"ontological divide" and "absolute moral distinction between humans and other animals" is untenable in light of Genesis, Isaiah, Micah, and others. Such thinking results in horrific behaviors as humans treat animals as mere machines existing solely for human convenience. The specific examples he cites are trophy hunting and factory farming which, he argues, "would have mortified all of the ancient Israelites, excepting those awful persons who 'break a dog's neck'" (p. 64; citing Isa. 66:3). There is urgent need of reorientation that involves not only an affirmation of the goodness of all creation but also recognition of moral obligations to contribute to its wellbeing.

This is a wonderful contribution to theological and biblically grounded discourses about the environment and animals. Though he does not interact with Norman Habel, in some respects *For the Love of All Creatures* reminds me of the writings of Habel, not least *The Birth, the Curse and the Greening of Earth: An Ecological Reading of Genesis 1–11* (2011) and other volumes in the Earth Bible Commentary series that he edits. There are many differences in approach, but both projects share a concern to reread biblical texts in light of the unprecedented environmental challenges facing our world.

Reviewed by Michael Gilmour, Providence University College, Otterburne, MB R0A 1G0.

SCIENCE AND RELIGION: Beyond Warfare and Toward Understanding by Joshua Moritz. Winona, MN: Anselm Academic, 2016. 318 pages, includes index and glossary of terms. Paperback; $30.95. ISBN: 9781599827155.

This book is an authoritative, judicious, and considerate review of why there is no real war between scientific pursuit and Christian faith. It successfully fills a large void in the literature of science/faith relationships by supplying an analysis and irenic disassembly of the conflict metaphor, as played out through several scientific disciplines.

Joshua Moritz has for many years been associated with the Center for Theology and the Natural Sciences (CTNS) at the Graduate Theological Union in Berkeley. He combines appointments at the CTNS and the philosophy department at the University of San Francisco. He brings to his writing an extensive background in the natural sciences, biblical languages, theology, and philosophy. He also brings a background informed by lots of discussion with students and others who have been indoctrinated with the conflict thesis.

The introductory chapter begins with a short review of the history of the modern "warfare metaphor" and its rhetoric, with reference to such figures as Andrew Dickson White and John W. Draper. He then briefly deflates three exemplary myths from the warfare corpus: Columbus did not prove (or need to prove) that the world was round; Galileo did not go to jail; and the John Scopes "Monkey Trial" was not really about the relationship between biological evolution and faith. At this point, many readers should realize that they have uncritically absorbed a set of common cultural myths about Christian repression of science.

Chapters two to four build a more nuanced and realistic model for the historical and theoretical relationships of faith and science. Chapter two demonstrates the positive role that theistic conceptions of nature played in the historical development of the natural sciences. Once again, prominent case histories are deployed from the history of geology, evolutionary biology, and cosmology. For example, the role of Christians like Nicolas Steno and William Buckland in the development of a concept of Earth's antiquity are emphasized. Chapter three provides an introduction to the philosophy of science, with attention to the role of faith in the life of the scientist. Moritz lays out a case that beliefs central to scientific investigation, such as a belief that the world is orderly and rational, or that it is good and worthy of investigation, are properly faith statements that are actually supported by theism. He also provides strong support for the complementary thesis that religious faith needs science. Chapter four discusses where real points of conflict lie and diagnoses the problem as one of imperialism by either scientists or Christians.

Chapters five through nine take up classic subject areas that are often portrayed as theaters of conflict. To list, in order: creation and cosmology; evolutionary biology; human nature, uniqueness, and the *imago Dei*; miracles and the laws of nature; and the problem of suffering. Each of these chapters runs about 25 to 35 pages and each competently summarizes a large body of technical literature. Any of these could be used in a classroom setting, for example, as a nice overview of the interactions of science and faith in a positive light.

The final chapter examines the scientific evidence for the nature of the end of the universe and provides a Christian hope in the world to come.

Each chapter concludes with a small set of discussion questions. These are typically followed by a section, "beyond the classroom," which suggests a group activity for further investigation. Then a set of relevant references for further study, including internet-based references, is supplied. These sections

make the book especially applicable for classroom use. I intend to use it in classroom teaching at my institution.

As the topics above indicate, the book is wide ranging in its scope, and well organized, with a definitive trajectory. It takes the warfare metaphor to pieces and offers a more wholesome perspective in its place, one in which faith and science interact, not just to support one another, but to broaden each other's vision. This book presents a win-win option for science-faith interactions. It is a win for the reader, too.

Reviewed by Ralph Stearley, Professor of Geology, Calvin College, Grand Rapids, MI 49546.

TECHNOLOGY

HOW TO FLY A HORSE: The Secret History of Creation, Invention, and Discovery by Kevin Ashton. New York: Doubleday, 2015. 336 pages. Hardcover; $27.95. ISBN: 9780385538596.

During the process of developing the "Internet of Things," Kevin Ashton discovered that much of what he had been led to believe about the creative process was wrong. In *How to Fly a Horse*, Ashton uses several detailed stories from history to help remove the mystery surrounding creativity and to inspire the reader to follow their own passion to make things better by making something new.

In the first few chapters, Ashton challenges commonly held myths surrounding creativity and invention. He makes the case that the ability to create is not a special characteristic possessed by a few, but is rather the essence of what makes each of us human. Inventing is not about having a stroke of genius, but requires hard work driven by a desire to make things better. Ashton asserts, "work is the soul of creation" (p. 24). Using the story of the Wright brothers along with others, he undermines the myth that creating rests on leaps of innovation. According to Ashton, invention is not characterized by leaps, but by methodical stepping, with failure greeting many of those strides. Discovery, we learn, also requires persistence.

Later in the book the author turns his attention to inspiring and instructing the reader in the pursuit of an actively creative lifestyle. Ashton explains that each of us by virtue of our unique heritage of genetics and past experience is positioned to make our own special contribution to the world. While acknowledging the importance of the past, he cautions us to guard against allowing our preconceived notions of the world or the cultural assumptions of those around us to impede our search for the new. He describes fascinating research into the brain's filtering ability, which often allows us to see only what we are expecting to see. Ashton is suspicious of analysis and planning, preferring trial-and-error methods. He tells us that creating is fundamentally about doing. He writes, "There is no creating in meetings. Creation is action, not conversation" (p. 225). Citing research that children are often more openly creative than adults, he maintains that "adults think before acting; children think by acting" (p. 221). As a professor of engineering, I acknowledge that analysis and planning are, at times, used to delay doing and that they can also stifle creativity. However, I believe Ashton is overlooking the fact that while naïve creativity is unencumbered by the past, it is not informed by it either. To abandon analysis and planning is to ignore, to a large degree, communal wisdom, both now and down through the ages.

With urgency in his voice, Ashton reveals his motive for writing the book in the concluding chapter. Looking up from his work, he sees problems looming on the horizon that may eventually threaten modern civilization. He understands that a growing population with an ever-increasing consumptive appetite is not sustainable on a finite planet, and this is leading to a number of significant, multifaceted environmental problems. While I believe Ashton correctly assesses the seriousness of our situation, his solution is troubling. He sees our creative spark as a product of evolution: the only thing that separates us from other species. As a result, he believes that our only hope for a future is found in ourselves: in our ability to create. He hints at this hope earlier in the book when describing the process of invention:

> Creation demands belief beyond reason. Our foothold is faith—in ourselves, in our dream, in our odds of success, and in the cumulative, compound, creative power of work. (p. 66)

Ashton believes that the only way out of our dilemma is that we all should sacrifice ourselves to the all-consuming hard work of creating. "And this is why we need new: Consumption is a crisis because of math; it is not yet a catastrophe because of creation. We beat change with change" (p. 240). By reducing our humanity to our creativity, Ashton is left clinging awkwardly to a blind faith in human ingenuity, free from restraint, which is precisely what has caused our problems in the first place. Ashton attempts to resolve this absurdity by suggesting that we must not be creating enough, fast enough.

The suggestion that we can do it ourselves is familiar snake oil. It is of the same vintage that Adam and Eve tasted in the garden. However, when we put