Book Reviews

affirmation of the "religious tendency of the sciences" was all the more important in an era marked by a growing separation of science from theology.

Chapter 7 provides an interesting examination of how the authors of the Bridgewaters constructed an image of the Christian "man of science" in an era when many scientific practitioners wanted to establish a new identity of the man of science, in direct opposition to the clerical gentlemen of science that the authors represented. As Steven Shapin has pointed out, in early modern culture the "man of science" was heterogeneous in that it attached to preexisting roles. A number of key figures spent their whole lives working within religious institutions or sustained by clerical positions, such as Nicholaus Copernicus, Marin Mersenne, and Pierre Gassendi. The argument that God had written two books by which his existence, attributes, and intentions might be known was foundational for "natural theology" to such English clerics such as John Ray, Stephen Hales, Gilbert White, and William Paley. The naturalistparson, Shapin contended, belonged to the century's inventory of recognized characters, and the scientific portion of his activities was understood to flow from some version of what it was to be a minister.

But this "priestly" role is seen almost concurrently in other key figures who spent much of their careers as amanuenses, clerks, tutors, or domestic servants to the gentry and aristocracy. With the advent of the eighteenth century, we witness a vast expansion in the numbers of scientifically trained people employed as civic experts in commerce, the military, and government. The man of science as godly naturalist and moral philosopher buckled under the emerging identity of the valued civic expert. While professorial and medical roles included the "pious naturalist" and, more specifically, parsonnaturalist, especially among Protestants, there was a growing perception by the beginning of the nineteenth century that men of science were objects of "religious suspicion" (p. 375). Thus the authors of the Bridgewaters strategically reemphasized "the vision of the man of science as pious, patient, and humble" (p. 390), "embedded within Christian orthodoxy and as inculcating Christian habits of mind" (p. 429).

Chapter 8 examines how the *Bridgewaters* influenced the scientific practices of notable readers such as Charles Babbage, Charles Darwin, Robert Chambers, Richard Owens, and William Carpenter. Topham illustrates how the *Bridgewaters* functioned as a foil, enabling them to negotiate between arguments advocating for intelligent design and those rooted in empirical scientific observation. The irascible Babbage, for instance, who published his own unauthorized *Ninth Bridgewater*

Treatise, appreciated the design arguments presented in the series, but offered a radically different "vision of God's agency" (p. 436) which amounted to little more than deism. Darwin, moreover, included an epigraph from Whewell's *Bridgewater* at the start of his *Origins of Species*, but the two ultimately disagreed on the mechanism of evolution.

In his conclusion, Topham returns to the Bridgewaters as promoting a "theistic science" serving "to assure a generation that the rapidly changing disciplinary sciences ... would feed rather than undermine Christian faith" (p. 471). They were a "godsend to the sciences," he writes, convincing the public that the progress of science was not inimical to Christianity (p. 473). At the same time, the theological meaning of the Bridgewaters was "somewhat ill defined," in part since most authors came from strikingly different theological orientations (p. 474). Topham concludes, as I did in my research on the liberal Christians John W. Draper and Andrew D. White, who are often labeled "co-founders" of the "conflict thesis," that science and religion are fundamentally at war. While Draper and White believed that their liberal theologies offered a reconciliation of science and faith, secularists, free-thinkers, and atheists used their narratives as weapons against all religious traditions.

Similarly, Topham notes how the *Bridgewaters* led many radical thinkers, such as George Holyoake, to see theistic science as "hopelessly outmoded" (p. 477), hollow, and ultimately constraining science (p. 478). There seems to be a lesson here that, for whatever reason, today's theologians and Christian men and women of science keep ignoring.

Reviewed by James C. Ungureanu, PhD, Carthage College, Kenosha, WI 53140.

NEUROSCIENCE

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NEUROETHICS: Agency in the Age of Brain Science by Joshua May. New York: Oxford University Press, 2023. 340 pages. Hardcover; \$110.00. ISBN: 9780197648087. Paperback; \$29.95. ISBN: 9780197648094.

Neuroethics, "the study of moral issues that are either raised or answered by neuroscience" (p. 4), is a relatively young field, whose origins are generally traced to the early 2000s. Despite its rapid growth since then, it remains unfamiliar to many, and over the years, numerous introductions and overviews have been written to make it more familiar. Joshua May's new book, the latest in this line, is described as an "opinionated introduction" (p. 9). It has grown out of the author's undergraduate course in neuroethics and is written partly

Book Reviews

with students in mind. However, he aims to "[challenge] the distinction between a research monograph and a textbook" (p. xvi), not only introducing a representative range of neuroethical topics, but also contributing to the debates.

May follows Adina Roskies, one of the field's founders, in distinguishing two main branches of neuroethics: the more practically focused "ethics of neuroscience" and the more theoretical "neuroscience of ethics." He emphasizes, though, how "intertwined" (p. 6) these branches are. The design of the book reflects this: each of the four main parts consists of a pair of chapters on related topics, one more theoretical and one more practical in focus.

Before we reach these, a single introductory chapter is designated as Part I. This does a good job of defining and introducing the field, as well as summarizing the book and announcing May's overall approach and conclusions. In addition, the chapter offers appendices with overviews of philosophy and neuroscience for readers unfamiliar with these disciplines. To put it mildly, this is an ambitious thing to attempt in a few pages of an opening chapter, but May succeeds in offering lucid and accessible accounts.

In the first main part, "Autonomy" (Part II), the more theoretically focused chapter (chap. 2) is on free will, while the more practically focused (chap. 3) is entitled "Manipulating Brains." The former examines three threats that neuroscience might pose to the idea that humans have free will: determinism, physicalism, and epiphenomenalism (the last implying that our experience of conscious will is illusory). May argues that none of these rules out free will, but they do suggest that we are less free than we often think. Chapter 3 then explores ethical concerns about manipulating brain activity for therapeutic purposes, concluding that such interventions are legitimate, but a cautious approach to balancing risks and benefits is needed.

Part III is entitled "Care" (perhaps an odd title for a pair of chapters largely concerned with agency and responsibility). Chapter 4 focuses on mental disorders, asking "whether having a mental illness ... categorically exculpate[s] one for inappropriate behavior" (p. 116). May's answer is that a "nuanced" view is required, in which we cannot generalize about the effects of mental disorder on agency and responsibility but must judge on a case-by-case basis. To my mind, while I generally agree with the conclusion, this chapter is less satisfying than much of the book. It is built on a contrast between "naïve" and "nuanced" views of the implications of psychopathology for responsibility, but the former seems

something of a straw man, as May himself comes close to acknowledging in the conclusion. One section of the argument, claiming that some psychopathologies enhance agency, I find rather unconvincing. And there are a few instances of careless expression, as when physical injury is categorized as a non-pathological effect on agency (p. 115, table 4.2). Chapter 5 continues in similar vein with a discussion of addiction, critically examining the "brain disease model" and arguing that conceptualizing addiction as a disorder (as distinct from a disease) does not imply complete loss of agency, responsibility, or accountability.

Part IV turns to the neuroscience of morality, with one chapter examining the neuroscience of moral judgment and another assessing the legitimacy of moral enhancement. The first is focused on the relationship and balance between reason and emotion in the making of moral judgments. It includes a well-judged critical account of Joshua Greene's high-profile but controversial brainimaging studies of moral cognition. This is followed in chapter 7 by an ethical evaluation of moral bioenhancement: the project to improve ourselves morally by the use of neurotechnologies such as psychoactive drugs or electrical brain stimulation. May develops a "presumptive case" (p. 175) in favor of this project and rejects a series of objections to it.

The final main part is entitled "Justice." Chapter 8, "Motivated Reasoning," begins with neuroscientific perspectives on self-deception, cognitive bias, and the like, then moves into a discussion of bias, questionable practice, and misconduct in science. While acknowledging the challenges-including those facing neuroscience, in particular - May takes an optimistic view of the capacity of scientific communities to produce genuine knowledge. This optimism feeds into the next chapter on brain reading, the use of functional neuroimaging to gain information about subjects' mental activity, in which it takes two almost opposite forms. In criminal justice, May concludes that for all its limitations, brain reading can be useful in the courts. By contrast, he believes that it is unlikely to be effective enough in neuromarketing to seriously threaten consumers' privacy or autonomy; other technologies such as big data pose greater threats. While May takes concerns about brain reading seriously, I can't help wondering if his general aversion to alarmism tends in this chapter toward overoptimism. But it would take a longer discussion to settle that question.

May's overall argument, spelled out in the concluding chapter, is for a "nuanced neuroethics" that avoids alarmism, takes evidence and complexity seriously, recognizes the alikeness of neurotypical and neurodiverse

Book Reviews

people, and engages both neuroscience and philosophy carefully. The book is beautifully written, communicating complex content and ideas with admirable clarity. In general, I find it persuasively argued, with a few caveats of the sort indicated earlier. The structure of the book is effective in integrating the "neuroscience of ethics" with the "ethics of neuroscience." Another valuable design feature is that each chapter begins and ends with a real-life case study, effectively keeping the book's complex discussions grounded in concrete realities. However, most of the case studies are drawn from the world of criminal justice, which could give a rather skewed impression of the areas of human life on which neuroethics has a bearing.

I would certainly recommend May's book to readers of this journal. While some of the content is complex and challenging, the clarity of presentation should make it accessible to advanced students. It would be a valuable text for an upper-level undergraduate or graduate class in neuroethics, as well as an excellent introduction for anyone prepared to work through some complex ideas and arguments. If I use it for my own classes, though, I shall need to supplement it, because one thing it does not address at all is religious and theological perspectives. This is not to fault May for not having written a different book: as a philosopher also trained in neuroscience, he brings these two disciplines together very adeptly. In this respect, the book also faithfully reflects neuroethics as a field, often a highly secular one in which religious and theological voices are not much in evidence. To my mind, there is work to be done to challenge that secularity and explore what difference a theological engagement with this field might make. But that is my agenda, not May's.

Reviewed by Neil Messer, Professor of Theological Bioethics, Baylor University, Waco, TX 76798.

Psychology

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THE PERSON IN PSYCHOLOGY AND CHRISTIAN-ITY: A Faith-Based Critique of Five Theories of Social Development by Marjorie Lindner Gunnoe. Downers Grove, IL: IVP Academic, 2022. 244 pages. Paperback; \$30.00. ISBN: 9780830828722.

As a teacher of counseling psychology in a faithbased (Christian) tertiary institution, Marjorie Lindner Gunnoe responds to the challenge facing her students to engage theologically with contemporary psychological science. Her goal is to facilitate a bridge between the (largely secular) theories that dominate the field of counseling practice and the Christian faith of psychology practitioners and educators. To this end, Lindner Gunnoe develops what she sees as a trans-confessional (broad, not framed within a particular Christian theological tradition—though still largely Protestant) theological position about human ontology, motivation, and behavior, applying it to five key theories in contemporary psychology.

Linder Gunnoe's "faith-based working model" (p. 2) presents a Christian stance along four dimensions: the essence of human life; human purpose; moral-ethical tendency; and agency and accountability. Lindner Gunnoe does acknowledge her own location in the Reformed tradition but references widely while eschewing any attempt to anchor her theology in that tradition. Most of the book is devoted to comparing the four dimensions of this faith lens to the theories and work of five twentieth-century shapers of contemporary psychology: Erik Erikson and his lifespan stages; John Bowlby and Mary Ainsworth's attachment theory; B.F. Skinner's radical behaviorism; Albert Bandura's social learning theory; and evolutionary psychology broadly. For each theory, she identifies the way in which the questions posed by the four dimensions are answered (or not), asking how and if they are compatible with the faith-based position articulated at the beginning.

While the book is academic, written by an academic for academic teaching contexts, it is academic 'light' in reference density, using more accessible language suitable for practical theology and knowledge mobilization in the field. Lindner Gunnoe's attempt to thoroughly understand and represent nuances in the writings of the psychology founders is appreciated. With each theory, she tries to present a balanced view, moving past the reductionist (and atheist) emphasis of the theories that is commonly presented in (secular) textbooks, by digging into a variety of primary and secondary sources. The book is thought-provoking, insightful, and interesting both from the standpoint of faith in practice, and from the field of psychology.

Making no claims to be a theologian, Linder Gunnoe offers reflections on the "temporal characteristics of personhood ... physical and psychological features manifest in our relationships with other humans and the rest of creation" (p. 5). Rather than approach her reflection from the traditional theological categories (e.g., ontology, teleology), she identifies the four key aspects of humanity that are addressed by biblical reference, and which pertain most directly to the field of psychological intervention (essence, purpose, morality/ethics, and agency/accountability).