



## HISTORY OF SCIENCE

**CONVERSATIONS WITH GALILEO: A Fictional Dialogue Based on Biographical Facts** by William R. Shea. London, UK: Watkins Media, 2019. xi + 115 pages, including notes and further reading. Hardcover; \$14.95. ISBN: 9781786782496.

Have you ever wanted to engage in an extended conversation with a famous person whose work and historical milieu you have studied carefully for many years? William R. Shea, one of the world's leading Galileo scholars, invites you to sit down, relax with a cup of coffee or a glass of wine, to engage in a conversation with Galileo. *Conversations with Galileo: A Fictional Dialogue* incorporates many of Galileo's own words taken from his works or letters. This slim book will allow you to experience how such a dialogue may have transpired.

Shea, a Canadian historian, was Galileo Professor of the History of Science at the University of Padua, Italy from 2003–2012, the very university where Galileo once taught. He has authored many books about Galileo and the Scientific Revolution. The latest, co-authored with Mariano Artigas, are *Galileo in Rome: The Rise and Fall of a Troublesome Genius* (2003) and *Galileo Observed: Science and the Politics of Belief* (2006). *Conversations with Galileo* is part of a series of books published by Watkins Media Ltd., offering conversations with luminaries such as JFK, Oscar Wilde, Casanova, Buddha, Charles Dickens and Isaac Newton.

First, a word about the format of *Conversations with Galileo*: A three-page introduction by Dava Sobel, author of *Longitude* (1995) and *Galileo's Daughter* (1999), is followed by a short (21-page) biography by Shea entitled "Galileo (1564–1642): His Life in Short." Then we are offered 13 chapters dealing with a vast range of topics. Each chapter then begins with Shea posing a leading personal question. These questions cover what, I suspect, most people would want to ask Galileo: questions about censorship, the earth as a planet, scientific failures, what do you take the Bible to say, relations with the Roman Catholic Church Congregation of the Holy Office, also known as the Roman Inquisition, and the Congregation of the Index, other church officials, and, perhaps a final question: what is your claim to fame? The Galileo I remember: the rebel, the seat-of-the-pants philosopher, the "heretic," the defender of the Copernican world-picture, and the creator of a "science of motion" (appearing in the last chapter, "His Claim to Fame") are all present.

So, what more would you want to ask? To me it was surprising to see what else Shea does in fact ask. There are conversations/chapters dealing with "Family Burdens," "Wine, Women and Song," "The Burdens of Teaching," "Moonlighting," "Mind your Horoscope," "The Plague," and "On Art and Literature." This is a

Galileo with a human face, with human foibles, jealousies, amorous interests, financial pressures and responsibilities, work-load issues, social conventions, concerns about the plague and social distancing, and literary interests. These are subjects which are usually hidden or absent in many accounts of Galileo's exploits. For instance, we learn of Galileo the lutenist and of his musical family: his father Vincenzo, his brother Michelangelo (a court musician to the grand duke of Bavaria in Munich). We meet his children: his two daughters, Virginia and Livia, who both entered a convent, and his son Vincenzo who had no scientific interests. We also learn about Galileo's life as a student. At seventeen, Galileo attended the University of Pisa to study medicine and "natural philosophy" (science in our parlance). He attended lectures for four and one-half years without acquiring a degree (which was quite common at the time) but did develop his mathematical interests. These are only a few of the personal details in Galileo's life which Shea explores in this book.

All in all, this is a delightful and inviting book, carefully constructed, written in an engaging style, and easy to read. Don't let the poorly designed cover keep you from picking it up. This is a good read for anyone wanting to get a look behind the scenes and meet an illustrious natural philosopher as he lived his rich and complex life.

*Reviewed by Arie Leegwater, Department of Chemistry and Biochemistry, Calvin University, Grand Rapids, MI 49456.*



## ORIGINS

**FINDING OURSELVES AFTER DARWIN: Conversations on the Image of God, Original Sin, and the Problem of Evil** by Stanley P. Rosenberg (general editor) and Michael Burdett, Michael Lloyd, and Benno van den Toren (associate editors). Grand Rapids, MI: Baker Academic, 2018. vii + 375 pages. Paperback; \$34.00. ISBN: 9780801098246. Kindle; \$16.99. ISBN: 9781493406586.

*Finding Ourselves after Darwin* responds to questions of how humanity defines itself and understands its primeval origins in a post-Darwinian world. It does so by offering a representative selection of Christian responses to questions about the image of God, original sin, and the problem of evil raised at the interface of evolutionary science and Christian faith. This book grew out of the project "Evolution and Christian Faith" funded by BioLogos, and many contributors participated in several colloquia held at Oxford.

*Finding Ourselves after Darwin* is thematically and structurally coherent, unlike many similar edited volumes. Two introductory essays by general editor Stanley Rosenberg and associate editor Benno van den Toren introduce the truth-seeking and dialogue-modeling commitments of the book. Following these essays, the book is divided into three parts: (1) The Image of God and Evolution, (2) Original Sin and Evolution, and (3) Evil and Evolution. Each part features five or six

## Book Reviews

contributors' responses to issues raised in each topic. Associate editors Michel Burdett, Benno van den Toren, and Michael Lloyd each provide introductory and conclusory comments to one of the three parts, in which they identify the part's driving questions and then summarize and interact with the material.

Discussion in part 1, *The Image of God and Evolution*, centers on the ability of four conventional models of imaging (functional, structural, relational, dynamic) to withstand challenges posed by evolution. Defending the viability of these four models takes precedence over intermittent discussion of human uniqueness, origins, and telos. Wentzel van Huysteen's introductory chapter suggests that evolutionary insights help inform a robust understanding of the human capacity for imaging. According to his "bottom-up" approach, the image of God emerged from nature through evolution; he believes we should take this into account when trying to understand the human person.

Following van Huysteen, Mark Harris shares a version of the functional model of imaging, which locates the *imago Dei* in humanity's role to be God's representative rulers on the earth. Harris uses scripture well but only marginally engages evolutionary theory since, according to him, it poses few challenges to the functional model of imaging.

Next, Aku Visala offers a strong defense for the structural theory of imaging against challenges raised by evolutionary theory. Structural theories of imaging often locate the image of God in uniquely human cognitive, moral, relational, and religious capacities; therefore, challenges to human uniqueness—such as claims that no clear dividing line exists between humans and animals—appear to threaten the viability of structural models of imaging. However, Visala shows that an appropriately modified version of the structural theory withstands these challenges by requiring no such clear dividing line (instead, humans stand apart from animals in the unique degree to which they actualize certain capacities). Visala also suggests that animals can have nonhuman souls and that animals continue to evolve in their imaging capacity; consequently, the "image of God is as much about becoming as it is about being" (p. 77). Visala advocates for an emergent dualist approach to the soul, one which embraces evolutionary insights into the way our "perceptual, conceptual, and emotional systems work" while maintaining that the soul accounts for certain phenomena evolutionary that explanations cannot account for, such as the existence of the person, human dignity, and life after death (p. 71).

Then Jay Oord presents a relational-love model of imaging in which he suggests that "living a life of love" is the essence of imaging (p. 88) and that God invites nonhuman creatures to bear God's image by imitating God's love.

Finally, Ted Peters offers a dynamic model of imaging in which humans are still evolving into the *imago Dei*. According to this model, the *imago Dei* exists not in humanity's past or present, but in humanity's future and in the person of Christ. As such, it functions as a "divine call forward" to become increasingly Christ-like (p. 96). Peters refrains from locating the *imago Dei* in humanity's past because he believes humanity's fallen state is "equiprimordial with our appearance in biological history" (p. 104) and that human nature was not fixed at some historical point but is retroactively determined by what humanity will be at the redemption. Unfortunately, Peters offers no clear definition of the *imago Dei* or explanation of its incompatibility with fallenness.

All contributors in part 1 affirm human uniqueness although some affirm it only by way of degree. In his concluding comments, editor Michael Burdett encourages readers to explore hybrid models, which allow them to affirm multifaceted understandings of imaging.

Part 2, *Original Sin and Evolution*, addresses the origins, transmission, and universality of sin. Contributors disagree whether the origins of human sinfulness should be identified with an intentional, human decision to turn away from God at a particular time in history (C. John Collins, Andrew Pinsent, and Gijsbert van den Brink) or with the inevitable realization of innate tendencies for aggression and self-assertion inherited from prehuman ancestors (Christopher Hays). Some contributors present science-compatible Fall narratives. For example, Collins proposes a "federal head" model in which two representative humans intentionally turned away from God at the headwaters of human history, bearing consequences for all humans. Hays, on the other hand, regards the historic placement of the first sin irrelevant since it was not responsible for subsequent sins. According to Hays, we can affirm the universality of sin and human culpability for sin without an originating sin.

McCoy's chapter cautions against misusing Irenaeus's theology to support theologies that dismiss a traditional Fall, which he argues is necessary to Irenaean thought. McCoy's chapter is insightful, but unless the reader is familiar with the external discussion McCoy is responding to, the chapter appears somewhat tangential to part 2's driving questions.

Contributors affirm the universality of sin, although they disagree on the mechanisms that unify humanity in sin and account for the transmission of sin: Collins suggests that unity in sin is rooted in covenant with God, Van den Toren argues that transmission of sin is inseparable from cultural evolution, and Pinsent suggests that original sin is propagated by the absence of supernatural grace (which he suggests was a pre-Fall addition to human nature).

Part 3, *Evil and Evolution*, addresses questions of why God is not culpable for animal suffering in pre-human history and why God employed violent means of creating; it highlights a variety of avenues available to affirm God's goodness in light of prehuman suffering. Only-way theodicies dominate: they include Rosenberg's view that death and decay are necessary marks of a finite world, Vince Vitale's "non-identity theodicy" (based on the idea that the existence of individuals alive today is contingent on past suffering), and Christopher Southgate's argument that the values of this world come at the expense of its disvalues. Michael Lloyd provides the only substantive free will defense, which attributes a cosmic Fall to free angelic beings, and Richard Swinburne offers an Irenaean soul-making theodicy which argues that the finite amount of suffering God allows us to endure is outweighed by the goodness of the soul-making opportunities it provides.

Part 3 benefits from the way contributors highlight lingering concerns in each other's models. Lloyd's chapter "Theodicy, Fall, and Adam" is exemplary: from only-way theodicies Lloyd calls for better defense of the unique creativity of violence, and from Augustinian nonbeing approaches he calls for a better defense of the inability of God to counteract creation's tendency toward nonbeing now if God will do so post-eschaton. However, since the format of the book does not facilitate intra-book responses, such challenges remain unaddressed. Moreover, editorial content and many contributors assume that prehuman suffering is "evil," and, although some contributors disagree, this assumption is unfortunately never explicitly contested. Nevertheless, part 3 concludes the book in a helpful way: it outlines potential solutions to concerns about evil and the goodness of creation that are discussed throughout the book.

In conclusion, part 1 provides defenses of four models of imaging—sometimes at the expense of discussion concerning human uniqueness, origins, and telos. Part 2 successfully provides a multifaceted discussion on the origins, transmission, and universality of sin. And part 3 offers theodicies that illuminate various directions forward; it also raises many unanswered questions. Ultimately, bringing a representative selection of views to the table—more so than novel ideas—is the function of this book. Editorial contributions unify *Finding Ourselves after Darwin* as an accessible, well-assembled exploration of truth. Editors, and sometimes contributors, offer epistemological guidance and identify fruitful avenues for future exploration, making the discussion one that uniquely moves the reader forward in their search for truth. Interaction between contributors, when present, adds richness to the discussion but is not consistent throughout the book. *Finding Ourselves after Darwin* is further unified by a commitment to the doctrinal core that is accompanied by various degrees of flexibility concerning the retention of theological theories that have grown up around certain doctrines.

*Finding Ourselves after Darwin* will help undergraduate students, pastors, and other informed Christians pursue a coherent and scientifically informed faith.

Reviewed by Charlotte Combrink, Religious Studies at Westmont College, Santa Barbara, CA 93108.

**READING GENESIS WELL: Navigating History, Poetry, Science, and Truth in Genesis 1-11** by C. John Collins. Grand Rapids, MI: Zondervan Academic, 2018. 336 pages. Paperback; \$36.99. ISBN: 9780310598572.

C. John Collins makes judicious use of C.S. Lewis throughout his book and offers a reading of the early chapters of Genesis that seeks to avoid both an ahistorical fundamentalist interpretation and a dismissive scientism that views Genesis as bad science by ignorant people. Collins identifies himself as a "religious traditionalist," and he seeks to read Genesis in ways that take seriously the original context of the author and first readers of the text. In doing so, he makes more evident the real meaning of Genesis as a rival creation story to other creation stories circulating at that time in the ancient near East. Collins has a twofold goal.

The first is to provide guidance to those who want to consider how these Bible passages relate to the findings of the sciences. The second is to establish patterns of good theological reading, patterns applicable to other texts. (p. 32)

Collins emphasizes quite rightly that to interpret a text correctly it is important to consider the context. It is context that determines whether the words, "I'm going to kill you" are a lethal threat to life or the joking retort of a friend. Genesis is not trying to do contemporary science, so to read Genesis as opposed to or in support of contemporary science is to rip Genesis from its ancient context in terms of both its literary form and its world view. The story of Genesis is not trying and failing to answer contemporary scientific questions; rather, the story of Genesis is emphasizing that, "all human beings have a common origin, a common predicament, and a common need to know God and have God's image restored in them" (p. 113).

We can understand what Genesis truly means by putting Genesis back into its ancient context. As Collins notes, "I take the purpose of Genesis to begin with opposing the origin stories of other ancient peoples by telling of one true God who made heaven and earth ..." (p. 137). Once Genesis is put back into its context, we can better appreciate the genre of the work. The language of Genesis is not scientific but poetic. Collins notes that we can communicate truths using different kinds of language. In ordinary language, we say, "You are beautiful." In scientific language, we might say, "You exhibit visible signs of youth, health, fertility, and symmetry." In poetic language, we could say, "Shall I compare thee to a summer's day? Thou art more lovely and more temperate: Rough winds do shake the darling buds of May, And summer's lease hath all too