REVIEWS

commentary, but some other religious questions receive superficial attention. Susan Richter refers to the Jesuits "and other Spanish or Portuguese orders" (330). Does she mean that the Society of Jesus was often referred to that way by enemies of Spain or Portugal? Or does she actually think that all Jesuits were Spanish or Portuguese? War often has many by-products, not all of them destructive or death-dealing; the editors of this very useful volume might have included a chapter or two on art, literature, and the Thirty Years' War. Such inclusion would not necessarily have helped to clarify a "puzzling and complex subject" (1), but it could certainly have enriched the complexity.

William Carroll. *Galileo: Science & Faith*, London: Catholic Truth Society 2009, 66 pp. £ 1.95. Review by Alessandro Giostra, Stanley Jaki Society.

The Galileo (1564–1642) case represents a very difficult and intriguing subject to investigate. It implies, indeed, a deep knowledge of the seventeenth-century historical context, the scientific and philosophical debate concerning the new astronomical theories, Galileo's personal events. The importance of Galileo for the birth of science has prompted some historians to carry on valid researches, and some popular expositors to derive easy and superficial conclusions. That is the reason why Galileo's condemnation by the Catholic Church still occupies a relevant place in the modern age conception of the relationship between science and faith. This booklet, forming part of the Catholic Truth Society Concise Histories, presents, in a synthetic and effective way, Galileo's thought and vicissitude from the science-faith perspective. Although it cannot be considered a complete treatise on that subject, it succeeds in rendering the basic aspects of the Galileo affair clear. The author, William Carroll, is Thomas Aquinas Fellow in Theology and Science at the University of Oxford.

Galileo has become an 'Icon of Modernity' (3–10), and one of the unfortunate consequences of his condemnation consists in the legend of a clear-cut distinction between science and Catholic faith: "surely one of the constitutive myths of the modern world" (6). A meaningful event happened in January 2008, when a group of students and professors opposed the invitation to the Pope to speak at the University La Sapienza in Rome. Among the reasons of that protest, there was the content of a Pope's speech in 1990 about the Galileo case. That fact can be considered a clear demonstration that Galileo's unfortunate vicissitudes have given rise to a persistent legend about the negative role of faith in the scientific discourse.

Therefore, the author expresses the necessity of a transition 'From Myth to History' (11–57). That central section of this booklet deals with Galileo's biography and thought. The discoveries through the telescope did not provide a demonstration of the earth's rotation on its axis and motion around the sun. They definitively rejected the Ptolemaic cosmology, but they accorded with Tycho Brahe's geoheliocentric system. Many learned astronomers at that time, who refused the Copernican solution because of the lack of consequences of the terrestrial movement on physical phenomena, adopted geoheliocentricism as a suitable system. In other words, the rejection of Ptolemy did not imply the necessary acceptance of Copernicus.

Among the protagonists of the Galileo case, a special attention must be devoted to Cardinal Robert Bellarmine (1542-1621), a consultor of the Holy Office. Bellarmine wrote a famous letter to Paolo Antonio Foscarini (1580-1616), a Carmelite friar who had issued a work in which he affirmed that Scriptures could be interpreted in accordance with Copernican astronomy. In his letter Bellarmine, an expert of theological controversies, declared that if there were a true demonstration of the terrestrial movement, then the Bible should be interpreted accordingly. That was just the main point in the Galileo affair, namely the impossibility to provide a coherent proof of the terrestrial motion. More in detail, Galileo believed that an argument from the phenomenon of tides would provide such a demonstration; actually, his argument of tides, expressed in the fourth day of the Dialogue on the Two Chief Systems, and the theory of comets stated in the Assayer, represent two grievous mistakes in a very successful scientific career. Galileo, after reading Bellarmine's response to Foscarini, wrote the Letter to the Grand Duchess Christina of Lorraine, to be considered a masterpiece of rhetoric and literary style, "to persuade the authorities of the Catholic Church not to act foolishly and condemn Copernican astronomy" (30). In that work Galileo claimed that the Bible is not

REVIEWS

a scientific text and science is the only way to interpret nature. Furthermore, he affirmed that Copernican astronomy is founded on clear observations and necessary demonstrations, and we know that was a clear mistake. Thus, Galileo founded, on that crucial point, his own view about science and faith that cannot contradict one another, as God himself is the Author of both nature and Scripture. Moreover, a true knowledge of nature is helpful for theologians in order to interpret accurately the Bible. At the end of the letter, Galileo abandoned the principle of accommodation and declared that the Copernican Theory, if carefully considered, could agree with some meaning of the Scriptures.

The theological consultants of the Holy Office concluded the immobility of the sun at the center of the world and the terrestrial motion were foolish and absurd philosophically, that is scientifically. Moreover, the motion of the sun was declared formally heretical, while the motion of the Earth was deemed to be at least erroneous in faith. Following the decree of the Index of Forbidden Books in March 1616, Galileo was admonished not to teach or uphold the Copernican Theory. He published the *Dialogue on the Two Chief Systems* in 1632, in order to defend the Copernican cosmology. Even if he had been ordered to deal with the Copernican model only as a pure mathematical hypothesis, "he had done precisely what he had been enjoined not to do in 1616" (51). Thus, the violation of the 1616 injunction was the reason of Galileo's condemnation, and, in the author's mind, the action of the Inquisition was disciplinary, not doctrinal.

In the final paragraph, the author's aim consists in showing the path 'From History to the Legend of Warfare Between Science and Religion' (58–65). That legend was created during the age of Positivism, which adopted the case of Galileo in order to conclude the incompatibility between science and faith. The superficiality of such a vision is evident; it would be enough to recall that the main protagonists of the Scientific Revolution, and Galileo among them, considered the universe as a mathematical harmony created by God. Moreover, in the nineteenth century, Angelo Secchi (1818–1878), the founder of astrophysics, was a Jesuit priest. In any case, legends often become part of the official culture: "Hans Kung, for example, has argued that Pope John Paul II's judgements on birth control and the ordination of women were as infallibly wrong as were those of his predecessors on astronomy and heliocentricity" (61–62). The false rhetoric about the impossibility to conciliate science and Christian doctrine continues to exert a powerful influence on the interpretation of modern history and, more in detail, the understanding of the Galileo affair. This booklet is just a helpful reading to know the truth.

William R. Shea. *Galileo Interviewed*. Zurich, Zurich Press, 2013. vi + 66 pp. Review by Alessandro Giostra, Stanley Jaki Society.

"No one extended the vision of humankind so much as he did. No one ever put more stock in perception than Galileo" (4). The importance of Galileo Galilei (1564-1642) in the history of science led the author to publish this brief essay, which includes a foreword by Dava Sobel, a well-known expositor of scientific matters. William Shea, Galileo professor of History of Science at the University of Padua, is author or editor of many books concerning Galileo and the Scientific Revolution. The outcome of his work is a very pleasant reading, which finds the way to present the father of modern science from an original perspective. It consists, indeed, in an imaginary interview made to Galileo by the English writer John Milton (1608-1674) in 1638. During that period, Galileo was spending his last years in Arcetri and he had already published his Discourses and Mathematical Demonstrations Relating to Two New Sciences, namely his greatest work. His unfortunate personal vicissitudes are the basic point of this book, which also deals with the seventeenth-century Italian context, the relevance of Galileo's scientific achievements, his difficult relationship with the Catholic Church, and his own familiar burden. Therefore, in addition to the illustration of the main contents of Galileo's scientific research, this book includes many details of his personality, which are often disregarded by historians of science.

At the beginning of this publication we find *A Short Account of Galileo's Life* (7-20), where the basic moments of his biography are highlighted. In that initial section the author not only lays stress on the essential steps of Galileo's career as a scientist. Other specific situations, indeed, are focused, such as the job of his father, a gifted man with little business sense, and his encounter with mathematics, when he