

Barton E. Dahneke.  
*Define Universe and Give Two Examples:  
A Comparison of Scientific and Christian Belief.*  
Palmyra, N.Y.: BDS Publications, 2006

Reviewed by Noel L. Owen

As one might deduce from its title, this is a very unusual book. In the first five hundred pages, the author includes three sections: (1) Perception of Reality, (2) Material-Universe Science, and (3) Total-Universe Christianity. Following these sections are approximately one hundred pages of appendices. After the first section's wordy and detailed account of the philosophies associated with science and the search for truth, the second section deals with the way science has developed and how absolute truth is difficult to find from observations and deductions based on natural science. The third section gives a detailed account of the doctrine of Christ and how this can lead to absolute truth. Each section has a huge number of extensive and sometimes very interesting endnotes, and the book as a whole is a wealth of knowledge on specific topics.

The purview of the book is enormous, and it is to Dr. Dahneke's credit that he discusses aspects of philosophy, science, and religion in a very knowledgeable way. Dahneke states in the preface that he wrote the book primarily for his extended family and friends so that they can better understand his beliefs and convictions. He also comments that he has written the book for readers who have no special preparation in science and mathematics; however, without some interest and background in those subjects the text will make very heavy reading. The contents of this book come under the general umbrella of natural philosophy. Whereas the original doctors of natural philosophy were considered experts in virtually all known science and philosophy, these days very few PhDs study deeply outside their own narrow area of research. Consequently, the number of people who will read and enjoy all the material covered in this book is somewhat limited, although I think that the text might be of considerable value to philosophy of science teachers. Despite the all-encompassing title, the author has self-imposed restrictions on both the science and the religious aspects of the book. He has deliberately chosen the field of

physics (and especially mechanics) as the most appropriate representation of science, and only Christianity (with special emphasis on Mormonism) is included in the discussion of religion.

The book is self-published, which helps explain why the overall style tends to veer toward the verbose with much repetition of certain ideas. However, to me the book resembles a large quartz stone in which we find small ingots of pure gold. There is a great deal of information within its covers, some of which I found fascinating and informative; maybe the best way to enjoy the book is to dip or delve into selected sections, rather than to wade through all the philosophical and scientific details. Some of the highlights for me include the following: the author's vignettes of the development of science and mathematics; a readable and understandable outline of the theory of relativity (161–71); and some fascinating insights into the work of Galileo, Kepler, Copernicus, and Newton, among others (103–56). Although I have read a great deal about Isaac Newton's life, his scientific and mathematical discoveries, and his years investigating alchemy, Dahneke's discussion of Newton's interesting views regarding the religious concept of the trinity were new and fascinating to me (144–47). The endnotes and references are very extensive, and many contain gems of information and insight. For example, the endnote on Tyndale's work in publishing the English Bible is well worth reading (125–28). A summary of the development of quantum mechanics is expounded in greater detail than that found in many science textbooks, and there are sections on more esoteric topics such as quantum electrodynamics and the grand unified theory. The author's justification that mechanics is the basis of virtually all the hard sciences may read a little indigestibly to most biologists, chemists, and biochemists, and there is certainly an underlying feeling in the book that physics tops the scale of the sciences.

In a very similar manner, the author makes no bones concerning the superiority of the beliefs of the Latter-day Saints over other Christian churches, and LDS readers will enjoy his discussion of the doctrine of Christ. There are many scriptural quotes from the Bible as well as from the Book of Mormon, the Pearl of Great Price, and the Doctrine and Covenants. However, readers who are nonbelievers or agnostic will find the transition from the scientific approach to the Christian approach a little sudden and abrupt and may balk at Dahneke's assertion that faith is of overarching importance. The author scatters throughout the book eighteen propositions as short paragraphs that summarize his thoughts and conclusions regarding the issues under discussion. Although most are logical, carefully worded, and make perfect sense, I suspect that a few are too dogmatic to satisfy everyone.

Over the past several centuries, scientific discoveries have caused considerable dissent among church authorities, resulting often in persecution of individuals by the organized churches of that period.<sup>1</sup> The dichotomy between religious and scientific approaches that have been utilized to search for answers to some of humanity's important questions was described in 1964 by C. P. Snow in his classic book *The Two Cultures*.<sup>2</sup> Recently there has been a spate of books written by scientists on the subject of God and religion, and several of these are highly critical of religion and its influence on humanity.<sup>3</sup> It is timely to have a book that discusses both topics in an in-depth and unique way, and which comes out very much in favor of Christianity and its procedures to discover absolute truth. Dahneke gives a lucid account of the apostasy of the early Christian church, and he makes a very strong case for the latter-day restoration of the gospel of Christ and for the importance of the correct authority for priesthood ordinations.

It is interesting to compare the approach adopted by the author to that expressed by another LDS scientist—the late Henry Eyring—in some of his writings. Dahneke addresses the science and religion issues in a very logical and organized manner; he looks at both sides of an argument and declares in a very definitive way his conclusions, and in some instances he states his own views on controversial issues, such as pre-Adamic men. Eyring, on the other hand, although he held quite definitive views on some matters, often stated that he did not know the answers to many questions, but that did not bother him because he would put them on the “back burner,” since he was convinced that eventually he would know the truth. As a convert to the Church in the 1970s and as a scientist, I found the number of available LDS books that covered science and religion very limited, and I benefitted greatly from Eyring's philosophy that one should not be too concerned if there are issues for which currently there are no definitive answers. Had Dahneke's book been written earlier, as a new convert I would have certainly benefitted from reading parts of it as well.

In the chapter that discusses the role of faith in science (219–62), the author uses thermodynamics as an example of the prototype of a good and well-tested theory. He outlines the subject briefly in the text and refers readers to a more detailed mathematical treatment in one of the appendices. Along with other definitions, he quotes the well-known statement of Clausius concerning the second law of thermodynamics, namely, the energy of the world is constant; the entropy of the world is increasing. The author states quite correctly that if applied to our Earth the comment about entropy is false, since the definition of entropy infers an isolated system (that is, no energy entering or leaving the system), but when the law is

applied to the whole universe, it is true. He further states in a footnote that the universe is an isolated system. I find this a surprising statement coming from a committed Christian. If one believes in a God who created the universe and who can obviously inject energy into the universe at will, it is difficult to envision the universe as a closed system. In that case, Clausius' statement is obviously misleading and untrue even when applied to the whole universe as the "system."

In the penultimate chapter, Dahneke describes the interesting stories of two early LDS pioneers, who, it turns out, are directly connected with his own family. The rationale for including them involves the importance of Christian faith and the joy (as well as the sacrifice!) that follows true discipleship. Such stories are important for family members to know and appreciate, but they are a little incongruous in a book that invites readers of all ilk.

The appendices include detailed mathematical explanations of topics such as relativity, gravitational theory, quantum field theory, and Bell's theorem of correlated events, as well as sections from the Book of Mormon and a brief insight into the metaphysics of Immanuel Kant. In addition, as an example in a section discussing limitations in scientific inquiry, the author includes a detailed and critical study of the government reports on unidentified flying objects. The book has a very comprehensive index and is beautifully produced.

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1. For example, the trial and inquisition of Galileo by the Catholic Church for his support of the findings of Copernicus, who claimed that in the solar system the earth revolved around the sun and not vice versa, and the controversy in the Anglican Church arising from Charles Darwin's findings on the origin of species.

2. C. P. Snow, *The Two Cultures* (Cambridge: Cambridge University Press, 1964).

3. For example: Richard Dawkins, *The God Delusion* (London: Bantam, 2006).