

The Master of Saint-Eustache was determined to have the best of both worlds, Gothic and Renaissance, but his moment passed quickly and he had a terrible press. A few decades after the church was finished the *érudit* of old Paris, Henri Sauval, said that it had some pretty capitals (the photograph on p. 26 shows a superb example) and a fine Lady Chapel but nothing else of value. The nineteenth-century Gothic purist Viollet-le-Duc saw Saint-Eustache as a kind of Gothic skeleton clothed in Roman tatters stitched together like a harlequin's outfit.

Saint-Eustache was clearly waiting for a contrarian scholar to examine lovingly every inch, digest the few documents that earlier French research had turned up, and put herself into the creative mindset of the original Master. Anne-Marie Sankovitch did this in a masterly thesis submitted to the Institute of Fine Arts of New York University in 1991. Sankovitch realized that, although the Master had been formed in the Rayonnant style, he was at heart a historicist who decided to return to the earlier moments in French architecture that made room for the classical tradition, such as Autun or Amiens. Not only did she explicate problems of *Baugeschichte*, like breaks between campaigns and constraints caused by the irregular site, but she also tried to enter the mind-set of an architect who set himself difficult intellectual problems and then took delight in solving them. A rigorous thinker the Master must have been, someone who did not let the new forms coming into the Loire Valley swamp him but rather used them to create what he thought would be a style of lasting validity.

The brilliant young scholar behind this book was cut short in her prime. Here we have the thesis, the start of an unfinished edifice. The bibliography of Sankovitch's articles (xxi) gives some idea of her larger enterprise, which was nothing less than a complete rethinking of the architecture of the early French Renaissance. At least we have the cornerstone.

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Before Copernicus: The Cultures and Contexts of Scientific Learning in the Fifteenth Century. Rivka Feldhay and F. Jamil Ragep, eds.

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Nicolaus Copernicus's claim that the sun was the center of the universe, first articulated in a manuscript circulated early in the sixteenth century, now known as the *Commentariolus*, and elaborated in his 1543 work *On the Revolutions*, has loomed large in the historiography of the West for initiating what is commonly called the scientific revolution. Yet we have few sources that suggest what led to this claim. This has resulted in much speculation about the cause: historians have suggested, for example, opposition to Ptolemy's use of mathematical fictions, uncertainty about the order of

the planets, and support of Aristotelian physics. The editors of this volume, which contains papers from a 2009 workshop in Montreal looking at a variety of developments during the period prior to the appearance of the *Commentariolus*, decry the attempt of scholars “to reduce the ‘Copernican question’ to one of finding the univocal explanation that somehow supersedes all others” (5) and seek a broader outlook.

Christopher Celenza concentrates on the importance of travel in the fifteenth century. The Polish Copernicus spent seven formative years in Italy, which exposed him to new contacts and ideas. Not only did he live and work with the astronomer Domenico Maria Novara in Bologna, but Celenza points out that the curriculum there encouraged questioning authority. Edith Dudley Sylla, on the other hand, focuses on the intellectual background to the study of astronomy in Cracow, where Copernicus first attended the university. Georg von Peurbach’s *Theoricae novae planetarum* from the mid-fifteenth century was the principal textbook of astronomy, but Sylla shows how much it had in common with Abū ‘Alī al-Ḥasan ibn al-Haytham (Alhazen)’s eleventh-century work *On the Configuration of the World*. Michael Shank looks at Peurbach’s collaborator Regiomontanus, who finished the very influential *Epitome of the Almagest*; he emphasizes astronomical controversies in the second half of the fifteenth century and, in particular, Regiomontanus’s hope for a cosmology of concentric spheres without the Ptolemaic complexities. Raz Chen-Morris and Rivka Feldhay treat the issues of appearances and of the visible and invisible in the work of Leon Battista Alberti and Nicholas of Cusa, which could have led Copernicus to accept the earth’s motion.

It is not surprising that a volume coedited by Jamil Ragep would emphasize the continuing influence of the Islamic world beyond the period preceding the twelfth-century translations into Latin acknowledged by Copernicus. Even Sylla, whose chapter concentrates on golden age astronomy, claims that the cessation of translations “does not mean that other modes of transmission had to end, let alone that astronomical activity in Islamic areas ceased to progress because European interest in it declined” (47). Indeed, Sally Ragep shows how vibrant the practice of astronomy in the fifteenth-century Islamic world was: she finds 489 surviving treatises by 203 authors on many facets of its study despite subsequent upheavals and invasions. But do those numbers mean that such studies found their way to Christian Europe? Nancy Bisaha notes that cross-cultural exchanges continued, but the hostility of Christian Europe toward Islam impeded acknowledgment of debt to Islamic contributions. Robert Morrison shows how Jews were important intermediaries between the Islamic world and Christian Europe in the fifteenth century. Learned Jews connected the West with the Ottoman Empire, and the Judeo-Arabic astronomical text *The Light of the World* by Joseph ibn Naḥmias contained ideas and techniques from Islamic astronomers and was known among Renaissance astronomers. This work contains a figure similar to the form of the Ṭūsī couple used by Copernicus. Jamil Ragep uses the two different forms of the Ṭūsī couple, a combination of circles to illustrate epicyclic motion formulated by the thirteenth-century astronomer Naṣīr al-Dīn al-Ṭūsī, to trace the movement of the figure around the

Islamic and Christian worlds and to bolster the claim that Christian scholars were borrowing from more recent Islamic work.

In presenting different aspects of the fifteenth century, the authors in this volume have enriched our understanding of the cultural milieu of the fifteenth century and astronomy's place in it. They have suggested new and different ways to approach the problem of the path to the heliocentric universe.

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Medicine and Humanism in Late Medieval Italy: The "Carrara Herbal" in Padua.
Sarah R. Kyle.

Medicine in the Medieval Mediterranean 8. London: Routledge, 2017. xiv + 244 pp.
+ 10 color pls. \$149.95.

It was 1950 when Otto Pächt's "Early Italian Nature Studies and the Early Calendar Landscape" (*Journal of the Warburg and Courtauld Institutes* 13 [1950]: 30–31) first drew a wider audience's attention to the unprecedented naturalism of some of the plant illustrations in the so-called *Carrara Herbal*, and, since then, research has repeatedly discussed it as the first manifestation of a new artistic attitude toward nature. Baumann's investigation, despite certain deficiencies, convincingly traced the illustrations back to previous herbal pictures, assessing them in comparison with the morphology of natural plants (Felix Baumann, *Das Erbario Carrarese und die Bildtradition des Tractatus de herbis* [1974]). Readers might, therefore, be surprised that Sarah Kyle's book does not focus on the herbal's miniatures. Instead, it provides a refined understanding of the codex as a whole, taking a cultural-historical approach and placing it firmly in its scholarly context as well as within the context of the political ambitions of the court of the Carrara dynasty in Padua, where it originated shortly before 1404. The study draws on textual and artistic sources, humanist and antique writings by men of letters (mostly Petrarch) and by physicians, providing a fine compendium of original sources for the topics discussed.

After a short synopsis of the development of *materia medica* book illustration since antiquity based on other such surveys (e.g., Minta Collins, *Medieval Herbals: The Illustrative Tradition* [2000]), the book elaborates two main lines of reasoning. One argues that Francesco Novello, the herbal's commissioner, aimed to promote a self-image as a "physician prince" (88). This is supported by convincing analysis that in Padua, "the body of the ruler [was used] as a metaphor for his territories and his citizens" (10). Ensuring the well-being of this figurative entity required medicine to maintain the ruler's and the public's health. Francesco publicly promoted the Paduan university, notably its medical schools, which led to increased production of medical books and fostered innovation in medicine. Medical writings considering the ruler's health often combined salutary advice with moral guidelines, comparable to those in *Mirrors of Princes*. As an