed and principles established. To cushion the reader, the editor has provided introductory comments to highlight general issues.

For a historian of architecture, like myself, the special virtue of the history of technology as a field has always been its indifference to issues of hierarchy. To theorize from the ground up, from the habits and practices of doing and making rather than from academic categories, gives the best work in the history of technology the quality of a fresh breeze on a humid summer's day. At the beginning of this volume the editor, Wolfgang Lefèvre, poses big questions of this sort. After noting the sudden explosion of drawings in the Renaissance, Lefèvre asks: “Why did they produce drawings? For whom and for what purposes? What were the prerequisites for this drawing practice, what were the contexts, and what were the consequences? In short, how did drawing shape the practice...of the early modern engineers?” (1). Architectural historians, who typically investigate the role of a drawing as part of a teleological process culminating in a completed building, have rarely, if ever, asked why drawing itself developed. We, at least, should turn avidly to this volume.

What sort of answers do we find? A number of the authors take up the “social context” for drawing. Can one determine, based on the image, for whom it was