

with or resistant to considering creation care as part of our Christian calling, it may be most fruitful to explore this book, with its end-of-chapter questions, in discussion groups.

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HISTORY OF SCIENCE

RETHINKING HISTORY, SCIENCE, AND RELIGION: An Exploration of Conflict and the Complexity Principle by Bernard Lightman, ed. Pittsburgh, PA: University of Pittsburgh Press, 2019. ix–307 pages, with notes, selected bibliography, and index. Hardcover; \$50.00. ISBN: 9780822945741.

First some background to the making of *Rethinking History, Science, and Religion*. This edited collection by Bernard Lightman, Professor of Humanities at York University, Toronto, Canada, and past president of the History of Science Society, is the product of a two-day symposium on “Science and Religion: Exploring the Complexity Thesis,” during the International Congress of History of Science and Technology in Rio de Janeiro in 2017. One can consider this to be a companion volume to *The Warfare between Science and Religion: The Idea That Wouldn’t Die*, edited by Jeff Hardin, Ronald L. Numbers, and Ronald A. Binzley (Johns Hopkins University Press, 2018).¹

In one way, *Rethinking History, Science, and Religion* is a focused and daring work. It asks a fundamental question directed at much of contemporary historiography in the field of science-religion relations: if science and religion are not perpetually in conflict, as ever so many historians have claimed over the past fifty years, is complexity a better, if not the best, way to recount the relationship between science and religion? Complexity is the solution first proposed by John H. Brooke in his now classic 1991 text, *Science and Religion: Some Historical Perspectives* (Cambridge University Press).² In fact, Lightman dedicates his edited book to John H. Brooke, the leading proponent of complexity.

But what does the “complexity thesis” add to our discussion? Is it really a thesis? Is it a principle? Does it explain or does it rather describe the situatedness and contingency of the science-religion relationship, its cartography, as David Livingstone might say? Is its sole positive feature to discourage us from making facile assumptions about the relationship between science and religion? Or does it simply add another c-word to our vocabulary: complexity instead of contrast, concordance, compatibility, conflict, conversion, complementarity (or harmony)? Brooke has famously said, “There is no such thing as *the* relationship between science and religion. It is what different individuals and communities have made of it in a plethora of different

contexts” (p. 321, italics original, *Science and Religion*). That statement certainly invites one to consider a complexity thesis.

Although the role of complexity has been a conversation topic for several years,³ Lightman wants to gauge the current “pulse of the field.” He wishes contributors to test the “complexity principle” in scholarly contexts other than the usual Christian West (often seen as Europe and the USA/Canada), as well as in public spaces. This move invites an additional question: will the complexity thesis be able to provide a coherent narrative, or will it merely give us one contextualized example after another with no perceptible trend to bind them together? If there are many complex stories to tell, then it seems that a master-narrative or pattern would be a pipedream at best.

After an introduction by Bernard Lightman, the book is divided into three sections: Part I: The Local and the Global; Part II: The Media and the Public; and Part III: Historiographies and Theories. The book concludes with “Afterword: The Instantiation of Historical Complexity,” written by John Hedley Brooke.

Part I contains four chapters ranging from a local context (chap. 1, “The Stigmata of Ancestry: Reinvigorating the Conflict Thesis in the American 1970s,” by Erika Lorraine Milam), to more global ones (chap. 2, “Three Centuries of Scientific Culture and Catholicism in Argentina: A Case Study of Long-Term Trends,” by Miguel de Asúa; chap. 3, “Reexamining Complexity: Sayyid Ahmad Khan’s Interpretation of ‘Science’ in Islam,” by Sarah A. Qidwai; and chap. 4, “Christian Missionaries, Science, and the Complexity Thesis in the Nineteenth-Century World,” by John Stenhouse).

Each of these chapters addresses the complexity thesis with a different focus. Erika Milam argues that the supposed conflicts between science and religion “gained rhetorical traction” by both scientific creationists and die-hard evolutionists because they both denied the complexity of their own origins. Irven DeVore’s studies of primate behavior is used as a template to test that thesis. Miguel de Asúa identifies three trends in Argentinean scientific culture: (1) colonial period harmony, (2) nineteenth-century conflict, and (3) twentieth-century indifference. Sarah A. Qidwai calls us to carefully consider the interpretation of science in Islam rather than by Islam in the 1865 self-published commentary by Sayyid Ahmad Khan (1817–1898). John Stenhouse examines whether Ronald Numbers’s suggestion that we introduce some mid-scale patterns (or generalizations) such as “naturalization, privatization, secularization, globalization and radicalization,” aids us in understanding the complexity of science/religion relationships in the nineteenth century. Stenhouse concludes that a study of missionary science outside the West complicates Numbers’s attempt to “simplify

Book Reviews

complexity,” and does not do justice to missionary practices well into the twentieth century.

Part II contains five chapters examining the role of the media and public response to science/religion discussions and events: chap. 5, “Creating a New Space for Debate: The Monthlies, Science, and Religion,” by Bernard Lightman; chap. 6, “Darwin’s Publisher: John Murray III at the Intersection of Science and Religion,” by Sylvia Nickerson; chap. 7, “The ‘Harmony Thesis’ in the Turkish Media, 1950–1970,” by M. Alper Yalçinkaya; chap. 8, “A Humanist Blockbuster: Jacob Bronowski and the Ascent of Man,” by Alexander Hall; and chap. 9, “Teaching Warfare: Conflict and Complexity in Contemporary University Textbooks,” by Thomas H. Aechtner.

In summary, these chapters illustrate how insights from the study of print culture, communications studies, and visual studies have broadened our more “familiar grooves” of explanation and deepened our understanding of science and religion.

Part III is to my mind the most stimulating section, one in which some of the leading historians of science and religion present (their) historiographies and theories. It contains four chapters: chap. 10, “Revisiting the Battlefields of Science and Religion: The Warfare Thesis Today,” by Ronald Numbers; chap. 11, “From Copernicus to Darwin to You: History and the Meaning(s) of Evolution,” by Ian Hesketh; chap. 12, “Scale, Territory, and Complexity: Historical Geographies of Science and Religion,” by Diarmid A. Finnegan; and chap. 13, “Conflict, Complexity, and Secularization in the History of Science and Religion,” by Peter Harrison.⁴

Focusing on two of the chapters: In a relatively short chapter (a “brisk survey” of eight pages), Numbers explores the factors that contribute to the continued support of the warfare thesis and the “growth of the opposing neo-harmonist point of view” (p. 183). Contemporaries such as Carl Sagan, Francis Crick, Stephen Hawking, William Provine, the New Atheists, and Christian and Muslim fundamentalists such as Ken Ham and Adnan Oktar are considered. Numbers chides scholars who legitimately question the warfare thesis but often do not address popular audiences.

Peter Harrison argues that we need to make complexity intelligible. Although historians are often averse to meta-narratives, he considers them to be both “unavoidable and indispensable.” Harrison defends the utility of a master-narrative, at least something that rises above mid-scale patterns (such as those suggested by Ronald Numbers). He appeals to Charles Taylor’s view of secularization as one way to begin to address the relation between science and religion. Taylor, for instance, distinguishes between science as cause of religious disbelief and science as a retrospective justification for

it. Secularization involves a change in the conditions of belief which Taylor contributes to transformations within Western Christianity.⁵

In “Afterword: The Instantiations of Historical Complexity,” John Hedley Brooke reflects on each of the contributed chapters. He provides a concise judgement about complexity:

Understood neither as a thesis competing with other theses nor as a prescription to seek out complexity for its own sake, but as a heuristic guiding principle for a critical research methodology, it ceases to be trivial and has proven fertile. (pp. 239–40)

Brooke once again restates his earlier view on complexity: it is a “corrective to essentialist and reductionist narratives of conflict,” and complexity’s primary function is to critique conflict narratives as well as facile harmonizing ones.

For anyone interested in exploring the latest in the historiography of science and religion, read this stimulating and informative book. You will be challenged. Whether the contributors do justice to the central role and character of religion one will have to judge. I for one have my doubts. If we consider our lives as lived to be religion, then religion is not irrelevant to, or in conflict with, or an influential factor on, but rather the very ground for scientific practice.

Notes

¹See my review in *PSCF* 71, no. 3 (2019): 183–84.

²See my essay review, “Telling the Story of Science and Religion: A Nuanced Account,” *British Journal for the History of Science* 29, no. 3 (1996): 357–59.

³See Part 2, “Complexity and the History of Science and Religion,” in *Recent Themes in the History of Science and Religion*, ed. Donald A. Yerxa (Columbia, SC: University of South Carolina Press, 2009).

⁴Peter Harrison’s book *The Territories of Science and Religion* (Chicago, IL: University of Chicago Press, 2015) has been described by Ronald L. Numbers as “the most significant contribution to the history of science and religion since the appearance of John Hedley Brooke’s landmark study, *Science and Religion: Some Historical Perspectives*.” [See Matthew Walhout’s review in *PSCF* 67, no. 4 (2015): 281–84.]

⁵For a more extensive discussion of “science causes secularization,” see Peter Harrison’s article “Science and Secularization,” *Intellectual History Review* 27, no. 1 (2017): 47–70.

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ORIGINAL SIN AND THE FALL: Five Views by J. B. Stump and Chad Meister, eds. Downers Grove, IL: IVP Academic, 2020. 200 pages. Paperback; \$24.00. ISBN: 9780830852871.

The doctrine of original sin has been controversial since its earliest articulation by Augustine of Hippo in the fourth century, and it remains a provocative