RST 39.1 (2020): 135–137 *Religious Studies and Theology* (print) ISSN 0829-2922
https://doi.org/10.1558/rsth.40975 *Religious Studies and Theology* (online) ISSN 1747-5414

Science Without God? Rethinking the History of Scientific Naturalism, edited by Peter Harrison and Jon H. Roberts. Oxford University Press, 2019. xv + 263 pp. $99 ISBN: 978-0-19-883458-8

Reviewed by Travis Dumsday, Concordia University of Edmonton, Travis.Dumsday@concordia.ab.ca

This impressive new anthology consists of thirteen original essays plus a general introduction by one of the co-editors (Harrison). The latter, rather than summarizing the claims of each individual entry, instead sets the tone for the volume as a whole by laying out its overarching themes and aims. Harrison defines "scientific naturalism" disjunctively, as involving either a commitment to methodological naturalism or metaphysical naturalism or both. He rightly notes that the precise definitions of each disjunct are contested, as is their relationship; particularly in dispute is whether the methodological variety lends support (or even entails) the metaphysical. Also disputed is their significance for the history of science, and it is with this issue that the essays of the volume are primarily concerned. A popular narrative: naturalism played a key role in the development of Greco-Roman science, then declined with the benighted miracle-obsessed mediaeval scholastics, and re-emerged along with (while also contributing causally to) the scientific revolution. Harrison writes that "this is a story about the connection between naturalism and human progress – one that not only attributes the success of the sciences to their naturalistic assumptions, but which also regards commitment to the supernatural as inimical to scientific progress. A number of the essays in this volume explore this narrative and offer challenges to it" (6).

That is certainly the case with Daryn Lehoux's entry on the Greco-Roman world. He argues that, with the exception of the materialist Epicureans, there was no sharp split between a broadly religious worldview on the one hand, and early attempts to understand nature by way of empirical observation and the positing of physical causes for physical events. Across the other major philosophical schools it was generally accepted that natural regularities were indeed real and reliable even though they found their ultimate ground in divinities. Lehoux also makes the point that while some modern historians have imposed an anachronistic religion vs. naturalism divide onto the classical world, on the grounds that belief in capricious gods would surely undermine the reliability of natural regularities, in fact it was the Epicureans whose doctrine of chance (the occasional random swerves of atomic motion) really put that reliability in danger.

Michael Shank's piece on mediaeval science likewise challenges the popular narrative, this time by showing that a version of methodological naturalism was commonly accepted by both philosophers and theologians up through the fifteenth century. While focusing mostly on Christian scholars, Shank also marshals evidence from the work of rabbi Levi ben Gerson (d. 1344).

Co-editor Peter Harrison contributes a fine entry on the early modern period; he argues that neither methodological nor metaphysical naturalism played any significant role in the two key natural philosophies of the period: Cartesianism and Newtonianism. Claims about God are crucial for both of their systems, though in very different ways, with Descartes employing God as a necessary *presupposition* for scientific knowledge and Newton introducing God as a *conclusion* of careful empirical study.

The story of Newtonianism is carried forward by J. B. Shank. He discusses how Newton's system was reshaped towards (metaphysical) naturalist ends by some of his eighteenth century successors; that contributed to an eventual pairing of atheism and science, which would have left its founder aghast. Keeping the focus on physics, Matthew Stanley's chapter makes the case that although nineteenth century French physics was largely tied to both methodological *and* metaphysical naturalism, only the former was widely upheld by British physicists. Up through the end of the Victorian era most of them retained a firm commitment to the idea that God was the ultimate foundation of natural laws. Stanley also takes the story briefly into twentieth century physics and its sometimes surprising relationships with naturalism (he mentions for instance the keen interest in Taoism and parapsychology taken by some of the key figures behind the development of quantum cryptography).

John Hedley Brooke examines the varied and ambivalent relationship between theology and chemistry from the middle ages through the twentieth century, observing how chemical findings were invoked in diverse ways by both opponents and proponents of metaphysical naturalism. Michael Ruse looks at biology, focusing on the role of methodological naturalism in the rise of evolutionary theory.

The next two entries take up the history of psychology. Michelle Pfeffer reminds us that materialist ontologies of the human person are not solely the purview of metaphysical naturalism. She notes that dozens of British Christian scholars in the seventeenth and eighteenth centuries wrote in defence of the bodily nature of the human soul. For the most part they were motivated not by advances in science or medicine but by new minority Protestant readings of scripture, according to which the spiritual understanding of the soul was a Greco-pagan misreading of Hebraic

materialism. In their eyes, dethrone the immaterial soul and with it would go purgatory and popery. Jon H. Roberts' chapter is more wide-ranging; he provides an overview of the relationship between psychology and theology over the past four hundred years, though he spends most of his time on the nineteenth century, which saw the emergence of psychology as an autonomous academic discipline.

Nicolaas Rupke covers the links between theology and modern geology, initially taking as his case study Alexander von Humboldt's 1845 popular work *Kosmos*, and the international reaction to it. Humboldt's approach was novel to the extent that he provided an overview of geology and astronomy with nary a reference to God, opting for methodological naturalism. Geology would become a key tool of both Christians and atheists in their debates over metaphysical naturalism and the proper reading of Genesis, and Rupke draws several connections between developments in this science and in the then-emerging field of higher Biblical criticism. *That* field is treated in the subsequent entry, by Scott Gerard Prinster. Although dealing to some extent with its origins in Germany, his main focus is on early to mid-nineteenth century American and British developments and their link to a growing commitment to methodological naturalism within Biblical scholarship. Notably, he too discusses the ties between higher criticism and the new geology.

Constance Clark's chapter on the history of anthropology is interesting but ultimately a bit out of place, not quite succeeding in linking back up with the theme of scientific naturalism. This is disappointing insofar as there have been some recent discussions about metaphysical naturalism within cultural anthropology that would have been worth examining (e.g., the published controversies surrounding the religious and paranormal experiences of those doing field research on topics such as shamanism and ritual magic).

Bernard Lightman's concluding chapter on the Victorian era concentrates on Thomas Huxley, John Tyndall and Herbert Spencer, examining the ways in which their own varying versions of naturalism both conflicted with and (at least implicitly) drew on Christian theology.