Book Reviews

CULTURE AND THE BIG QUESTIONS

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WHAT'S EATING THE UNIVERSE? And Other Cosmic Questions by Paul Davies. Chicago, IL: University of Chicago Press, 2021. 208 pages. Hardcover; $22.50. ISBN: 9780226816296.

I could not have foreseen Paul Davies's latest book appearing. It is distinctively different from his previous books. Once again, it is beautifully written, as only a renowned physicist with a gift for explaining highly abstract concepts in understandable terms could accomplish. Yet this book is much shorter, much more concise, and lacks the long philosophical musings that made Paul Davies's previous books so enjoyable. It contrasts with his earlier work, *The Goldilocks Enigma: Why Is the Universe Just Right for Life?*, a brilliant ten-chapter work over three hundred pages long. That book covers the physics of a universe just right for human life and pursues many different philosophical questions and answers. In contrast, *What's Eating the Universe?* has thirty truly short chapters with just 165 pages of material. Nevertheless, this book is highly recommended, especially for the novice who just wants an overview of the present state of our understanding of physics and cosmology, and a brief foray into some of the big questions.

Davies takes the reader on a journey beginning with the COBE (Cosmic Background Explorer) findings of ripples in the microwave radiation coming to us from every direction. These slight variations in temperature supported the Big Bang model of the universe by connecting the nearly uniform radiation background to galaxy formation with slight "hot spots" necessary to seed the gravity wells, allowing matter to grow from a nearly uniform state to the galaxies we see today. This is just one outstanding example of how scientific investigation has succeeded in explaining our universe.

Davies then presents a historical overview of the major ideas that have contributed to our growing understanding, moving from Copernicus to Einstein. He uses delightful analogies to help the reader grasp the ideas. For example, he uses the analogy of a trained marksman (sharpshooter) to explain how precise the initial expansion of the universe had to be for it to avoid either quickly collapsing or expanding too fast to form stars and galaxies. The many questions addressed by Davies include the speed and shape of space as it expands, the source and nature of matter, including dark matter, and the enigma of dark energy, the cause behind the accelerating expansion of the universe. Davies is a wonderfully gifted writer, and his descriptions are extremely helpful in clarifying these matters.

The title suggests that there are deeply troubling questions about our present understanding of the universe and its governing laws, leaving us with puzzling inconsistencies or paradoxes. And though there are some paradoxes, Davies is the first one to admit that the real story is that our present understanding of the universe via scientific investigation is an overwhelming success. The universe is understandable in terms of elegant mathematical laws that go astonishingly far in explaining and describing what we observe. And this is what's eating Paul Davies, not the universe. Most of his scientist friends have rejected the idea of meaning or purpose intrinsic to this universe, simply accepting the success of science without the need to question why it works. But Davies cannot leave it alone. He writes:

> A universe that "just exists" for no reason, with specific properties that "just are," is correctly described, in formal logic, as "absurd." But if there is no rational coherent scheme beneath the surface phenomena of nature, if things "just are," if the universe is absurd, then the success of the scientific enterprise is totally enigmatic. It cannot be pursued with any expectation that the methods adopted hitherto will continue to work, that we will go on uncovering new mechanisms and processes that make sense, for how can sense be rooted in absurdity? (pp. 158–59)

However, for a Christian scientist, the universe is not absurd. It has meaning and purpose because it was created with meaning and purpose by a transcendent Creator God. Its basis of mathematically elegant laws is no accident, but rather a clear case of design, regardless of how God chose to create it. Davies knows this and is quite willing to acknowledge that this avoids the absurdity of a rational universe without a rational cause. Yet Davies persists, in the hope that science itself will one day uncover that deeper layer required to explain it. Davies personally experienced a journey from a Christian upbringing to atheist scientist, finally to agnostic scientist in which the deeper questions arising from science keep eating at him.

Reviewed by Steven Ball, Professor of Physics, LeTourneau University, Longview, TX 75602.

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THE SCIENTIFIC SPIRIT OF AMERICAN HUMANISM by Stephen P. Weldon. Baltimore, MD: Johns Hopkins University Press, 2020. 285 pages. Hardcover; $49.95. ISBN: 9781421438580.

The Scientific Spirit of American Humanism by Stephen Weldon recounts with approval the rise of non-theistic, and even antitheistic, thought in modern science. At the outset, I will confess to being a biased reviewer (perhaps, even, an antireviewer). If I were to tell this story, I would lament, rather than celebrate, the seemingly antireligious stance lauded in this history. I must also confess to being an active participant in this history, both as an amateur student in the fundamentalist/modernist controversy in the Presbyterian churches and in my own active involvement in faith-science discussions among evangelicals in the American Scientific Affiliation (ASA). No historical account is objective—it will always reflect its author's perspective. This is true of this book and of this review.

Weldon tells the history episodically highlighting key people who contributed to this story. He begins in chapter 1, "Liberal Christianity and the Frontiers of American Belief," with Unitarians (theists/deists who reject the deity of Christ), liberal Protestants, and atheistic freethinkers. After a few chapters, he turns to a largely secular story dominated by philosophers rather than ministers. Chapter 12 presents charts that show how the 1933 Humanist Manifesto had 50% signatories who were liberal and Unitarian ministers, while the 1973 Humanist Manifesto II had only 21%. By the end of book, humanism becomes secular/atheistic humanism. Weldon describes humanism as "a view of the world that emphasizes human dignity, democracy as the ideal form of government, universal education, and scientific rationality" (p. 5). While not explicitly mentioned, but likely included in the phrase "scientific rationality," is atheism. The 1973 Humanist Manifest II begins with this theme in its opening article about religion:

> We find insufficient evidence for belief in the existence of a supernatural; it is either meaningless or irrelevant to the question of survival and fulfillment of the human race. As non-theists, we begin with humans not God, nature not deity.

Chapter 2, "The Birth of Religious Humanism," tells the early 1900s story of ministers John Dietrich, Curtis Reese, and philosopher Roy Wood Sellers, all who were or became Unitarians. "'God-talk' was no longer useful." Unitarianism ends up being a haven for religious humanists, even for those who have eliminated traditional religious language. These are the roots of today's secular humanism.

In many ways, this era is the other side of the religious history of America that this journal's readers may know. The ASA has roots in the more conservative and traditional end of American Protestantism. The old Princeton Presbyterians, Charles Hodge, A. A. Hodge, and B. B. Warfield, represent a strictly orthodox Christianity, but one open to the advances of modern science. One did not have to be theologically liberal to be proscience. The phenomenon of young-earth creationism is a relatively recent development. Conservative Protestants were not as opposed to conventional science as Weldon's treatment suggests.

The Humanist Manifesto (1933) is the subject of chapter 3, "Manifesto for an Age of Science." It was written by Unitarian Roy Wood Sellers and spearheaded by people associated with Meadville Theological School, a small Unitarian seminary, originally in Pennsylvania; after relocating, it had a close association with the University of Chicago. The Manifesto begins with the words, "The time has come for widespread recognition of the radical changes in religious beliefs throughout the modern world. The time is past for mere revision of traditional attitudes." The first affirmation is "Religious humanists regard the universe as self-existing and not created."

"Philosophers in the Pulpit" (chap. 4) highlights the University of Columbia philosophy department and John Dewey, in particular. Dewey was one of the more prominent signers of the Humanist Manifesto and a leading advocate of philosophical pragmatism. This chapter also tells the story of Felix Adler, also associated with Columbia, and the founder of Ethical Culture, an organization with nontheistic, Jewish roots.

"Humanists at War" (chap. 5) and "Scientists on the World Stage" (chap. 6) recount the increased secularization of humanism. Humanists in the 1940s increasingly struggled with the religious character of humanism. Should the category of religion be used at all? During this era, natural scientists, such as evolutionary biologist Julian Huxley and *Drosophila* geneticist Hermann Muller, rather than philosophers, led the most prominent forms of humanism. This humanism was increasingly secular, scientific, and even atheistic.

Weldon is not hesitant to expose the foibles of this movement. Chapter 7, "Eugenics and the Question of Race," traces how selective population control became part of the conversation. In addition to Huxley and Muller, Margaret Sanger is also part of this story. Philosopher Paul Kurtz makes his first appearance in this chapter and continues to be a significant player in the rest of the book. He was the editor of the Humanist Manifesto and used its pages to explore the question of race and IQ.

Chapter 8, entitled "Inside the Humanist Counterculture," describes a period dominated by questions of human sexuality and psychology. Weldon's use of the word "counterculture" is apt. In the 1960s, the feminist Patricia Robertson and lawyer/activist Tolbert McCarroll expressed the zeitgeist of the sexual revolution. The psychology of Carl Rogers, Erich Fromm, and Abraham Maslow moved humanism from a more objective/scientific focus to a more experiential one. They are representatives of the third force (or humanistic) school of psychology, in contrast to Freudian psychoanalysis or Skinnerian behaviorism. Although agreement was rare, by the end of the decade, under Paul Kurtz (influenced by B.F. Skinner), the public face of humanism returned to a more scientific leaning.

Chapter 9, "Skeptics in the Age of Aquarius," is one chapter where I found myself, as a traditional evangelical, to be in nearly complete agreement. This chapter describes how New Age beliefs, along with an ascending occultism, came under fire from the scientific humanists under the leadership of Paul Kurtz. Weldon even cites a *Christianity Today* article that makes common cause with the secular humanists in their resistance to the growing occultism of western culture. I found this chapter to be a useful critique of New Age thinking.

"The Fundamentalist Challenge" (chap. 10) and "Battling Creationism and Christian Pseudoscience" (chap. 11) recount the clash between secular evolutionists and fundamentalist creationists, especially regarding the public-school science curriculum and the teaching of evolution. Here the author clearly demonstrates his prosecularist/anti-fundamentalist inclinations. On a more personal note, the mention of Francis Schaeffer, R. J. Rushdoony, and Cornelius Van Til, strikes at my own history. While some elements of this conservative Presbyterianism were clearly anti-evolutionist, others in the conservative Reformed camp were open to the proscience (including evolutionary biology) views of Warfield and Hodge, even in the early days of anti-evolutionism among fundamentalists. While some in the ASA would count themselves among young-earth creationists or flood geologists, the majority are open to old-earth geology and even to evolutionary biology. The reaction of Weldon himself, and other critics of this era, seems more akin to a religious fundamentalism of its own—albeit a fundamentalism of naturalism. Fundamentalists are not the only ones engaging in a culture war. My own view is that old-earth geology, old universe (big bang) cosmology, and evolutionary biology should be taught as the mainstream scientific consensus even in private religious schools. But dissent and disagreement should be allowed among teachers and students alike. Sometimes it seems to me that these fundamentalist creationists and atheistic evolutionists are all more interested in indoctrination than education.

Embedded in chapter 10 is the history of the Humanist Manifesto II (coauthored by Paul Kurtz). It clearly espouses positions antithetical to traditional Christian orthodoxy, especially in the explicit anti-theistic and prosexual revolution statements. But it is striking to me how much agreement I can find with people who so strongly disagree with traditional Christian faith. This tells me two things: while fundamental religious differences may exist between people, there is something about being human in this world that brings Christians and non-Christians together on many very fundamental questions such as liberty, human dignity, friendship, and peaceful co-existence. Such values are not the unique provenance of humanists or Christians or other religious groups. The second thing is that we are much better at emphasizing differences and seeking to force others to conform to our way than we are at tolerating differences and persuading those who disagree.

The opening of chapter 12, "The Humanist Ethos of Science and Modern America," brought me once again to a personal reflection that is relevant in reviewing this book. My own love of the natural sciences can be traced to Sagan, Asimov, Clarke, Gould, Dawkins, and others who brought the wonder of science to the broader public. Without denying their a-religious, and even antireligious posture, it is noteworthy that the truths about the natural world are independent of who discovered them or communicates them. And they are wondrous whether or not you acknowledge the hand of God in creating them. The process of science works whether the world was created by God or is the result of properties of the universe that just are. It is interesting to me that a brief discussion of post-modernism appears in this chapter. Postmodernism's undermining of the objectivity of natural science leads one to wonder whether this undermines the whole book by hinting that a postmodernist perspective is the consistent nonreligious/atheist view. In contrast, the ASA's faith statement states: "We believe that in creating and preserving the universe God has endowed it with contingent order and intelligibility, the basis of scientific investigation." According to Christians, natural science is possible because creation is orderly and intelligible. Atheists and skeptics simply assert the world's orderliness and intelligibility.

Like myself, readers of this journal are likely to have a different perspective on the events traced in Weldon's book. Nevertheless, the history recounted here helps us to see why there is such a divide between science and those who continue to be influenced by more conservative religious views. As such, it is a worthwhile read and of interest to those who follow the science-faith literature.

Reviewed by Terry Gray, Instructor in Chemistry, Colorado State University, Fort Collins, CO 80523.

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SCIENCE UNDER FIRE: Challenges to Scientific Authority in Modern America by Andrew Jewett. Cambridge, MA: Harvard University Press, 2020. 356 pages. Hardcover; $41.00. ISBN: 9780674987913.

John William Draper and Andrew Dickson White's role in fueling popular ideas about conflict between the primarily natural sciences and religion has been often studied. It is now well known that their claims were erroneous, prejudice laden (in Draper's case against Roman Catholicism), and part of broader efforts to align science with a liberal and rationalized Christianity. In *Science under Fire*, Boston College historian Andrew

Jewett recounts a similarly important but lesser-known tale: twentieth-century criticism of the primarily human sciences as promoting politically charged, prejudice laden, and secular accounts of human nature.

Jewett is an intellectual historian who focuses on the interplay between the sciences and public life in the United States. *Science under Fire* follows up on his 2012 *Science, Democracy, and the American University*, which explored the role of science (or, more precisely, science-inspired thinking associated with the human sciences) as a shaper of American culture from the mid-nineteenth through the mid-twentieth century. As with that previous work, *Science under Fire* illustrates how science can be practiced as a form of culture building and leveraged for sociopolitical ends. While *Science, Democracy, and the American University* explored how various ideas about science came to displace the then-dominant Protestant understandings of morality in the late nineteenth century, *Science under Fire* considers how a variety of critics reacted to the growing influence of those sciences.

Throughout both historical periods, members of the public, politicians, and many social scientists did not view science as offering a neutral or unbiased account of the nature of humans and their behavior. Rather, they practiced, appropriated, and criticized various accounts in order to advance particular visions about how society should be organized. These visions were not primarily driven by scientific data but by philosophical precommitments, including some which led their proponents to deny the validity of the Protestant and humanist values which previously anchored American public life. So, *Science under Fire* addresses religious and politically conservative apprehension over "amoral" psychology and the teaching of evolution in schools. However, its story is much broader. The secular and religious liberals and conservatives, libertarians and socialists, humanities scholars and social scientists all at times lamented the dehumanizing effects of technology or worried that scientists were unduly influenced by selfish motives.

Science under Fire begins with a twenty-three-page summary of the book's main themes. This is followed by two chapters that explain the cultural developments which fostered apprehension about science's role in society. By the 1920s, some thinkers were calling on Americans to adopt "modern" scientific modes of thought, in part by dismissing religion as a source of objective values (chap. 1). Their efforts were resisted by humanities scholars, Catholics, and liberal Protestants, who focused on lambasting naturalist approaches in psychology (e.g., by Freud and John Watson) as pseudoscientific and offering classical or religious values as a bulwark against the excesses of capitalism and consumerism (chap. 2).

In the 1930s and 40s, these critiques were given new impetus as worries arose over social scientists' role in shaping Roosevelt's New Deal as well as mental associations between amoral science and Japanese and German totalitarianism (chap. 3). Post-World War II fears over science grew to encompass concerns about "amoral" scientists such as B.F. Skinner, Benjamin Spock, and others engaging in "social engineering" by training children to value social conformity at the expense of traditional religious or humanist moral guidance (chap. 4). The increasingly vehement religious opposition to scientists' attempts to address questions of morality was partly driven by opposition to "atheist" communism and featured a broad coalition of Protestant and Catholic critics decrying the effects of "scientism" (chap. 5).

There was also a postwar resurgence in interest in the humanities, as well as efforts by thinkers such as C.P. Snow, to position the social sciences as a humanist bridge between "literary" and "scientific" cultures (chap. 6). In the United States, Snow's call for greater prominence for the sciences was challenged by New Right conservatives, who regarded it as dangerously opening the door for liberal academic social scientists to portray their ideologically charged views as objectively scientific. Their efforts included supporting conservative social scientists' research, intervening in academic politics and research funding, and, somewhat justifiably, complaining about the persecution of conservative scholars (chap. 7).

Nevertheless, postwar criticism of scientism was couched in flexible enough terms to appeal to politically and theologically diverse thinkers associated with various institutes and literary endeavors (chap. 8), ultimately including many in the iconoclastic New Left counterculture of the 1960s and 70s (chap. 9). By that time, movements critical of science included religious opposition to evolution and psychology; neoconservative criticism of the "welfare state"; and feminist, Black, and indigenous critiques of science as a tool for justifying an oppressive status quo (chap. 10).

In the Reaganite era, science was targeted by pluralist, postfoundationalist, poststructuralist, and postmodern thinkers; religious conservative challenges to evolution and "secularism" in science; tighter budgets and a downgrading of blue-sky research; and worries over the implications of artificial intelligence and genetic engineering (chap. 11). After a short evaluative conclusion, sixty-two pages of endnotes help flesh out Jewett's argument.

Science under Fire helps illuminate how science and religion have interacted as culture-shaping forces in American public life. Readers will learn how debates that are *prima facie* about science and religion are really about values and cultural authority, and will discover the origins of some of the assumptions and strategic moves that shape popular science-faith discourse. They will also be invited to enlarge their repertoire of science-faith thinkers (e.g., John Dewey, Reinhold Niebuhr, B.F. Skinner) and topics (behaviorism, debates over Keynesian economics as a backdrop, and how science's value-free ideal was invented and leveraged).

Nevertheless, readers should be aware that Jewett's near-exclusive focus on sweeping intellectual tendencies and the social sciences (with occasional forays to reflect on genetic technology and the atomic bomb) means that *Science under Fire* is not an entirely balanced account of science, politics, and religion in America. Some chapters focus on major streams of thought to the point that the story of individual movements, thinkers, and their interactions with one another is lost. Fundamentalist and conservative evangelical reactions to scientism are treated relatively perfunctorily compared to liberal Christian responses (e.g., the Institute for Religion in an Age of Science is mentioned while the American Scientific Affiliation is not). A bias toward sociological explanations occasionally leads to a degree of mischaracterization. For example, Thomas Kuhn is mentioned only in connection with the 1960s counterculture, and the Vietnam-era Strategic Hamlet Program is characterized as an attempt to "make proper citizens out of Vietnamese peasants" rooted in modernization theory (p. 181), without mentioning it as a counterinsurgency strategy inspired by Britain's successful use of "New Villages" in the Malayan emergency. Finally, although most of the book is lucid, it is occasionally meandering, repetitive, and convoluted. This is particularly true for the introduction, which readers might consider skipping on the first read.

These criticisms are not meant to be dismissive. *Science under Fire* is a unique and uniquely important book. Those who are willing to mine its depths will be rewarded with a treasure trove of insight into the social and political factors that continue to shape conversations about science, technology, and faith in the United States today.

Reviewed by Stephen Contakes, Associate Professor of Chemistry, Westmont College, Santa Barbara, CA 93108.

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CREATING CONSPIRACY BELIEFS: How Our Thoughts Are Shaped by Dolores Albarracín et al. New York: Cambridge University Press, 2022. 308 pages. Paperback; $39.99. ISBN: 9781108965026.

Conspiracy thinking is a prominent topic of discussion in American life today—and Christians, with their concern for truth, should not only be informed about, but contributing to, this discussion. This includes awareness of how scholars in the neuro-psychological and social sciences are contributing to our understanding of the nature of conspiracy thinking.

This book investigates the causes of conspiracy thinking in the United States. Its authors draw their findings from existing social scientific literature on conspiracism, general social psychology research, and six empirical statistical studies conducted during the last two years of the Trump presidency (2019–2021): three cross-sectional online surveys, a longitudinal phone panel survey on "deep state" conspiracy claims, a "manipulation" of fear experiment on the alleged relationship between the COVID-19 virus and 5G technology, and a social media study of Twitter hashtags and "fear words."

This book shares many similarities with previous academic works on conspiracy thinking—for example, Hofstadter (1965), Pipes (1997), Robins and Post (1997), Sunstein and Vermeule (2008), Barkun (2013), and Uscinski and Parent (2014)—but distinguishes itself by relying extensively on recent polling data and statistics instead of interviews, case studies, newspaper op-eds, or conspiracist media. Indeed, the authors consciously dispute psychological works that scrutinize the personality traits and life experiences of conspiracy believers, and political science works that link conspiracy fears to power asymmetries. Such approaches, they contend, insufficiently explain the process through which conspiracy beliefs are spread. They argue, instead, that psychological and political factors are themselves shaped by a mixture of personal, media, and social media contacts.

Their central aim is thus to examine how patterns of media consumption shape conspiracy beliefs, habits that are themselves affected by one's pre-existing feelings of anxiety, which is herein defined as a nonspecific

> perception of threat [that] depends on relatively stable psychological motivations of *belief defense* [the desire to maintain a coherent set of beliefs], *belief accuracy* [the desire to maintain a realistic view of the world], and *social integration* [the desire for trust, status, and acceptance within a group], as well as sociopolitical factors and situational factors like communications and media exposure. (p. 163)

When these needs are not met, anxiety rises. But whereas desire for belief accuracy produces, on its own, an increase in critical discernment—and hence a decrease in false conspiracy beliefs—the combination of pre-existing anxiety (e.g., feelings of ostracism) with shared conspiracy narratives increases one's predisposition to believe conspiracy claims. When one's need for closure and community trumps their need for belief accuracy, new information will be interpreted in ways that justify their emotional state and existing beliefs. The emotional turmoil and social discomfort of anxious individuals make them more prone to accept conspiracist interpretations for troubling situations, drawing them into an alternative "media ecosystem."

Assent to conspiracy claims occurs when anxiety is assuaged by theories that offer plausible and unfalsifiable "proofs" of "hidden hand" driving events. Plausibility is achieved when a theory offers the believer historic similarity (similar plots occurred in the past), psychological similarity (the enemy's alleged motive is conceivable), and normative plausibility (other members of one's community share the same belief). The unfalsifiable nature of conspiracy claims lies in their assertion that proofs of a nefarious plot have been hidden or destroyed by the conspirators; such claims dovetail with the believer's existing distrust of authoritative sources of information. The repetition of conspiracist messages by like-minded others (friends, social networks, etc.), and by popular media (e.g., Fox News) reinforces these beliefs. The believer's wounded ego can further elicit schizotypy, paranoia, and narcissism, which serve as means of self-defence against debunkers and skeptics.

The influence of various media is proportional to time spent with, and trust placed in, these sources of information, along with the consumer's prior levels of neuroticism, suspiciousness, and impulsivity. Online media have an additional influence via their use of bots, individually tailored algorithms, and various forms of "information laundering" in reply threads and chatrooms. Heavy media consumption aligns the consumer's view of the world with the one shown in their preferred media.

The prime contribution of this book is its postulation that anxiety precedes conspiracy thinking (rather than the inverse), a psychological explanation for conspiracy belief that does not lead its authors to conclude, as others have, that conspiracism is inherently a form of neurosis. However, its heavy use of statistics, jargon, and unduly complicated flowcharts renders the text onerous, especially for those without statistical training. Given that this is meant to be the book's most important new input into the literature, it is also its greatest weakness.

Despite the great efforts made by its authors to produce a detailed empirical study of the effects of media on conspiracy beliefs, the book's conclusions are somewhat underwhelming as they echo the findings of many previous studies and offer few new insights into the topic. For instance, their claim that social interaction is the "proverbial elephant in the room" (pp. xiii, 205) is hardly convincing. The media consumption habits of conspiracy believers are a recurring theme throughout the literature, and none make the claim that conspiracy beliefs develop in an information vacuum. The book's conclusion that anxiety serves as an "intervening mechanism" (p. 87) between conspiracy claims and a person's needs for closure and social integration in not particularly revelatory either. That humans are social animals is an argument as old as Aristotle, and that conspiracy myths help insecure individuals improve their sense of social cohesion is at least as old as Karl Popper's "conspiracy theory of society."[1]

The book's statistical data also exhibits several flaws, leading its authors to wrongly conclude, as Hofstadter did in 1965, that the phenomenon of conspiracy thinking is essentially a product of conservative angst[2]—a claim that has been powerfully disproven by many of Hofstadter's critics. This may be due to the timeframe of the authors' research studies, which were conducted mostly during and after President Trump's first impeachment trial (in 2019–2020), which elicited a massive conservative media backlash. It could also be due to their failure to examine long-term patterns of conspiracy chatter, which would have shown (see Uscinski and Parent, 2014) that conspiracy ideation ebbs and flows along political lines over longer periods of time. Their data also contains some unrepresentative samples, namely, the overrepresentation of low-wage earners, the unemployed, and the highly educated, and the underrepresentation of working-class high school graduates and Hispanics (pp. 243–44).

One could surmise that such flaws are due to an extraordinary historical context (the Trump presidency and COVID-19 restrictions), but they are also likely attributable to the implicit political biases of current social psychological research, which, as Duarte et al. demonstrated,[3] is strongly skewed to the political left. This is made evident in the authors' clearly stated opinion that conservative media is the primary cause of conspiracy beliefs and related violence (pp. 224, 169–70) from which its audience—akin to cultists and terrorists—should be deprogrammed with "corrective alternatives" and ridicule (p. 215). This seems to contradict their primary claim that anxiety is the underlying cause (and not the product) of conspiracy beliefs, which should presumably be allayed with kinder methods than these. By identifying conspiracy theories as both a product of right-wing media and, simultaneously, as a "type of misinformation" (p. 11), the authors leave themselves open to the charge of circular reasoning. Indeed, their political bias is shown in their frequent use of contested progressive concepts and phrases such as "racialized," "Latinx," "pro-social behavior to reduce [one's] carbon footprint," and by connecting peaceable conservative media such as Focus on the Family to the use of gun violence by Edgar Maddison Welch in a Washington pizzeria (p. 219).

The small number of conspiracy theories on which the authors based their surveys is another example of skewed sampling. Most of these represent themes that cause far more anxiety to conservatives than liberals (for example, the "deep state," COVID-19 restrictions, illegal immigration, President Obama's birth certificate), while little attention is given to conspiracy theories that traditionally appeal to the political left (for example, JFK, 9/11, GMOs, "BigPharma," CIA malfeasance, Hurricane Katrina) or to progressives' fears about policing, systemic racism, abortion rights, or gender identity, making it all the more likely that their research subjects who displayed conspiracist thinking stood on the right side of the political fence.

Finally, the book spends too much time discussing tangentially pertinent psychological research (for example, the influence of music on pain and imitative suicide) and too little detailing the content and origins of the few conspiracy theories their research is based on (with the exception of the 2016 "Pizzagate" panic). This makes the book difficult for the layperson to follow, when it is compared to academic works such as those of Barkun[4] or Uscinski and Parent,[5] which are accessible to a nonspecialized audience. Few details are given, for instance, of the Tuskegee syphilis experiments, which are mentioned frequently but never in detail as an example of a genuine government conspiracy (rather than a significant but nonsinister breach of medical ethics). In the end, the book complements the rest of the literature but falls short of providing significant new insights, and is unlikely to elicit interest among laypersons, especially those who hold conspiracy beliefs.

Notes

[1] Karl R. Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* (New York: Routledge & Kegan Paul, 1963).

[2] Richard Hofstadter, *The Paranoid Style in American Politics, And Other Essays* (New York: Knopf, 1965).

[3] José L. Duarte et al., "Political Diversity Will Improve Social Psychological Science," *Behavioral and Brain Sciences* 38 (2015): e130, https://doi.org/10.1017/S0140525X14000430.

[4] Michael Barkun, *A Culture of Conspiracy: Apocalyptic Visions in Contemporary America* (Berkeley, CA: University of California Press, 2013).

[5] Joseph E. Uscinski and Joseph M. Parent, *American Conspiracy Theories* (Oxford, UK: Oxford University Press, 2014).

Reviewed by Michel Jacques Gagné, Champlain College, St. Lambert, QC J4P 3P2. Michel is a historian and author of Thinking Critically about the Kennedy Assassination: Debunking the Myths and Conspiracy Theories *(Routledge, 2022).*

TECHNOLOGY

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12 BYTES: How We Got Here, Where We Might Go Next by Jeanette Winterson. New York: Grove Press, 2021. 336 pages. Hardcover; $27.00. ISBN: 9780802159250.

Throughout a set of twelve essays, Jeanette Winterson explores computing through history, culture, and philosophy. She focuses on the values and stories built into technology. She begins with a section titled "The Past" which refers to Ada Lovelace and Mary Shelley, explaining the origins of computing. The section that follows is about "superpowers" and computing. This second section is the most philosophical of the four parts of the book, navigating relationships between current and past philosophies, and explaining how technology influences the way people will think about the world. The third section is called "Sex and Other Stories," which discusses sex and gender and sexism. The concluding section of the book titled "The Future" comprises three concluding essays.

Though I certainly did not agree with all of Winterson's claims, the book felt like one side of a respectful dialogue rather than imposing a singular view of the world. She does not directly state her current religious beliefs, but shares that she grew up as a Christian. Although her current view of the Bible is not clearly stated, she brings it into the discussion frequently and uses a respectful tone to discuss religion. For leaders in faith and technology, *12 Bytes* provides thoughtful insights on many different aspects of the assumptions, history, and future of technology and how it shapes society.

Chapter 4: "Gnostic Know-How" is a discussion of religions, AI, and the religion of AI. Winterson compares the faith that many people place in technology to the Christian hope of the resurrection. She is far more critical of the Church of Big Tech than she is of any traditional religion. She very clearly states that faith placed in AI is misplaced, saying, "We could create a god (AI) in our own image—warlike, needy, controlling. It isn't a good idea" (p. 113).

In addition to religion, women are a recurring theme of the book. She starts by introducing the author Mary Shelley and the computing pioneer Ada Lovelace, who are mentioned in later essays as well. In other essays she focuses on women as a group, with trademark sass: "Why wouldn't we want an able, considerate, smart helper who is always available, and mostly free? That used to be called a wife. But then feminism spoiled the party" (p. 78). Multiple essays focus primarily on women, as in "Hot for a Bot," which discusses sex bots as encouraging the objectification of women by building actual objects as replacements. She also discusses women and discrimination in STEM fields in the essay "The Future Isn't Female."

Another significant theme is the economy. Starting with the history of workers' rights and the industrial revolution, she discusses the future of our economy, considering the rapidly changing role of technology. She expresses many concerns about Big Tech and the economy. At one point she writes, "Did you imagine you owned your face? Owning is so last century. This is a sharing economy. We share. Big Tech collects" (p. 61). She suggests that describing the new economy as the "sharing economy" is ironic since sharing is not a financial transaction, but we are moving in the direction of increased transactions. Using history and descriptions of present-day business practices, all the way through to Big Tech's COVID-19 profits, she argues that companies should be forced to be more responsible. In envisioning a new economy, she has as many questions as answers, but she lays out principles that may guide reformation.

I have read many books about AI, but I have not found another book that engages with modern AI and technology alongside philosophy in the way that *12 Bytes* does. It respectfully and thoughtfully considers the relationships between religion, philosophy, and technology; I would recommend it for those interested in exploring these connections. The primary question posed by the book is not one about the direction of technology, but rather it asks, *Where does humanity go from here?*

Reviewed by Elizabeth Koning, graduate student in the Department of Computer Science, University of Illinois at Urbana-Champaign, Urbana, IL 61801.

THEOLOGY

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THE LOGIC OF THE BODY: Retrieving Theological Psychology by Matthew A. LaPine. Bellingham, WA: Lexham Press, 2020. 363 pages. Paperback; $26.99. ISBN: 9781683594253.

In this book, the author seeks a theological and biblical response to contemporary neuropsychology, stemming from a need for more effective pastoral care and faith-based counseling.[1] LaPine seeks to address a perceived gap between a theological understanding of human agency, and current neuroscience and psychology that leaves pastors and faith-based counselors under-equipped to meet the real mental health and counseling needs they encounter. Although the ultimate purpose is to provide much-needed support for applied pastoral or counseling care, the book is written as a theological reflection to inform a practitioner's theology of practice.

Anchored in the Reformed tradition, LaPine provides an overview of pre-Reformation and Reformed theological history in relation to the historical evolution of the field of psychology. Given the scope of these fields, the task of a thorough theology of psychology would take volumes. As a classical Reformed theologian, LaPine uses almost four hundred pages to narrow down the conversation to the theological basis for emotions and neurobiology, specifically through the relationship between the body and mind or spirit. The relationship of will, emotion, biology, spirit, and soul forms the core pieces of this book, around which the chapters revolve.

In his introduction, LaPine presents his "straw man" conflict: the rich spiritual position of faith, against "the modern, reductionist tendency to explain our emotional life exclusively in terms of brain function" (p. xix). At the same time as he points to a distance between (secular) psychology and theology, LaPine also highlights two opposing streams of theology: one that makes the spirit or the spiritual superior to the body or biology, and one that does not. LaPine shows that neuropsychology values the body and integrates it with the biological facts of emotion and volition (will), whereas mainstream Reformed theology does not, valuing the spiritual in primacy. LaPine notes that this dualism leaves Reformed counselors and pastors without a theology for a more holistic account of human psychology. He states that the Reformed mainstream shows a "lack of psychological nuance" (p. 4), leading to "emotional volunteerism," or the position that people have moral culpability for emotions. In other words, an experience like anxiety becomes a moral sin, to be addressed by prescriptive spiritual re-orientation. The risk here is either a moralistic approach to mental health and human pain, or else abandonment of theology in an attempt to align counseling to contemporary psychological science in practice. Both these options undercut holistic care by undervaluing or ignoring either the body or spirit respectively.

LaPine argues, rightly in my view, that "sufferers simply cannot repent and believe their way out of anxiety" (p. 36); this begs a need for a more robust and nuanced theology, particularly given the current scientific evidence for the neurobiology of emotion. LaPine describes what he calls a "tiered psychology," for which he finds a better grounding in Thomistic theology. The first three chapters of the book are dedicated to a history of theological attempts to account for psychology, in dialogue with the medical scientific understandings of those times. Chapter four explores the theology of Calvin, covering roots in theology for the current Reformed mainstream demotion of the body, as well as nuances of interpretation that LaPine sees as evidence of threads of Reformed theology that instead carried on the earlier holism. In chapter five, he continues the history of Reformed theology in respect of the debate of the seat of the soul, the place of the will, and the question of the influence of the body's impulses on moral or cognitive control.

The overall picture in this historical review is of an emerging dualism and hierarchy in which reason is morally obligated to control the inherently sinful impulses of the "flesh." Chapters six to nine alternate between explorations of natural law, science, and biblical reference to show that a more biblical and authentic (to Calvinism) theology comes closer to Thomas Aquinas's views, as well as to contemporary neuroscience (accepting psycho-emotional struggle as a human phenomenon without inherent moral culpability).

LaPine's Reformed-style writing (dense discussion with heavy footnotes, discussion spiraling around the same theme in different ways for several hundred pages) is admirable for its integrity. He has done his homework on both theological history and many aspects of psychology and neuroscience. As well, he is addressing very important issues in the context of a history of inadequacy in faith-based responses to mental health and counseling across Christian denominations. LaPine's work fills a critical gap at a timely moment in history, when the church needs a better response to human needs, and practitioners need tools for a more robust theology of practice.

At the same time, the author's deep dives into highly technical theological language and footnoted minutiae make a commitment to reading the whole book difficult for anyone who is unfamiliar or uncomfortable with the dense writing style of Reformed theology. There are also inconsistencies in the central arguments. For example, LaPine's opening section pits faith approaches against biological materialism as the current mainstream view, but draws on nonmaterialist views and resources in other areas without acknowledging that materialism is only one among the current views, many of which are more inclusive of spirituality. Materialist determinism is more confined to the medical model, which governs only a fraction of the practice of counseling psychology, most of which has embraced either existential, psychodynamic, or humanistic approaches.

LaPine does an interesting job of trying to pry Reformed theology from a particular tradition of Reformed thought, showing this particular tradition to be just one among many options consistent with core Reformed commitments. The book, however, can't quite get unstuck from its initial strategy of attaching its arguments to highly specific and selective theological and psychological parameters. A therapist or pastor wishing to better anchor their counseling approach in their theology might do well to select from the range of neuropsychotherapeutic theories and approaches in the dialogue between their theology and psychology, rather than start with defining the task as a conversation with materialist determinism.

The theological treatment sometimes loses "the forest for the trees." The discussion of interpretive nuances in Jesus's embodied experience of anguish in Matthew 26 (chap. 7) is a nugget. LaPine's arguments ground the issues well in scripture and in the heart of the Christian faith (the life and death of Jesus), as well as in its roots of Jewish understanding. Nonetheless, the reader loses track of the key salient points in the main theology chapters that lay out the "chess pieces" of the debate—Aquinas (chap. 2), Calvin (chap. 4), Reformed tradition (chaps. 7–8)—after slogging through the tangents and lengthy footnotes. Shortening the book by 200 pages would have been a worthwhile editorial exercise and would also have made the book comprehensible to more readers.

LaPine's neuropsychology discussion sometimes gives an impression of romping loosely through a broad field that never shakes the overgeneralized straw-man role set at the beginning, despite some interesting and pertinent references (such as Panksepp's emotional systems). It is difficult to see the precise connection between the theology and contemporary psychology, despite the enduring relevance of the central debate about moral choice, spirituality, and emotional health. Nevertheless, professionals with psychology training will find interesting points and connections. LaPine's book is a worthwhile exercise in wrestling with one's beliefs about the interactions between body, mind, and soul, and with the place of human agency in mental health and moral life. For this, the book provokes a discussion that is much needed. The book is a worthwhile resource for any faith-based Christian (any denomination) student of counseling or chaplaincy, or for clergy or divinity students who want to take their responsibility for counseling and pastoral care seriously. The cost of the book is very reasonable, and well worth it for the segments a reader may find most useful. As well, the questions addressed (relationship of spirit/soul and body, moral choice vs. mental health) are central to the task of counseling. The church is long overdue for supporting practitioners toward a theology of practice in counseling psychology that integrates current science.

Generally, I give the book a thumb's up. I recommend it for therapists, though those who haven't read theology in a while, will find it hard slogging. I also recommend it for counseling and psychology training in faith-based institutions because LaPine addresses many of the core issues and difficult questions of agency and moral responsibility. The structure of the book could provide a nice framework for a course on topics such as the history of "theology of psychology," development of a theology of practice, or theories of change in pastoral counseling. Readers, however, do need to supplement the contemporary psychology references with further reading for a first-hand understanding of the nuances of the field, rather than relying on LaPine's brief and oversimplified summaries.

Note

[1] This book is available through the ASA Virtual Bookstore at: https://convention.christianbook.com/Christian/Books/easy_find?Ntt=THE+LOGIC+OF+THE+BODY%3A+Retrieving+Theological+Psychology&N=0&Ntk=keywords&action=Search&Ne=0&event=ESRCG&nav_search=1&cms=1&ps_exit=RETURN%7Clegacy&ps_domain=convention.

Reviewed by Heather Sansom, Registered Psychotherapist in private practice, and Professor, Cambrian College, Sudbury, ON P3A 3V8.

Letters

The Data of Gender Dysphoria

There was so much said, and there was so much not said, in "An Attempt to Understand the Biology of Gender and Gender Dysphoria: A Christian Approach" (*PSCF* 74, no. 3 [2022]: 130–48) by Tony Jelsma.

The crucial claim, "Mental health usually improves after transition, particularly over time" cites one study.[1] Its conclusion was overturned.[2] After receiving publicity,[3] letters to the editor raised concerns, including its omission of suicides. Upon reanalysis, as Richard Bränström and John Pachankis' study had also found for hormones,[4] surgery's impact was not statistically significant.[5]

Correcting only one data error, the article of the study was reposted. Clicking "View Correction," top left, finds the correction. It calls the conclusion, "too strong."[6] To hunt down exactly what "too strong" means, click "Archive," "2020," "August," scroll to "Letters to the Editor" to click and read the editor's comment, the seven letters, and the authors' response—especially table 1.[7]

Today, this nonlongitudinal study still suggests it found a "longitudinal association between gender-affirming surgery and reduced likelihood of mental health treatment"[8]—while the truth—that the study's design "is incapable of establishing a causal effect of gender-affirming care on mental health treatment utilization"[9]—remains fourteen clicks away. So, "too strong" means "wrong"—"*so* wrong," that it's meme-worthy: Did you know a perpetual motion machine solved the mystery of dark matter? Oops: That statement is "too strong."

Welcome to the world of transgender science. Commonplace are "small studies with cross-sectional designs, nonprobability samples, and self-reported treatment exposures and mental health outcomes."[10] Jelsma's reference (p. 136) reporting high satisfaction with genital surgery, used a nonrandomized sample of 71 people. The reference (p. 137), that reported the regret rate is 1%, included studies with short follow-ups. Jelsma noted WPATH (World Professional Association of Transgender Health) standards. If WPATH doesn't meet standards for evidence-based medicine[11] and for conflicts of interest consistent with issuing "Standards of Care,"[12] why follow them?

I'm not saying Jelsma's research is poor. I'm saying the evidence is poor. Statistics are not science. Jelsma attempted a challenging, controversial topic, adding insights about body perception, and importantly, raised good questions.

By contrast, despite highly uncertain evidence, gender activists, certain they are right, push "affirmation,"[13] herding people—like cash cows—onto the WPATH ("WrongPATH") toward sterilization. Their claim that experimental puberty blockers are reversible is "increasingly implausible."[14]

- If a boy bullied by boys, who begins to identify with girls, is better supported by solving his root problems than by "affirmation" toward castration,[15] why denounce it as "conversion therapy"?
- If the unprecedented spike in gender dysphoria among adolescent girlfriends is from influencers like social media,[16] how will double mastectomies solve it? "Affirmation" can be a Pied Piper.

Activists' "When-the-only-tool-is-a-hammer-every-problem-looks-like-a-nail" ideology first cuts off people's options, then cuts off their organs. People are being hammered. The number is unknown.

One part of a Christian response, is to seek and speak truth. Healthy sex organs, better futures, and even lives are being sacrificed on the altar of gender ideology. And that statement is not "too strong."

Notes

[1] Richard Bränström and John Pachankis, "Reduction in Mental Health Treatment Utilization among Transgender Individuals after Gender-Affirming Surgeries: A Total Population Study," *American Journal of Psychiatry* 177, no. 8 (2020): 727–34, http://dx.doi.org/10.1176/appi.ajp.2019.19010080.

[2] "Correction to Gender-Affirming Surgery and Use of Mental Health Services," *Medscape* (October 13, 2019), https://www.medscape.com/viewarticle/919822. *Medscape* removed their news article about the study in note 1 above after the *American Journal of Psychiatry* issued a correction invalidating the results.

[3] "Correction of a Key Study: No Evidence of 'Gender-Affirming' Surgeries Improving Mental Health," *Society for Evidence Based Gender Medicine* (August 30, 2020): Table 1. Table 1 is found under the heading, "Original Study by Bränström and Pachankis (2019)" and shown by clicking "Click here for more," https://segm.org/ajp_correction_2020.