Science and Religion

THINKING FAIR: Rules for Reason in Science and Religion by Lucas John Mix. North Charleston, SC: CreateSpace Publishing, 2016. 302 pages. Paperback; $19.99. ISBN: 9781515153283.

In this thoughtful probing of the way we think and reason, Lucas Mix challenges us to be aware of how and why we hold the beliefs that we have. He shows how the path to knowledge in science differs from that in religion and that both are necessary in our worldview that guides our behavior.

Lucas Mix is well qualified to speak about both science and religion. He holds a PhD in organismic and evolutionary biology from Harvard University and carried out a postdoctoral project at Harvard in theoretical biology considering the history of the definitions of life. He also holds an MDiv from the Church Divinity School of the Pacific and is an ordained priest. He is a member of the Society of Ordained Scientists and is part of the Anglican community.

After an introductory chapter, the remaining twenty chapters are organized in four sections: Reason; Science; Religion; and Change. Mix is interested in what we think, what we do, and with whom we do it. We need to understand why people think what they do and how this affects their actions. He has no intention of persuading us what to think or even how to think. Rather, in his own words, he intends to "present this as an exercise in thinking broadly, sympathetically, and systematically about how you view the world. I want you to experience different ways of thinking and reflect on what it would mean to do them well" (p. 7).

The three chapters in the section on Reason lay out the basic tools and terminology for considering how we think. The way in which we perceive reality and correlate it with our experience comprises the logic and reason that we use. We utilize a set of axioms and logic in our reasoning. Deduction, induction, observation, and authority are the primary ways of reasoning for finding new knowledge. For Mix, "Rationality comes from thinking clearly, transparently, systematically, and carefully" (p. 42). His goal is to encourage us to recognize our own style of reasoning and to learn to understand and appreciate the way other people think.

Chapters 5–10 delve into science and the way in which we acquire knowledge through what we call the scientific method. Four key principles of the scientific method are discussed: Mutual observables; symmetry; hypotheses; and iteration. Applying these principles in practice takes various forms and relies on a variety of factors that help us gain confidence in an explanation. Scientific aesthetics is one of those criteria, including simplicity, utility, fruitfulness, and coherence and consistency. Finally, he discusses the basic concepts of reductionism, emergence, ontological physicalism, and methodological physicalism.

Through all these principles of thinking, science offers us a way to develop a model of reality. As we compare this model with reality, we encounter phenomena that either reinforce that model or else compel us to reassess our model. Learning centers on the way in which we respond to that comparison and how we compare our understanding with that of others. Above all, Mix points out that the scientific method fails to provide us with all the knowledge we need to make decisions and take action. That leads us to the section on religion, to which he devotes six chapters.

Whereas science provides what Mix calls a transparent, effective epistemology that informs us about our world, it does not provide guidance for ideas, choices, and values. For Mix, "religion has to do with propositions about order and value, how we generate them, and how we react and respond to them. Ontology and epistemology fall out of religion, almost by necessity" (p. 120). Mix emphasizes his view of knowledge and belief. Knowledge is a statement for which we have some evidence that it is true. Belief is conviction with consequences, knowledge that changes our behavior. With this perspective, science is not the sole domain for knowledge nor is religion the sole purveyor of belief. Our worldview needs a broader view than what either science or religion alone can provide.

After devoting a few chapters on common issues such as miracles, determinism vs. free will, revelation, and the existence of the soul, Mix turns to what he sees as the three basic aspects of religion: philosophy, practice, and politics. Philosophy deals with "right thought," referring to orthodoxy and the creeds commonly associated with religion. Practice deals with "right behavior," the norms of activity and rituals that characterize religions. Politics refers to "right relationships," our participation in the community and our social interactions. Religion is therefore a necessary complement to science in helping us with our values, choices, and actions.

The final section of four chapters is titled Change. Here we arrive at the challenge that Mix has for us. We all have a model of the cosmos and that model might not match the reality that we encounter. When we understand why we think the way we do and why others think otherwise, we are better able to respond to that dissonance.

Scientific knowledge leads to models that enable power when they accurately reflect the way nature works. Religious knowledge and beliefs lead to values that help us decide how to use that power. The critical feedback loop of belief shaping behavior and behavior shaping belief depends on our awareness of our ways of thinking. "Above all," Mix concludes, "I want you to have greater control over your own ability to grow conviction. I want the change to be in your hands" (p. 271).

It is refreshing to read a book that does not seek to persuade or to argue for a particular idea. The ratio of question marks to periods is remarkably high, almost reflective of a study guide. The questions are designed to be internalized and to become an autonomic way of thinking for us.

I found the book easy to read and comprehend. It made me realize how little attention I had paid to considering the way I think and the reasons for my reasoning. The thrust of the book might be called "Philosophy Made Practical" with a focus on science and religion, though it is much more broadly applicable. Mix does not introduce new philosophical ideas and has selected only those aspects that he feels are most relevant to us. He is clear about his Anglican faith and why he finds it to be a valued part of his way of reasoning. Yet he respects other religions with their perspectives. He challenged me to recognize that philosophy is not a specialty reserved for experts, but a necessary part of our lives. I need to learn to incorporate this self-awareness of my thinking into my way of life.

If all authors and speakers on science and religion would not only read this book but adopt the reflective style he suggests, the conflicts would be greatly diminished. I highly recommend it to all who are interested in philosophy, epistemology, and their role in science and religion.

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TECHNOLOGY

NETWORKED THEOLOGY: Negotiating Faith in Digital Culture by Heidi A. Campbell and Stephen Garner. Grand Rapids, MI: Baker Academic, 2016. 192 pages, including endnotes and index. Paperback; $22.99. ISBN: 9780801049149.

Christian communities have always shaped and been shaped by changes in media technology. Second-century Christians were early adopters of the codex, bound books as opposed to scrolls. This in turn prompted the development of the canon (from a human viewpoint) and consequently shaped the ecclesiastical authority structure and distinction between orthodoxy and heresy. Centuries later the printing press made possible the rapid promulgation of ideas that emerged during the Reformation but also, it has been argued, led to more standardization of liturgy and hymns and prayers.

The contemporary church is enjoined to give a thoughtful response to modern media and the technology that supports it. Today's digitized, transcoded, and mashable media content changes the way we think about text and other information. Social media and other online social interaction change the way we think about friendships and communities. Virtual worlds and augmented reality change the way we think about presence. All of these have implications for how the church sees itself and practices its mission.

Christians are far from having a united response. One chapel speaker at Wheaton College (where I teach) began by asking students to open the Bible apps on their cell phones. The chaplain at Covenant College, on the other hand, has banned electronic devices from chapel; students should bring God's word in a good old codex. What does one value more, reaching tech-saturated millennials at their level, or eliminating the distractions from communal worship in a physical, real-time setting?

In *Networked Theology*, Heidi Campbell and Stephen Garner seek to "map out a framework for identifying an authentic theology" that accounts for new media and digital culture and equips the church to reflect and respond appropriately. Campbell is a communications professor and Garner is a theologian. Together, though drawing especially from Campbell's prior work, they bring a well-informed perspective on the intersection of media studies and theology. The book provides context (historical, technical, and theological) to questions new media raise for religious communities and provides discussion points that some communities may find helpful.

The authors spend the first few chapters surveying the background. They highlight the church's response to media and technology throughout its history but especially summarize the contributions of Jacques Ellul and Ian Barbour in the recent century. Some Christians have responded to various new waves of tech with optimism about how they improve lives and empower ministry. Others are more skeptical, mindful of the cultural cost and the people who are marginalized. Still other faith communities have developed a more nuanced view of the social context of technologies. The authors also give an introduction