

## BIOLOGY

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**SEX IS A SPECTRUM: The Biological Limits of the Binary** by Agustín Fuentes. Princeton University Press, 2025. 216 pages. Hardcover; \$23.84. ISBN: 9780691249414.

The debate over sex and gender shows no signs of subsiding, and numerous books have emerged addressing this issue from philosophical, theological, and scientific perspectives. This book is an addition to the field, coming from an evolutionary anthropological perspective. Agustín Fuentes is a professor of anthropology at Princeton University. He has a longstanding interest in human evolution, having written several books on this topic. In this book, like his others, Fuentes addresses common misconceptions about humans. Here, his agenda is to dismantle the (mis)conception that males and females are fundamentally different kinds of people. Although he acknowledges some fundamental differences between the sexes, he frames them in such a way that they don't seem to matter, leading to his conclusion that sex is not binary but is on a spectrum. On the one hand, I applaud his efforts to dismantle the "men are from Mars and women are from Venus" view, which leads to bias and discrimination. However, although many features of men and women do overlap, the essentials of sex (i.e., reproductive functions) are still binary.

This is not a large book, and it is intended for a lay audience. Fuentes begins by discussing the evolution of sexual reproduction, first with different mating types (yeast), followed by a discussion of anisogamy (large and small gametes), and then devoting most of the book to the human context. Along the way, Fuentes tends to avoid using the terms "male" and "female," instead calling them a "small (or large) gamete producer" or by qualifying the words with the modifier "3G" (genes, gonads, genitalia) when discussing sex in humans.

There is much that is helpful in this book, in which Fuentes dismantles incorrect stereotypes. We see how varied sex determination and sexual development can be, especially in animals. We also see that the extent of variation of many features *within* a sex generally exceeds the differences *between* sexes, so that there is considerable overlap between the two sexes. When we look at humans, the story is even more complicated because the social aspects of humans add more diversity. Although there is some sexual dimorphism in humans, there is a wide range of variation, such that we cannot use body size, physical strength, or even personality to predict whether someone is male or female.

Fuentes spends some time dismantling the idea that there is such thing as a male or female brain, which

ironically is an argument used by many to support the existence of transgender persons. The question of brain sex is a complex one because different hormonal environments in males and females do influence the brain and behavior. The spectrum of male and female behaviors largely overlaps, and we must acknowledge cultural conditioning, which affects males and females differently.

Given the amount of attention paid to questions of gender lately, I found it surprising that Fuentes spent little time discussing gender. He defines gender as "a set of expectations, perceptions, and behavior that a social group believes about how bodies and behavior *should be* in relation to aspects of sex biology" (p. 68, italics original). He also describes how those expectations can change over time. This should be a warning to us, especially as Christians, to be careful about assigning gender roles as something that is based on one's sex.

In his desire to describe sex as a spectrum rather than binary, Fuentes includes examples of intersex individuals, those with differences of sexual development (DSDs), i.e., those who are not 3G males or females. Here we get into the question of what constitutes normal variation and what is a disorder. While there is diversity in sexual development, a biological condition that makes it impossible for someone to reproduce (for many different reasons, depending on the condition) should be described as a *disorder* of sexual development, not merely a difference, and thus these cases should not be used to argue that sex is a spectrum.

One intersex example that Fuentes cites is the case of South African runner Caster Semenya, whom Fuentes describes as female, even though only one of Semenya's three "Gs" is female (Semenya is XY, has undescended testes, and produces testosterone in the male range). This leads to a discussion about who may participate in women's sports. Women's sports leagues are typically established separately from men's to ensure fair and competitive environments, acknowledging the average physical differences that arise from hormonal and developmental changes during puberty. Among other things, testosterone enhances muscle mass in men and increases the proportion of red blood cells in the blood. Although Fuentes accepts that point, he then argues that Semenya should be allowed to compete as a woman because defining what a woman is by testosterone production "reflects a social construct of what the 'correct' range of testosterone should be" (p. 144).

Fuentes then discusses transgender athletes competing in women's sports. He rightly points out that athletic training for women is generally underfunded and thus women often do not reach their full athletic potential. Yet even if they did so, they would not be able to

compete at the same level as men in sports that require physical strength. He acknowledges that there are some examples of transgender women who would have a competitive edge but maintains that using such a small proportion of people in an already small population of elite athletes as the “key group to understand human-wide patterns of sex biology is misleading and faulty science” (p. 146).

The major point Fuentes makes in this book is that “sex involves *all* the processes of sexual reproduction—not just gametes” (p. 38). That is true, but despite the overlapping ranges for many sexual aspects of men and women, some aspects of sex biology are inescapably binary. The gametes one produces are either large (eggs) or small (sperm). DSDs notwithstanding, only one sex can gestate a baby. This does not make men and women fundamentally different kinds. After all, most of our genetic inheritance is the same in both sexes, and sexual differentiation does not begin until six weeks of development under hormonal influence. However, when it comes to reproduction, sex is clearly binary. Broadening the definition of sex to include behavioral and cultural aspects (i.e., redefining sex to mean gender), as Fuentes does, gives the impression that sex is a spectrum but, from a biological perspective, sex is first and foremost about reproduction.

Overall, *Sex is a Spectrum* presents many good arguments that dispel the idea that males and females are fundamentally different. However, Christians should be aware of Fuentes’s agenda. He focuses on sociological aspects of sex (which are on a spectrum) and minimizes binary biological differences. Moreover, one must be cautious in applying what happens in animals to that in humans. Is sex binary or on a spectrum? Many processes of sex are indeed on a spectrum or bimodal, but the reproductive aspects of sex are inescapably binary.

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## EVOLUTIONARY THEORY

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**BEYOND EVOLUTION: How New Discoveries in the Science of Life Point to God** by Sy Garte. Tyndale Refresh, 2025. 304 pages, including technical details, glossary, and notes. Hardcover; \$19.98. ISBN: 9798400501364.

Sy Garte is an accomplished biochemist who has been a professor at New York University, University of Pittsburgh, and Rutgers University. His work has been widely published in peer-reviewed scientific journals. He is the author of numerous essays and blogs exploring the integration of science and Christian faith, and of two previous books, *The Works of His Hands* (Kregel, 2019)

and *Science and Faith in Harmony* (Kregel, 2024), plus a chapter in the book, *Coming to Faith Through Dawkins*, ed. Denis Alexander and Alister McGrath (Kregel, 2023).

*Beyond Evolution* is his newest book exploring faith and science. Here Garte poses provocative questions and makes many bold claims. He makes it crystal clear that he accepts evolutionary theory but is critical, however, of neo-Darwinism. The author argues that the neo-Darwinian (modern synthesis) form of evolution has been overemphasized in public discourse; this explains why evolution is such a flash point for many Christians. He suggests that too many Christians and scientists treat evolution almost as a metaphysical worldview rather than a tool for understanding life’s diversity.

In chapter 2, Garte starts to build his argument by pointing out deficits in evolutionary theory. For example, it cannot frame fitness mathematically, which makes the theory susceptible to misuse, and it is insufficient to explain the origin of life. Furthermore, new research suggests that epigenetic changes are long lasting, perhaps permanent, and mutations are not completely random; bacteria have some degree of control (by mechanisms yet unknown) over where mutations occur, thereby enhancing their survival.

According to Garte, evolution by natural selection is not the most fundamental principle in biology, a claim he explores in chapter 3. Instead, high-accuracy self-replication (HASR), or biological inheritance, provides a more foundational insight into life than simple variation and natural selection. He believes evolution is an inevitable consequence of HASR and claims that HASR could not have evolved by natural selection and is therefore strong evidence for God.

I found the most provocative arguments and claims in chapter 4 in which Garte explores agency, cognition, and teleology in biology (ACT). He claims that all living things are agents (A) or entities that act intentionally in goal-oriented ways. The author refers to teleology (T) as explanations that consider the purpose or end of something. Here he makes bold statements that may require a new understanding of purpose. Garte says that “no rock cares about being eroded ... but bacteria, oak trees, and dolphins *do* care” (p. 85, italics in original). Some readers may need to remind themselves that the goal-oriented purpose Garte describes includes simply staying alive and reproducing. Although he blends cognition (C) into his teleology argument, he explores cognition most deeply at the end of chapter 4. He quotes Andreas Wagner in defining cognition as “the mechanisms by which animals acquire, process, store, and act on information from the environment” (pp. 94–95).<sup>1</sup> These mechanisms include perception, learning, memory, and decision-making. The author cites several examples

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of simple creatures—bacteria, slime mold, fungi, and plants—that use signal transduction and cellular learning processes to predict and manage future events based on current conditions.

Garte circles back to the origin of life in chapter 5, where he carefully and accurately describes what science does and does not know about abiogenesis. He briefly covers energy requirements for life, the RNA world hypothesis, and more, and includes problems with the hypotheses that attempt to explain how life first came to be. Here the author accurately points out that science is missing a lot when it comes to explaining abiogenesis—most notably laws and theories that explain the transformation of chemistry into living cells. Discovering these laws and theories will require new scientific approaches, but even then, science may fall short of providing a complete explanation for the origin of life, demanding acknowledgment of the existence of a divine designer. In this respect, Garte comes close to, if not fully, embracing a “God of the gaps” argument.

In chapter 6, Garte explores emotions, thoughtful reflection, humor, creating and appreciating art, and non-kin altruism as aspects of human behavior—aspects that cannot be explained by evolution, but by a loving, divine Creator God who made humans in his own image. He also suggests that a clue to consciousness lies in the human propensity to tell stories. After exploring the soul and the mind-body problem, Garte ends this chapter with a discussion of love. He connects love to story, emotions, and beauty and says the existence of love is enough to point us to a divine Creator. Although he mentions artificial intelligence in his discussion of consciousness, a deeper exploration in the context of his argument would have been fascinating.

Garte ends his book with a story to draw his arguments together, attempting to move away from a “God of the gaps” argument by encouraging us to forget about the gaps. He urges scientists to continue to explore “both books”: scripture and the book of the natural world. Garte’s writing is accessible and his tone generous; he deliberately avoids overly technical jargon and provides an appendix with technical details, as well as a glossary for non-scientists who want more information. The author is deeply committed to both his Christian beliefs and to evidence-based science, inviting both believers and skeptics to follow the evidence wherever it leads. His theological framing could, at times, be stronger, but he readily admits he is not a theologian.

I admire his willingness to take on difficult questions and recommend this book to anyone who wants to hear how a respected scientist uses good, current science, scripture, and theology to explore interesting, provocative questions at the intersection of science and faith.

Readers may want to be on the alert to see if Garte’s prediction—that biology is on the verge of major breakthroughs that will incorporate ACT and design into its foundational theories—comes true.

## Notes

<sup>1</sup>Andreas Wagner, *Arrival of the Fittest: Solving Evolution’s Greatest Puzzle* (Current, 2014).

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**FRIGATEBIRDS, SEA LIONS, & DARWIN: Musings on Evolution, Creation, and Ecology** by David B. Schreiner. Wipf & Stock, 2025. 140 pages. Paperback; \$27.00. ISBN: 9798385203178.

According to the two books model of revelation, God can communicate theological truths through both scripture and the created world. Experiencing nature can therefore stimulate questions about biblical interpretation we might not otherwise have entertained. In *Frigatebirds, Sea Lions, & Darwin*, David B. Schreiner, Associate Professor of Old Testament and Inductive Biblical Studies at Asbury Theological Seminary, recounts several trips to the Galapagos with his wife, daughters, and biologist brother. His family’s encounters with the beauty and savagery of nature challenged some of his presuppositions about evolution. The double-edged sword of ecotourism in the Galapagos as both a source of conservation revenue and pressing environmental destruction challenged his understanding of humans as stewards of a land in need of taming. Presented as a mix of travelogue, musings, and biblical hermeneutics, the author has sought to provide “reflections and thoughts...as an inroad to a conversation that remains very difficult” (p. 16). Rather than try to convince through systematic biblical analysis or persuasive rhetoric, his hope is to share his experiences to “possibly produce similar reflections in the minds of my readers” (p. 9). This book is therefore more conversational than many in the science-faith realm, akin to *The Fool and the Heretic* by Todd Charles Wood and Darrel R. Falk (Zondervan Academic, 2019), or *How I Changed My Mind About Evolution*, ed. Kathryn Applegate and J. B. Stump (IVP Academic, 2016) rather than to more systematic treatments of science and faith. Its success, therefore, depends on how thought provoking you find his experiences and reflections.

The author provides three major contributions to the science-faith conversation. First, questions about evolution naturally came to mind when he was confronted by the same species Darwin observed. Schreiner, therefore, spends some time reflecting on his own theological journey within a fundamentalist context, and how major findings in the Ancient Near East and a strong

understanding of literary, linguistic, and cultural context create ways of reading the Genesis text that can reconcile scripture with Darwin. For example, reflecting on Genesis 1:24 (“God said, ‘Let the earth produce living creatures ...’”), the text records a Hiphil stem (used in Hebrew to express causative action) to the verb translated “produce,” implying that it is the earth causing the production of life. Schreiner writes,

I will never forget the moment when I realized the potential of these statements ... To put it bluntly, the semantic framework of the biblical text allows for the attribution of agency upon the created order. By implication, in my mind, the concept of evolution is something that need not be antagonistic to the Christian faith. (p. 62)

However, he is quick to add that God must be the source of Earth’s creativity. Failing to recognize this is “one of the severe deficiencies of Darwin’s ideas of natural selection” (p. 62). I would suggest the author take a closer look at the frontispiece of *The Origin of Species*, especially later editions, in which Darwin takes great pains to suggest natural selection is not in opposition to, but requires, divine agency. Nevertheless, such statements from a conservative theologian make space for more robust discussion around evolution and faith.

Schreiner’s second contribution is a significant and strong rebuttal of young earth creationist rhetoric. He quotes in full, across several pages, a social media post written by Ken Ham of Answers in Genesis. He slowly and methodically exposes the rhetorical strategy Ham employs, and then he shows why a faithful conservative Christian could reject Ham’s approach and still be faithful to scripture.

Evolution is only a small portion of this book. More space is given to ecological considerations, Schreiner’s third contribution. The Galapagos revealed both the profound harm humans can bring when trying to do good (e.g., invasive species, climate change exacerbated by tourism) as well as the profoundly good (e.g., the success of Galapagos tortoise conservation). The author suggests that this tension can be explained theologically by the concept of the image of God (our capacity for good) and our fallen nature (thus, the brokenness in our solutions). He goes further than I am comfortable with, explaining all interspecies hostilities as a product of the fall. I found this position difficult to reconcile ecologically with scriptures that celebrate God’s active participation in feeding the carnivore (e.g., Ps. 104:21). Nevertheless, I can celebrate Schreiner’s conclusion “that Christians should not only be concerned with their ecological context, but they should advocate for policies and practices that curb the unnecessary degradation of their ecological contexts and unbridled consumerism” (p. 92). I wish he had engaged more with the negative

outcomes of well-intentioned stewardship, but I am glad to hear another conservative voice add to the call for Christ-centered conservation.

Unfortunately, the value of this book is hampered by obvious errors and poor editing: “like” instead of “think” (p. 95), two separate uses of “that” instead of “than” (pp. 50, 51), “guilt” instead of “guilty” (p. 39) are but a few examples. One chapter is entitled “Seal Lions Bites and Frigatebirds”—I assume it should be “Sea Lion Bites” or “Sea Lions’ Bites”; this mistake is replicated on the page headers. Furthermore, some of the language in the book is off-putting; for instance, at one point Schreiner says that scientists believe Christians are “ideologically retarded”—given the context, I cannot tell if he is using that term to mean “halted in growth” or as a pejorative that should be excised from his language.

Nevertheless, the conversational nature of this book may be a breath of fresh air for students who were raised in a fundamentalist household and who need to hear a conservative theologian offer the very questions they have been asking, without fear of undermining the inerrancy of scripture or losing one’s salvation. I would be curious to hear where these thoughts take Schreiner in the next few decades. I just hope there is a better editor to help him articulate these important conversations.

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## MEDICINE AND HEALTH

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**THE REFORMATIONS OF MEDICINE: Early Modern Beginnings and Contemporary Possibilities** by Ekaterina N. Lomperis. Fortress Press, 2025. 250 pages. Paperback; \$44.00. ISBN: 9781506491172.

What does Martin Luther have to say to Christians about medical care and suffering in the body today? Ekaterina Lomperis, Richard B. Parker Associate Professor of Theology and Wesleyan Thought at George Fox University, argues that Luther’s medical theology offers a surprisingly rich resource for spirituality and contemporary health care. Her book seeks to retrieve and develop Luther’s dialectical approach to physical suffering, which she notes hasn’t received enough scholarly attention despite the depth of scholarly interest in divine suffering or the “theology of the cross.”

Lomperis argues that “for Luther, while internally recognizing the inevitability of afflictions and welcoming their spiritual benefits, Christians also ought to resist suffering by piously utilizing available means” (p. 51). Through close readings of Luther’s lectures on the Old Testament, she develops a Lutheran theology of medicine that accepts suffering, not as satisfaction for sin

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but as an “alien work of God” that includes physical afflictions that can strengthen and deepen faith. At the same time, Christians should resist that same physical suffering through use of medicines and health care. In addition, Luther teaches, in his lectures on Joseph in Genesis, that it is a sin to recklessly endanger the body, ignore opportunities to alleviate pain, or fail to provide for bodily needs. Lomperis points to Luther’s distinction between the inner person (the soul liberated by faith) and the outer person (responsible for action) to highlight that the freedom of the inner person compels the outer person to resist suffering through appropriate means and also to extend care to neighbors in need.

From this foundation, Lomperis develops Luther’s “theology of means” and “theology of idolatry.” Medicine is a created “means” through which God’s Word works healing power. Miraculous faith healings also rely on divine agency; however, Luther believes that God prefers the created means, rather than miracles, for conveying power. As Luther states, “The use of medicine is permitted, yes even necessary, for it is the means created for the preservation of health” (p. 114). Luther’s concern surfaces when humans, seeking physical cures, place more trust in the created means (medicine) rather than in the creator God; such misplaced trust constitutes idolatry. Luther’s reading of Isaiah 38 illustrates this balance: the prophet prescribes treatment, but healing power resides in the divine Word, not in the remedy itself.

This book fills a notable gap in scholarship on Luther’s theology of the cross in relationship to physical and embodied suffering and the proper use of medicine. While Ronald Rittgers explored a *Reformation of Suffering* (Oxford University Press, 2012) and Susan Karant-Nunn a *Reformation of Feeling* (Oxford University Press, 2012), Lomperis extends these trajectories into a “reformation of medicine.” Her work situates Luther’s theology of the cross within embodied experience, offering a nuanced theological account of how Christians might respond to physical suffering. This well-researched book draws extensively on primary texts such as Luther’s biblical lectures and treatises such as *The Freedom of a Christian* and *Whether One May Flee from a Deadly Plague*, while also engaging thoroughly with the historical theology of Luther and of medical care. Lomperis intersperses the chapters with engaging vignettes of Luther’s life and story, which place the theological issues within a narrative context.

Lomperis’s argument proves pastorally compelling and theologically sound. Luther’s dialectic in a theology of medicine—to accept suffering as spiritually formative while resisting it through the created means of medicine—offers a framework for Christian participation in health care that avoids both fatalism and therapeutic

idolatry. The final chapter moves from historical analysis to constructive application, urging Christian communities to advocate for equitable health systems. However, the book could go further in addressing these systems. Concrete examples of justice-oriented initiatives, such as the Black Church’s tradition of providing clinics for underserved populations, would strengthen the case. Likewise, naming systemic barriers, such as health insurance monopolies and pharmaceutical pricing, would sharpen the ethical challenge.

Stylistically, the book provides accessible content without sacrificing scholarly rigor. Its organization reflects careful thought, and the bibliography is robust. While primarily suited for theologians and ethicists, pastors and Christian health professionals should also find it valuable. In fact, I plan to encourage my brother, a pediatrician, to consider reading sections on Luther’s theology of medicine and its applicability in current health-care contexts.

Lomperis offers a timely and faithful retrieval of Luther’s theology of health and health care: “when afflicted by physical suffering, Christians should purposefully and diligently utilize available means to resist it” (p. 87). At the same time, Christians place the power of healing with God, without placing an idolatrous trust in the medicine itself. This book deserves attention from anyone interested in the intersection of theology and health care.

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**SCRIPTURE AND SCRUBS: A Christian Calling to Healthcare** by Michael E. Sherr, Jason K. Lee, and Angelia M. Mickle. B&H Academic, 2025. 240 pages. Paperback; \$27.99. ISBN: 9781087789224.

Frontline healthcare workers see medical dramas unfold before them each day—stories of heartbreak, heroism, compassion and diagnostic dilemma no less vivid than plotlines from *The Pitt* or *Grey’s Anatomy*. Daily realities may be either more incredible or somewhat mundane, but for Christian health professionals (CHPs), there is always a deeper story. Each interaction provides opportunities to reveal God’s loving grace, to be a divine ambassador in a broken world.

Sherr, Lee, and Mickle have collaborated to write a book for frontline healthcare workers, challenging us to see and understand the spiritual significance hidden in every day’s work. Their passion is that CHPs would develop spiritual competencies that strengthen their clinical skills and knowledge, modeling both professional excellence and deep spiritual sensitivities, and being willing to be used by God in each patient encounter.

The three co-authors come from different disciplines, having had diverse professional experiences before filling academic appointments at Cedarville University. Sherr directs the social work program as associate dean and professor. Lee is a professor of theological studies and leads Cedarville's Center for Biblical Integration. After taking a variety of roles in nursing, Mickle is now a professor and dean of the School of Nursing. Together they encourage Christians in medical fields to integrate Christian faith into daily work, understanding how God works through healthcare workers as a means of common grace in the usual course of their professional duties.

The book is divided into two parts. The first, entitled *What Are You?*, begins by relating stories of Christian healthcare workers in a variety of fields who care for physically and emotionally vulnerable patients. The narrative then paints a portrait of the "God of the Bible," retelling the overarching narratives of God's interactions with humans from Creation to Christ. The divine covenants with Adam, Noah, Abraham, Moses, David, and the New Covenant each illustrate the story of divine grace.

The authors are explicit that God's grace, though expressed both as saving grace and as common grace, is one grace with two expressions. They define healthcare workers as "servants of common grace," caring for people with broken bodies and spirits, conduits for God's love and healing power, even when not speaking.

Part II, entitled *What Do You Do?*, defines five spiritual competencies that CHPs should cultivate: giving comfort, giving and receiving forgiveness, pointing patients toward permanent glory, becoming a jar of clay, and working as an ambassador of Christ.

This book is rich in biblical references and quotations, with a scripture index listing hundreds of passages. Stories of Augustine of Hippo, Tertullian, Basil of Caesarea, John Calvin, Charles Spurgeon, and many other faithful historical figures enliven the text. Biographical sketches of CHPs fill each section, illustrating the wide variety of professional roles within healthcare and describing encounters, both mundane and memorable. We meet nurses, pharmacists, physical therapists, certified nursing assistants, and medical school professors in various chapters.

One of the CHPs profiled is an Air Force Reserve nurse who managed a skilled nursing facility for COVID-19 patients. She had a small team—one licensed practical nurse and three medics working twelve-hour shifts without interruption—to provide total nursing care for 57 sick patients. She spent Christmas separated from her husband and three children. Another, a physical

therapist, worked with an enraged teenager awakening after three weeks in a medically induced coma. The patient had sustained 62 fractures in a motor vehicle accident, limiting his every movement. The therapist persevered despite angry insults, and his patient learned to stand on his own and walk with assistance. When discharged, he was full of joy and gratitude, saying he wants to train as a physical therapist.

The structure of *Scripture and Scrubs* challenges Christ followers in healthcare to identify first as CHPs, a high calling that transforms each job description. The book traces physical frailties to the fall in Genesis and finds spiritual meaning in the basic work of healthcare, reminding patients of their mortality and relieving the suffering that originated as a consequence of disobedience.

Once that dual identity is established—blending professional excellence with Christian mission—the authors outline work specific to this spiritual calling. The section on giving and receiving forgiveness illustrates how essential it is that CHPs practice giving grace in relationships with coworkers and with patients angry at their infirmities. Giving comfort for physical, emotional, and spiritual pain requires us to identify with others and devise methods of relief. This is sacred work.

This book does a good job of casting the vision for Christians in healthcare to understand their holy calling, extending care and mercy to vulnerable patients and families. Each chapter concludes with discussion questions adaptable to students or working professionals in various fields. The topics raised should spur good discussion and application to everyday situations for a wide audience.

Healthcare is a demanding field, requiring physical endurance, emotional strength, integrity and intellectual creativity to meet daily challenges. The book's recommendations for CHPs fall mostly in the realm of practicing spiritual disciplines: the study of scripture, prayer, meditation, and involvement with a local church and with other believers—all strong remedies.

I would have liked more detail on exactly how the authors and the profiled CHPs incorporated spiritual practices into their busy lives. What prompts do they use to pray for patients or coworkers? How do they fit in Bible study or Christian fellowship when they have to pull a double shift? What guardrails do they put in place to assure they give their family members the time and attention needed? How was their faith sustained in troubled times? The profiles at times seemed to focus on professional duties rather than exploring more personal spiritual histories.

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Recent stories of the COVID-19 pandemic illustrate the overwhelming requirements of healthcare under stressful conditions. The book discusses how we can be “jars of clay,” conduits of God’s grace despite our personal imperfections, but stops short of recommending more holistic care for health workers. Burnout was frequently cited as a consequence of neglecting prayer or Christian fellowship, but this could have been more comprehensively addressed.

Despite being written by academics with teaching credentials, the book is not written with research citations for an academic audience. *Scripture and Scrubs* is intentionally anecdotal with strong scriptural and theological support. Literature might have been cited highlighting the positive association between spiritual practices and resilience or the tangible benefits to organizations when their frontline healthcare workers are well cared for. Pairing scriptural truths with the conclusions of research studying the effectiveness of spiritual practices would have strengthened the book’s recommendations, particularly for students.

The theological discussions in the book are rich, but they go beyond entry-level doctrine. Challenging texts such as “Jacob have I loved, Esau have I hated” might be off-putting even to experienced Christians, especially if they read the book individually rather than discussing it with other CHPs. There is good material here, but it is best suited for mature Christians.

I would recommend this book for group discussion. As an encouragement to Christian believers, either studying or working in healthcare, it can be an inspiration to deeper understanding of our calling. Jesus practiced a healing ministry as he spread news of the kingdom of God. We have the mandate and the privilege of continuing what he began.

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## PHYSICS

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**THE ESSENTIAL EINSTEIN: Scientific Writings** by Diana Kormos Buchwald and Tilman Sauer, eds. Princeton University Press, 2025. 560 pages. Hardcover; \$35.00. ISBN: 9780691131078.

and  
**THE ESSENTIAL EINSTEIN: Public Writings** by Diana Kormos Buchwald and Tilman Sauer, eds. Princeton University Press, 2025. 400 pages. Hardcover; \$35.00. ISBN: 9780691272191.

This two-volume collection of Einstein’s writings covers 38 of Einstein’s most important scientific papers and 96 selections written for non-specialists and the general

public, translated where necessary from German to English. These papers span over 50 years, from the four breakthrough publications of his *annus mirabilis* in 1905 all the way to his final ill-fated attempt to unify gravity and electrodynamics in 1955, the year of his death.

The thicker and more challenging book, *Scientific Writings*, has a cover picture of the less familiar young Einstein; the more accessible *Public Writings* has the familiar elderly Einstein of popular imagination, all wrinkles and wispy white hair. This is symbolically appropriate, in that 22 of the 38 scientific papers (including all of Einstein’s most famous and revolutionary ideas) have dates *before* 1919, while 89 of the 96 public writings were written *after* 1919. These book-end photographs tell the story of Einstein’s explosive transformation from an obscure patent clerk into a universally recognizable icon (and iconoclast) of the radical new world of modern physics.

From 1903 to 1919, Einstein is madly eclectic, firing off papers in a half-dozen different fields: kinematics, optics, gravitation, statistics, thermodynamics, and magnetism. Anyone with an undergraduate physics major (or an equivalent self-education) will wander this period like the visitor to a well-tended and well-labeled garden, recognizing familiar landmarks that appear in any modern textbook. Here are the Lorentz transformation equations, written with Einstein’s original convention of using Greek letters for the new coordinate system – and (confusingly) the name “beta” for what today we call the gamma factor! Around this corner, there is a discussion of radioactive decay that first mentions that it is “natural to consider any inertial mass as a reserve of energy” (*Scientific Writings*, p. 125), and derives that energy as  $mc^2$ . A few steps further along the path, the first (and initially quantitatively incorrect) prediction of the slight deflection of rays of distant light passing close to the sun. Then the forest turns darker and thicker: 1915 leads into a mysterious thicket of differential geometry that expresses his new theory in notation radically unlike anything that had come before.

At this point, the *Public Writings* timeline begins to run in parallel with the *Scientific Writings*, creating a fuller story of Einstein’s travels, interests, and audiences. Cambridge’s Arthur Eddington, a Quaker inspired as much by Einstein’s pacifism and cosmopolitanism as by the novelty of relativity, now steps forward as a tireless public-relations agent for Einstein, scoring him numerous opportunities to give lectures, write magazine articles, and give press interviews. Here are several of the articles that laid the foundations of Einstein’s legend in England and America, culminating in Eddington’s Southern-Hemisphere expedition – originally proposed to extend Eddington’s conscientious objector status on the grounds of its indispensable importance.

During the war years, Einstein describes patriotism, nationalism, and militarism as a malign spirit gripping the German nation. Within the first year of WWI, he calls for a union of all European nations that will put an end to “fratricidal war,” with a prescient warning that “the terms of peace must not become the wellspring of future wars” (*Public Writings*, p. 9). When the war ends, we see his reputation in Germany begin to suffer as reactionary rivals and agitators start to question relativity as a degenerate and outlandish project to undermine traditional scientific virtue. At first, Einstein is good-humored, writing a tongue-in-cheek dialogue in 1918 to refute various objections in invented conversation with an imagined friendly critic. Within a few years, he has lost all patience with speakers “unworthy of an answer from [his] pen,” who have “motives other than a search for truth,” and who would give him a better reception if he were “a German nationalist, with or without the swastika, instead of a Jew with liberal, international persuasion” (*Public Writings*, p. 60). This Einstein is a savage, withering polemicist with a tone far removed from his popular image as a kindly eccentric.

As Einstein’s scientific papers become more mathematically impenetrable, there are fewer familiar landmarks to orient the reader. By 1917, we have stumbled upon Einstein’s first controversial philosophical commitment, one he would later himself disavow, the idea that an additional term (the “cosmological constant”) ought to be incorporated in the general relativistic field equations to uphold “Mach’s principle,” the idea that space-time itself must be *created* by mass in all cases and cannot exist without it. In the mid-1920s, we get the famous pair of papers that lay out Bose-Einstein statistics (and imply the existence of an associated form of exotic matter, the Bose-Einstein condensate). From this point onward, our once-familiar garden of flowers and monuments becomes a twilight labyrinth of twisted vines and cyclopean architecture, with so many maddening dead ends as to be scarcely worth the effort to hunt for the few rare fruits hidden among them.

But by this time, Einstein’s ever more prolific popular writing has given him a new name to replace his initial identity as a “German man of science”: Zionist. Einstein’s attitude toward the political prospects for German Jews takes a tough-love tone. He chastises them for a “servile mentality” (*Public Writings*, p. 45), for their boundary policing of non-religious Jews, and for exclusion of lower-status Eastern Europeans displaced by war. His most common recommendations are for self-reliance, a greater sense of cultural pride, a vigorous resistance to materialism and hedonism, and deep investment in science and the arts. For Einstein, the ideal project to unify these concerns (and awaken European Jewry from its complacency) is the settlement and ecological restoration of Palestine. His vision for “Israel” is an enlight-

ened localism: agrarian communes on land purchased fairly from the “Arabs” and supported by a world-class Hebrew University. Repatriation to Palestine offers a sense of cultural unity (to recapture the loyalty of assimilated upper-class Jews) and hope (for the downtrodden lower classes).

Einstein’s Zionism stands in constant tension with his distaste for nationalism. At times, he praises nationalism as a temporarily useful force in Jewish culture until it reaches greater maturity; at other times, he decries it as a sully of his ideal of universalist international humanitarianism. By the late 1930s, Einstein has turned from youthful utopianism to an increasing anxiety that his idealistic vision for Israel will be replaced by “a Jewish state with borders, an army, and a measure of temporal power” (*Public Writings*, p. 246), recreating all the ugly pathologies of the Europe it sought to escape. He calls on his people, in hindsight perhaps naively, to resist becoming “a nation in the political sense” rather than a voluntary spiritual community.

In a review of this length, it is nearly impossible to communicate the breadth of topics that concerned Einstein late in his life. However, of interest to this readership are the half-dozen or so articles on science and religion. Various endnotes in these articles reveal instances in which Einstein edited harsh criticism of faith (“the God idea seems to be childish simplicity”; *Public Writings*, p. 215) in favor of more diplomatic language. Einstein consistently advocates for the replacement of supernatural religion with a sense of cosmic wonder and confidence in the knowability of natural laws. One might be forgiven for seeing his identification of the highest of three stages of religious development with imagination-driven science as a gambit shrewdly designed to deflect him from the criticism of being an atheist. But no reader can deny that Einstein is entirely sincere in his conviction that only this mystical and spiritual devotion to the order of the cosmos (whether labeled as “religion” or “philosophy”) can adequately stir the hearts of history’s greatest scientists. Later in life, in some autobiographical notes, Einstein touchingly remarks on his maturation out of “the religious paradise of youth” and into the maturity of skepticism, with the pathos-laden comment that scientists (unlike the heroes in his discarded childhood Bible stories) were “the friends who could not be lost” (*Public Writings*, p. 314).

Simply on the basis of the diversity of topics covered—and the intimacy that the editors offer with Einstein’s original text through introductory commentary and end notes—I can highly recommend this pair of books to anyone in search of an extended primary-source encounter with Einstein’s work. The editing and layout are excellent and the translation is consistently readable. I would warn that anyone interested in reading

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the *Scientific Writings* collection should be prepared to tackle some lengthy and equation-heavy papers with minimal handholding. Given that every paper is written by the most famous theoretical physicist in all of history, this warning hardly seems necessary!

Readers daunted by the length of these two volumes should be certain not to miss the final paper of the *Public Writings*, Einstein's "Recollections." Here, uniquely, Einstein drops his formal tone and his focus on external issues and allows himself to become a character in his own scientific narrative. We see the sole brief mention of his youthful, but troubled, marriage to Mileva described as a natural outgrowth of the social environment of his early self-education. Einstein, writing just three weeks before his death, also takes special care to credit his good friend Marcel Grossmann, the Swiss mathematician whose meticulous class notes carried the scatterbrained Einstein successfully through university and whose training in differential geometry provided Einstein with the crucial mathematical insights to properly formulate general relativity. Einstein's final words of the essay express growing pessimism that his unpopular approach toward a unified field theory would ever replace quantum mechanics, but the weight of this failure is eased by his closing quote from the Enlightenment philosopher Gotthold Lessing: "The striving for truth is more delicious than its assured possession" (*Public Writings*, p. 400).

Reviewed by Edward Hamilton, professor of physics, LeTourneau University, Longview, TX 75602.

## SOCIAL SCIENCE

DOI: <https://doi.org/10.56315/PSCF3-26Lundgren>

**THE PURSUIT OF SAFETY: A Theology of Danger, Risk, and Security** by Jeremy Lundgren. IVP Academic, 2024. 312 pages. Paperback; \$41.99. ISBN: 9781514008010.

Lundgren, professor of theology at Wheaton College, has written a beautiful and accessible book on a subject that has received surprisingly little attention from Christian authors. It frames a theology of danger, risk, and security around the idea of safety and its tokens, which have become central facets of modern society.

The book starts with a series of vignettes to demonstrate to the reader the pervasiveness of a culture of safety in modern (Western, Global North) life. It then defines and distinguishes some of the key terms around safety—harm, danger, risk, security, and others—and establishes the terms of reference for the work. An interesting question that emerges early on is why the author focusses on safety rather than risk as the central topic of the book. Risk is a far more nuanced concept than safety but, arguably, safety is a more tangible object for

a theological study. It also raises interesting and important questions about the nature of a safety that should be pursued under God and in fulfilment of his promises.

The second part of the book moves on to consider the historical emergence of risk and safety as it is now understood. Initially, it considers the premodern period, giving examples of how likelihood has long been assessed in a variety of mathematical and non-mathematical ways. Here, premodernity is characterized as a universe in which natural and supernatural are intertwined in a "porous cosmos." Charting the historical development of modern risk discourses is a challenging endeavor, because humanity has always faced threats, been multicultural in its interpretations of these, and possessed widely diverging capacities to counter any threats. As Lundgren notes, there are different philosophical traditions that significantly influence the interpretation of relationships between humanity, nature, and God at different times and in different places. Although he uses the terms premodern, modern, and late-modern, he also acknowledges the problems with such divisions, such as simplicity and generalization.

The third part of the book, *Avoiding Harm in a Fallen World*, seeks to provide some pointers for Christians seeking to place the pursuit of safety within a wider biblical life—acknowledging that the Bible itself regards safety as a good thing. The issue is the idolization of that pursuit. However, there are certain discussions in this section that perhaps say more about the author's own priorities and experience than about risk and theology. For example, he describes a study showing that children's chances of dying while crossing the road decrease as the child ages. Lundgren argues against the use of this for public guidance on allowing small children to cross the road unaccompanied (on the grounds that this is "societally burdensome," a phrase that arises many times). Yet, while his points about the limitations of the statistical analysis are valid, there are other good reasons for restricting what children may and may not do—not least, the pace of brain development and abilities to make judgments of different kinds. Furthermore, he appears to suggest that accompanying children across the road somehow precludes simultaneously training them to do so by themselves. Like other examples in the book, this seemed decidedly arguable and culturally narrow.

The section goes on to provide a detailed theological discussion of the links between the pursuit of safety and Jesus's commands about not worrying. It acknowledges the subjectivity and complexity involved in individual decisions about risk—whether crossing roads or taking medications that have side effects—suggesting that what matters is not the decision made, but the attitude of the heart that makes it. Similarly, the life-enhancing

role that technology has taken in modern society has to be recognized as being under Christ. Finally, in this section, the author covers the challenges that arise from a safety culture that renders accidents immoral—and therefore requires the taking of any and all actions to prevent them, potentially at great cost in other ways. In general, the discussion is balanced here, but there are a few exaggerations. Most risk management literature focusses on minimizing risk, not eliminating it; this is widely acknowledged as impossible even where desirable. The discussion then turns to the importance of forgiveness as a principle when accidents do happen, and the points at which procedural management of risk becomes idolatrous. Finally, this section examines the role of wisdom in navigating the “pursuit of safety,” using a detailed and useful discussion of Ecclesiastes 10, highlighting again that the problem is not the pursuit itself, but the idolatry of making it total and absolute.

Part Four, the final two chapters of the book, discusses living under the Lordship of Christ. These chapters are pastoral, considering the call to discipleship to understand the role of safety under Christ in the Christian life. This section balances the pursuit of safety with the pursuit of life in Christ, and leads into the final chapter, “Putting Safety in Its Place,” which returns to earlier critiques of how modern safety discourse excludes God and religion. It then discusses the dangers in the denial of the fallen human condition that have sometimes emerged in future-anticipating dialogues and attempts to control risk. Ultimately, the gospel has great explanatory power for the failure of risk management to bring about safety: the world is in need of redemption.

There are some elements that I would add to this discussion; I will outline three. The first concerns the locus of responsibility. Part of the rationale for “tokens of safety,” such as warnings, is that they protect public services—for example, healthcare—from being overwhelmed. Thus, while failing to observe a safety notice may enhance individual freedom in some respects, any harm that results not only affects the individual but has consequences for other people too. Relatedly, some people carry more risk than others because of circumstances not only beyond their control but also imposed upon them. For example, the actions of those in rich countries, in failing to curb carbon emissions, inflict additional threats on those in poorer countries. They also, therefore, critically enable identification of injustice in the distribution of risk and in the protection of the vulnerable—which itself is a biblical activity. There is an irony for me as a geographer that “putting safety in its place” might also be interpreted as pointing to the nuances of (geographical) “place” in the generation or removal of safety for particular groups, with or without their own voices being heard.

Secondly, there is relatively little acknowledgement here of the importance of stewarding knowledge—though there are strong hints of this in the chapter on technology. Indeed, Lundgren accuses Bacon (in a footnote) of putting us on a path to secularization in his call for humanity to increase its knowledge of the universe. That this call was itself driven by an interpretation of Scripture in which we are called to know about God’s world—to better understand God himself through it—is sadly not discussed in detail. Knowing creation and having faith are surely not opposed; indeed, there are instances in Scripture in which God’s people are criticized for failing to heed warnings or knowledge. The focus on safety, rather than risk, allows the author to spend a lot of time arguing against a “zero-risk” culture, but this is a rarity. Most procedural and calculative risk assessments are intended to reduce, not eliminate, risk.

Finally, there is a relative paucity of references to the role of economics in the generation of safety culture—particularly, the extensive role that the insurance industry has played and continues to play in the definition, calculation, and management of risk. Indeed, litigation and selfish accumulation of wealth has driven a considerable industry around risk that is worthy of consideration and evaluation in a book like this.

Overall, this is a rich and detailed discussion, particularly strong when it is closely reading the biblical texts; like the secular “all-inclusive” theories of risk, it struggles to contain the topic effectively where the discussion is more sociological. In part, of course, this is caused by the author writing from a particular place with particular experiences and particular politics. However, it is a compelling, well-researched and scholarly book that will provide non-specialists with an interesting and thorough overview of this important topic.

*Reviewed by Amy Donovan, professor of environmental geography, University of Cambridge, Cambridge, UK CB2 3EN.*

## TECHNOLOGY

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**MORE EVERYTHING FOREVER: AI Overlords, Space Empires, and Silicon Valley’s Crusade to Control the Fate of Humanity** by Adam Becker. Basic Books, 2025. 367 pages, index. Hardcover; \$32.00. ISBN: 9781541619593.

As I sit down to write this review using Microsoft tools, a temptation beckons: shall I go to that emergent oracle, Copilot? After all, my editor has stressed the importance of a snappy first sentence—and Clippy-on-steroids promises snappy! Hardly a day goes by when my online news feed does not suggest, alongside the latest adventures of the British royal family and culture war performances of American politicians, the antics

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of Big Tech leaders who, via symbolic praxis, betray a worldview thick with high divine claims for the marvels tech has wrought. (Once, my health insurance provider quite literally sent me an ad referring to its app as “All-Powerful!”) It is to this *zeitgeist* that Becker has penned this fascinating work of recent tech history and cultural critique.

Becker, physicist and scientific philosopher, has an elegantly simple organizing principle. First, he introduces a guru of the sort that makes waves inside the tech sector but is unlikely to be well known outside of it. His opening example is Eliezer Yudkowsky, and he later spills a good amount of ink to explore Ray Kurzweil. Becker next draws out some of the eccentricities of whoever is currently his example, some of which strain acceptance from anyone operating within the more-usual plausibility structures (e.g., Kurzweil’s dream of utilizing AI-based algorithmic necromancy to call up the shade of his late father), only then to offer a defense of their intellectual integrity by pointing out the influence of their thought on the tech giants whose creations undergird our entire global economy. This defense, however, is rhetorical. Becker’s design is to convince his reader to take whatever guru he has introduced seriously *enough* that the next step makes sense: to delve into their philosophy and the influences flowing into it. From there, he turns away from biography to critique of tech culture, showing how philosophical influences blind its partisans both to the limitations of their art and to its real-world ethical implications.

The effect is a cumulative argument against Big Tech’s oft generously entertained, and yet undemonstrated and quite possibly toxic, claims: for example, that the dawn of artificial *general* intelligence (AGI) is upon us, that the need to work will soon be relegated to the past, and that “the Singularity” is about to emerge and will prove either boon or bane to civilization, depending on how we have managed to align its values. It is here where the first strength of the book lies. Who in computer science or tech-sector-adjacent fields has not been affected along the periphery of their consciousness by claims of precisely this sort? These claims are explored in my “Ethical, Social, and Legal Implications of Computing” course. My students—along with a few of my colleagues—are transfixed by some of the claims about what sorts of societal transformations are possible, even likely. Meanwhile, transformations have already happened and are accelerating in pace; the undeniability of these lend credence to the claims of imminently emergent AGI.

These are claims of practically religious significance, a fact not lost on Becker, who spends some of his time tracing current trends back to sectarian Christian interests of an albeit unorthodox and non-mainstream character.

This is the second strength of his presentation. To illustrate by way of contrast: years ago, I attended a pastors’ conference where a major topic was theological anthropology, particularly applied to the discernment of modern-day idols. Over the course of the conversations, some of the presenters submitted that much modern technology has become precisely that—a focus for idolatry. However, this claim was not defended or even explored in depth. Reading Becker, I feel I have now seen just such an explorer in action. He shows that the oft-grandiose claims of tech utopians speak to the heart of human spiritual longings for immortality and actualization, only then to show themselves unable to deliver what they promise. Meanwhile, real human needs are left unmet.

The work has, in my view, one limitation (perhaps as a function of the price that must be paid to attempt its rhetorical strategy). At many points the big picture he paints comes across as so severely negative in its depiction of Silicon Valley that it becomes hard to imagine redemptive engagement with it. The fact remains—the implausibility of so many of Big Tech’s claims aside—that since the Industrial Revolution, tech has utterly transformed society. Much of that transformation is occurring now through the strategies of Silicon Valley. It cannot be doubted that social media has transformed politics, that ubiquitous (and AI-embedded) smart devices change how we work and play and even think, and that now large language models and related tools are transforming research and communication. These changes are not merely negative; intuitively, there is promise as well as peril. A more irenic argument than Becker’s might do more to get at that rubber-meets-the-road reality. However, strident polemics can often effect what irenicism cannot, which, in this case, is to disenchant readers bewitched by many of our time’s empty claims about tech’s power. Becker has opted for that more strident option and, while I note its limitation, I admire his rhetorical decision as well. I will be seriously considering giving his book to my undergraduates for them to engage his arguments and, hopefully, stimulate some important conversations.

*Reviewed by Matthew Bell, instructor of computer science, Whitworth University, Spokane, WA 99251.*

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**THE ARTIFICE OF INTELLIGENCE: Divine and Human Relationship in a Robotic Age** by Noreen Herzfeld. Fortress Press, 2023. 208 pages. Paperback; \$34.00. ISBN: 9781506486901.

*The Artifice of Intelligence* offers a timely theological examination of artificial intelligence (AI) at a moment when rapid technological development often outpaces careful moral reflection. In this volume, Noreen Herzfeld—

Reuter Professor of Science and Religion at St. John's University and a computer scientist—provides readers with a thoughtful, accessible account of AI's promises and perils while grounding the discussion in a robust moral theology. Her central concern is not whether AI will become "human," but whether human beings may compromise their own humanity through the ways they design, deploy, and depend on intelligent machines.

Herzfeld frames her exploration around two fundamental questions: What is AI? and What is humanity? The book's argument unfolds primarily through the second question, with Herzfeld drawing heavily on Karl Barth's trinitarian understanding of personhood. Humanity, she argues, remains fundamentally relational and embodied. This conviction shapes her approach throughout the volume and becomes crucial to her eventual conclusion that "AIs are machines, not living things ... precious resources when used well, but tools and nothing more" (p. 174).

Rather than treating AI as a monolithic entity, Herzfeld moves through a series of theological-ethical considerations that probe how AI reflects, imitates, or distorts human relationality. Herzfeld first introduces the problem and names Barth's relational organizing principle. She then explores the relationship between AI and human existence as (1) "seeing and being seen" (humanity as distinct but fully present), (2) "being heard" (possessing mutual communication), (3) "lending assistance" (exhibiting agency and ability to give and receive), and finally (4) "offered gladly" (authentic encounters freely and intentionally given). These discussions afford Herzfeld opportunity to explore the limits of AI while also introducing several thorny ethical challenges that occur through human use of artificial intelligence for personal gain or social engagement. While each chapter varies in approach, the general flow moves from speculation around AI's seeming ability to possess human qualities to analyzing how using this technology influences human behavior for good or ill. The final two chapters provide the opportunity to situate the discussion against a larger theological horizon on what constitutes the eternal destiny of humanity (flourishing in light of the resurrection) and, lastly, what distinguishes humanity in relationship to God and faith. In each case, AI provides opportunities for creativity and service but also introduces ethical pressures. Herzfeld includes interesting case studies such as the dramatic consequences of militarized technologies such as Lethal Autonomous Weapons (LAWs), and emotional or sexual companionship through robotics; examples offer compelling material for classroom debate or general conversations.

One of the book's strengths is its holistic understanding of human embodiment. Herzfeld frequently draws on

neurophysiology to illustrate both the complexity of the mind and the brain's interdependence with the body. While her engagement with neuroscience may surprise readers expecting a more purely theological approach, it ultimately reinforces her claim that human beings cannot be reduced to information processors—and that AI, as disembodied software, cannot replicate the fullness of human life. This emphasis becomes especially significant in the final chapters, where she situates AI within a broader theological horizon of resurrection hope and lifelong formation in relationship with God.

Although the book provides rich examples, its organization occasionally feels exploratory rather than thesis driven. Herzfeld withholds her central conclusion until the end, guiding readers through a series of reflections before drawing them together. Some readers may find this inductive method engaging; others may wish for a clearer roadmap from the outset. Nonetheless, her approach mirrors the method of a researcher testing a hypothesis, allowing readers to grapple with the complexities of AI before receiving her final assessment.

Herzfeld's work complements other contemporary Christian engagements with technology, such as Brian Brock's *Christian Ethics in a Technological Age* (2010) or Andy Crouch's *The Life We're Looking For* (2022), while offering her own distinctive emphasis on relational and embodied theology. Readers interested in the societal implications of AI may also appreciate the broader analyses offered by Kate Crawford or Ruha Benjamin, though Herzfeld's book remains more explicitly theological in orientation.

The final chapter proposes a set of guidelines inspired by the Rule of Saint Benedict: technology must always serve love of neighbor, it should be valued as a gift without being idolized, and its creation should be approached with reverence as an extension of human creativity within God's world. These principles provide a constructive vision for Christian engagement with AI—neither alarmist nor utopian but grounded in theological wisdom.

*The Artifice of Intelligence* succeeds as an accessible introduction to AI for readers in theology, ethics, ministry, and computer sciences. Herzfeld invites thoughtful discernment rather than hasty judgment, reminding readers that the deeper question beneath every technological innovation is what it means to be human. In a rapidly evolving technological landscape, her reflections offer a moral compass for Christians seeking to navigate the promises and challenges of artificial intelligence.

*Reviewed by Dean G. Blevins, professor of practical theology, Nazarene Theological Seminary, Kansas City, MO.*

## Letters

### Let's Not Underestimate the Complexities of Sin and Sickness

I appreciated Madueme and Cho's article on the theology of medicine (Hans Madueme and Joel Cho, "Every Square Inch: A Brief Theology of Medicine," *PSCF* 77, no. 4 [2025]: 246–56), particularly their reminders about the Christian roots of medicine and the goodness of creation, and their "big picture" approach demonstrating compatibility and integration of faith and science. There is no arguing their point that sickness and suffering should not be accepted and that we should work to alleviate it. However, I do question their assumption that "all diseases and ... death itself ... result from the fall of Adam and Eve." I also wonder if they pay insufficient attention to the complexities of disease in both medicine and theology.

First, although none question the ubiquity and inevitability of sin in the world, the concept of an original and dramatic fall from perfection is being increasingly questioned in theological discourse (which the authors briefly acknowledge in an endnote). The Hebrew term translated "good" is usually interpreted as functional goodness rather than something akin to Western perfectionism. "Death" is often interpreted as spiritual, not physical (evidenced by the continued existence of Adam and Eve outside the presence of the Lord). It is also likely that the first humans suffered as a result of the goodness of creation—they might have fallen from a height, injured themselves and experienced pain and suffering (gravity and pain both being good but having unwelcome side effects).

Furthermore, the concept of sin in the Bible is complex, with references to communal as well as individual sin, and conceptual intertwining of sin and its consequences and of sin and demonization. Although there are some associations between sin and sickness in the Bible, these are inconsistent. Indeed, Jesus does not explain why people are unwell, he simply heals them. On occasion he points out that sin is not a cause of disease (John 9:3); quite often he notes that evil spirits are a cause of disease (Matt. 9:33, 17:15–18). Given Jesus's teaching on compassionate care for one's neighbor, one does not need a doctrine of the fall to validate medical care.

From a scientific perspective, disease, disorder, disability, illness, and injury are all complex, and it is helpful to distinguish between them, especially in academic discussions. Not all such conditions are bad: fever aids healing, pain reminds us of a need to rest, allergies are a protective response exaggerated in some people, and anxiety reminds us of our need to give our burdens to

Christ. Most disorders have subjective as well as objective elements, and I appreciate the article's support of holistic approaches. Interestingly, the authors, despite claiming that all disability is due to the fall, suggest that not all "should be treated," implying, as is common in disability studies (especially the social model), that some disabilities may be a result of creational diversity (e.g., ADHD, autism, deafness) or societal limitations. However, they then confusingly state that not all disabilities should be treated because medicine has its limits; this is a capacity rather than a moral/ethical statement.

Although the article's title acknowledges its "theology of medicine" is "brief," I do think it is helpful to emphasize the multifactorial nature of disease in both medical and biblical teaching. We can appreciate the complexity of God's good creation and care for it without assuming all problems are a result of the "fall."

E. Janet Warren  
ASA fellow

### Authors Respond to Janet Warren

We're grateful to Janet Warren for taking the time to read and comment on our brief theology of medicine (Hans Madueme and Joel Cho, "Every Square Inch: A Brief Theology of Medicine," *PSCF* 77, no. 4 [2025]: 246–56). While we will be clarifying some misunderstandings and areas of disagreement, we appreciate this opportunity to engage with a fellow physician, theologian, and sister in Christ in the spirit of cordial dialogue. What follows is our attempt to address some of Warren's concerns.

First, Warren writes: "the concept of an original and dramatic fall from perfection is being increasingly questioned in theological discourse." That's true, but we disagree with such theologians and hold to the historic doctrine of the fall. In our opinion, modern scholars who reject a historical fall seem to be driven more by scientific metanarratives than by the text of Scripture (for discussion, see Hans Madueme, *Defending Sin: A Response to the Challenges of Evolution and the Natural Sciences* [Baker Academic, 2024]). In addition, we purposely avoided "perfection" language in our article, preferring to emphasize the absence of sin in the prelapsarian state.

Incidentally, although Augustine is usually the one in the crosshairs, it is worth recalling his belief that the prelapsarian situation had ample room for growth—after all, Augustine held that glorified saints will be unconditionally immortal and incapable of sinning, neither of which was true of Adam and Eve before they fell. In other words, even if Augustine sometimes used

“perfection” language, his actual theology was more nuanced.

Second, Warren points out that most OT scholars interpret “good” (Gen. 1:10, 12, 18, 21, and 25) and “very good” (1:31) as “functional goodness.” However, our argument does not hinge on the exegesis of the Hebrew word *tov* alone. Rather, our claim that original creation was without sin or evil flows seamlessly from the doctrine of *creatio ex nihilo* (creation from nothing). Since God created the world from nothing (Gen. 1:1; John 1:3; Rom. 4:17; Heb. 11:3), the original creation must have been sinless because it necessarily reflected his holy character. Hence, the Christian tradition historically insisted that the causal origin of sin lies in the creature rather than the creator (the presence of the serpent points to the reality of the devil, but that’s a separate issue—sin entered the world because of Adam’s sin, not the angelic fall).

All this is crucial for a theology of medicine: if we say that pathology and disease are built into creation from the outset, then sickness would simply be part of how God made the world from the beginning. If that’s the case, then we are implying that the Eternal Son created pathology as part of the goodness of creation and then turned around in the incarnation to heal those same pathologies he instigated—pitting Jesus the Creator against Jesus the Healer! Affirming the historicity of the fall avoids such theological incoherence.

Third, Warren’s argument that “death” in Genesis 2 and 3 is spiritual, not physical, is common in evangelical literature on science and faith. Exegetically, however, we believe that “death” was both spiritual and physical. Moreover, Paul writes in Romans 5:12 that “sin came into the world through one man [Adam], and death through sin”—and from the context of vv. 12–21, death is meant primarily in the physical sense (though spiritual death is implied too). Paul removes any ambiguity in 1 Corinthians 15:21 when he contrasts Adam’s death with Christ’s resurrection: note, crucially, that both are physical.

Fourth, Warren suggests that Adam and Eve “likely suffered as a result of the goodness of creation.” While Scripture is not explicit, there is experiential and exegetical evidence against the presence of any prelapsarian suffering or illness. In our view, accidental injury or death would have been impossible in the world of Genesis 1–2, where Adam and Eve existed in perpetual shalom (injuries and illness clearly disrupt shalom). We do not know how God would have maintained such a state of being, but the fact that everyone East of Eden dreads illnesses and injuries implicitly harks back to a time of shalom when there was no sin. Exegetically, too, Scripture promises an eschatological future when

we will live forever in the new heavens and new earth where “death shall be no more, neither shall there be mourning, nor crying, nor pain anymore, for the former things have passed away” (Rev. 21:4; cf. Isa. 25:8). Why would God make such promises if illness and injury were part of the original goodness of creation?

Fifth, we agree that the Bible’s teaching on sin is multifaceted. Warren states that, “Given Jesus’s teaching on compassionate care for one’s neighbor, one does not need a doctrine of the fall to validate medical care.” We take her point, but we respectfully suggest that this perspective is incomplete. Once we recognize Adam’s fall and its implications, patient care becomes that much more poignant, its significance even more glorious. Medicine is eschatologically charged, a fight against the effects of Adam’s sin, waiting for Jesus to return in glory. This distinctive contribution of a Christian theology of medicine is lost if we jettison a historical fall.

Sixth, Warren is correct that we could have stated our position on treating disabilities more clearly. Here’s Take 2: We do not hold the view that disabilities such as autism and deafness ought to be accepted merely as “creational diversity.” Autism and other such disabilities result from the fall; it is therefore a worthwhile endeavor to advance medical technology and to actively pursue efforts to treat all such disabilities. However, while we are open to the possibility that certain “official” medical diagnoses are simply misclassifications of creational diversity, we firmly hold the principle that all disabilities originated from the fall. Our position also recognizes our creaturely and technological limitations, cautioning against a treatment-at-all-cost mentality that can have unintended consequences and cross ethical boundaries (e.g., experimenting with the embryonic stem cell treatment of autism).

In conclusion, while we recognize that our position on the fall is controversial in modern academia (as we acknowledged in the article), we maintain that this historic and biblical position is vital to a Christian theology of medicine. Herman Bavinck remarked, “The two truths or facts by which all of Christian dogmatics is governed are (1) the fall of Adam and (2) the resurrection of Christ.”<sup>1</sup> Just so. Although it may be tempting in the Western intellectual milieu to downplay or deny the role of the fall in medicine, we demur. The cure is worse than the disease.

## Note

<sup>1</sup>Herman Bavinck, *Reformed Dogmatics*, ed. John Bolt, trans. John Vriend, vol. 3, *Sin and Salvation in Christ* (Baker Academic, 2006), 38.

Respectfully,

Hans Madueme and Joel Cho

## What About Us?

In the December 2025 issue of *PSCF*, there is a book review of *Science and the Sacred: Beyond the Gods in Our Image* by C. S. Pearce and Philip Clayton (*PSCF* 77, no. 4 [2025]: 287–88). The review was written by Samuel Powell, former professor of philosophy and dean of the School of Theology and Christian Ministry at beautiful Point Loma Nazarene University in San Diego, where the ASA has sometimes had its annual meeting.

Powell introduced his review thus:

Protestants for whom neither atheism nor fundamentalism is an option face a declining menu of choices. On the American scene, there was a time when evangelicalism claimed a spot on that menu; however, its generation-long alignment with reactionary politics has rendered it unattractive for some Protestants. For the latter, the only thing left is some species of liberal theology. (p. 287)

I suspect that many educated Americans share such a sweeping analysis. But I, my church friends, and many of my friends in the ASA would not align with any of the four options Powell offers. Those of us in the ASA have always sought to carve out another way. As early *PSCF* editor Richard Bube used to put it, we affirm both “authentic science and authentic theology.”<sup>1</sup> Fundamentalism rejects key findings of science, while liberal theologians, discouraged by higher criticism from a deeper study of the Bible, have turned to other sources such as Whitehead and Teilhard for their theology. But my friends and colleagues in the ASA affirm both. They are practitioners of cutting-edge science, enjoy discussing the Bible at length, and don’t hesitate to acknowledge Jesus Christ as Lord and Savior.

Furthermore, this has been done by thousands of ASA members and fellows, continuing in their scientific work despite the rise and fall of various political and theological movements over many decades. The word “evangelical” has an ancient history, but as Powell noted, it has recently been co-opted.

Let the labels go. Regardless, I see ASA members serving as boundary workers, bridge builders, and peacemakers across artificial divides. Jesus said, “My kingdom is not of this world” (John 18:36). God’s world—creation—transcends the world of political boundaries. This is an understanding that is affirmed by traditional creeds as well as by modern science.

Of course, the biblical texts require scholarly interpretation. Early Christians had to wrestle with the dilemma of Christ as God and man; after a struggle of a few centuries, they formulated concepts such as hypostatic union to clarify how the Bible presented Christ’s two natures. This was a successful achievement of boundary-work,

and in fact, I believe all good theology is dialogical. This approach allows ASA members to listen and learn from each other while avoiding polarization and labeling. In short, the ASA is a place for Christian fellowship within the scientific community.

Careful hermeneutical work should be an aspect of Christian scholarship. But interpretation of the revealed Scriptures should not lead to their abandonment, as liberal theologians do when they replace the God of the Bible with vague conceptions of a Deity, as with many formulations of process theology.

I am disappointed that even some professors of theology have apparently failed to notice the exemplary work of the ASA and other such ministries in the United States. Maybe it would help to carve out a new category other than evangelical, but then it would probably just turn into another label.

### Note

<sup>1</sup>Bube, Richard, personal communication. This topic is also discussed in Richard Bube, *Putting It All Together: Seven Patterns for Relating Science and the Christian Faith* (University Press of America, 1995).

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