

Galileo: The Heretic Who Wasn't

A Book Review of
GALILEO: A VERY SHORT INTRODUCTION. By Stillman Drake. New
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Students venturing into the social studies of science will quickly realize that the origins of modern science cannot be studied without understanding the role that organized religion played in its development. Indeed, there has been a legacy where historians of science have overplayed the hypothesis that science and religion are fundamentally opposed to each other. The condemnation of Galileo Galilei by the Inquisition of the Roman Catholic Church in 1633 is widely presented as the paradigmatic case of the interminable conflict between science and religion. However, the study of Galileo's life, work, and his trial requires more than the simplistic thesis of an authoritarian, religious institution silencing a singular, scientific genius.

The literature on Galileo's trial is rich with several scholars exploring the theological, political, and philosophical dimensions of the affair (for example, MACHAMER (1998)). In 1992, Pope John Paul II stated that the Church had indeed erred in condemning Galileo, and this much-delayed but brave admission was followed by several alternative hypotheses on what led to the unfortunate events of 1633. In the light of these developments, *A Very Short Introduction to Galileo* (Drake, 2001) by Stillman Drake comes as a novel approach to the historiography of science and religion.

Stillman Drake, one of the leading researchers in Galilean scholarship, is well known for the classic biography *Galileo at Work: His Scientific Biography* (Drake, 1978). In this new concise work, Drake attempts to examine a relatively less-researched facet of Galileo: his "attitudes and characteristics" (Drake, 2001, p. xviii). Drake explores Galileo's personality in order to present an alternate hypothesis—"that Galileo was a zealot not for the Copernican astronomy, but for the future of the Catholic Church and for the protection of religious faith against any scientific discovery that might be made" (Drake, 2001, p. xvii). Through a fresh reading of Galileo's correspondences and publications, Drake finds that the assumption of Galileo being a Copernican zealot appears conflicting. He questions how a person who meticulously (and perhaps

shrewdly) formed friendships with intellectuals in influential circles would risk losing all their support for an altogether controversial cause.

The introductory chapter on Aristotelian philosophy is useful for understanding why the Scientific Revolution heralded by Galileo, Bacon, and Descartes (Zilsel, 2000), was offensive to the philosophers of early modern Europe. Even though Galileo's personality remains the focus of the book, several pages are also devoted to explaining the essence of his *Dialogue Concerning the Two Chief Systems of the World—Ptolemaic and Copernican* (Galilei, 1953), as it was this work that prompted the Church to act against Galileo. Furthermore, Drake studies the many facets of Galileo's personality independent of his conflict with the Church.

Drake observes that Galileo's early manuscripts from 1585, when Galileo began working on physics, do not indicate any disputation with the natural philosophy of Aristotle, even though as a student in Pisa he had gained a reputation of contradicting his philosophy professors. Drake elaborates on Galileo's steady rise in career and prominence, his acquaintance with officials in the Catholic Church, and his recognition among the Jesuits at the Collegio Romano. Even during his earliest disputes with philosophers, Galileo was supported by Maffeo Barberini, a Cardinal who later became the Pope Urban VIII and eventually sentenced Galileo to indefinite imprisonment. Through these examples, the reader is able to appreciate that each individual in the Catholic Church was quite complex (as was Galileo) and needs to be carefully considered. For example, Robert Bellarmine, a member of the Inquisition, which sentenced Giordano Bruno to death in 1600 for heresy, took a more lenient stand in Galileo's case by merely delivering an Injunction in 1616 that Galileo should no longer hold, defend, or teach Copernican astronomy.

In his analysis, Drake submits that Galileo's trial was an outcome of the unwillingness of philosophers to accept Galileo's science. Even when the Inquisition found Galileo guilty of promoting Copernicanism in 1633, Drake explains that Galileo was found merely to have disobeyed Bellarmine's Injunction of 1616. No scientific or theological question was raised against him or his *Dialogue* (Galilei, 1953). It was "the professors of philosophy who undertook to interpret the Bible and create a new heresy," for which Galileo paid the price (Drake, 2001, p. xxiii).

While Drake might appear to take the side of the Church, he shows that several members of the Church continued to admire and support Galileo even after his condemnation. Three out of ten cardinals in the Inquisition refused to sign the order for his imprisonment and Archbishop Ascario Piccolini of Siena managed to convert Galileo's prison sentence to house arrest. Drake attributes Piccolini's humane assistance and encouragement from Galileo's daughter Sister Maria Celeste to Galileo getting his mind back on science. Even under house imprisonment, Galileo made his last and greatest scientific contribution—*Two New Sciences* (Galilei & Drake, 1974), which was published in 1638. He died in 1642 without turning his back on his Catholic faith, hoping that his name would

be added to “de libro viventium” [the book of the living] (Drake, 2001, p. 101).

Throughout the book, Drake uses a supposed “unscholarly” (Drake, 2001, p. xix) approach to prove that “the cause for which Galileo suffered...was clearly not Copernicanism, but [rather] sound theology and Christian zeal” (Drake, 2001, p. 117). And perhaps this is why the Church also admitted that Galileo “had much to suffer” because of its erroneous actions (Sharratt, 1996, p. 211–222). *A Very Short Introduction to Galileo* lacks the detailed narrative of the author’s previous works, but it is meant to serve as an introductory text rather than as a scholarly treatise. Nonetheless, the book offers several insights to help elucidate the uneasy but interesting interplays between science and religion. Drake’s book helps to show that science-religion dialogue has now graduated from the period of “estrangement” to a period of “engagement” (Kozhamthadam, 2003) and invites readers to pursue the dialogue further.

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