affect family and community development? But this quibble should not detract from the fact that Katherine Lynch has produced a valuable, well-argued, and thought-provoking contribution to the fields of family history, urban history, and community formation, among others. In her conclusion, she writes, "If this study encourages research on the sorts of factors and interrelationships explored here, I will count my work a success" (221). It will, and she should.

William R. Shea and Mariano Artigas. *Galileo in Rome: The Rise and Fall of a Troublesome Genius*. Oxford: Oxford University Press, 2003. xii + 226 pp. £ 16.99 / \$ 28 paper. Review by ALESSANDRO GIOSTRA, ACCADEMIA GEORGICA, TREIA.

William R. Shea, holder of the Galileo Chair of the History of Science at the University of Padua, and Mariano Artigas, professor of Philosophy of Science at the University of Navarra, reconstruct Galileo's personal life by highlighting his six trips to Rome. This is surely an original point of view, allowing the authors to lay stress on the famous case between Galileo and the Church, which "remains as fascinating as ever, and it has much to teach us that is relevant to our own day" (xi).

In the first chapter, "Job Hunting and the Path to Rome" (1-18), Shea and Artigas deal with early moments in Galileo's career. The meeting with Ostilio Ricci during this time, which brought about Galileo's conversion to mathematics, can be deemed the beginning of his scientific path. Galileo's first trip to Rome is set within the cultural milieu of the Counter Reformation. He arrived in Rome in 1587 under the pontificate of Sixtus V, namely the pope who "was more active than any pope within living memory" (11), because of his own tireless action for architectural modernization, public works, the advancement of learning, and against criminality. The most important scientific figure in Rome was "the leading Jesuit mathematician" (5) Cristopher Clavius, the main protagonist of the "Calendar Reform" (6), whom Galileo met in the autumn of that same year. It is uncertain whether at this time he

REVIEWS 277

also met "the leading Jesuit theologian" (7) Cardinal Robert Bellarmine, who in the following years would play a key role in Galileo's life.

The second trip to Rome is outlined in Chapter 2, "The Door of Fame Springs Open" (19-48). The situation of the 1611 trip was totally different from Galileo's previous one in 1587, when he was still an unknown researcher searching for a job. The Tuscan scientist had just ended his eighteen year professorship at the University of Padua; furthermore, the publication of Sidereus Nuncius, regarding celestial novelties observed through the telescope, made him famous all over the scientific world. After a brief description of the results he achieved with that instrument, Shea and Artigas describe Galileo's Roman meetings. On this occasion the Jesuit astronomers agreed with his discoveries, as one can read in their response to Cardinal Bellarmine, and congratulated him on his astonishing outcome. After meeting Prince Federico Cesi, Galileo officially became a member of the Lyncean Academy, a cultural institution which contributed greatly to his scientific work. Galileo left Rome in April 1611 and in a letter to the Florentine grand duke sent by Cardinal Francesco Maria del Monte his triumph was made clear.

In the third chapter, "Roman Clouds" (49-93), the authors highlight the events that led to the first decree against Copernicanism. The work on sunspots and the *Copernican Letters* increased suspicion against Galileo, even if at this point his works were still not banned. "Had Galileo been able to demonstrate the truth of Copernicanism, all would have been well, but he did not have and was never to have such proof" (73); such is the main reason inducing the Church to reject the new astronomic theory. The distinctive features of that debate can be seen in the famous letter to Paolo Antonio Foscarini by Cardinal Bellarmine, whose opinion was fundamental for the decision made in 1616. It was just the lack of a physical proof of the Copernican theory which led Bellarmine to believe in an astronomy that saved the phenomena. In his letter Bellarmine remarked that the Council of Trent had prohibited the Scriptures from being interpreted in opposition to the common

agreement of the Holy Fathers. Whenever a proof is given, according to Bellarmine, it is better to establish that we do not understand Scripture than to affirm that what has been proven is false. In Bellarmine's mind it is necessary to concede that the ideas for a physical proof of the terrestrial motion and astronomy as a mathematical device are connected with more complex questions related to the Aristotelian arrangement of learning. His letter to Foscarini, however, makes clear that the lack of a demonstration of the motion of the Earth was a crucial point in the opposition to Copernicanism. Indeed, the Decree of the Congregation of Index did not consider Copernicus' work "formally heretical," as the Holy Office had done, but only "false and contrary to Holy Scripture" (85).

Galileo's Roman journey in 1624 is the subject of Chapter 4, "Roman Sunshine" (94-122). Cardinal Maffeo Barberini had been elected to the papal throne, taking Urban VIII as his name. The new pontiff had expressed very favorable opinions on Galileo's activity until this time. Thus, Galileo strongly hoped that even the Church would accept the new astronomical theories; the events of the following years, however, gave Galileo the lie. The authors lay stress on the ideas held by the pope about astronomical theories as simple mathematical conjectures, in accordance with the contents of Andreas Osiander's preface to Copernicus' De Revolutionibus Orbium Coelestium. At the end of this section, Shea and Artigas treat the denunciation to the Holy Office of Galileo's Assayer, since the atomic theory upon which it is founded clashed with the dogma of transubstantiation. The question was put to rest by the theologian Giovanni di Guevara, "who read Galileo's work and saw no reason to pursue the matter" (119).

As one can read in one of Galileo's letters to Prince Federico Cesi, the *Dialogue on the two Chief System* was almost ready at the end of 1629, although health problems beginning in 1625 made for "slow progress" (127) in writing it. The attempt to publish the *Dialogue* in Rome led to his penultimate trip to The Eternal City, which is treated in Chapter 5, "Star Crossed Heavens" (123-157). Galileo's endeavor was unsuccessful because of a combination of

REVIEWS 279

circumstances, among them the death of Federico Cesi. After editing his masterpiece in Florence in 1632, Galileo took his last trip to Rome the following year, the one during which he was condemned (Chapter 6, "Foul Weather in Rome," 158-200). Shea and Artigas further emphasize that the final judgment against Galileo was the result of contemporary circumstances such as political tension in the Church, Galileo's wish to conceal Bellarmine's admonitions of 1616, the attempt to hide the Copernican meaning of his work, and the lack of ecclesiastical permission for its publication, coupled with the lack of a valid proof of Copernicanism, which had been the main reason for the Decree of 1616. The last pages of the book are devoted to Galileo's final years. It is outside the authors' task to go deeply into the contents of Galileo's scientific testament, the Discourses and Mathematical Demonstrations concerning Two New Sciences, as it was published in 1638. There were no problems for the publication of the Discourses; "since the book did not mention Copernicanism, the Church decided to let the matter drop" (198).

Shea and Artigas' work reaches its aim to "avoid technicalities" (xi) and at the same time offers a detailed biography of Galileo. Galileo's case has too often been deemed an instance of Catholic deafness to scientific progress. A more careful consideration of the facts and attention to recent discoveries concerning the history of science shows the insubstantiality of such a vision. It is not wrong however to consider the different viewpoints upheld by Galileo and Bellarmine as the clearest example of the relationship between Copernican astronomy and scriptural exegesis in the early seventeenth century. Galileo supported the impossible literal interpretation of those biblical passages concerning astronomy; thus, the Bible is not a scientific book. In this way he proved to be a better theologian than Bellarmine, who at his turn surpassed Galileo in the epistemological dimension of knowledge. Indeed, in opposition to Galileo, who was sure of having gotten a true demonstration of the motion of the Earth, the cardinal relied upon the lack of evidence for the new cosmology. Although some lay readers interested in the history of scientific thought could deem such a

conclusion to be paradoxical, it should be esteemed quite otherwise by specialists.

Sophie van Romburgh. "For My Worthy Freind Mr Franciscus Junius": An Edition of the Correspondence of Francis Junius F.F. (1591–1677). Leiden and Boston: Brill, 2004. x + 1134 pp. \$317.00. Review by ERNEST B. GILMAN, NEW YORK UNIVERSITY.

The indefatigable Dutch polymath whose letters are here collected was a jack of all scholarly trades and the master of them all. Medievalists are aware of Junius's pioneering contributions to the study of Anglo-Saxon and Germanic philology. He was an expert in the comparative study of Old Norse, Old High German, Old Frisian, and Gothic as well as Old English. The codex in the Bodleian containing the Old English texts of Genesis A and B, Exodus, Daniel and "Christ and Satan," still bears his name as "The Junius Manuscript." For Renaissance art historians, The Painting of the Ancients (published in Junius's own Latin, English and Dutch versions over the period 1637-1641) represents the first comprehensive account of the visual arts in antiquity, and a central document in the history of ut pictura poesis. It stood as the standard work on the subject until the age of Winckelmann. This book was commissioned by Thomas Howard, 14th Earl of Arundel, in whose household Junius served as tutor and librarian for twenty years before the civil war. It was in this office that Junius supplied the scholarly expertise, and perhaps also his share of the enthusiasm, behind the transnational antiquarian ventures of the "Collector Earl." Among the projects that occupied a long life devoted to scholarship was a posthumously published Catalogus, arranged alphabetically, of all the references to objects of art (painting, sculpture, architecture, pottery and much else) that Junius could delve out of the archive of classical literature.

A new edition of *The Painting of the Ancients* was published in 1991 by Philipp and Raina Fehl. Yet with no full biography of Junius, and—given his prominence in the age—relatively few special studies (my own among them) in print, our image of the industri-