

The next section of the book contains ideas of physical pain utilized in all these early societies. Greeks used pain as an essential part of determining a physical diagnosis: pain is still an important concept utilized in modern healthcare. Romans expanded such thinking to consider pain as a disruption of the body's natural state; thus, they emphasized the importance of bringing the body back to its natural order. As an example, Galen felt that patients were not able to explain pain well, and this meant that the final opinion of pain resided solely with the medical provider. Such thoughts have had disastrous effects right up to today, when one considers healthcare's role in causing the recent opioid crisis in the United States (p. 4). Written pain narratives in Roman history were extensive and often seem to model the current history and physical examination process taught to modern medical students. Early Christian ideas of pain were somewhat parallel to Stoic belief structures in which human pain could be used as a learning tool. Early Christian writers often considered the imitation of Christ's suffering through the suffering of an individual as a learning, holy experience. Such ideas eventually led to the concept of the "martyr," which the author describes using examples in wonderful detail.

The last section of the book deals with healthcare in the ancient world, and I found this part of the book most fascinating when considering how healthcare is practiced in modern society. Both Greeks and Romans utilized their temples as places of healing, utilizing prayer and purification rituals. Treatments were extremely limited, mainly due to a lack of understanding the scientific method. Dangerous bleeding, purging, and cauterization were common ancient practices. The author points out that the Romans did build hospitals for a time, but the hospitals were used simply for preserving the health of property (slaves) and soldiers.

Early Christians considered medicine as a gift from God, and their building of early hospitals (in reality, often homes to provide rest and nutrition for the sick) during times of recurrent plagues likely marked a significant advancement in early healthcare as such simple but essential therapies do have healing benefits. It is fascinating to see early writers, such as Origen, believe that more spiritual people would be healed by God while not necessarily requiring medical care from a physician. These propositions parallel pseudo-scientific ideas that still percolate in modern society; the rise of the anti-vaccination movement in some religious movements is a good example. Regardless of the writing of early Christian writers, it is understandable that many patients would continue to follow some of the pagan medical therapies of Greco-Roman society, since good treatment options were limited, while the writing of the

ancient Greeks and Romans in essence provided a "second opinion" in care.

I have many good things to say about this book. Rhee goes into great detail regarding the writings of healers in ancient Greek, Roman, and Christian societies. Examples of patients and therapies used to heal in these early historical periods are provided in extensive detail. Many of the medical aspects of prevention continue to echo in today's society, including the emphasis on exercise and diet to improve health, using pain to determine a cause of illness, and the building of hospitals to improve care. Unfortunately, there is also the continuation, in some religious systems, of the idea that illness is due to sin in which prayer alone can cure. Such beliefs are unfortunate; a better belief is that God has provided modern medicine as a gift to improve humanity's well-being. I highly recommend this book, not only for people interested in early healthcare in Greco-Roman and early Christian society, but also for people looking at the evolution of healthcare over time as it began to slowly progress into today's scientific, evidence-based, modern medicine.

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**OF MAYBUGS AND MEN: A History of Philosophy of the Sciences of Homosexuality** by Pieter R. Adriaens and Andreas De Block. Chicago, IL: The University of Chicago Press, 2022. 246 pages. Hardcover; \$105.00. ISBN: 9780226822426. Paperback; \$32.50. ISBN: 9780226822440. Electronic; \$31.99. ISBN: 9780226822433.

Pieter Adriaens and Andreas De Block offer a substantive analysis of the science of sexual orientation as it relates to male homosexuality. As a psychologist who has been involved in research<sup>1</sup> in the areas of sexual orientation and sexual identity, I found the concepts in the book helpful in thinking through the evidence for what I believe and why. For example, although I have critiqued animal models as inadequate to explain the complexities of human sexual orientation and behavior, Adriaens and De Block challenge the reader to think more deeply about such a response and how it matches up with existing theories and the scientific support for each theory. They are even handed and largely dispassionate in their accounting of both theories and evidence to support various theories.

The authors note in the introduction that the book will be about male homosexuality rather than homosexuality in general; that is, they purposefully exclude female homosexuality as it has been far less attended to in the scientific literature and what is known suggests female homosexuality appears to be different than

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male homosexuality in important ways.<sup>2</sup> The introduction also frames the goals of the authors: speaking of homosexuality, to “increase its familiarity” and, by so doing, “reduce homonegativity” (p. 15). Interestingly, the word “homonegativity” is frequently used by the authors throughout the book although, surprisingly, not as carefully defined as many other terms. The authors prefer the term to “homophobia,” which they view as too clinical or psychiatric. Homonegativity captures other negative emotions apart from fear, “such as disgust and anger” (p. 196). This is perhaps a small point, but I find the term too imprecise and frequently wielded against any formed judgment about what is morally impermissible behavior.

Chapter one, “Not by Genes and Hormones Alone,” addresses the question of innateness. Psychologists such as myself tend to be rather casual in their use of terms like “innate” and the authors help all of us here by defining terms and examining key findings related to the etiology of homosexual orientation. They are measured and judicious in their treatment of twin studies, direct genetic evidence, the maternal immune hypothesis, and prenatal hormonal exposure. They conclude that male “homosexuality is at least somewhat heritable and somewhat canalized” (p. 41). Indeed, the complexity of the research here leads the authors to conclude that no one theory will account for the variety of experiences even among male homosexuals that exist today, let alone expressions noted throughout history and across cultures. I could not agree more with this conclusion.

Christians may wonder about other theories of etiology that are popular mostly in conventionally religious communities, such as traumatic experiences (e.g., childhood sexual abuse) or the sexualization of emotional deprivations due to a failure to identify with one’s same-sex parent. These theories are not directly engaged and, while Freud is discussed, the emphasis in this chapter is on the biological bases of homosexuality, which is where so much of science is today and with good reason; there is insufficient scientific support for these other theories and little interest in psychopathology-based accounts of homosexuality. The authors are more interested in examining the broader essentialist versus constructivist debate and whether or to what extent biological data inform that debate.

Chapter two, “Sham Matings and Other Shenanigans,” addresses research on animal homosexual behavior. This chapter content speaks to the title of the book, as the sexual behavior of maybugs, dolphins, sheep, and many other animals is discussed. As I mentioned above, I have been rather dismissive of animal research, but the authors present a more comprehensive and com-

pellent case for animal models that at least has to be engaged and cannot be simply dismissed as irrelevant. I think ultimately the Christian does not look at animal behaviors as being sufficiently complex to be analogous to human sexuality, orientation, identity, and behavior, but there is more research and more thought behind the research; it is important to be familiar with this research for those who work in this area.

Chapter three, “Beyond the Paradox,” looks at evolutionary theory and homosexuality. Evolutionary theory is another topic that many Christians might not find particularly compelling when it comes to thinking about sexual orientation. They might be more likely to simply disregard modern homosexuality as largely incompatible with evolutionary theory. This chapter challenges such a maneuver and, again, invites the reader to consider how evolutionary theory may provide a reasonable account of modern male homosexuality.

Chapter four, “Values, Facts, and Disorders,” considers the relationship between homosexuality and psychiatric nosology. This was a helpful chapter that provides the reader with more of the history and cultural context out of which homosexuality was viewed as a disorder and how it was viewed prior to that—from crime to disorder, from behavior to instinct—and how views of heredity and other important concepts initially played into early and developing conceptualizations. This chapter also briefly addresses the question of reorientation or conversion therapy.

There is also an epilogue that raises the question of whether there are risks associated with future research on the etiology of sexual orientation. Such questions are tied to prevention and to some extent conversion or reorientation. Interestingly, the mainstream LGBTQ+ community and more conservative Christian communities might actually have a superordinate goal, to not screen or select in utero for sexual orientation preferences because of the contemporary Christian commitment to valuing the *imago Dei* in all persons from conception. The epilogue surprised me the most because it came across as outside of the scope of what the authors had been addressing in the history and philosophy of science. But, again, it was well considered and thoughtful. The authors concluded that the risks should be managed in a way that protects the LGBTQ+ community but also does not preclude such research from taking place. The authors are more concerned with the “morally questionable biases” (p. 191) behind the research. Again, such a statement does not make an argument for ethical conclusions about homosexual behavior, nor does it engage formed judgments that reach conclusions other than those of the authors.

Christians interested in the history and philosophy of science related to male homosexuality will not be disappointed by this book. It is in depth and even handed in its treatment of research and competing theories. I would not describe it as anti-religious in its presentation of ideas and historical context. In fact, the authors do not really engage religion as such; rather, they engage some of the ideas derived from or contemporaneous with religious thought at the time, particularly if those thoughts were evident in science, but, again, they do so in a measured way. They primarily engage arguments and the conclusions derived within science (e.g., genetics, zoology, psychiatry) itself.

## Notes

<sup>1</sup>M. A. Yarhouse and D. C. Haldeman, "Introduction to Special Section on Current Advances in the Intersection of Religiosity/Spirituality and LGBTQ+ Studies," [Editorial], *Psychology of Religion and Spirituality* 13, no. 3 (2021): 255–56, <https://doi.org/10.1037/rel0000438>; and M. A. Yarhouse et al., *Listening to Sexual Minorities: A Study of Faith and Sexuality on Christian College Campuses* (Downers Grove, IL: InterVarsity Press Academic, 2018).

<sup>2</sup>See W. H. James, "Biological and Psychosocial Determinants of Male and Female Human Sexual Orientation," *Journal of Biosocial Science* 37, no. 5 (2005): 555–67, <https://doi.org/10.1017/S0021932004007059>.

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**NATURALISM IN THE CHRISTIAN IMAGINATION: Providence and Causality in Early Modern England** by Peter N. Jordan. Cambridge, UK: Cambridge University Press, 2022. 218 pages. Hardcover; \$99.95. ISBN: 9781009211987.

How should religious conviction shape scientific thought? This is the question many early moderns asked themselves, and which Peter Jordan explores in his book. In a close analysis of prominent early modern English theologians and scientists, Jordan weaves together a coherent intellectual outlook that provides important commentary on the relationship between science and religion.

Jordan's selection of early modern Protestantism will not be new to those interested in the relationship between science and religion. Jordan's PhD advisor, Peter Harrison, who oversaw the dissertation from which this book developed, has left his mark on this topic for the last three decades in books such as *The Bible, Protestantism, and the Rise of Natural Science* (1998), *The Fall of Man and the Foundations of Science* (2007), as well as *The Territories of Science and Religion* (2015). As a consequence Jordan's guiding assumption, that Christian thought created a context within which early

modern science was explained, is not anything novel. What is unique is his recognition that early modern theology was not entirely static or homogenous in its relationship to science. By focusing on shifting ideas of the Christian doctrine of providence, what Jordan highlights is the way in which certain thinkers accommodated the doctrine of providence to embrace new scientific developments, such as mechanism and atomism. As a result, this work reminds us that the area of early modern science and religion, while well studied, still has areas of investigation that may bear important fruit.

The book itself, which contains an introduction, conclusion, and five chapters, is organized into four parts. The first part introduces his analytical term of "providential naturalism," by which he means a perspective on the natural world that integrates Christian commitments to providence and explanations of the natural world. It is because he is analyzing the doctrine of providence that his selection of English Protestants makes sense. As he explains in chapter two, English Protestants developed a well-structured formulation of providence, which explained the wide variety of ways in which God acted within the world, activities which could contain—though were not entirely constrained by—the natural world. The important implication of this, which Jordan explores later in the work, is that the newer developments of science, which did not fit the expected patterns of Aristotelianism, and hence of the expectations of how the natural world should function, could nevertheless find an articulation within a world that was believed to be fundamentally controlled and shaped by God.

The second part provides important contextualization for the development of the theories of providence. In a work looking to interrelate theology and science, this section is particularly interesting because it serves as a reminder that the doctrine of providence itself was influenced by unanticipated aspects. The topics he addresses here are chance-based games, such as dice and lots, as well as prodigies. Both games and prodigies provided frequent opportunities for early moderns to develop their definitions of providence. Games of chance became popular in the early modern period; they raised all sorts of questions about how providence related to the natural world, and whether all outcomes, including games of chance, were necessarily providential.

Similar questions about the boundaries of providence show up in John Spencer's thoughts on prodigies, which Jordan analyzes in chapter four. Spencer, a clergyman at the University of Cambridge, became quite critical of the large number of prodigies that were believed to occur on a routine basis within the world. In Spencer's estimation, while it is indeed the case that nature com-