

# Book Reviews

well designed for high school or lower-level college learners. They prompt not only comprehension of scientific concepts but also personal application and ethical reasoning. For example, students might be asked to analyze problems related to plastic waste in water systems and then reflect on how their own choices influence that system. Alternatively, they may examine habitat loss and connect it to faith-based principles of protecting creation. This dual-layered questioning approach makes the book a strong tool for educators, especially in Christian schools or any educational setting that prioritizes values-oriented learning.

This textbook succeeds in presenting environmental science in a way that is not only rigorous and accessible but also deeply meaningful. Its thoughtful integration of faith and learning presents students with an opportunity to see science not as a separate domain from belief but as a complementary field that enriches their understanding of purpose and responsibility in the world. For educators yearning to find a textbook that encourages both intellectual growth and character formation, this book is an exceptional option. It strikes a balance that neither downplays scientific rigor nor neglects ethical considerations, ensuring that students not only gain knowledge but also develop a sense of purpose.

A noteworthy aspect of *Environmental Science* is that it integrates Christian principles with ecological stewardship, making it particularly suited for faith-based educational environments. In contrast, other faith-based textbooks focus on scriptural teachings while varying in scientific rigor. Secular environmental science textbooks prioritize comprehensive scientific principles and data, often without religious context. This creates a clear distinction whereby the faith-based texts emphasize stewardship aligned with biblical teachings, while secular texts offer a neutral, evidence-focused perspective. Each type serves its intended audience effectively, highlighting the diverse approaches to environmental education.

In conclusion, *Environmental Science* is an outstanding choice for educators looking for a resource that promotes both scientific literacy and character formation through a faith-informed lens. By equipping students with both knowledge and a deeper sense of purpose, this textbook helps cultivate the next generation of thoughtful, responsible caretakers of Earth. Mark and Karen McReynolds offer not only a valid academic perspective but also a moral compass for students navigating the complex and often daunting world of environmental science. This engagement with the material will inspire students to take action in their communities, bringing innovative solutions to the environmental challenges we face today.

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**A THEOLOGY OF THE MICROBIOME: An Intersection of Divinity and the Microbial Life Within Us** by John F. Pohl. SacraSage Press, 2024. 363 pages. Paperback; \$24.99. ISBN: 9781958670538.

The microbiome has been the focus of intense research, especially over the last decade. Topics related to the intersection of faith and the microbiome are ripe with possibility for better understanding the relationship between the human body, the microbiome, the spiritual dimension, and God's nature. This book gives a perspective on how process theology can be used to integrate faith and microbiome science. In this well-researched book, the author goes to great lengths to document both scientific and theological sources; however, it may be a challenging read for those unfamiliar with process theology. A glossary of relevant terms would have been helpful.

John Pohl is a physician who is board-certified in pediatrics and pediatric gastroenterology with clinical and research interests in pancreatitis and cystic fibrosis; his certifications and expertise make him highly qualified to address medical aspects of the human microbiome. The preface reveals that this book is the outcome of his doctoral degree in theology from Northwind Theological Seminary, working under a leading scholar in relational and open theology, Thomas J. Oord.

Process philosophy and theology were developed in the mid-20th century by Alfred Whitehead, Charles Hartshorne, and other theologians. A key tenet of process thought is that God can both affect and be affected by any process found in the universe, from the macro scale to the subatomic particle. Process theology is aligned with open theology, and as such, the outcome of this interactive process is uncertain, and therefore God is not completely omniscient, omnipotent, or immutable.

In the first chapter ("A Call to Metaphysics to Benefit Religion and Science"), Pohl lays a philosophical and historical framework for subsequent chapters, with a focus on comparing the process of science with theology and metaphysics. Metaphysics is seen as a complement to science since it can take into consideration the entirety of nature, including aspects that cannot be addressed by science. In this chapter, the author also begins to articulate the concepts of process theology that challenge the traditional Christian understanding of God's nature in terms of his characteristics.

I found Pohl's discussion of Stephen Jay Gould's concept of nonoverlapping magisteria (NOMA) to be especially interesting. Gould's proposal does not allow any overlap between science (objectivity) and religion or theology (subjectivity). In contrast to NOMA, Pohl redefines a term used in philosophy, "monad," to describe reality in

a more holistic way. His “Subjective Objective Monad” (SO-Monad) is a unit of reality combining both subjective and objective aspects that occur concurrently and in unison as they move through space and time—a concept that is used throughout the book. The subjective aspect of Pohl’s thesis includes an emphasis on God’s desire for “eternal creativity” and a priority for “nature’s freedom.” One example of this concept, introduced in a later chapter, is a description of the multitude of interactions that a single *E. coli* bacterium has, over time, within the human gut as it encounters other microbial cells, its chemical and nutritional environment, host cells, et cetera. Process and open theology see each encounter as an opportunity in line with God’s priority of nature’s freedom; the bacterial cell is given creative freedom by God’s design to make decisions and respond to the environment, within nature’s limits. These interactions by a microbe are a metaphor or a model for human lives and our opportunities for creativity and freedom in our interactions with our environment, including with other organisms and the divine.

The next two chapters focus on biological and philosophical aspects of the microbiome. Chapter 2 (“Microorganisms and the Microbiome”) delves into biological examples and metaphors that support Pohl’s model for interaction with the divine. Most microbiome research is focused on the large populations of microbes that inhabit the intestinal tract. The many commensal and symbiotic interactions that develop within the host-microbiome ecosystem depend on a multitude of interactions. Such interactions are described (using process philosophy/theology terms) as “occasions, prehensions, and concrescences” that occur repetitively in biological systems throughout time. It is difficult to find precise definitions within the text for these terms, but according to process philosophy, the initial “occasions” are the basic units of reality, “prehensions” are the way occasions relate, and a “conrescence” is the process by which many prehensions can be combined to form a complete actual “occasion.” The interactions of *E. coli* bacteria in the human gut, as they move through time and space, are given as a prime example of these interactions.

As a microbiologist, I found “The Microbiome and the Human Condition” (chapter 3) to be the most informative. Pohl describes the human microbiome in considerable detail based on recent scientific literature. For me, Pohl’s most salient contributions came from his medical expertise and discussion of microbial impacts on cystic fibrosis, obesity, Type I diabetes, and cancer. A section on the microbiome and neurology was also enlightening, covering such topics as the positive or negative ramifications of microbes on anxiety and depression, and brain disorders including Parkinson’s disease and dementia. Each of these health and disease outcomes is

an example of the importance, and necessary interactions, of the microbiome within a healthy human, and a surprising aspect of God’s creativity and design.

Chapter 4 (“A Theology of the Microbiome”) outlines in more detail the process theological implications of the microbiome. Four approaches are described that can incorporate both the subjective and objective aspects of reality using process theology and the microbiome: modeling, mechanism, mathematics, and metaphor. These ideas are further developed with modeling systems that emphasize the possibility for continuous creation in nature in line with open theology. In Pohl’s discussion, he proposes that eternal creativity in an open future is more conducive to God’s nature, and that more-abstract forms of mathematics may give new insight into God’s co-creative nature. A metaphor approach can be helpful for understanding complex ideas, and Pohl suggests that the microbiome is a metaphysical metaphor for how God interacts with nature.

In the final chapter (“Reconciling Subjectivity and Objectivity in Nature and God”) and in the appendix, Pohl further develops a synthesis of the nature of God from a process theology perspective, with emphases on the need for subjective thinking and the importance of love and creativity. In several New Testament examples, Pohl concludes that Jesus’s expressions of emotion indicated that he was surprised by events and therefore lacked complete omniscience. Although I am not a theologian, I found his arguments interesting but problematic, and not convincing in light of orthodox views of Jesus being of one nature with God, within the triune, omniscient, and omnipotent Godhead.

I recommend this book, especially chapter 3, for theologians and scientists who seek a greater understanding of recent advances in microbiome research, especially those who are interested in how microbes affect our health in both positive and negative ways. However, the theological perspective may be a hindrance to those not attuned to process theology. Although not espousing orthodox theology, it is a thought-provoking and interesting addition to one aspect of the current biology-theology discussion.

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## CHRISTIANITY AND CULTURE

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**CHRISTIANITY AND INTELLECTUAL INQUIRY: Thinking as Pilgrimage** by Douglas Jacobsen and Rhonda Hustedt Jacobsen. Oxford University Press, 2025. 221 pages. Hardcover; \$29.99. ISBN: 9780197820346.